



Dewey Avenue Corridor Traffic Calming Study

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Monroe County, New York

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EXECUTIVE SUMMARY

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This report summarizes the analysis and preliminary design studies of the Dewey Avenue Corridor Traffic Calming Study. The Genesee Transportation Council (GTC) funded the preparation of the report under its Unified Planning Work Program (UPWP). The Town of Greece and the City of Rochester contracted with EDR and SRF Associates to conduct site analysis, assess feasibility, and produce concept-level planning and design for a traffic calming strategy along Dewey Avenue in the Town of Greece and the City of Rochester in Monroe County, New York. Guidelines for the design and implementation of the traffic calming improvements were prepared.

Background

The Town of Greece and the City of Rochester are located in north-central Monroe County. Dewey Avenue is an urban minor arterial that begins at Lyell Avenue in the City of Rochester and extends 8 miles to the Town of Greece's northern border near Lake Ontario. The study area consists of portions of Dewey Avenue located in the Town of Greece and the City of Rochester, and covers approximately 3.75 miles from the intersection with Ridge Road West to the intersection with Latta Road. In the Town of Greece, Dewey Avenue is a Monroe County highway and in the City of Rochester, the road is a city street.

In 2001, the Town of Greece completed an update of their Community Master Plan. In order to implement the recommendations contained in this update, the Greece Town Board adopted a new Zoning Ordinance and Official Zoning Map in 2003. However, no major changes were made in the Dewey Avenue area because the Master Plan Update recognized Dewey Avenue as an area with special characteristics that was in need of further study, and the Town Board did not want to delay the overall, town-wide zoning effort.

The Town of Greece initiated the Dewey Avenue Corridor Study in 2006 to ensure that any future development in the corridor strengthened community character. The Corridor Study, completed by EDR in 2007, was a planning effort designed to create a more comprehensive work plan for preserving and revitalizing this area. In 2008, the Town of Greece had started to implement some of the study's recommendations, and determined that the next step was a feasibility study of traffic calming methods to determine how best to improve the pedestrian experience and lessen reliance on vehicular travel.

In pursuit of this goal, the Town of Greece, in cooperation with Monroe County DOT, pursued funding to undertake a comprehensive feasibility study for the corridor. The City of Rochester suggested that the study area be expanded to include a portion of Dewey Avenue in the City of Rochester. The joint study was approved by the GTC for funding in 2008. The purpose of the traffic calming study was to evaluate the options for reducing the adverse impacts of vehicular traffic on pedestrian circulation within the sections of the Dewey Avenue Corridor included in the study area.

Vehicular Facility Analysis

The vehicular facilities in the Dewey Avenue Corridor were assessed to determine what traffic calming strategies would be most appropriate. The standard procedure for capacity analysis of signalized and unsignalized intersections is outlined in the *2000 Highway Capacity Manual* (HCM 2000). Traffic analysis software, SYNCHRO 7.0 (Build 761), which is based on procedures and methodologies contained in the HCM 2000, was used to analyze operating conditions at study area intersections. The procedure yields a LOS based on the HCM 2000 as an indicator of how well intersections operate. Existing operating conditions were documented in the field and modeled using traffic analysis software. The traffic analysis models were calibrated based on actual field observations, and included the 2009 lane changes near Latta Road.

The Intersection Capacity Utilization (ICU) can be thought of as an intersection wide volume-to-capacity ratio. ICU is well suited to the purpose of transportation planning studies. The intended applications for ICU are traffic impact studies, future roadway conceptual design, and congestion management programs. The primary output from ICU is analogous to the intersection volume-to-capacity ratio. The ICU does not provide a complete picture of intersection performance, but it does provide a clear view of the intersection's volume related to its capacity.

The capacity analysis data collected was used to assess the quality of vehicular traffic flow for the existing AM and PM commuter peak hour conditions at the signalized intersections in the study area. Analyses of the existing intersections indicate that all of the intersections studied are currently operating at level of service "C" or better on all approaches during the peak periods, with a few exceptions that currently operate at LOS "D".

The ICU capacity analysis results indicate that all of the study intersections are currently operating at less than 65% of their capacity during both peak hours, except the Denise and Stone Road intersections during the PM peak hour and the West Ridge Road intersection during both peak hours, which are operating at approximately 75% of their capacity. These percentages indicate that there is excess capacity available at these intersections and throughout portions of the corridor. This suggests that opportunities may exist in many areas for pedestrian and bicycle enhancements without significantly compromising vehicular capacities.

In addition, historical traffic volume growth in the study area and planned developments in the corridor were reviewed and evaluated to determine a growth rate to account for normal increases in area-wide traffic growth. A twenty-year traffic forecast was derived and used for future traffic analyses. Analyses of the study intersections indicate that all of the intersections studied are operating at level of service "C" or better on all approaches during the peak periods under 2029 future no-build conditions with a few exceptions that are projected to operate at LOS "D".

The ICU results indicate that virtually all of the study intersections are projected to operate at less than 65% of their capacity during the AM peak hour under future no-build conditions. During the PM peak hour, several intersections are projected to operate at 70% or greater. Based upon the operational analyses and local development patterns, an intersection with an ICU greater than 70% may not be capable of accommodating major traffic calming improvements. An intersection with an ICU below 70% has excess vehicular capacity available, suggesting that opportunities may exist for pedestrian and bicycle enhancements without significantly compromising vehicular capacity.

According to *Intersection Capacity Utilization Evaluation Procedures for Intersections and Interchanges 2003 Edition* published by Trafficware, an intersection with an ICU between 64% and 73% is characterized as "having no major congestion. The majority of traffic should be served on the first cycle." In reviewing the ICU results at intersections throughout the Dewey Avenue corridor, 70% is used to differentiate between intersections that are potential candidates for a road diet. However, it is noted that detailed capacity analyses are required to determine the appropriate geometry at each intersection.

Bicycle and Pedestrian Facility Analysis

Bicycle infrastructure and facilities were also inventoried in the corridor. Bicycle safety was judged on the presence or absence of a dedicated bicycle facility, shared lane widths including the on-street parking lane, and the amount of space a cyclist needs to safely maneuver. Other considerations that affect bicycle safety are speed limit, average annual daily traffic (AADT) volumes, percent heavy

traffic, number of driveways, and any obstructions to the public realm, including overgrown landscaping and road grates.

The Dewey Avenue Corridor lacks dedicated bicycle facilities of any form. There are no road shoulders, and the widest outside lane is twelve feet wide, less than the fourteen-foot minimum recommended in the AASHTO Guide for the Development of Bicycle Facilities that is necessary to accommodate a bicycle traveling beside an automobile. Bicycle users must choose between (illegally) using the sidewalk, traveling a parallel street, or sharing the narrow outside lane of the road with automobiles traveling at higher speeds. There is an opportunity to improve the conditions that contribute to the safety and comfort experienced by bicyclists using the corridor.

Pedestrian safety was evaluated based on factors such as sidewalk width and quality, and the presence of a buffer zone (tree lawn). Pedestrian safety factors present in the travelway include crosswalk length and quality, presence or absence of medians, and the type of median. A pedestrian LOS was developed for the pedestrian realm on both sides of the roadway along the entire length of the corridor. Every zone of the Dewey Avenue pedestrian realm was scored based on a number of pedestrian realm variables. The quality of the pedestrian realm in the corridor ranges between a 'B' and a 'D', with most segments of the corridor performing at a LOS of 'C'. Generally, the LOS for corridor segments on the east side of Dewey Avenue was slightly better than those on the west side. Variables that negatively affected the LOS were: lack of sufficient buffer width, inadequate crossing opportunities, lack of support facilities, and poor sidewalk quality.

An inventory of all marked crosswalks that traverse Dewey Avenue at signalized intersections was performed for this study. Information was collected on the width, length, and presence of curb ramps and pedestrian signals at each signalized crosswalk location. This data was then analyzed to develop a LOS for each crosswalk that traverses Dewey Avenue at a signalized intersection. The results of this analysis indicate that there are no immediate safety concerns at crosswalk locations within the study area. On a grading scale of LOS 'A' through LOS 'F', the crosswalks on Dewey Avenue were rated with LOS 'B' or LOS 'C', meaning they provide an acceptable way for crossing the street in a reasonably safe and comfortable fashion. Although the results of the crosswalk assessment indicate that there are no apparent safety concerns, there are opportunities for crossing enhancements.

In general, there are pedestrian facilities currently in place along the Dewey Avenue Corridor, including sidewalks, marked crosswalks, and pedestrian signals. The LOS scores for most of the segments of the Dewey Avenue Corridor indicate that there is an opportunity to improve the conditions that contribute to the sense of safety and comfort experienced by pedestrians. Pedestrian LOS and Walk Score were analyzed side by side, which indicated segments of the pedestrian realm are deficient in quality, yet have a large number of pedestrian generators in close proximity. This important analysis provides a list of locations to be used to develop priorities for future pedestrian realm improvements.

Traffic Calming Alternatives and Recommendations

A number of traffic calming alternatives and their potential impacts were considered for the corridor. Multiple design, program and policy solutions can be used to solve each traffic calming issue. For each alternative, reviewing the design details, impacts, and viability for the Dewey Avenue Corridor was critical to selecting appropriate solution. Multi-modal transportation is very important, and the recommendations attempt to balance vehicular capacity with bicycle and pedestrian access in order to maximize corridor safety for all users.

The alternatives were categorized as on-street, off-street, or program and policy alternatives. On-street alternatives include all possible strategies within the roadway, such as bicycle lanes or a road diet. Off-street alternatives generally deal with the area from the curb to the front of a building with the main focus on the pedestrian experience. Program and policy alternatives provide strategies for zoning changes, educational programs, enforcement, maintenance, program effectiveness, and security. A brief summary of design details and benefits for each alternative is provided in the report. In addition, each alternative was evaluated in relationship to impacts on budget, various user groups, and sustainability to ensure a process that assessed the tradeoffs between each alternative.

From the list of all the possible alternatives, a set of strategies was recommended for the corridor. Committee and public comments, cost, user and sustainability impacts, and appropriateness for the Dewey Avenue Corridor informed the selection of recommendations. The issues addressed by the recommendations include:

- No bicycle facilities, outside lane too narrow and no shoulders
- Pedestrian Level of Service (LOS) C or D
 - Lack of sufficient buffer
 - Poor sidewalk quality
 - High number of access drives introduce conflict and a lack of continuity for pedestrians
 - Inadequate crossing opportunities
 - Existing crossing needs enhancement
 - Lack of resting areas
 - No sidewalk
- Lack of pedestrian-oriented, human scale environments in an area with high potential for walking
- Lack of bus stop comfort and safety amenities
 - Unsafe crossings
 - Lack of seating
 - No ADA access
- Resident/Pedestrian perception of high vehicle speed
- Concentration of bicyclist collisions with vehicles
- Concentration of pedestrian collisions with vehicles

The report provides a detailed description and illustrations for each strategy that is recommended. The following solutions are recommended for the Dewey Avenue Corridor:

On-street

Recommendations

- Bicycle boulevards
- Bicycle boxes
- Bicycle lanes/space
- Curb extensions
- High visibility crosswalks
- Refuge islands
- Road diet
- Signage and signalization changes

Off-Street

Recommendations

- ADA-accessible bus stops
- Bicycle lockers
- Bicycle racks
- Sidewalk improvements
- Buffer areas
- Building changes
- Pedestrian-scale lighting
- Shared-access driveways
- Sidewalk amenity zone
- Coordinate with EBP
- Ped/bike-oriented parking

Programs & Policies

- Access management overlay district
- Bike/ped supportive code language
- Education programs
- Maintenance programs
- Other pedestrians
- Program effectiveness measures
- Residential speed watch program
- Security enhancements

Phasing and Implementation

The implementation of the recommended traffic calming strategies should be phased based on priority areas. The priority areas to be targeted are those with a high walk score and a low pedestrian LOS. In addition, those areas with a high incidence of pedestrian- and bicyclist-injury crashes should also be a priority in implementation.

High Priority Areas

- Ridge to Eastman (east side)
- Eastman to Velox (east side)
- Barnard to Shady Way (east side)
- Latta to Rumson (west side)
- Rumson to McGuire (west side)
- Velox to Ridge (west side)

The following locations have lower walk scores but also have low pedestrian LOS and should be considered next in terms of priority:

- Winchester to Bennington (east side)
- McGuire to Brookridge (west side) – this stretch spans several blocks
- Briarcliff to Maiden (west side)
- Beaumont to Dalston (west side)

The phasing of some of the physical improvements is contingent on the implementation of the Road Diet. That is, changes within the travel lanes, such as a bicycle lane, cannot happen until the Road Diet is approved and implemented. In addition, some of the recommendations will be most effective in conjunction with educational programs (e.g. bicycle boulevards). The following lists identify the priorities and phasing of the recommended improvements. Table 10 is an implementation matrix that identifies the precise locations of each recommended corridor improvement.

On-Street Recommendations

High Priority, Short-Term

- Road Diet with bicycle lanes/shoulders
- High Visibility Crosswalks
- Share the Road signs
- Leading Pedestrian Intervals
- Pedestrian Countdown signals
- Bicycle Boulevards

High Priority, Long-Term

- High Visibility Crosswalk with curb bump-outs
- High Visibility Crosswalk with refuge island and curb bump-outs

Off-Street Recommendations

High Priority, Short-Term

- New Sidewalks and Sidewalk Improvements in high priority areas
- Bicycle Racks at Destinations
- Benches and Resting Points

High Priority, Long-Term

- Bicycle Lockers
- Pedestrian & Bicycle-Oriented Parking Lots

- Shared-Access Driveways
- Sidewalk Amenity Zone

Program and Policy Recommendations

High Priority, Short-Term

- Educational Programs
- Program Effectiveness Measures
- Maintenance Programs

High Priority, Long-Term

- Access Management Overlay District
- Pedestrian/Bicycle Supportive Code Language

The implementation matrix also details the priority, timing, location, regulatory approvals needed and the responsible parties for each of the recommended strategies.

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A. Background and Purpose of Study

The Town of Greece, over the past thirty years, has completed several studies of the Dewey Avenue corridor. The first corridor study, completed in 1980, focused on making the commercial districts more attractive to shoppers, and improving the relationship between the commercial areas and adjacent residential neighborhoods. Many of the recommendations of this study were implemented in the 1980s and 1990s.

In 2001, the Town completed an update of their Community Master Plan. In order to implement the recommendations contained in this update, the Greece Town Board adopted a new Zoning Ordinance and Official Zoning Map in 2003. However, no major changes were made in the Dewey Avenue area because the Master Plan Update recognized Dewey Avenue as an area with special characteristics that was in need of further study, and the Town Board did not want to delay the overall, town-wide zoning effort. As a result of recommendations made in the Master Plan Update, the Town Board formed a task force to examine the existing conditions in the Dewey Avenue area and recommend courses of action to take in order to preserve and enhance the corridor's vitality.

In the 2006 Interim Development Law, the Town Board identified the need to formulate new and unique zoning standards that would be particular to the Dewey-Stone Road Corridor. Such new standards would be intended to preserve the unique historical, developmental, and structural characteristics of this corridor and the Dewey Avenue area in general, and to encourage future development in the area that is sensitive to preserving these historical, developmental, and structural characteristics. In order to protect the public interest, the Town Board used this law for an interim period to limit non-single family residential construction on land in the Dewey-Stone Corridor.

During that time, the Dewey Avenue Corridor Study was initiated in 2006. The Town is experiencing development along the corridor that does not support the vision for this area that is held by local residents. The community anticipates further development, particularly in the commercial districts, and would like to ensure that any future development strengthens community character. Instead of an update of the earlier study, the Town wanted a much more comprehensive and in-depth effort to re-evaluate Dewey Avenue. The Dewey Avenue Corridor Study summarizes the planning efforts designed to create a more comprehensive work plan for preserving and revitalizing this area.

With the completion of the Dewey Avenue Corridor Study, the Town of Greece is eager to build upon the community support and public awareness that the Study now enjoys. To continue this momentum, the Town of Greece has already begun to implement some of the study's recommendations, including the installation of pedestrian amenities. The Town determined that the

next step was a feasibility study of traffic calming methods to determine how best to improve the pedestrian experience and lessen reliance on vehicular travel. In pursuit of this goal, Greece (in cooperation with Monroe County DOT) applied for and was awarded funding through the 2008-2009 UPWP to undertake a comprehensive feasibility study.

Subsequent to the submittal of Greece's UPWP application to the Genesee Transportation Council (GTC), the City of Rochester inquired whether the Town of Greece would consider an extension of the study area to include the portion of Dewey Avenue lying between Ridge Road West and the Greece town line. Recognizing the interconnectedness and similarities between its segment of Dewey Avenue and the segment proposed for inclusion by the City, the Town, with approval from the GTC, agreed to expand the traffic calming study's scope. With the City of Rochester as a project participant, the expanded version of the study was approved by the GTC for funding.

The purpose of the traffic calming study is to evaluate the options for reducing the adverse impacts of vehicular traffic on pedestrian circulation within the sections of the Dewey Avenue Corridor included in the study area. The study area consists of portions of the Dewey Avenue Corridor located in the Town of Greece and the City of Rochester, which includes properties on either side of Dewey Avenue from Latta Road on the north to Ridge Road West on the south.

B. Community Involvement

The planning process for this study included public outreach. Local residents and business owners served on the advisory committee, and the general public was invited to two public information meetings.

Committee Meetings:

August 27, 2008 – Representatives from the Town of Greece, the City of Rochester, EDR, SRF, GTC, and Monroe County DOT convened for a project kickoff meeting at the Town Hall in Greece. The group reviewed the consultant selection process, recent corridor developments, consultant contracts, GTC oversight, project timetable, stakeholders/committee membership, the scope of services, deliverables, and billing. The group also discussed existing relevant plans and studies, as well as locations where a road diet has been employed successfully in and around the study area.

December 5, 2008 – Representatives from the Town of Greece, the City of Rochester, EDR, SRF, GTC, Monroe County DOT, and NYSDOT met for the first Technical Committee meeting. The consultants gave a presentation that summarized the inventory of existing conditions. The corridor was discussed relating to: character zones, user groups, road width, traffic volumes, Level of Service for both sidewalks and crosswalks, and walk scores. The group discussed various issues, such as on-road bicycle facilities, snow storage and the formation of the Advisory Committee. The timing and content of the first public meeting was also discussed.

August 17, 2009 – Representatives from the Town of Greece, the City of Rochester, EDR, SRF, GTC, Monroe County DOT, NYSDOT, Town of Greece Planning Board, Northgate Neighbors, and Dewey Avenue Corridor businesses met for an Advisory Committee meeting. The consultants reviewed the preliminary inventory and analysis report, MCDOT's Road Diet, the issues summary, alternatives and recommendations, the public meeting agenda, and the project timeline. The group discussed various topics, such as senior access to transit, use of the corridor by youth, business parking requirements and curb cuts, and traffic speeds.

March 3, 2010 – Representatives from the Town of Greece, the City of Rochester, EDR, SRF, GTC, Monroe County DOT, NYSDOT, Town of Greece Planning Board, Northgate Neighbors, and Dewey Avenue Corridor businesses met to review the draft recommendations for the corridor. In advance of the public meeting, the consultants provided an overview of the inventory and analysis, the issues summary, and the alternatives and recommendations. The group discussed various topics, such as access management and the feasibility of recommended strategies that are new to this region, such as bicycle boxes.

Public Information Meetings:

September 28, 2009 – The first public information meeting was well attended by community members. The meeting provided information about the overall project, the inventory process, main issues, and next steps through the following tools: a handout, a looped PowerPoint presentation, and a series of display boards. Stations were set up displaying corridor maps and identified issues of concern. Community members were asked to provide feedback at the stations and via the handout. Appendix A provides a summary of the public comments compiled from the meeting. The consultants were available to answer questions, review material, and solicit input from the community members.

April 26, 2010 – The second public information meeting was also well attended by community members. The meeting provided information about the overall project, the inventory and analysis process, main issues, corridor recommendations, and implementation steps through the following tools: a handout, a looped PowerPoint presentation, and a series of display boards. Community members were asked to provide feedback on comment sheets. Appendix A provides a summary of the public comments compiled from the meeting. The consultants were available to answer questions, review material, and solicit input from the community members.

C. Relationship to Other Plans and Studies

The Dewey Avenue Corridor Traffic Calming Study builds on the following previously completed planning initiatives in the Town of Greece and the City of Rochester:

Dewey Avenue Mixed-Use Zoning District Planning Initiative

In 2009, the Town of Greece commenced an initiative to implement zoning modifications that were identified in the Dewey Avenue Corridor Study. The need for more mixed-use development within the Corridor's commercial districts is an essential part of the land use vision. To help achieve the desired corridor character, the Town intends to develop a new mixed-use zoning district for the Dewey-Latta, Northgate Plaza, and Dewey-Stone commercial nodes. The exact boundaries will be determined in the course of the planning process. Completion of this initiative is anticipated in 2010.

Dewey Avenue Corridor Study

In 2007, EDR completed a corridor study for Dewey Avenue in the Town of Greece. The study, designed to preserve and revitalize the corridor, involved site analysis, community visioning, design guidelines, illustrative examples, planning tools, and recommendations for implementation. The study envisions Dewey Avenue as a vibrant, safe, and active traditional mixed-use neighborhood. The objective was to attain a sustainable and attractive balance of residential, commercial, and institutional land uses. Automobile use is balanced with pedestrian accessibility and safety. The core strategies of the study addressed enhancing commercial vitality, establishing livable neighborhoods, and the preservation of local character. A key recommendation of the study was to study traffic and pedestrian access in the Dewey Avenue Corridor.

Dewey Avenue Community Design Charrette

In 2007, the Rochester Regional Community Design Center (RRCDC) and the Maplewood Neighborhood Association conducted a neighborhood design charrette. Based on the input received from neighborhood residents, the RRCDC prepared design recommendations for the segment of Dewey Avenue between Lexington Avenue and Eastman Avenue. Recommendations were prepared for the area surrounding the Dewey Avenue and Ridge Road intersection, which is included in the study area for the Dewey Avenue Corridor Traffic Calming Study.

Interim Development Law of the Town of Greece, New York

In 2006, pending studies of matters that relate to development or redevelopment of properties along or in the vicinity of Dewey Avenue, this law provided an interim measure to protect the public interest by limiting non-single-family residential construction on land located in the Dewey Avenue-Stone Road Corridor. The law established the Dewey Avenue Interim Overlay District for the purposes of enforcing this law.

Community Master Plan & Generic Environmental Impact Statement for the Town of Greece

This Plan, completed in 2001 by Clough, Harbour and Associates, revised the 1992 Community Master Plan. The plan provides an extensive inventory and analysis of the existing conditions in the Town of Greece, and describes the Town's vision, goals and objectives. The plan also includes recommendations, alternatives and an implementation plan for achieving the community vision.

Rochester 2010: The Renaissance Plan

The 2010 Renaissance Plan, completed in 1998, is Rochester's first citywide comprehensive plan since 1964. The plan incorporates the goals and visions of each of the ten sector plans that were prepared under the Neighbors Building Neighborhoods program. The plan uses three themes to articulate a renaissance of urban revitalization: renaissance of responsibility, renaissance of opportunity, and renaissance of community. The renaissance of responsibility theme seeks to renew Rochester's history of civic activism and philanthropy established by past famous residents, such as Frederick Douglass, Susan B. Anthony, and George Eastman. The renaissance of opportunity theme promotes Rochester as the economic, social, cultural, transportation and institutional center of the county and region. The renaissance of community theme seeks to identify Rochester's downtown as a place that will be redeveloped and perceived as the region's Center City with an exciting mix of housing, retail, services, cultural venues, entertainment and night life. Based on the three themes, the Renaissance Plan identifies eleven goals, or campaigns:

- | | |
|--|---|
| Campaign 1: Involved Citizens | Campaign 7: Quality Service |
| Campaign 2: Educational Excellence | Campaign 8: Tourism Destination |
| Campaign 3: Health, Safety, & Responsibility | Campaign 9: Healthy Urban Neighborhoods |
| Campaign 4: Environmental Stewardship | Campaign 10: Center City |
| Campaign 5: Regional Partnerships | Campaign 11: Arts and Culture |
| Campaign 6: Economic Vitality | |

Transportation Project Report: Design Report, Dewey Avenue, Phase II

This report, prepared in 1992 by the NYSDOT and Monroe County DOT, addresses safety and capacity improvements on a 3.3-mile section of Dewey Avenue in the Town of Greece. The report discusses deficiencies within the existing highway corridor and makes recommendations for improvements to existing pavement areas. Dewey Avenue was rebuilt with 4/5 lanes; the portion in Greece was rebuilt in 1993, and the City section was rebuilt in 1997. (Not addressed in this report,

but important to note: in 2009, the north end of Dewey Avenue, from Denise Road to Latta Road was reduced to 3 lanes with shoulders by restriping.)

Dewey Avenue Parking Facilities, Town of Greece

This study was prepared in 1992 by Erdman Anthony Consulting Engineers for the Monroe County Department of Engineering. The report addressed the existing parking problems on Dewey Avenue in the vicinity of the Dewey-Stone Road business district. The report discusses transportation deficiencies within the existing highway corridor and makes recommendations for improvements.

Dewey Avenue Revitalization Study

This study, prepared in 1980 by Erdman Anthony Associates and Architect John Fayko, was prepared for the Town of Greece. The purpose of this study was to make the three commercial districts located within the corridor more attractive to shoppers and encourage a better relationship between the business districts and the residential neighborhoods that abut them. The study resulted in recommendations for improving vehicular and pedestrian circulation systems, new off-street parking facilities, and the condition of commercial properties. Many of the recommendations were implemented in the 1980s and 1990s.

Regulations, Local Laws and Ordinances

Rules affecting land use and development in the Town of Greece and the City of Rochester, such as Zoning (Chapter 211) of the Town of Greece Code and Zoning (Chapter 120) of the City of Rochester Code.

D. Alternative Transportation Benefits

Transportation accounts for more than thirty percent of U.S. carbon dioxide emissions (West, 2007). Alternative transportation, such as walking, bicycling, and taking public transportation, can help alleviate this problem. According to the American Public Transportation Association (APTA), public transportation in the United States saves approximately 1.4 billion gallons of gasoline and about 1.5 million tons of carbon dioxide annually (APTA, 2007). Walking and bicycling as a means of transportation reduces carbon dioxide emissions even further. Walking, bicycling and public transportation benefit the environment as well as personal health, finances, time, and stress. (See Appendix B for more details on alternative transportation benefits.)

E. Complete Streets

In addition to understanding the opportunities and constraints specific to the study area, we can look to the complete streets concept for solutions. According to the National Complete Streets Coalition (NCSC), complete streets are roadways designed and operated to enable safe, attractive, and comfortable access and travel for all users (NCSC, 2008). Pedestrians, bicyclists, motorists and public transport users of all ages and abilities are able to safely and comfortably move along and across a complete street. Complete streets also create a sense of place, improve social interaction, and generally increase land values of adjacent property.

Complete streets look different in different places. They must fit with their context and to the transportation modes expected (Laplante & McCann, 2008). Although no singular formula exists for a complete street, an effective one includes at least some of the following features (NCSC, 2009):

- sidewalks
- bike lanes
- wide shoulders
- bus pullouts
- special bus lanes
- raised crosswalks

- plenty of crosswalks
- refuge medians
- audible pedestrian signals
- sidewalk bump-outs (bulb-outs)

These features make a street safer and more pleasant for pedestrians and vehicles. A Federal Highway Administration safety review found that designing a street for pedestrian travel by installing raised medians and redesigning intersections and sidewalks reduced pedestrian risk by 28% (NCSC, 2009). The practice of complete streets is not only about allocation of street space, but also about selecting a design speed that is appropriate to the street typology and location, and that allows for safe movements by all road users (Laplante & McCann, 2008). (See Appendix C for more details on complete streets.)

F. Types of Users: Bicyclists and Pedestrians

The Dewey Avenue Corridor is used by bicyclists and pedestrians of all ages and skill levels. Both user groups are described briefly in this section, and in more detail in the next chapter.

Bicyclists

The Federal Highway Administration identifies the following types of bicycle users:

- Group A: Advanced Bicyclists
- Group B: Basic Bicyclists
- Group C: Children

Group A is comprised of advanced or experienced riders who are generally using their bicycles as they would a motor vehicle. Group B is comprised of basic adult and teenage riders who may also be using their bicycles for transportation purposes, but are less confident of their ability to operate in traffic without special provisions for bicycles. Group C bicyclists are children riding on their own or with their parents and require access to key destinations in their community, despite not traveling as fast as their adult counterparts.

Pedestrians

Types of pedestrians include the following:

- Children
- Elderly - generally slower walking speed
- Disabled - mobility, hearing, and visually impaired
- Fitness walkers/joggers
- Shoppers
- Pedestrian Commuters - walking to work or school

The design of pedestrian facilities must address the needs and preferences of each of these types. The pedestrian realm needs to be a place that all community members can use in a safe and convenient fashion.

Town of Greece and City of Rochester Bicyclists and Pedestrians

Bicycling is a growing mode of transportation for recreation and commuting in the Town of Greece and the City of Rochester. The 2000 U.S. Census recorded 94,141 residents living in the Town of Greece and 219,773 living in the City of Rochester.

In 2000, less than one percent of workers over sixteen in Greece biked to work, and approximately one percent of workers walked to work. Less than one percent of workers over sixteen in Rochester biked to work, and approximately six percent of workers walked to work. More than half of the workers over sixteen (23,828 residents in Greece and 52,442 in Rochester) worked within twenty minutes from home. This suggests an opportunity to increase walking and bicycle ridership to work with the proper facilities.

In addition, students are potential walkers and bicycle users. According to the 2000 U.S. Census, 6,263 residents of the Town of Greece, and 12,182 residents of the City of Rochester attended high school. Elementary and middle school students can also walk and bike to school, but may require supervision.

G. Goals and Objectives

The purpose of this traffic calming study is to evaluate the options for reducing the adverse impacts of vehicular traffic on pedestrian circulation within the sections of the Dewey Avenue Corridor included in the study area. The goals of the study, as identified by the Town of Greece and the City of Rochester, include:

- Upgrading pedestrian circulation within the corridor to an equal priority with vehicular movement.
- Minimizing pedestrian conflicts and driver confusion, thus optimizing safety for both.
- Improved livability and quality of life.

This section contains an inventory and analysis of existing conditions in the Dewey Avenue Corridor. The topics discussed in this section include a corridor description, analysis of vehicular and pedestrian conditions, and an assessment of walkability and bikability.

A. Corridor Description

The Town of Greece and the City of Rochester are located in north-central Monroe County. The City of Rochester was officially established in 1817, and Town of Greece in 1822. From the earliest days, the corridor functioned as a thoroughfare for farmers bringing their produce to market in Rochester (Greece Historical Society, 2007). Dewey Avenue begins at Lyell Avenue in the City of Rochester and extends 8 miles to the Town of Greece's northern border near Lake Ontario. The study area covers approximately 3.75 miles from the intersection of Dewey Avenue with Ridge Road West to the intersection of Dewey Avenue with Latta Road. Dewey Avenue is also known as New York State Route 18, a state touring route. However, in the Town of Greece, Dewey Avenue is a Monroe County highway and in the City of Rochester, the road is a city street.

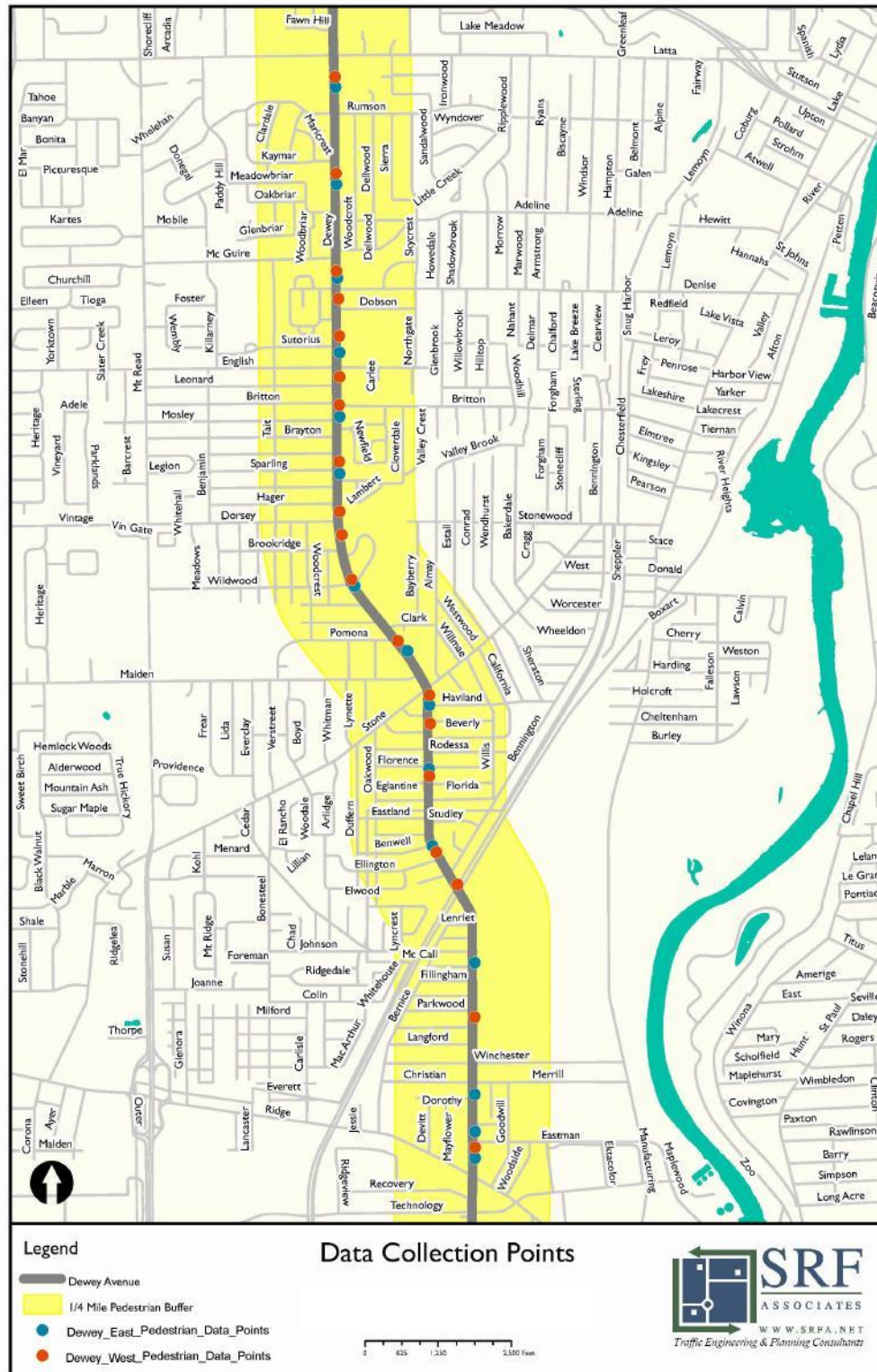
In general, the Dewey Avenue area consists of businesses and residential neighborhoods that are within about one half mile of the street. In the corridor segment within the Town of Greece, these areas contain some of the oldest commercial and residential development found in the Town. This area has special historical, developmental and structural characteristics that distinguish it from other areas of Greece that were developed more recently (Community Master Plan, 2001). The character is more similar in nature to that of the City of Rochester, mostly because it was developed in a similar era. The neighborhoods in the portion of the study area in the Town of Greece fall into the larger boundaries of planning district #2, as defined in the 2001 Town of Greece Community Master Plan. Planning districts are areas that share common problems, issues and opportunities.

Planning district #2 consists predominantly of high density, single-family residential parcels that were developed before World War II. During the late 1800's, Eastman Kodak developed a plant in the southeastern corner of the town, creating new job opportunities and an increase in housing demand (Tomkiewicz & Husted, 1984). In 1920, Sunrise Park was one of the first residential developments along Dewey Avenue, at the southeast corner of the Dewey-Stone intersection. The housing was advertised to potential buyers as the "tract with a thousand peach trees" (Greece Historical Society, 2006). This planning district is part of the early, urbanized part of Greece and is nearly fully developed in a largely grid-like pattern, with few vacant parcels (CMP, 2001).

Historically, most of the commercial development in this area of the Town and the City was concentrated along Dewey Avenue and Ridge Road. Today, Ridge Road is a more active commercial corridor, while Dewey Avenue primarily serves neighborhood and community markets. The Community Master Plan characterizes the area as one that faces the impact of commercial uses through increased traffic, increased runoff from large parking areas, and a lack of suitable pedestrian facilities. The plan suggests that land use conflicts contribute to the erosion of neighborhood character which, as recent studies show, have encouraged people to move out of established neighborhoods in search of less congested areas.

In the Dewey-Stone area, this commercial pressure has also resulted in the conversion of former residential buildings and lots to commercial uses. Residential uses often adjoin non-residential uses, typically with no transition or buffering between them. When most of the structures in the Dewey Avenue area were built, the standards pertaining to setbacks, parking, lot sizes, building sizes, infrastructure, and other similar elements of development were different than the current standards in the Town.

Figure 1: Data Collection Points

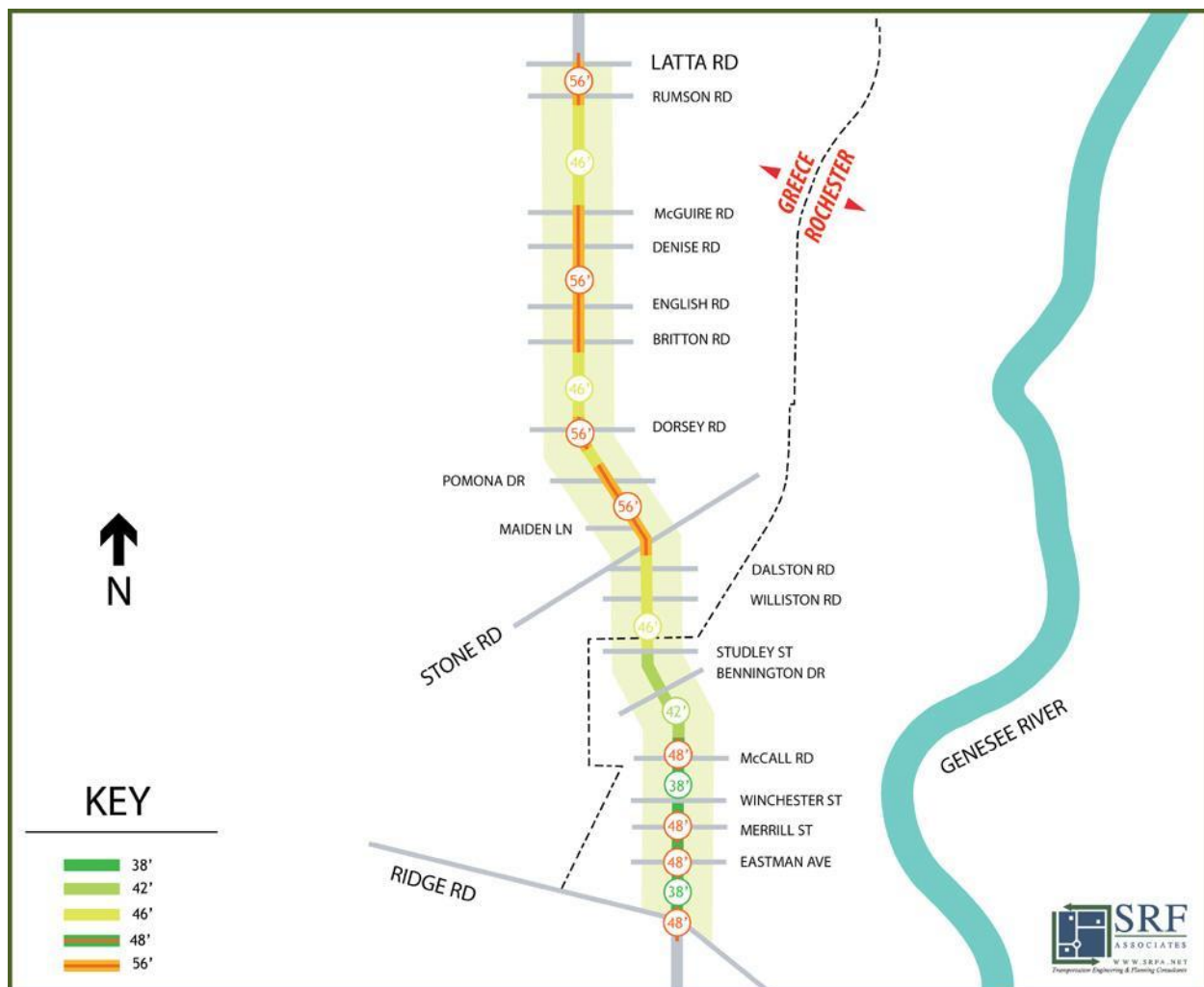


Dewey Avenue was reconstructed in the 1990's, upon completion of the 1992 Transportation Project Report. The section within the Town of Greece was reconstructed in 1993, and the section in the City of Rochester was reconstructed in 1997. During this time, the section of the corridor containing 4 (5) lanes was constructed. In 2009, a road diet occurred between McGuire and Rumson Roads.

1. Road Classification and Width

Dewey Avenue is functionally classified as an urban minor arterial. The posted speed limit is 35 MPH in the Town of Greece, and 30 MPH in the City of Rochester. The characteristics of the roadway, such as dimensions, signalization, and intersection geometry, were documented for the entire corridor. The roadway varies in lane configuration and width along the corridor. In the context zones that are within the City of Rochester, the pavement width varies between 38' and 48', depending on the presence of turn lanes at intersections. In the context zones that are within the Town of Greece, the pavement width alternates between 46' and 56' depending on the presence of turn lanes at intersections. In some segments there is also a two-way left turn lane between major intersections.

Figure 2: Pavement Width



The lane geometry along Dewey Avenue is fairly consistent, aside from the presence or absence of left turn lanes. Outside lane widths in the City portion of Dewey are 10' wide, while they are 12' wide in the Town of Greece. The wider outside lane in the Town of Greece provides extra maneuvering room; however, it is not wide enough to accommodate parked cars or bicyclists.

Generally, when motorists perceive a wide travel lane they tend to increase their speed. Roadway corridors that feature narrow building setbacks and elements such as trees or parallel parking tend to slow traffic, or at least make drivers more cautious. These elements are traffic-calming devices.

2. Character Zones

Dewey Avenue has a distinct variety of land uses and development characteristics along the corridor that can be categorized into ten different character zones. See Figure 3 for a corridor map and Appendix D for photos of existing conditions. (Please note – the character zone numbering corresponds to the *Dewey Avenue Corridor Study* completed in 2007 for the Town of Greece, which did not include the character zones located south of Zone 1 in the City of Rochester.)

Zone A

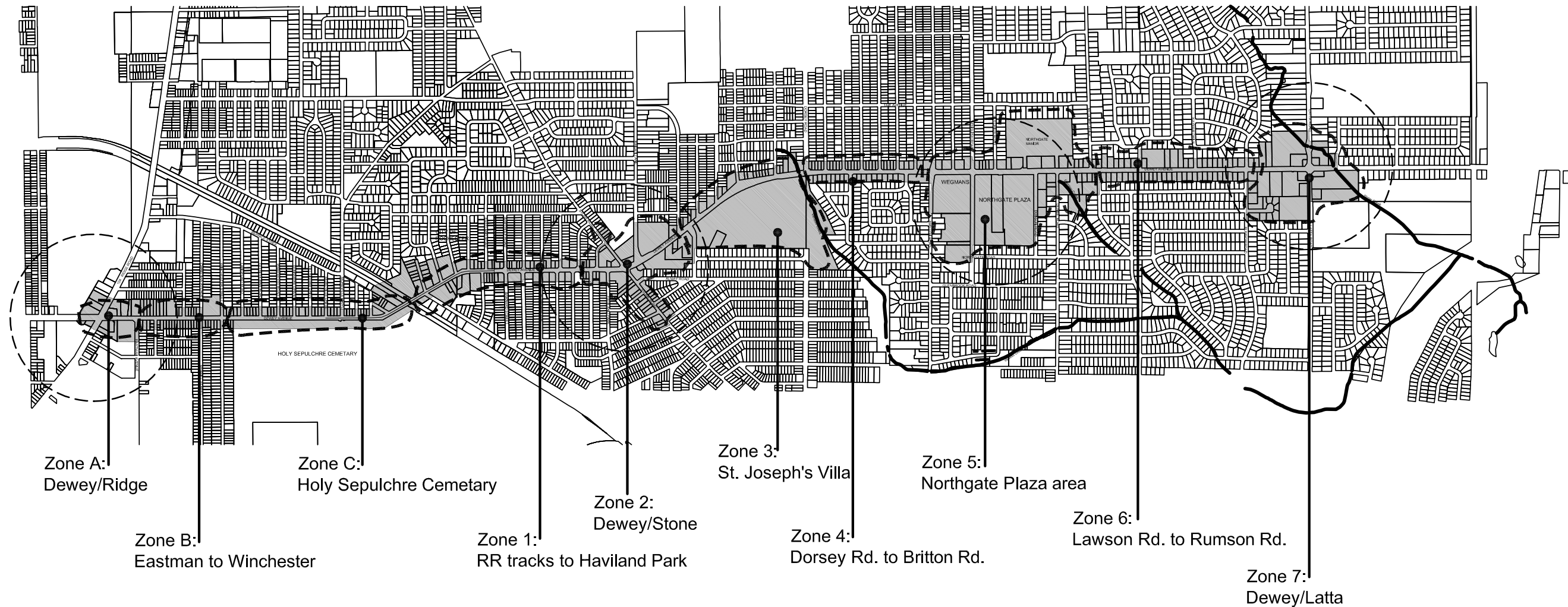
The most southern section of the study area, Zone A encompasses the Dewey Avenue and Ridge Road intersection. The zone ends one block to the north, at Eastman Avenue. The Dewey-Ridge intersection has 6 traffic lanes, narrowing to four lanes beyond the intersection. The area is dominated by commercial and industrial development, including restaurants, bars and shops within walking distance of the intersection. Much of the development in the adjacent areas is related to Eastman Kodak, with Eastman Business Park and Kodak Park nearby. Many Kodak buildings have been demolished in recent years, leaving vacant space and large empty parking lots in the vicinity. Sidewalks in this area are 10' wide and abut the curb.

Zone B

Zone B is located between Eastman Avenue and Winchester Street. The area is primarily residential use, consisting of mostly 2-story framed houses built at the beginning of the 20th century. Between Christian Avenue and Winchester Street, the United Methodist Wesleyan Church sits on a large, well-maintained property on the western side of Dewey. Small commercial properties exist at the north and south edges of the zone. To a pedestrian, the four lanes of traffic may appear to move quickly through this section of the corridor, despite being somewhat buffered by a tree lawn and a few street trees. The cross streets that connect to Dewey are pedestrian friendly, with sidewalks, street trees and attractive street lighting on both sides.

Zone C

Zone C is located between Winchester Street and the City/Town line. The area is dominated by Holy Sepulchre Cemetery. The trees and open space of the cemetery are situated on the eastern side of Dewey for virtually the entire stretch of this zone. Trees on the cemetery property add to the attractive character of this area. The cemetery side of the corridor does not have sidewalks, and a large iron fence bounds the cemetery perimeter. On the western side of Dewey is a mixture of single-family homes and small businesses. Cross streets in this area, such as Langford Road, are also fairly pleasant. The character changes somewhat when Dewey Avenue crosses the railroad tracks, and the cemetery ends. The character past the railroad tracks consists of a mix of residential and commercial buildings, similar to the character found in the adjacent sector, Zone 1.



DEWEY AVENUE CORRIDOR TRAFFIC CALMING STUDY

City of Rochester and Town of Greece, Monroe County, New York

Figure 3 - Character Zones

Note: The zone numbers in this figure correspond with Zones 1 - 7 that were identified in the Town of Greece Dewey Avenue Corridor Study. Zones A, B, and C, which are located in the City of Rochester, were added for the Traffic Calming Study. Their location south of Zone 1 necessitated a different identifier than a number, since the numbers would be out of order.

Zone One

This section of Dewey Avenue can be found between the City/Town line and Haviland Park. Within this zone, a mix of residential and commercial uses exists. Commercial development is close to the street in comparison to other commercial development along Dewey Avenue. Many of the residential structures have been converted to commercial use.

Zone Two

Moving north along the corridor, the Dewey-Stone area is the next distinct zone, located at the intersection of Dewey Avenue, Stone Road and Maiden Lane. This area is almost exclusively small-scale commercial development, with drug stores, restaurants and gas stations. A significant landmark in this area is the St. Charles Borromeo Roman Catholic Church complex, which includes both the current church building and the old church structure, which is now used for a parish center. This intersection is now known as “Dewey-Stone”, but was formerly known as “Barnard”.

Zone Three

The open, graceful campus of St. Joseph’s Villa defines the next zone along the corridor. St. Joseph’s Villa helps at-risk youth overcome emotional and behavioral challenges, and is situated on a campus that was previously used as a vegetable and flower bulb farm by Vick Quality Seeds. St. Joseph’s Villa contains some of the oldest trees, most attractive architecture, and well-maintained grounds along the Dewey Avenue corridor. On the western side of the street are well-maintained residences fronted by a large tree lawn where the road curves.

Zone Four

Zone four begins near Veness Creek and Dorsey Road, and is comprised of a residential area that continues along Dewey up to Kyoto Japanese Restaurant and the HSBC bank at Britton Road. This residential area has a more varied collection of architectural styles than the other residential zones along the corridor, and the houses are situated closer to the street than in other residential sectors.

Zone Five

Zone five is located between Britton and Denise Road. This area contains a variety of large and small commercial uses, including a Wegman’s supermarket and Northgate Plaza. Discount retailer Big Lots currently anchors Northgate Plaza and is flanked by a number of smaller commercial spaces, several of which are currently vacant. (A Wal-Mart store is planned for Northgate Plaza, which will replace Big Lots and overhaul the plaza.) On the western side of Dewey Avenue, across from the Wegman’s supermarket and Northgate Plaza, are a number of smaller commercial businesses. These smaller businesses, which include Goodyear, Advance Auto Parts, Wendy’s, Kwik Fill, and Dunkin’ Donuts, are sited closer to the street than Wegman’s and Northgate Plaza, which are separated from the corridor by large parking areas.

Zone Six

North of this major commercial area, zone six contains another residential area. Near McGuire Road, a well-maintained residential zone begins and continues on to Rumson Road. The homes located in this area are small, and set back a bit further from the street than in other residential areas along Dewey Avenue. Aldersgate United Methodist Church is also located in this segment of the corridor. During the course of the traffic calming study, a road diet was implemented by the Monroe County DOT in this area of the corridor.

Zone Seven

The final zone along Dewey Avenue is the Dewey-Latta area. Between Rumson and Latta Roads, the uses along Dewey Avenue are exclusively commercial. Several plazas can be found in this sector, as well as some chain stores and restaurants, such as Rite Aid and Burger King. The plazas and businesses in this area are well maintained, but have deep setbacks and large amounts of asphalt. Rite Aid Pharmacy, which is situated on the southwest corner of the Dewey-Latta intersection, is particularly unfriendly to pedestrians because of the lack of windows on the sides of the building that face Dewey Avenue and Latta Road.

3. Pedestrian Generators

Many pedestrian generators (destinations that are frequented by pedestrians) exist along the Dewey Avenue Corridor. These pedestrian generators are a fairly typical mix for an urban-suburban arterial. They include, but are not limited to:

- Retail plazas of various sizes, which include Northgate Plaza, medium-sized strip retail plazas near Latta, Ridge, and Stone, as well as smaller ones throughout the corridor;
- Schools, including St. Joseph's Villa, and others within close proximity;
- The Barnard Crossing branch of the Greece Public Library;
- The post office north of Ridge Road;
- Churches, including Bethany Presbyterian Church, Covenant Presbyterian Church, Wesley United Methodist Church, Dewey Avenue Presbyterian Church, Church of Christ (Lawson Rd), and Aldersgate United Methodist Church
- Single- and multi-family residential

These land uses are prime examples of pedestrian generators. It is important that residents and visitors are able to walk to and between these corridor destinations. Figure 4 illustrates the existing linkages located along the Dewey Avenue Corridor. Recognizable linkages on the Dewey Avenue Corridor include the paths that connect:

- | | |
|-------------------------------|---------------------------------|
| - Retail to Retail | - Neighborhoods to the Corridor |
| - Schools to Churches | - Schools To Retail |
| - Schools to the Library | - Churches to Retail |
| - Churches to the Library | - Retail to the Library |
| - Churches to the Post Office | |

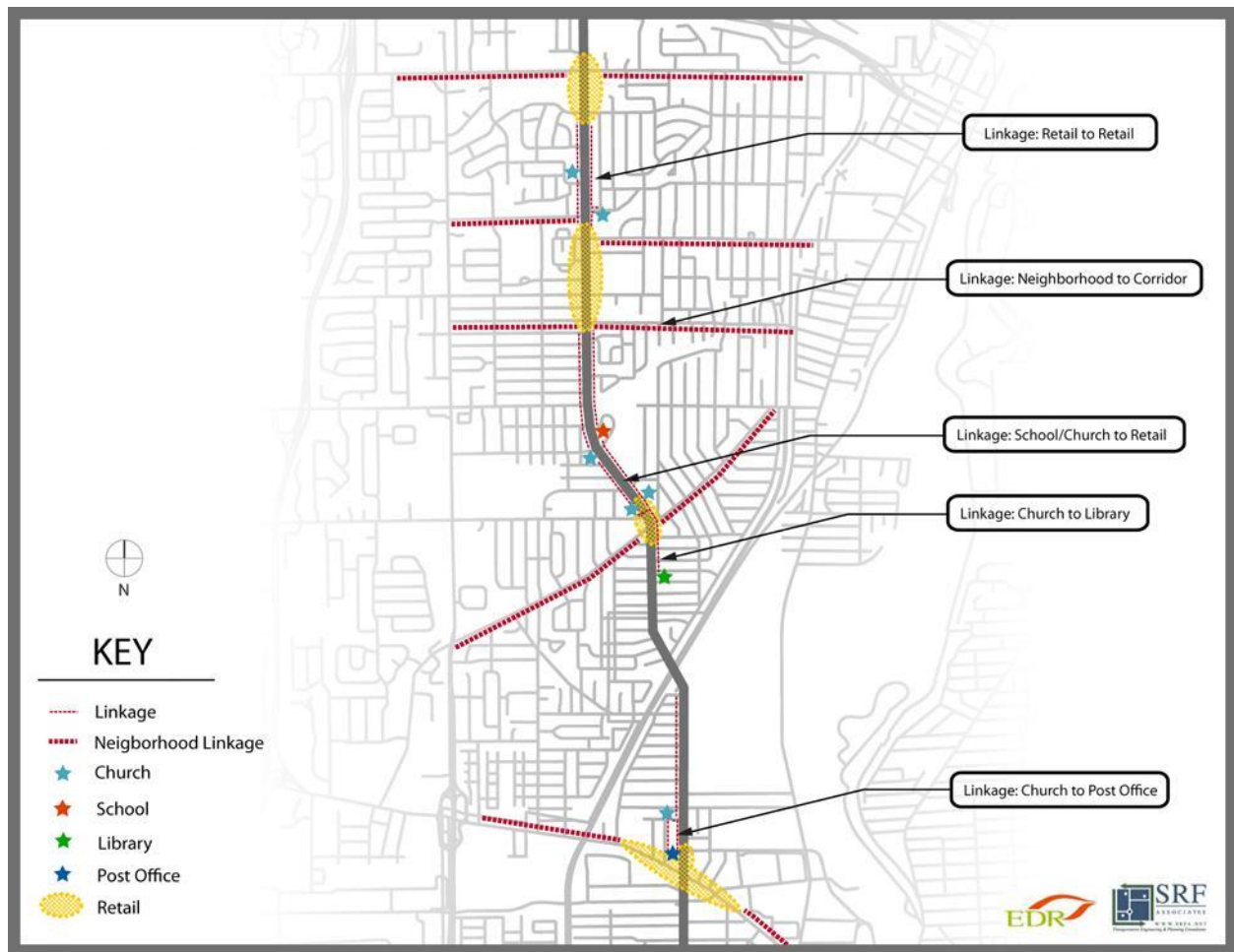
Strong pedestrian connections between these neighborhood destinations are what sustain a thriving pedestrian environment. Priority should be given to the connective paths identified in the linkage assessment as prime locations for pedestrian realm and crossing facility improvements.

4. Public Transit

Public transit removes automobiles from the road, and accounts for a component of pedestrian traffic between bus stops and destinations. Three Regional Transit Service (RTS) bus routes serve the Dewey Avenue Corridor. Route 10 "Dewey", travels back and forth between downtown Rochester and the intersection of Dewey Avenue and Latta Road. The route follows Dewey for most of the way and also makes two loops onto side roads. Route 14 "Ridge Road" travels along Ridge Road between Greece and Irondequoit, with loops to downtown Rochester. This route provides an east-west connection to the southern end of Dewey Avenue. Route 15 "Latta" also travels between downtown Rochester and the Dewey/Latta intersection, but has a more complex series of loops than

Route 10. All three bus routes travel through the study area on a regular basis. Figure 5 shows the location of bus stops along the Dewey Avenue Corridor.

Figure 4: Destinations and Linkages

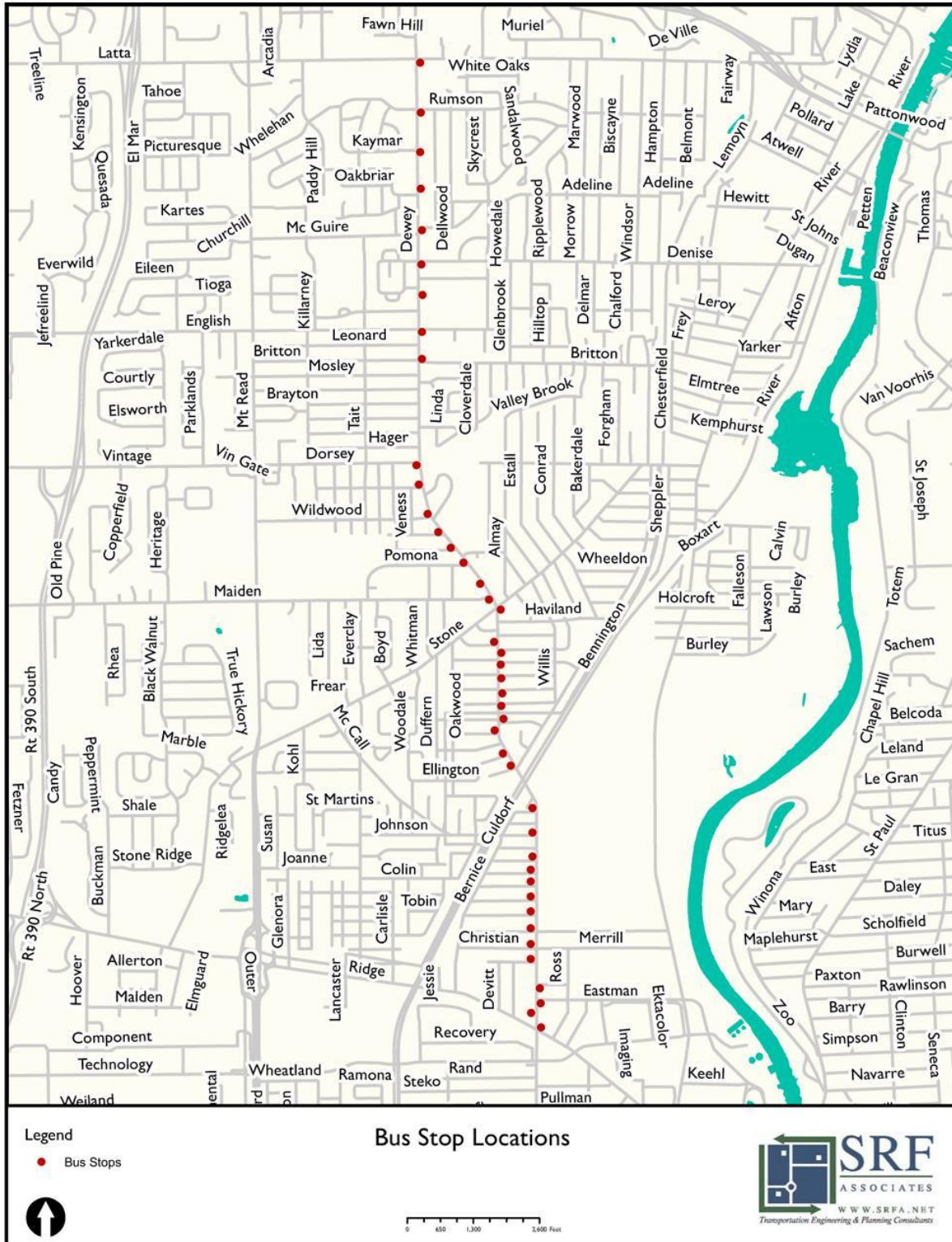


5. Historic and Scenic Features

Historic and scenic features along the corridor are varied. The southern end of the corridor offers distinctive views of Kodak Park, which is an important piece of the history of both the City of Rochester and the Town of Greece. Currently, the views to Kodak Park from Dewey Avenue occur across an expanse of underutilized parking areas, but the space, if redeveloped, offers interesting possibilities for improved views.

In other places along the corridor, Dewey Avenue runs adjacent to scenic open space areas. Two examples of this are St. Joseph's Villa and Holy Sepulchre Cemetery. The mature vegetation at these properties provides an attractive green edge in an otherwise fairly developed corridor.

Figure 5: Bus Stop Locations



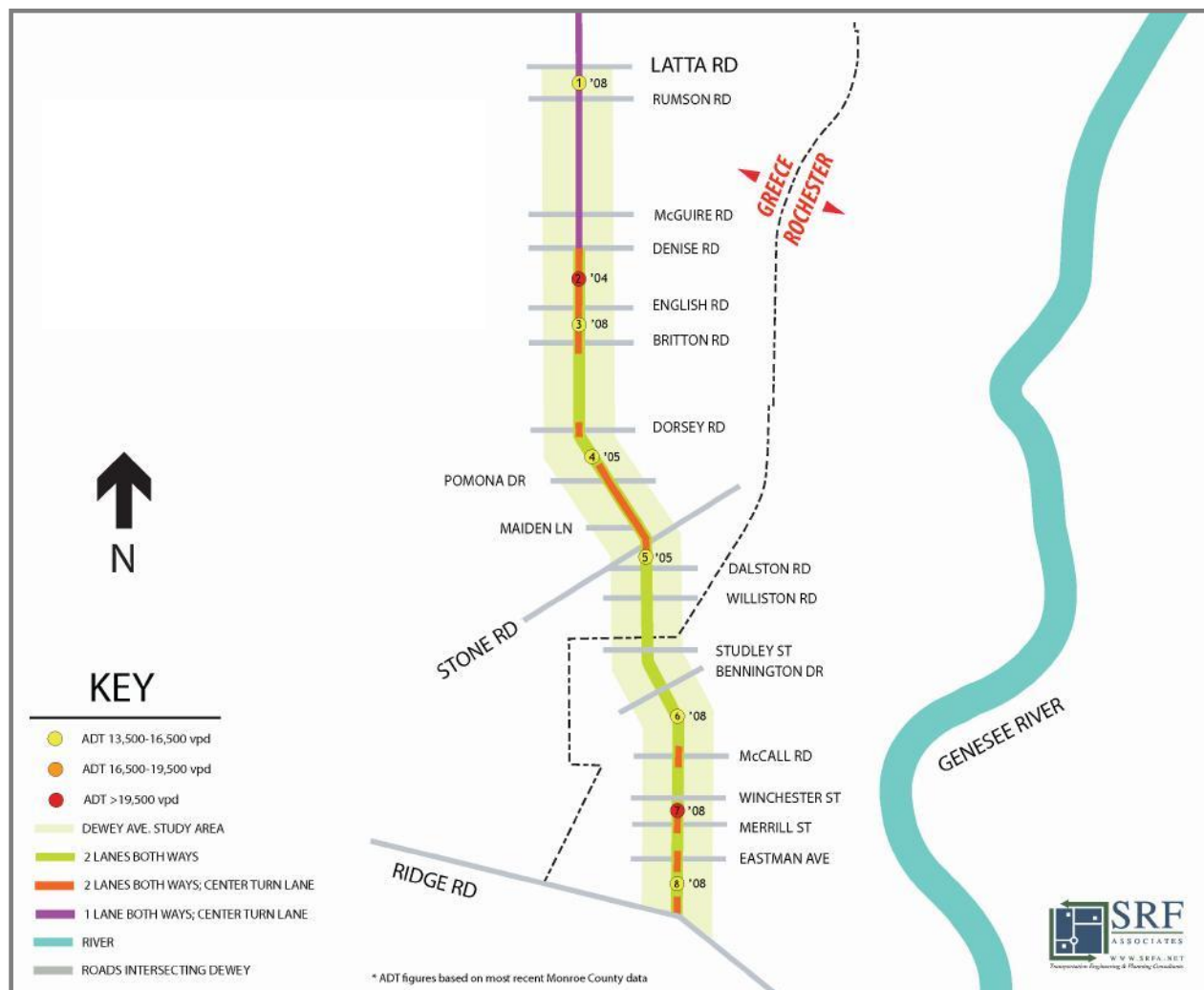
B. Vehicular Inventory and Analysis

The following section details the existing traffic volume, vehicular capacity analysis, projected traffic volume, and provides a safety evaluation for the Dewey Avenue Corridor.

1. Existing Traffic Volume

Weekday AM (7:00-9:00AM) and PM (4:00-6:00pm) vehicular turning movement count volumes and pedestrian crossing volumes, as well as hourly machine recorded vehicular counts at several locations throughout the study area were obtained from the Monroe County Department of Transportation (MCDOT). The data varied in age and where necessary, older data were updated. SRF collected updated turning movement count data at four intersections (Latta Road, Maiden Lane, Stone Road, and McCall Road) within the study area on December 11, 2008, January 21, 2009 and January 22, 2009. This data can be seen in Figure 7, Existing Traffic Volumes.

Figure 6: Average Daily Traffic Volume



Data was also collected on the signal timing and phasing at each of the signalized intersections along the Dewey Avenue Corridor. This information was necessary to calibrate the traffic operations model used for analysis of the study area. This data can be seen in Appendix E, *Collected Traffic Data*, available upon request.

2. Vehicular Capacity Analysis

The capacity analysis data collected was used to assess the quality of vehicular traffic flow for the existing AM and PM commuter peak hour conditions at the signalized intersections in the study area. Two measures of effectiveness are used, Level of Service (LOS) and Intersection Capacity Utilization (ICU). Capacity analysis is a technique used for determining a measure of effectiveness for a section of roadway and/or intersection based on the number of vehicles during a specific time period. A LOS is calculated to provide an indication of the amount of delay that a motorist experiences while traveling along a roadway or through an intersection. Since motorists experience the most delay at intersections, the capacity analysis specifically focuses on intersections.

Six Levels of Service are defined for analysis purposes. They are assigned letter designations, from "A" to "F", with LOS "A" representing operating conditions with the least time delay. LOS "F" is the least desirable operating condition where longer delays are experienced by motorists. Suggested ranges of service capacity are included in Appendix E, *Collected Traffic Data*, available upon request.

The standard procedure for capacity analysis of signalized and unsignalized intersections is outlined in the *2000 Highway Capacity Manual* (HCM 2000). Traffic analysis software, SYNCHRO 7.0 (Build 761), which is based on procedures and methodologies contained in the HCM 2000, was used to analyze operating conditions at study area intersections. The procedure yields a LOS based on the HCM 2000 as an indicator of how well intersections operate. Existing operating conditions are documented in the field and modeled using traffic analysis software. The traffic analysis models are calibrated based on actual field observations, and included the 2009 lane changes near Latta Road.

The Intersection Capacity Utilization (ICU) can be thought of as an intersection wide volume-to-capacity ratio. ICU is well suited to the purpose of transportation planning studies. The intended applications for ICU are traffic impact studies, future roadway conceptual design, and congestion management programs. The ICU is not intended for operations or signal timing design. The primary output from ICU is analogous to the intersection volume-to-capacity ratio. The ICU does not provide a complete picture of intersection performance, but it does provide a clear view of the intersection's volume related to its capacity. A summary of LOS/ICU calculations for the signalized study area intersections is presented in Table 1.

Table 1: Existing Level of Service and Intersection Capacity Utilization

INTERSECTION	EXISTING CONDITIONS	
	AM	PM
Dewey Avenue /Latta Road		
Eastbound – Latta Road	B	B
Westbound – Latta Road	A	A
Northbound - Dewey Avenue	C	C
Southbound - Dewey Avenue	D	C
Overall LOS (Delay in sec/veh) ICU	C(21.2)/48.7%	C(21.4)/62.2%

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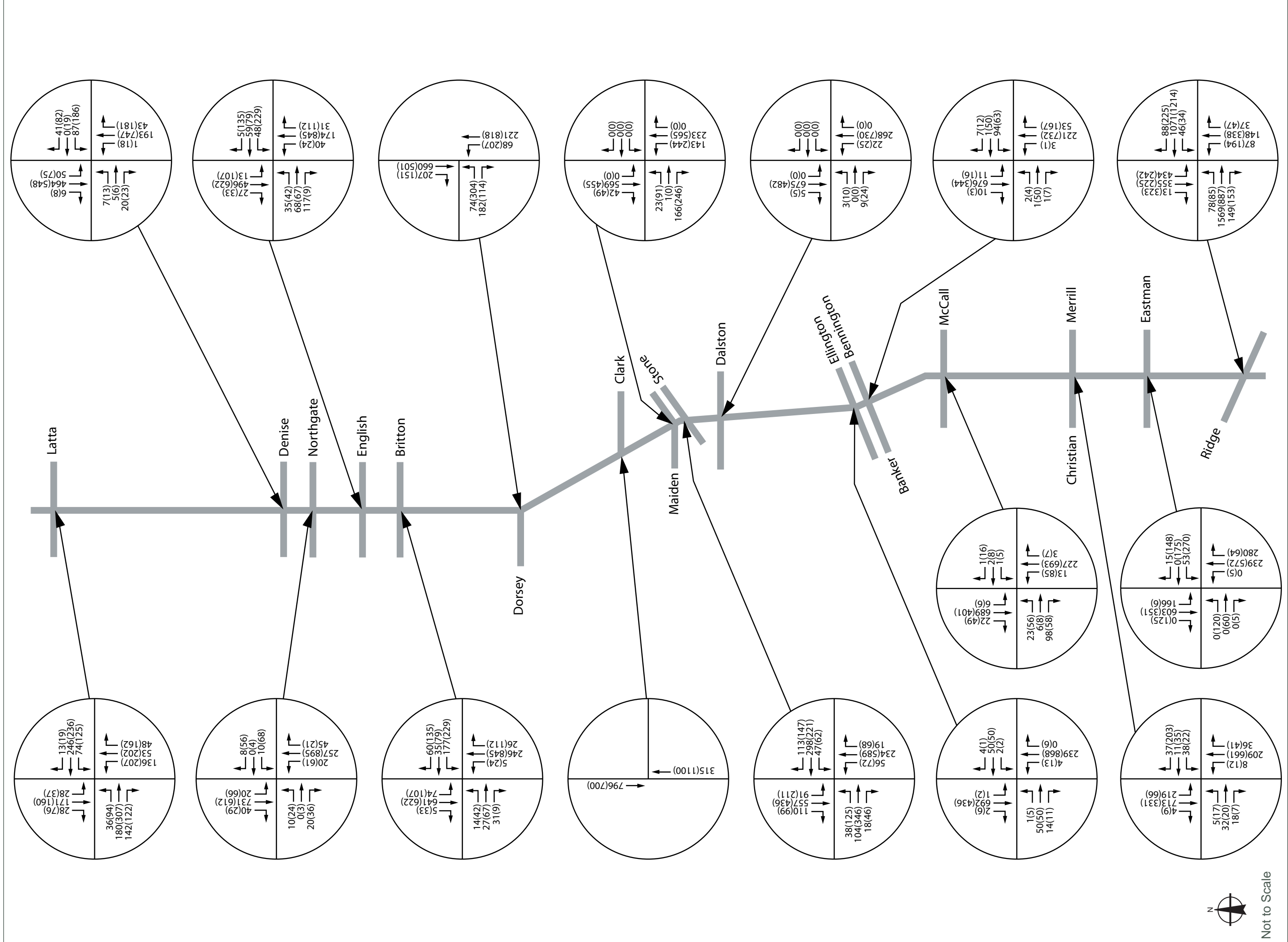
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<i>Dewey Avenue /Denise Road</i>		
Eastbound – Denise Road	B	B
Westbound – Denise Road	B	C
Northbound - Dewey Avenue	A	A
Southbound - Dewey Avenue	A	A
Overall LOS (Delay in sec/veh) ICU	A(5.7)/49.5%	A(9.3)/71.9%
<i>Dewey Avenue /Northgate Plaza</i>		
Eastbound – Northgate Manor	A	B
Westbound – Northgate Plaza	B	C
Northbound - Dewey Avenue	A	A
Southbound - Dewey Avenue	A	A
Overall LOS (Delay in sec/veh) ICU	A(2.0)/35.9%	A(4.0)/62.0%
<i>Dewey Avenue /English Road</i>		
Eastbound – English Road	B	B
Westbound – English Road	B	C
Northbound - Dewey Avenue	A	B
Southbound - Dewey Avenue	A	B
Overall LOS (Delay in sec/veh) ICU	A(8.2)/56.2%	B(15.4)/63.9%
<i>Dewey Avenue /Britton Road</i>		
Eastbound – Britton Road	A	B
Westbound – Britton Road	B	C
Northbound - Dewey Avenue	A	B
Southbound - Dewey Avenue	A	A
Overall LOS (Delay in sec/veh) ICU	A(7.0)/56.9%	B(15.6)/63.9%
<i>Dewey Avenue /Dorsey Road</i>		
Eastbound – Dorsey Road	B	C
Northbound - Dewey Avenue	A	A
Southbound - Dewey Avenue	A	B
Overall LOS (Delay in sec/veh) ICU	A(5.1)/56.5%	B(13.5)/57.0%
<i>Dewey Avenue /Maiden Lane</i>		
Eastbound – Maiden Lane	B	B
Westbound – Maiden Lane	NA	NA
Northbound - Dewey Avenue	A	A
Southbound - Dewey Avenue	C	C
Overall LOS (Delay in sec/veh) ICU	B(17.5)/38.3%	B(17.4)/42.7%
<i>Dewey Avenue /Stone Road</i>		
Eastbound – Stone Road	C	D
Westbound – Stone Road	A	C
Northbound - Dewey Avenue	B	C
Southbound - Dewey Avenue	C	D
Overall LOS (Delay in sec/veh) ICU	B(18.6)/61.5%	C(30.1)/71.0%

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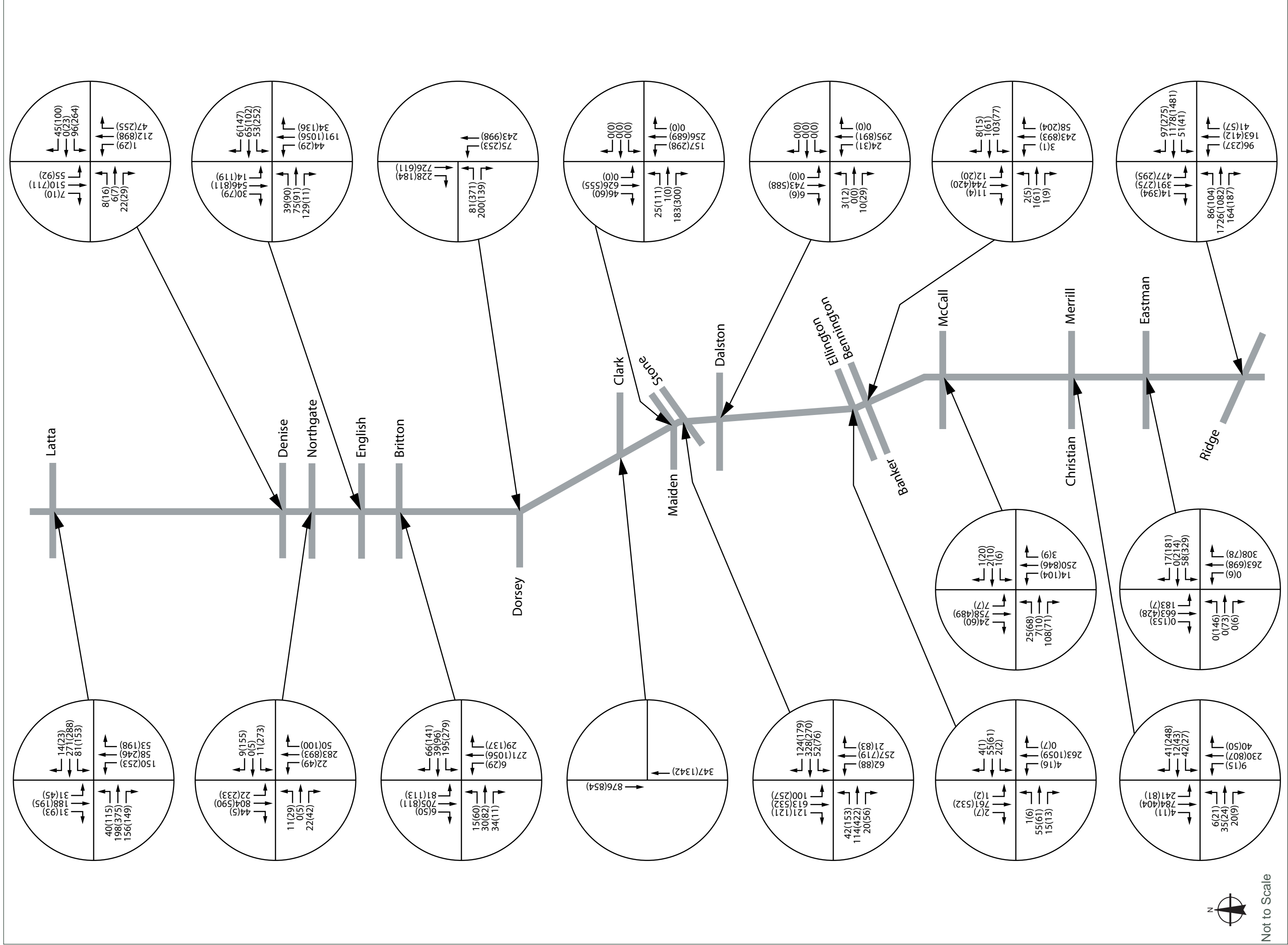
Dewey Avenue /Dalston Road		
Eastbound – Dalston Road	C	C
Northbound - Dewey Avenue	A	A
Southbound - Dewey Avenue	A	A
Overall LOS (Delay in sec/veh) ICU	A(0.6)/35.9%	A(1.7)/50.0%
Dewey Avenue /Ellington Road		
Eastbound – Ellington Road	B	B
Westbound – Driveway	B	B
Northbound - Dewey Avenue	A	A
Southbound - Dewey Avenue	A	A
Overall LOS (Delay in sec/veh) ICU	A(5.3)/31.6%	A(3.84)/45.4%
Dewey Avenue /Banker Place-Bennington Drive		
Eastbound – Banker Place	B	B
Westbound – Bennington Drive	A	A
Northbound - Dewey Avenue	A	A
Southbound - Dewey Avenue	B	B
Overall LOS (Delay in sec/veh) ICU	A(4.3)/45.8%	A(5.5)/47.0%
Dewey Avenue /McCall Road		
Eastbound – McCall Road	B	B
Westbound – McCall Road	C	A
Northbound - Dewey Avenue	A	A
Southbound - Dewey Avenue	A	B
Overall LOS (Delay in sec/veh) ICU	A(5.0)/35.7%	A(6.2)/46.5%
Dewey Avenue /Christian Avenue-Merrill Street		
Eastbound – Christian Avenue	C	B
Westbound – Merrill Street	C	B
Northbound - Dewey Avenue	A	A
Southbound - Dewey Avenue	A	A
Overall LOS (Delay in sec/veh) ICU	A(5.9)/52.3%	A(7.0)/49.8%
Dewey Avenue /Eastman Avenue		
Eastbound – Eastman Avenue	A	A
Westbound – Eastman Avenue	B	B
Northbound - Dewey Avenue	A	A
Southbound - Dewey Avenue	A	B
Overall LOS (Delay in sec/veh) ICU	A(4.5)/53.3%	B(11.4)/54.1%
Dewey Avenue /West Ridge Road		
Eastbound – W. Ridge Road	B	B
Westbound – W. Ridge Road	C	B
Northbound - Dewey Avenue	D	D
Southbound - Dewey Avenue	D	C
Overall LOS (Delay in sec/veh) ICU	C(28.8)/73.9%	C(25.0)/73.9%



DEWEY AVENUE CORRIDOR TRAFFIC CALMING STUDY

City of Rochester and Town of Greece, Monroe County, New York

Figure 7- Existing Traffic Volumes



DEWEY AVENUE CORRIDOR TRAFFIC CALMING STUDY

City of Rochester and Town of Greece, Monroe County, New York

Figure 8 - Future Traffic Volumes

Analyses of the existing intersections indicate that all of the intersections studied are currently operating at level of service “C” or better on all approaches during the peak periods, with the following exceptions that currently operate at LOS “D”:

- Dewey Avenue southbound at Latta Road during the AM peak hour;
- Stone Road eastbound and Dewey Avenue southbound at Stone Road during the PM peak hour; and
- Dewey Avenue northbound and southbound during the AM peak hour and northbound during the PM peak hour at West Ridge Road.

The ICU results indicate that all of the study intersections are currently operating at less than 65% of their capacity during both peak hours except the Denise and Stone Road intersections during the PM peak hour and the West Ridge Road intersection during both peak hours which are operating at approximately 75% of their capacity. These percentages indicate that there is excess capacity available at these intersections and overall throughout the corridor. This suggests that opportunities may exist for pedestrian and bicycle enhancements without significantly compromising vehicular capacities. These ICU results are for planning level purposes only. Further analysis using the HCM method is necessary before reducing the number of lanes on Dewey Avenue.

3. Future Traffic Volumes

Historical traffic volume growth in the study area and planned developments in the corridor were reviewed and evaluated to determine a growth rate to account for normal increases in area-wide traffic growth. A twenty-year traffic forecast was derived and used for future traffic analyses. Re-development of Northgate Plaza will add approximately 250-300 vehicles per hour (vph) (total both directions) to the through traffic north of Denise Road and south of Britton Road during the PM peak hour. This equates to a growth rate of approximately 1% to 1.3% per year for 20 years.

The Northgate Plaza trip projections were added to the existing traffic at the immediate intersections (Britton to Denise) and a growth rate of 1% per year for 20 years was added to the remainder of the intersections in the Dewey Avenue corridor to account for future growth during the PM peak hour. During the AM peak hour, a growth rate of 0.5% per year for 20 years was added to the morning peak hour traffic to account for growth as the retail uses are not as active during this time period. These growth rates were reviewed and approved by Monroe County Department of Transportation for use in this analysis. Figure 8 shows the 2029 peak hour traffic volumes at the study intersections.

A summary of LOS/ICU calculations for the signalized study area intersections under existing and future (2029) no-build conditions is presented in Table 2.

Table 2: Future Level of Service and Intersection Capacity Utilization

INTERSECTION	EXISTING CONDITIONS		FUTURE NO-BUILD	
	AM	PM	AM	PM
Dewey Avenue /Latta Road				
Eastbound – Latta Road	B	B	B	C
Westbound – Latta Road	A	A	A	A
Northbound - Dewey Avenue	C	C	C	D
Southbound - Dewey Avenue	D	C	D	C

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Overall LOS / Delay in sec/veh /ICU	C(21.2)/48.7%	C(21.4)/62.2%	C(21.8)/52.3%	C(26.7)/73.0%
Dewey Avenue /Denise Road				
Eastbound – Denise Road	B	B	B	B
Westbound – Denise Road	B	C	B	C
Northbound - Dewey Avenue	A	A	A	A
Southbound - Dewey Avenue	A	A	A	B
Overall LOS / Delay in sec/veh /ICU	A(5.7)/49.5%	A(9.3)/71.9%	A(5.4)/48.8%	A(10.0)/79.3%
Dewey Avenue /Northgate Plaza				
Eastbound – Northgate Manor	A	B	A	B
Westbound – Northgate Plaza	B	C	B	C
Northbound - Dewey Avenue	A	A	A	A
Southbound - Dewey Avenue	A	A	A	D
Overall LOS / Delay in sec/veh /ICU	A(2.0)/35.9%	A(4.0)/62.0%	A(2.0)/37.6%	C(24.2)/74.2%
Dewey Avenue /English Road				
Eastbound – English Road	B	B	B	C
Westbound – English Road	B	C	B	C
Northbound - Dewey Avenue	A	B	A	B
Southbound - Dewey Avenue	A	B	A	B
Overall LOS / Delay in sec/veh /ICU	A(8.2)/56.2%	B(15.4)/63.9%	A(8.4)/58.7%	B(19.2)/72.9%
Dewey Avenue /Britton Road				
Eastbound – Britton Road	A	B	A	B
Westbound – Britton Road	B	C	B	C
Northbound - Dewey Avenue	A	B	A	C
Southbound - Dewey Avenue	A	A	A	A
Overall LOS / Delay in sec/veh /ICU	A(7.0)/56.9%	B(15.6)/63.9%	A(7.6)/59.6%	B(18.9)/73.6%
Dewey Avenue /Dorsey Road				
Eastbound – Dorsey Road	B	C	B	C
Northbound - Dewey Avenue	A	A	A	B
Southbound - Dewey Avenue	A	B	A	B
Overall LOS / Delay in sec/veh /ICU	A(5.1)/56.5%	B(13.5)/57.0%	B(6.1)/59.0%	B(15.9)/67.3%
Dewey Avenue /Maiden Lane				
Eastbound – Maiden Lane	B	B	B	B
Westbound – Maiden Lane	NA	NA	NA	NA

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Northbound - Dewey Avenue	A	A	A	B
Southbound - Dewey Avenue	C	C	C	D
Overall LOS / Delay in sec/veh /ICU	B(17.5)/38.3%	B(17.4)/42.7%	C(20.2)/40.8%	C(22.0)/49.9%
Dewey Avenue /Stone Road				
Eastbound – Stone Road	C	D	C	D
Westbound – Stone Road	A	C	B	E
Northbound - Dewey Avenue	B	C	B	B
Southbound - Dewey Avenue	C	D	C	D
Overall LOS / Delay in sec/veh /ICU	B(18.6)/61.5%	C(30.1)/71.0%	B(19.6)/65.7%	D(44.0)/83.7%
Dewey Avenue /Dalston Road				
Eastbound – Dalston Road	C	C	C	C
Northbound - Dewey Avenue	A	A	A	A
Southbound - Dewey Avenue	A	A	A	A
Overall LOS / Delay in sec/veh /ICU	A(0.6)/35.9%	A(1.7)/50.0%	A(0.9)/38.3%	A(2.0)/57.2%
Dewey Avenue /Ellington Road				
Eastbound – Ellington Road	B	B	B	B
Westbound – Driveway	B	B	B	B
Northbound - Dewey Avenue	A	A	A	A
Southbound - Dewey Avenue	A	A	A	A
Overall LOS / Delay in sec/veh /ICU	A(5.3)/31.6%	A(3.84)/45.4%	A(5.5)/33.5%	A(4.0)/54.2%
Dewey Avenue /Banker Place-Bennington Drive				
Eastbound – Banker Place	B	B	B	B
Westbound – Bennington Drive	A	A	A	A
Northbound - Dewey Avenue	A	A	A	A
Southbound - Dewey Avenue	B	B	B	B
Overall LOS / Delay in sec/veh /ICU	A(4.3)/45.8%	A(5.5)/47.0%	A(4.4)/49.1%	A(6.3)/55.0%
Dewey Avenue /McCall Road				
Eastbound – McCall Road	B	B	B	B
Westbound – McCall Road	C	A	C	A
Northbound - Dewey Avenue	A	A	A	A
Southbound - Dewey Avenue	A	B	A	B
Overall LOS / Delay in sec/veh /ICU	A(5.0)/35.7%	A(6.2)/46.5%	A(5.2)/38.6%	A(7.4)/52.3%

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Dewey Avenue /Christian Avenue-Merrill Street				
Eastbound – Christian Avenue	C	B	C	B
Westbound – Merrill Street	C	B	C	B
Northbound - Dewey Avenue	A	A	A	B
Southbound - Dewey Avenue	A	A	A	A
Overall LOS / Delay in sec/veh /ICU	A(5.9)/52.3%	A(7.0)/49.8%	A(6.3)/54.8%	A(8.8)/58.0%
Dewey Avenue /Eastman Avenue				
Eastbound – Eastman Avenue	A	A	A	B
Westbound – Eastman Avenue	B	B	B	B
Northbound - Dewey Avenue	A	A	A	A
Southbound - Dewey Avenue	A	B	A	B
Overall LOS / Delay in sec/veh /ICU	A(4.5)/ 53.3%	B(11.4)/54.1%	A(5.2)/ 53.3%	B(14.0)/ 62.2%
Dewey Avenue /West Ridge Road				
Eastbound – W. Ridge Road	B	B	C	C
Westbound – W. Ridge Road	C	B	B	D
Northbound - Dewey Avenue	D	D	D	D
Southbound - Dewey Avenue	D	C	F	D
Overall LOS / Delay in sec/veh /ICU	C(28.8)/73.9%	C(25.0)/73.9%	D(48.5)/90.1%	D(37.6)/87.3%

Analyses of the study intersections indicate that all of the intersections studied are operating at level of service “C” or better on all approaches during the peak periods under 2029 future no-build conditions with the following exceptions that are projected to operate at LOS “D”:

- Dewey Avenue southbound at Latta Road during the AM peak hour and northbound during the PM peak hour;
- Dewey Avenue southbound at the new Northgate Plaza Wal-Mart driveway during the PM peak hour;
- Dewey Avenue southbound at Maiden Lane during the PM peak hour;
- Stone Road eastbound and Dewey Avenue southbound at Stone Road during the PM peak hour; and
- Dewey Avenue at West Ridge Road: northbound Dewey Ave operates at LOS “D” and southbound Dewey Ave operates at LOS “F” during the AM peak hour, and the westbound, northbound and southbound approaches all operate at LOS “D” during the PM peak hour.

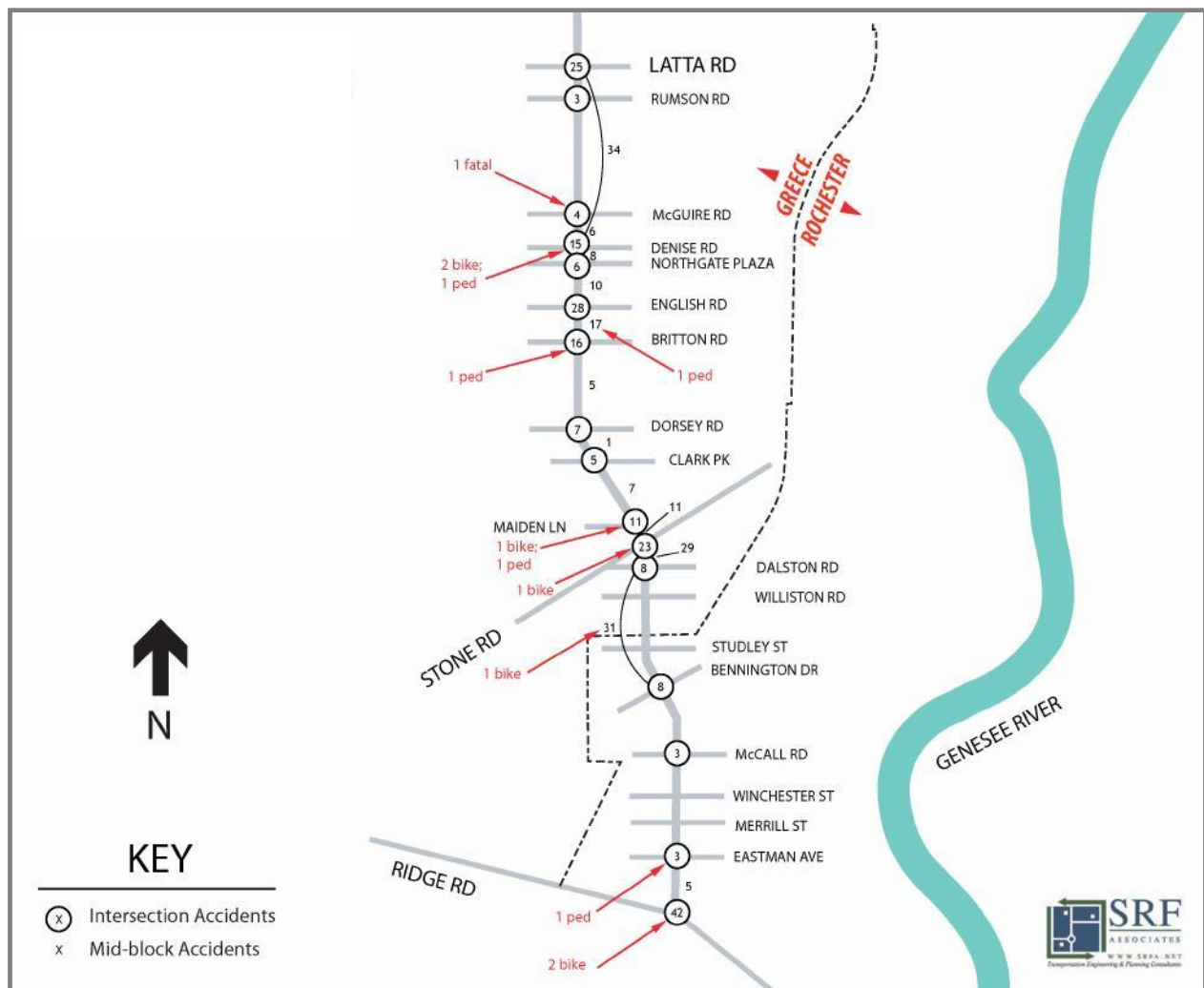
The ICU results indicate that all of the study intersections are projected to operate at less than 65% of their capacity during the AM peak hour except the Stone Road intersection, which is projected to operate at 65.7% under future no-build conditions. During the PM peak hour the intersections are divided into three categories as follows:

- ICU <70%: Dorsey Rd, Maiden Lane, Dalston Rd, Ellington Rd, Bennington Dr, McCall Rd, and Merrill St, and Eastman Ave.
- 70% < ICU < 80%: Latta Rd, Denise Rd, Northgate Plaza, English Rd, and Britton Rd.

- ICU > 80%: Stone Road and West Ridge Road

Based upon the operational analyses and local development patterns, intersections with ICU's greater than 70% may not be capable of accommodating major traffic calming improvements. Intersections with ICU's below 70% have excess vehicular capacity available suggesting that opportunities may exist for pedestrian and bicycle enhancements without significantly compromising vehicular capacities. According to Intersection Capacity Utilization Evaluation Procedures for Intersections and Interchanges 2003 Edition published by Trafficware, intersections with ICU's between 64% and 73% are characterized as "having no major congestion. The majority of traffic should be served on the first cycle." In reviewing the ICU's at intersections throughout the Dewey Avenue corridor, 70% is used to differentiate between intersections that are potential candidates for a road diet. However, it is noted that detailed capacity analyses are required to determine the appropriate geometry at each intersection.

Figure 9: Accidents in the Dewey Avenue Corridor



4. Safety Evaluation

Accident reports were investigated to assess the safety history within the study area. The accident reports reviewed covered a three-year time period from September 1, 2005 through August 31, 2008. During this period, 290 accidents were documented within the study area; comprised of 186 accidents at 15 intersections and 104 accidents in the segments between intersections. 5 accidents involved pedestrians and 7 accidents involved bicycles.

The intersections of Latta, English, Britton, Stone, and Ridge with Dewey Avenue had the greatest number of accidents. Several mid-block segments also had a high number of accidents including Latta to Rumson, Denise to English, English to Britton, Stone to Dalston, and Dalston to Bennington. Vehicular collisions with pedestrians and bicyclists occurred mostly within the Northgate area, Stone Road area, and at the intersection of Ridge Road with Dewey Avenue. Figure 9 identifies accident locations.

C. Pedestrian Inventory and Analysis

Providing safe routes of travel for cars, bicycles, and pedestrians is a responsibility and priority for all communities. Pedestrian safety was evaluated based on factors such as sidewalk width and quality, and the presence of a buffer zone, also referred to as the tree lawn or the furnishings and edge zones. Pedestrian safety factors present in the travelway include crosswalk length and quality, presence or absence of medians, and the type of median.

1. Pedestrian Realm Data

The pedestrian realm is defined as the area of the right-of-way between the roadway and the abutting building facade. The pedestrian realm can extend into private property if the facilities to support pedestrians, such as sidewalks or other amenities are present, and the property owner allows the use of the property for pedestrian use. Businesses often provide amenities for pedestrians to attract interest and enhance safety for pedestrian users. The pedestrian realm often includes:

- Sidewalks
- Buffers that create space between the pedestrian and vehicular traffic
- Plantings or other ornamental features on public or private property
- On-street parking (which also serves as a buffer)
- Street/Pedestrian lighting
- Signage
- Street furniture and amenities (e.g. benches, waste and recycling containers, public art)

Oftentimes, traffic control devices, road signage, and other objects are placed within the pedestrian realm, but may not be intended for the use of pedestrians. Oftentimes, these items are obstructions to the pedestrian. This can be particularly problematic when sidewalks abut the road, which occurs frequently along the corridor.

SRF & Associates (SRF) walked the entire length of the corridor, from Latta Road in the north to Ridge Road in the south, to collect data with the appropriate level of detail. The walk was performed on Thursday, September 25, 2008, between the hours of 9:00 a.m. and 4:30 p.m. SRF collected data pertaining to the pedestrian realm of both the east and west sides of the street on Dewey Avenue, and also measured and documented the conditions of the roadway. Critical variables, documented during the data collection process, were utilized to evaluate how well the Dewey Avenue Corridor serves non-motorized users.

The variables include:

- Sidewalk width/condition
- Buffer width
- Number of street trees
- Crossing facilities (crosswalk dimensions and pedestrian signal operation)
- Benches
- Newspaper and trash receptacles
- Bus stops/shelters
- Pedestrian generators
- Conflict points (i.e. locations where a pedestrian is in direct conflict with vehicular traffic)
- Personal security (the feeling of security from criminal activity)

In addition, an investigation of access driveways, or curb cuts, was performed during the walk of the corridor, and was used in the Pedestrian LOS analyses. Segments that contain numerous access driveways have a high number of conflict points between vehicles and pedestrians (i.e. pedestrians must cross several driveways as they walk along the sidewalk). The segment of roadway between Britton and Denise is of particular concern. Segments with a significant number of conflict points should be further evaluated to determine if access consolidation is feasible and/or appropriate.

2. Grading Scale – Pedestrian Path LOS

A pedestrian LOS was developed for the pedestrian realm on both sides of the roadway along the entire length of the corridor. Using a score rating of 1 to 5, every zone of the Dewey Avenue pedestrian realm was scored based on the pedestrian realm variables described above.

The Australian Method, developed by Nicole Gallin for calculating Pedestrian Levels of Service, was used for analysis purposes in this study. A research paper entitled “Application of Level of Service Methods for Evaluation of Operations at Pedestrian Facilities” published in the *Transportation Research Record* in 2002 compared five different pedestrian Level of Service methodologies. This method was chosen because of the critical pedestrian realm factors that are considered in calculating the LOS score. The Australian Method is focused on safety, as well as the relative comfort and convenience for pedestrians, which the Highway Capacity Manual (HCM) methodology neglects to measure. A national standard does not exist that ranks the quality of the pedestrian environment quite like the Australian Method.

The consultant team, in collaboration with the Advisory Committee, assigned weights to the Pedestrian LOS variables corresponding to their importance in the context of the Dewey Avenue corridor. The following scale of 1 to 5, was used for determining the weight of each variable:

Table 3: Weighting Scale

Weighting Scale	
1	Least important
2	Less important
3	Important
4	More Important
5	Most important

Variables were assigned a specific weight based on the following:

1 - Pedestrian Volume - For this assessment, high pedestrian volumes correlate to a decreased LOS due to congestion and user discomfort. Since the Dewey Avenue Corridor is low intensity urban/suburban in character, and not a bustling downtown core, the presence of other pedestrians will not significantly decrease a users comfort, therefore this variable was assigned a low weight.

1 - Mix of Users - Most of the users observed on the sidewalks of Dewey Avenue were walking (as opposed to skateboarding, rollerblading, etc.). The presence of other non-walking users will not significantly decrease a user's comfort; therefore, this variable was assigned a low weight.

3 - Path Width - Along the Dewey Avenue Corridor, the width of the sidewalk is important in terms of comfort and a perception of safety.

3 - Obstructions - Obstructions can be a problem for those users with mobility impairments; however, due to a lack of major obstructions along the corridor, this variable was assigned an average weight of importance.

3 - Connectivity - The degree to which the path provides a useful, direct and logical link between key departure points and destinations is an important measure of the walkability of the corridor and was weighted accordingly.

3 - Personal Safety - User comfort is diminished if there is any perception that criminal activities or violence is prevalent in the surrounding community; therefore, this variable was weighted as important.

4 - Crossing Opportunities - Concern was expressed that pedestrian crossing facilities should be given particular attention in this study; therefore, they were weighted more important in this assessment.

4 - Support Facilities - Pedestrian amenities and road characteristics suited to pedestrians are likely to contribute to users' desire to walk the corridor; therefore, support facilities were weighted more important in this assessment.

4 - Path Environment - The quality and width of buffer space between a pedestrian and vehicular traffic contributes positively to that pedestrian's level of comfort; hence, buffer space was weighted more important in this assessment.

5 - Potential for Conflict - Pedestrian/vehicle conflicts are a recognized issue along the Dewey Avenue Corridor, due to numerous driveways. This factor has been weighted heavily and most importantly for this assessment.

5 - Surface Quality - The quality of the sidewalk's surface is of great importance to users for safety and perception of the environment, and has been weighted accordingly for this assessment.

Based on the scale developed, the LOS was determined by the total point value accumulated. The total is calculated by multiplying the points awarded to each variable based on field data by the weight of that variable. The LOS for each segment is shown in Figure 10. A score of 180 is the highest score attainable. The LOS was determined by the point scale identified in Table 4.

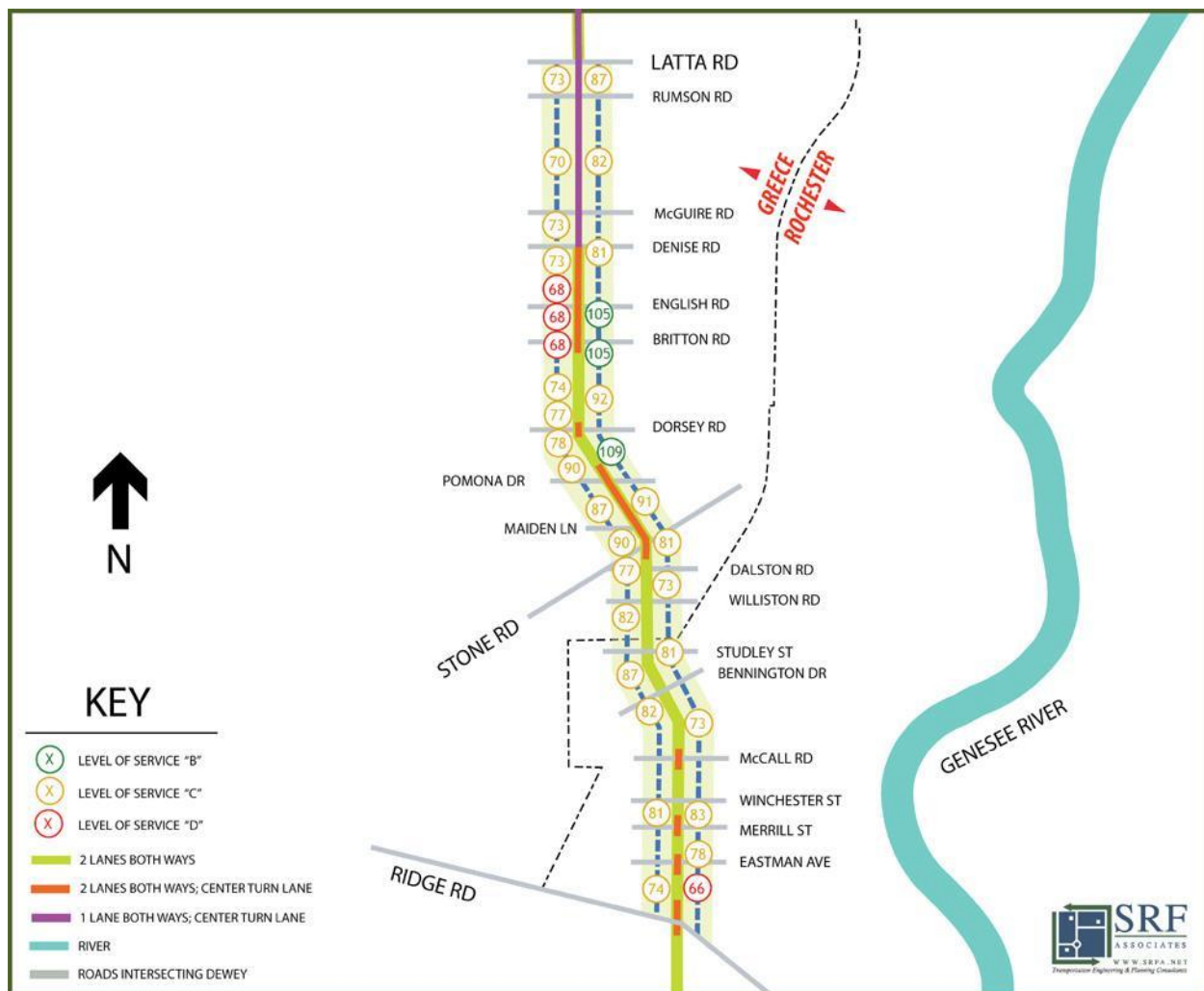
Level of Service Grading Scale

It should be noted that Pedestrian Level of Service differs greatly from Vehicular Levels of Service. A Level of Service of "C" is generally considered an acceptable vehicular level of service. Based on the Australian Method, a Level of Service of "C" or lower for a pedestrian level of service indicates that while basic pedestrian conditions exist, a significant number of factors impact the pedestrians' safety and comfort.

Table 4: Level of Service Scale

Level of Service Scale	
LOS A	180 -132 points
LOS B	101 -131 points
LOS C	69 -100 points
LOS D	37 - 68 points
LOS E	≤ 36 points

Figure 10: Pedestrian Level of Service



LOS A	A pedestrian environment where ideal pedestrian conditions exist and the factors that negatively affect pedestrian LOS are minimal.
LOS B	Reasonable pedestrian conditions exist but a small number of factors impact pedestrian safety and comfort. LOS A is the ideal but LOS B is an acceptable standard.
LOS C	Basic pedestrian conditions exist, but a significant number of factors impact pedestrian safety and comfort.
LOS D	Poor pedestrian conditions exist and the factors that negatively affect pedestrian LOS are wide-ranging or individually severe. Pedestrian comfort is minimal and safety concerns within the pedestrian environment are evident.
LOS E	The pedestrian environment is unsuitable. This situation occurs when all or almost all of the factors affecting pedestrian LOS are below acceptable standards.

3. Pedestrian Path LOS Examples

LOS 'D'

East side of Dewey Avenue, just north of Ridge Road. This is one of the worst performing segments of sidewalk in the entire corridor.



LOS 'B'

East side of Dewey Avenue, adjacent to Saint Joseph's Villa, between Clark Park and Dorsey Road. This is one of the best performing segments of sidewalk in the corridor.



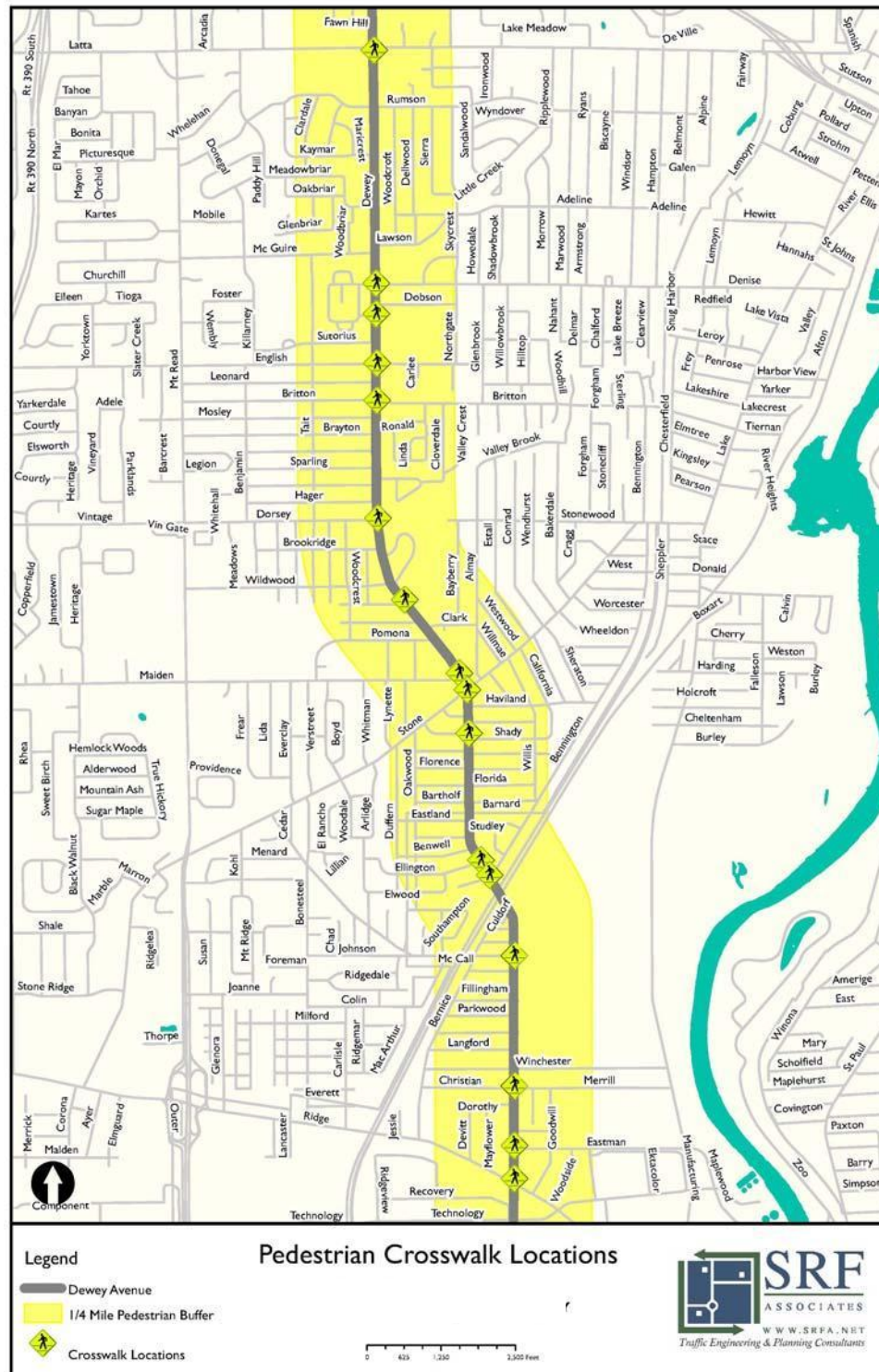
The quality of the pedestrian realm in other segments of the corridor falls somewhere in between the two examples given, most of them performing with a LOS of 'C'. Generally, the LOS for corridor segments on the east side of Dewey Avenue were slightly better than those on the west side. The segments of Dewey Avenue that operate at pedestrian level of service "C" are not necessarily substandard. However, there are a number of factors present that impact the pedestrians' comfort and perceived level of safety. Table 5 illustrates the pedestrian LOS for each segment analyzed. Variables that negatively affected the LOS were:

- Lack of sufficient buffer width
- Lack of support facilities
- Inadequate crossing opportunities
- Poor sidewalk quality

Table 5: Pedestrian LOS Assessment

Side of Dewey	Zone	Segment	Total Score	PED LOS
EAST	CITY	Ridge-Eastman	66	D
WEST	Zone 5	Dobson-English	68	D
WEST	Zone 5	English-Leonard	68	D
WEST	Zone 5	Leonard-Moslev	68	D
WEST	Zone 6	Rumson-McGuire	70	C
EAST	CITY	Winchester-Bennington	73	C
EAST	Zone 1	Barnard-Shady Way	73	C
WEST	Zone 7	Latta-Rumson	73	C
WEST	Zone 5	McGuire-Denise	73	C
WEST	Zone 5	Denise-Dobson	73	C
WEST	Zone 4	Moslev-Haar	74	C
WEST	CITY	Velox-Ridge	74	C
WEST	Zone 4	Haar-Dorsey	77	C
WEST	Zone 1	Beaumont-Dalston	77	C
EAST	CITY	Eastman-Velox	78	C
WEST	Zone 3	Dorsey-Brookridge	78	C
EAST	Zone 1	Bennington-Barnard	81	C
EAST	Zone 2	Shady Way-Maiden	81	C
EAST	Zone 5	Dobson-Lawson	81	C
WEST	CITY	Lenriet-Velox	81	C
EAST	Zone 6	Lawson-Rumson	82	C
WEST	Zone 1	Dalston-Eastland	82	C
WEST	CITY	Bennington-Lenriet	82	C
EAST	CITY	Velox-Winchester	83	C
WEST	Zone 3	Briarcliff-Maiden	87	C
WEST	CITY	Eastland-Bennington	87	C
EAST	Zone 7	Latta-Rumson	87	C
WEST	Zone 3	Brookridge-Briarcliff	90	C
WEST	Zone 2	Maiden-Beaumont	90	C
EAST	Zone 3	Maiden-Clark	91	C
EAST	Zone 4	Dorsey-Ronald	92	C
EAST	Zone 4	Ronald-Britton	105	B
EAST	Zone 5	Britton-Dobson	105	B
EAST	Zone 3	Clark-Dorsey	109	B

Figure 11: Pedestrian Crosswalk Locations



The pedestrian assessment concluded that there are several segments of the Dewey Avenue Corridor that have inadequate pedestrian facilities. The inadequate segments of the corridor do little to *encourage* pedestrians to utilize the public realm to the fullest extent possible. Safe, comfortable, and attractive pedestrian facilities often equate to increased pedestrian activity, which can have a positive impact on public health, the environment, and economic development.

4. Crosswalk Assessment

Well-defined pedestrian crossings are very important to the safety and comfort of pedestrians. An inventory of all marked crosswalks that traverse Dewey Avenue at signalized intersections was performed for this study. Information was collected on the width, length, and presence of curb ramps and pedestrian signals at each signalized crosswalk location. This data was then analyzed to develop a LOS for each crosswalk that traverses Dewey Avenue at a signalized intersection.

Table 6: Crossing Level of Service

Ranked Signalized Crossing Level of Service		
Crossing Dewey S. of Eastman	2.79	C
Crossing Dewey S. of English	2.76	C
Crossing Dewey S. of Britton	2.76	C
Crossing Dewey N. of Dorsey	2.73	C
Crossing Dewey S. of Denise	2.68	C
Crossing Dewey N. of Eastman	2.59	C
Crossing Dewey N. of Ridge	2.56	C
Crossing Dewey N. of Stone	2.51	C
Crossing Dewey N. of English	2.47	B
Crossing Dewey N. of Britton	2.47	B
Crossing Dewey N. of Merrill/Christian	2.45	B
Crossing Dewey S. of Stone	2.43	B
Crossing Dewey N. of Denise	2.37	B
Crossing Dewey N. of Northgate	2.37	B
Crossing Dewey N. of Maiden	2.33	B
Crossing Dewey S. of McCall	2.31	B
Crossing Dewey S. of Merrill/Christian	2.31	B
Crossing Dewey N. of Dalston	2.14	B
Crossing Dewey N. of Ellington	2.11	B
Crossing Dewey N. of Bennington/Banker	2.11	B

Based on documentation of the crossing facilities available on Dewey Avenue, an assessment was performed to determine how well the crosswalks serve pedestrians. The crosswalk assessment was based on the Level of Service Model for Signalized Intersections for Pedestrians (Petritsch and Landis). Several characteristics of the pedestrian crossing factored into the assessment, including:

- number of potential conflicts between vehicles and pedestrians,
- perceived comfort of pedestrians,
- vehicle speed, and
- number of lanes being crossed.

These variables were used to analyze the level of service at each crosswalk. The results of this analysis indicate that there are no immediate safety concerns at crosswalk locations within the study area. On a grading scale of LOS 'A' through LOS 'F', the crosswalks on Dewey Avenue were rated with LOS 'B' or LOS 'C', meaning they provide an acceptable way for crossing the street in a reasonably safe and comfortable fashion (see Table 6). The only unsignalized marked crosswalk on the corridor is located just north of Briarcliff Road, across from St. Joseph's Villa.

Although the results of the crosswalk assessment indicate that there are no apparent safety concerns, it does not mean that the distance between marked crosswalks is convenient for pedestrians. Activity level and pedestrian need, not distance, drive the decisions about where a crosswalk is appropriate. However, it is important to note that there are several instances of great distances between signalized crosswalk locations. Some pedestrians will not use a crosswalk if one is not convenient, which can result in a safety issue.

V&T law permits pedestrians to cross at any unmarked, unsignalized intersection. Nevertheless, the provision of marked crosswalks can benefit the pedestrian by showing them the most appropriate places to cross, and the motorist by showing them where to expect pedestrians. Crosswalks can be problematic when they give a pedestrian a false sense of security, but by basing recommendations on activity levels and pedestrian needs, this potential problem will be avoided.

5. Examples of Crossing Facilities



Crossing facilities include the pavement markings, as well as the pedestrian crosswalk signals, which indicate to pedestrians where and when they should cross.

6. Summary

In general, there are pedestrian facilities currently in place along the Dewey Avenue Corridor, including sidewalks, marked crosswalks, and pedestrian signals. The LOS scores for most of the segments of the Dewey Avenue Corridor indicate that there is an opportunity to improve the conditions that contribute to the safety and comfort experienced by pedestrians.

D. Walkability

The following section discusses different types of pedestrians, walking speed, walk score and a comparison of the data derived from walk score and pedestrian level of service calculations. This section discusses the different issues that contribute to the Dewey Avenue Corridor's walkability.

1. Types of Pedestrians

On average, two people walking side-by-side or passing one another generally require 4.67 feet of space, while two people in wheelchairs need a minimum of 5 feet to pass one another. While the minimum operating space and pedestrian facility width are relatively the same between users, the skills, confidence and preferences of pedestrians vary. These variations are mostly a result of differences in age and differences in physical, cognitive and sensory abilities.

Although AASHTO does not classify pedestrians in the same manner that they do bicyclists, a similar hierarchy of ability levels is possible. Pedestrians can be described in the following groups:

- Group A: Advanced Pedestrians – highest mobility level
- Group B: Basic Pedestrians – moderate mobility level
- Group C: Limited Mobility Pedestrians – lowest mobility level

Group A: Advanced Pedestrians

Group A is comprised of advanced or experienced walkers or joggers who are generally using the sidewalks for exercise or to reach a destination. Advanced pedestrians are typically comfortable walking or jogging year round in all weather conditions, maneuvering around obstacles and other pedestrians, and crossing roads without adequate pedestrian crosswalk provisions. Sidewalks in disrepair or with minimal road buffers usually do not deter usage by Group A pedestrians. Group A pedestrians prefer:

- Direct and convenient access to destinations in a walk or jog of less than 45 minutes.
- The opportunity to walk or jog at varying speeds.
- Sufficient operating space on the sidewalk to reduce or eliminate the need to slow down when passing other pedestrians.
- Continuous sidewalks along the entire corridor.

Group B: Basic Pedestrians

Group B is comprised of basic adult and teenage walkers who use sidewalks for transportation purposes, such as getting to the store or visiting friends, and for moderate recreational use. Group B pedestrians typically walk from spring to fall, and will occasionally use well-plowed sidewalks during the wintertime. Group B pedestrians prefer:

- Comfortable access to destinations in a walk or jog of less than 20 minutes, preferably by a direct route.
- Well-maintained, well-lit, continuous sidewalks with a minimum width of five feet and adequate buffers from roads.

- Marked crosswalks at intersections.
- Resting areas at least every 1000 feet.
- Sidewalks linking key destinations and neighborhood areas.

Group C: Limited Mobility Pedestrians

Group C is comprised of young children, seniors, and those with disabilities. This user group is often walking with supervision and/or assistance. In addition, support equipment, such as children's bicycles, strollers, and wheelchairs, is often used. They are walking to access key destinations or for moderate recreational purposes. Group C pedestrians use sidewalks mainly in good weather from spring to fall. Group C pedestrians prefer the following:

- Access to key destinations surrounding residential areas, including schools, recreational or community facilities, shopping, or neighbors, within a five to ten minute walk.
- Well-maintained, well-lit, continuous sidewalks with a minimum width of five feet and with moderate to large buffers from roads.
- Crosswalks with pedestrian signal operation.
- Resting areas at least every 500 feet.
- Sidewalks linking key destinations and neighborhood areas.

2. Walking Speed

The New York State Supplement to the National Manual on Uniform Traffic Control Devices (MUTCD) for Streets and Highways 2003 Edition mandates that crossings be designed to accommodate a walking speed of 3.5 feet per second. This walking speed should be used in the design of any crossing facility in the Dewey Avenue Corridor.

3. Walk Score Criteria

Walk Score is an online tool that allows users to determine the walkability of a certain address based on the number of pedestrian generators in close proximity to that address. Walk Score calculates the walkability of an address by locating pedestrian generators such as nearby stores, restaurants, schools, parks, etc. The walk score results can be used in conjunction with the pedestrian levels of service to determine priority locations for improvements throughout the corridor.

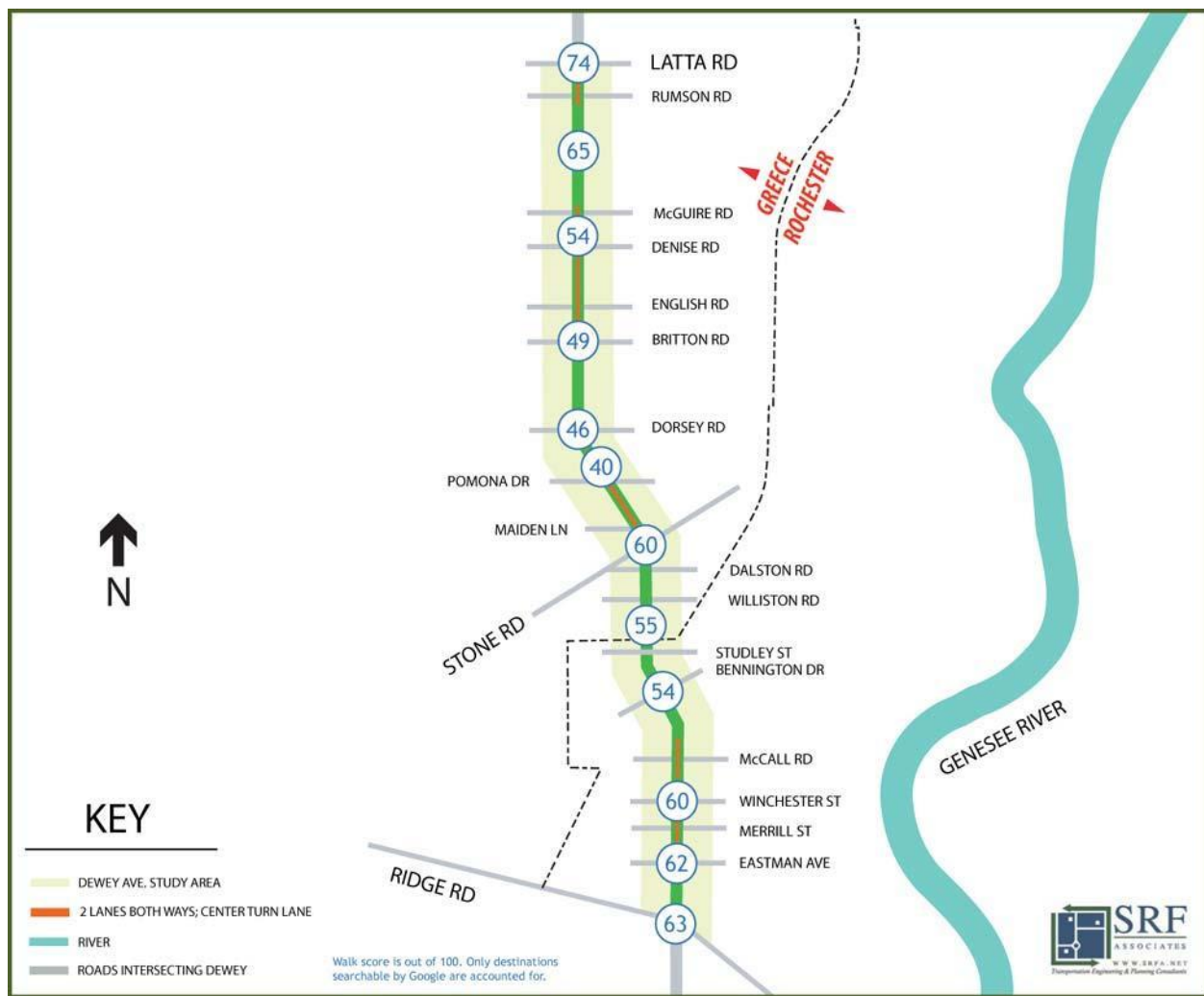
Table 7: Walk Score Scale

<i>Walk Score Scale</i>		
Walk Score	Description	Explanation
90–100	Walkers' Paradise	Daily errands do not require a car.
70–89	Very Walkable	Most errands can be accomplished on foot.
50–69	Somewhat Walkable	Some amenities within walking distance.
25–49	Car-Dependent	A few amenities within walking distance.
0–24	Car-Dependent (Driving Only)	Almost all errands require a car.

Generally, the tool measures how easy it is to live without the use of an automobile, not how attractive the area is for walking. There are a number of factors, such as street design and safety, which contribute to walkability but are difficult to measure with an algorithm.

The Walk Score algorithm awards points based on the distance to the closest amenity in each category. Categories include: transit, grocery stores, restaurants, schools, coffee shops, libraries, parks, bookstores, drug stores, hardware stores, bars, movie theaters, fitness, and clothing & music stores. If the closest amenity in a category is within .25 miles, the system assigns the maximum number of points. The number of points declines as the distance approaches 1 mile, and no points are awarded for amenities further than 1 mile. Each category is weighted equally and the points are summed and normalized to yield a score from 0 to 100. The number of nearby amenities is the leading predictor of whether people walk.

Figure 12: Walk Score

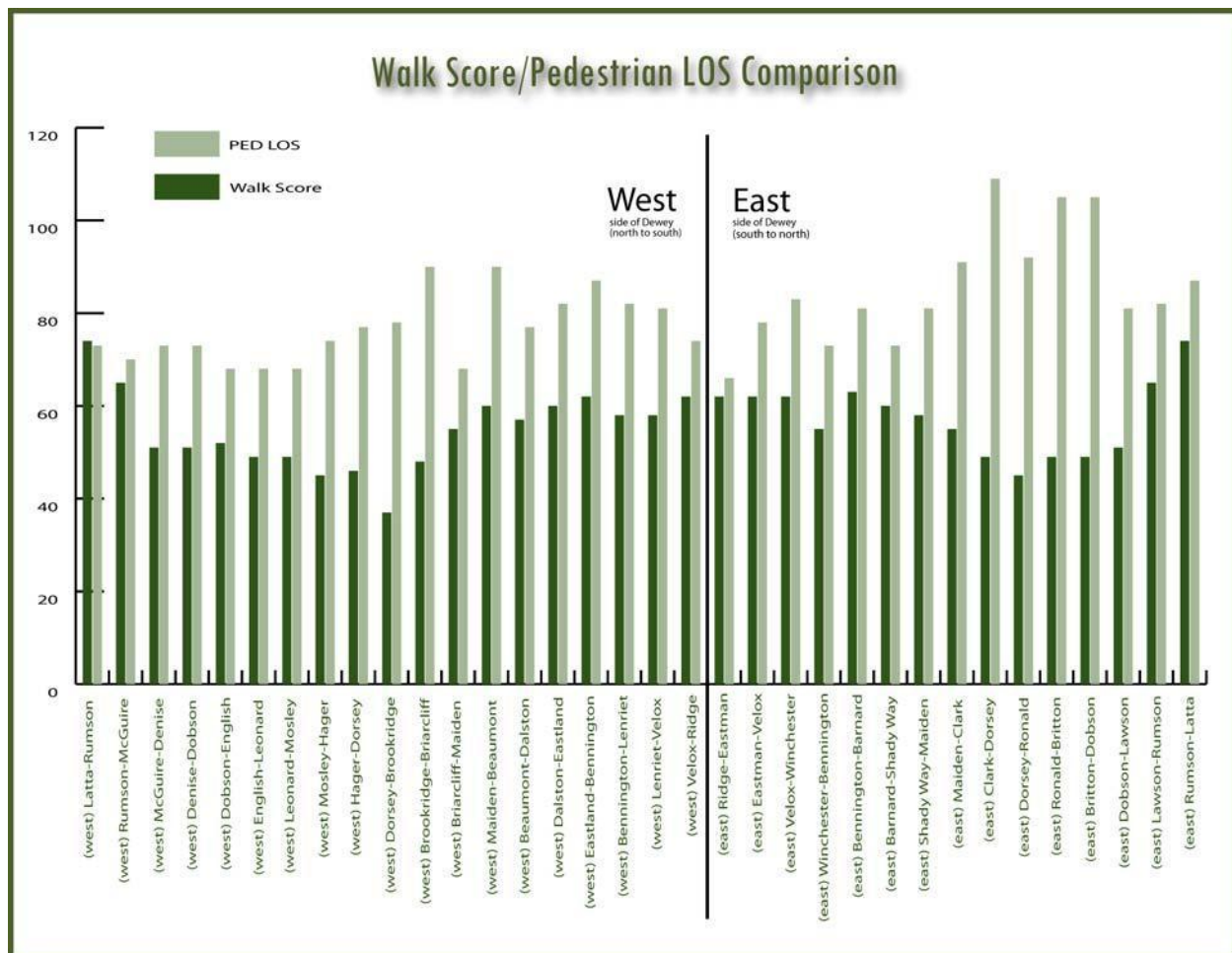


4. Comparison of LOS and Walk Score

Pedestrian LOS and Walk Score, when analyzed side by side, indicate segments of the pedestrian realm that are deficient in quality, yet have a large number of pedestrian generators in close proximity. Figures 13 and 14 are crucial illustrations that place these two sources of data side by side. This important analysis provides a list of locations that are used in the Implementation section of this report to develop priorities for future pedestrian realm improvements.

For example, the eastern side from Ridge to Eastman had a low pedestrian LOS calculation and a high walk score. This means that there are places to walk, but the pedestrian environment is not a comfortable place to do so. This location is a priority for improvements. Conversely, the western side of the McGuire to Denise segment had a low pedestrian LOS calculation and a low walk score. This suggests that even though the pedestrian environment is not comfortable, there are fewer places to walk nearby. This segment might be a lower priority for pedestrian improvements.

Figure 13: Walk Score/Pedestrian LOS Comparison

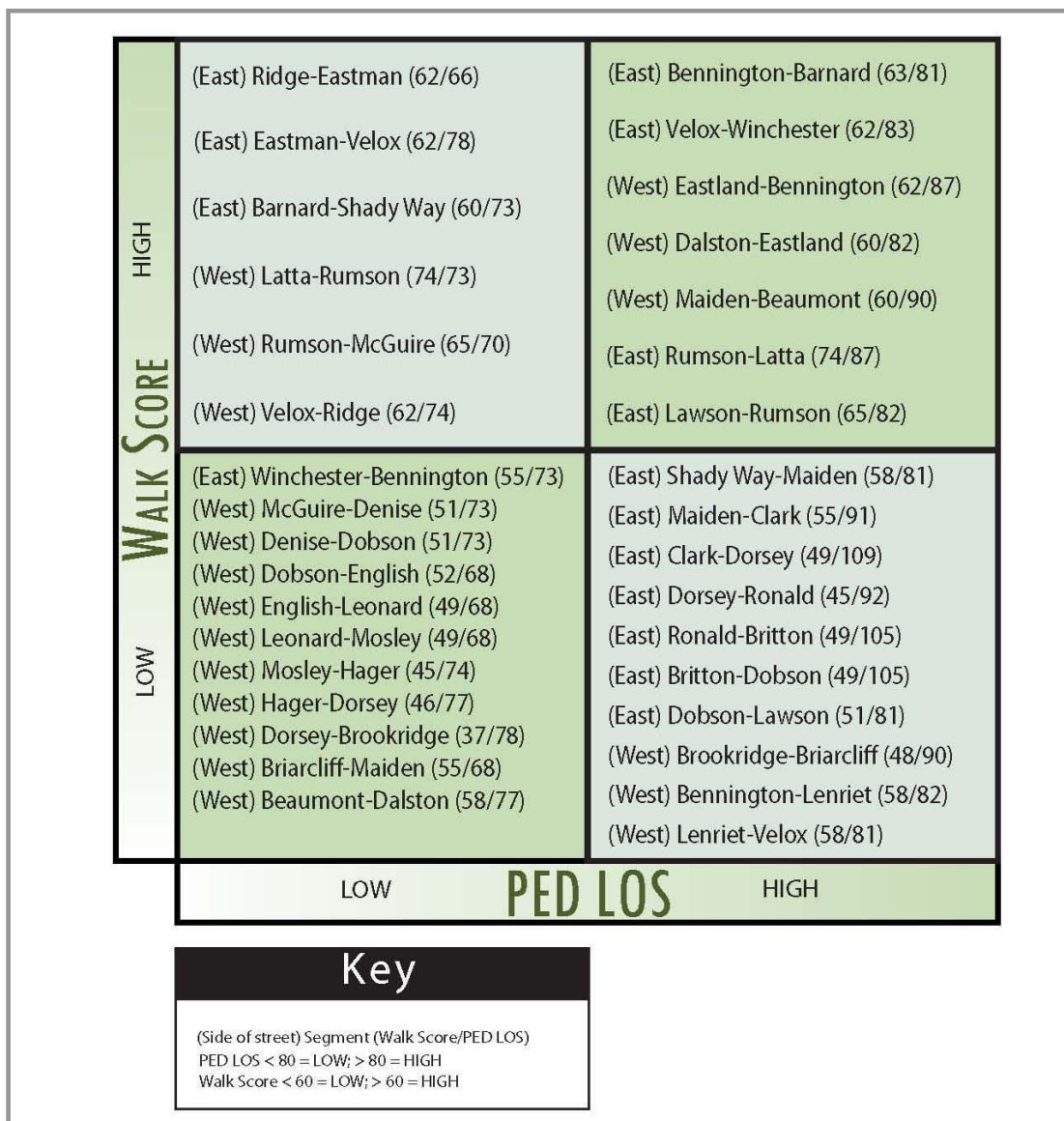


An important part of the pedestrian experience along Dewey Avenue is the transition from sidewalk to building entrance. Many businesses currently have parking lots located between the sidewalk and

the building, which presents a variety of safety and comfort issues that do not factor into the walk score or the pedestrian LOS calculations. Nonetheless, this space impacts the pedestrian experience, and should be considered when making recommendations to improve the pedestrian realm. In addition, it is important to note that increased pedestrian activity and reduced travel demand is best achieved by changing land use policies that bring destinations closer together. The City and Town may want to consider ways to encourage small-scale retail in neighborhoods, create neighborhood parks, and locate schools closer to residences and parks.

The following figure illustrates one of the key concepts of the study: where are pedestrians likely to walk, and where are the worst conditions for them to do so?

Figure 14: Walking Potential Vs. Deficiency



E. Bikability

The following section discusses different types of bicyclists, and assesses bicycle infrastructure. This section details the different issues that contribute to the Dewey Avenue Corridor's bikability.

1. Types of Bicyclists

On average, bicyclists require a minimum width of 40 inches to operate. A minimum width of four feet is necessary for any bicycle facility with exclusive or preferential use by bicyclists. When bicyclists are traveling alongside motor vehicles, a width of five feet or more is suggested for bicyclists.

While the minimum operating space and bicycle facility width remains relatively the same between users, the skills, confidence and preferences of bicyclists vary largely. The challenge in planning for bicycle facilities is designing for the diversity of user skills. According to the Federal Highway Administration (FHWA), the Federal policy goal for bicycling is "to accommodate current use and encourage increased use, while enhancing safety."

The FHWA identifies the following types of bicycle users:

- Group A: Advanced Bicyclists
- Group B: Basic Bicyclists
- Group C: Children

Defining the bicyclist skill level through three groups and designing for the specific groups helps to refine roadway and path treatments. A description of the three different types of bicycle users by the American Association of State Highway and Transportation Officials (AASHTO) Guide for the Development of Bicycle Facilities is provided below. Also, details of characteristics specific to the Town of Greece/City of Rochester Group A, B, C riders is described in each section that follows.

Group A: Advanced Bicyclists

Group A is comprised of advanced or experienced riders who are generally using their bicycles as they would a motor vehicle. They are riding for convenience and speed and want direct access to destinations with minimal detours and delays. Advanced riders are typically comfortable riding with motor vehicles in traffic. They comprise the majority of the current users of collector and arterial streets and are best served by the following:

1. Direct and convenient access to destinations usually via the existing street and highway system.
2. The opportunity to operate at maximum speed with minimum delays.
3. Sufficient operating space on the roadway or shoulder to reduce or preferably eliminate the need for either the bicyclist or the motor vehicle operator to change position when passing.

Ideally for Group A riders, all roads would be "bicycle friendly."

Group B: Basic Bicyclists

Group B is comprised of basic adult and teenage riders who may also be using their bicycles for transportation purposes, such as getting to the store or visiting friends. Group B bicyclists are less confident of their ability to operate in traffic without special provisions for bicycles. Basic riders prefer to avoid roads with fast and busy motor vehicle traffic unless there is ample roadway width to allow

easy overtaking by faster motor vehicles. Thus, basic riders are comfortable riding on neighborhood streets and shared use paths and prefer designated facilities such as bike lanes or wide shoulder lanes on busier streets. Some will develop greater skills and progress to the advanced level, but there will always be many millions of basic bicyclists. Group B bicyclists prefer:

1. Comfortable access to destinations, preferably by a direct route, using either low-speed, low traffic-volume streets or designated bicycle facilities, avoiding routes with high-volume or high traffic speeds.
2. Well-defined separation of bicycles and motor vehicles on arterial and collector streets (bike lanes or shoulders) or separate bike paths.

Group B bicyclists would be best served by designated bicycle facilities on key routes through main travel corridors with lower volume rates and similar travel times.

Group C: Children

Group C bicyclists are children riding on their own or with their parents. This group may not travel as fast as their adult counterparts, but still require access to key destinations in their community, such as schools, convenience stores and recreational facilities. It is important to make sure children do not develop a false sense of security if they are encouraged to ride on a busy street. Group C bicyclists prefer the following:

1. Access to key destinations surrounding residential areas, including schools, recreation facilities, shopping, or other residential areas.
2. Residential streets with low motor vehicle speed limits and volumes linked with shared use paths and busier streets with well-defined pavement markings between bicycle and motor vehicles.
3. Well-defined separation of bicycles and motor vehicles on arterial and collector streets linked with shared use paths and other bicycle facilities.

Group C bicyclists would be best served by routes that provide access to key destinations, but keep them off of busy roads, as safety is more important than travel time.

2. Assessment of Bicycle Infrastructure

Bicycle safety is judged on the presence or absence of a dedicated bicycle facility, shared lane widths including the on-street parking lane, and the amount of space a cyclist needs to safely maneuver. Other considerations that affect bicycle safety are speed limit, average annual daily traffic (AADT) volumes, percent heavy traffic, number of driveways, and any obstructions to the public realm, including overgrown landscaping and road grates. Bicycle infrastructure and facilities were also inventoried during the walk of the corridor.

The Dewey Avenue Corridor lacks dedicated bicycle facilities of any form. There are no road shoulders, and the widest outside lane is twelve feet wide, less than the fourteen-foot minimum recommended in the AASHTO Guide for the Development of Bicycle Facilities that is necessary to accommodate a bicycle traveling beside an automobile. Bicycle users must use the sidewalk, take a parallel route, or share the narrow outside lane of the road with automobiles traveling at much higher speeds along the corridor.

This section describes the traffic calming alternatives considered for the Dewey Avenue Corridor and their potential impacts. Multiple design, program and policy solutions can be used to solve each traffic calming issue. Thus, for each traffic calming alternative, reviewing the design details, impacts, and viability for the Dewey Avenue Corridor is critical to selecting appropriate solution.

For this report, the traffic calming alternatives are categorized as on-street, off-street, or program and policy alternatives. On-street alternatives include all possible strategies within the roadway, such as bicycle lanes or a road diet. Off-street alternatives deal with the area from the curb to the front of a building with the main focus on the pedestrian experience. Program and policy alternatives provide strategies for zoning changes, educational programs, enforcement, maintenance, program effectiveness, and security. A summary of design details and benefits for each traffic calming alternative that was considered is found in the *Design Elements for Traffic Calming Matrix* (Table 8) that follows this section.

Also included in the *Design Elements for Traffic Calming Matrix* (Table 8) are different impacts for each alternative. In addition to the typical measure of impact to the bottom-line, each alternative should be assessed based on different user and sustainability impacts. The subsections below explain the impacts reviewed and the matrix shows how each alternative impacts the budget, different users, and social and environmental aspects. Evaluating each alternative's impacts on budget, users and sustainability ensures a selection process that clearly, consistently, and comprehensively assesses the tradeoffs between different pros and cons of each alternative.

Each alternative was evaluated based on these three categories, as well as their appropriateness for addressing the issues specific to the Dewey Avenue Corridor. Based on input from the advisory committee and the community, the consultants selected which alternatives were the most appropriate for the study area.

A. Cost Impacts

Impact to the bottom-line is a key consideration for selecting a traffic calming alternative for implementation. The cost of implementing alternatives can range depending on cost of material, labor and design. The *Design Elements for Traffic Calming Matrix* (Table 8) provides a cost estimate range for each alternative considered. Cost estimates are grouped in the following three subcategories:

- \$ - Low cost: under \$10,000
- \$\$ - Medium cost: \$10-50,000
- \$\$\$ - High cost: > \$50,000

For example, bicycle boxes cost approximately \$200 each for striping. Maintenance would be an additional expense, but the cost impact would still be less than \$10,000. Thus, the matrix shows a "\$," which represents a low cost.

B. User Impacts

A key component to designing traffic calming elements is to understand that different users of the corridor will likely have different expectations. Some design elements may be beneficial for certain user groups and detrimental to others. For example, a traffic calming alternative, such as a refuge island, may improve safety for pedestrians or motorists, but may have a negative impact on bicyclists. The different user groups considered for each alternative include: pedestrians, bicyclists,

motorists, transit, neighbors, and emergency vehicles. The different user preferences for each traffic calming alternative are listed below.

- Pedestrians prefer:
 - i. Buffering from moving vehicles
 - ii. Aesthetically pleasing surroundings and amenities
 - iii. Safe environment
 - iv. Shorter walking distances
 - v. Access to community facilities
- Bicyclists prefer:
 - i. Well-connected network of bicycling facilities
 - ii. Safe travel routes
 - iii. Direct routes
 - iv. Access to community facilities
- Motorists prefer:
 - i. Minimal traffic delay and conflicts
 - ii. Parking and access to businesses and community facilities
 - iii. Consistently designed facilities
- Transit (drivers and passengers) prefers:
 - i. Space to operate and maneuver vehicles
 - ii. Minimal conflicts and delays
 - iii. Multi-modal facilities
 - iv. Bus stop access and facilities
- Neighbors prefer:
 - i. Neighborhood connectivity
 - ii. To feel safe and secure
 - iii. Access to property, businesses, and community facilities
- Emergency vehicles prefer:
 - i. Space to operate and maneuver vehicle
 - ii. Minimal conflicts and delays
 - iii. Safe travel routes

The *Design Elements for Traffic Calming Matrix* (Table 8) shows the review of each alternative's impact (positive, negative, mixed, or no impact) for each user group. For example, bicycle lanes provide bicyclists with their own lane, which has a positive impact on all user groups by reducing conflicts in the road between bicyclists and motorists, transit, or emergency vehicles, and on the sidewalk between bicyclists and pedestrians or neighbors.

C. Sustainability Impacts

Sustainable development meets the needs of the present without compromising the ability of future generations to meet their own needs (Report, 2003). As a form of development, traffic calming measures can have a positive or negative impact on the community, quality of life, livability, and the

environment. Thus, each traffic calming alternative considered for the Dewey Avenue Corridor was evaluated by the following sustainability measures:

- Reduces Energy Consumption by:
 - i. Supporting non-motorized travel,
 - ii. Supporting energy efficient movement of people and goods, and/or
 - iii. Using resources with lower operations and maintenance requirements.
- Reduces Consumption of Material Resources by:
 - i. Using recycled materials in construction,
 - ii. Requiring less infrastructure in design solution, and/or
 - iii. Increasing durability and life of design solution.
- Reduces Impacts to Environmental Resources by:
 - i. Minimizing impact on natural environment,
 - ii. Improving outdoor air quality,
 - iii. Encouraging and supporting biodiversity, and/or
 - iv. Reflecting historical and cultural context.
- Supports Healthy Urban Communities by:
 - i. Incorporating features that support community and livability,
 - ii. Incorporating features that support public services and adjacent land uses, and/or
 - iii. Incorporating features that enhance public health, safety, and security.
- Supports Sustainability During Implementation by:
 - i. Supporting local economic, social, and resource management needs during construction, and/or
 - ii. Reducing environmental and community impacts during construction.
(Bevan, 2007)

The *Design Elements for Traffic Calming Matrix* (Table 8) lists whether an alternative has a positive, negative, mixed (positive and negative), or no impact for each sustainability measure.

DEWEY AVENUE CORRIDOR TRAFFIC CALMING STUDY




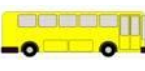




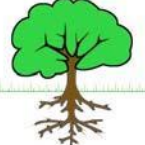


TABLE 8: DESIGN ELEMENTS FOR TRAFFIC CALMING SUMMARY

DESIGN ELEMENT	Cost	User Impacts	Sustainability	Recommended?
On-Street Alternatives				
Bicycle boulevards	\$	+	+	Yes
Bicycle boxes	\$	+/-	+	Yes
Bicycle lanes/space	\$-\$\$\$	+	+	Yes
Bus pullouts	\$\$	+/-	+	No
Crosswalks - high visibility	\$-\$\$	+/-	+	Yes
Curb extensions	\$\$	+/-	+	Yes
Drop bicycle lane at intersection	\$	+/-	+	No
Leading bicycle signal	\$-\$\$	+/-	+	No
Leading pedestrian intervals	\$	+/-	+	Yes
Mountable curbs on medians/corners	\$\$	+/-	+/-	No
Neckdowns or street narrowing	\$\$-\$\$\$	+/-	+	No
No turn on red signs	\$	+/-	+/-	Yes
On-street parking	\$\$-\$\$\$	+/-	+/-	No
Refuge islands	\$\$	+/-	+/-	Yes
Road diet	\$-\$\$	+/-	+	Yes
Share the road signage	\$	+/-	+	Yes
Signals - bicycle demand actuated	\$\$-\$\$\$	+/-	+	Yes
Signals - pedestrian countdowns	\$	+/-	+/-	Yes
Signalization	\$\$	+/-	+/-	No
Signal timing, phasing & progression	\$	+/-	+	No
Small curb radii at intersections	\$-\$\$	+/-	+	No
Smooth roadway surfaces	\$-\$\$	+	+/-	No
Turn lanes	\$-\$\$	+/-	+/-	No
Off-Street Alternatives				
ADA accessible bus stops	\$-\$\$\$	+	+	Yes
Arcades	\$\$-\$\$\$	+	+	No
Bicycle lockers	\$	+	+	Yes
Bicycle racks	\$	+	+	Yes
Buffer area	\$-\$\$	+	+	Yes
Buildings oriented onto the street	\$-\$\$\$	+/-	+	Yes
Building awnings	\$	+	+/-	Yes
Lighting - pedestrian-scale	\$\$	+	+/-	Yes
Lighting - street	\$\$	+	+/-	Yes
New or improved sidewalks	\$\$	+	+/-	Yes
Ped/bike-oriented parking lots	\$\$	+	+/-	Yes
Shared access driveways	\$\$	+	+	Yes
Shared use path	\$\$	+	+/-	No
Sidewalk amenity zone	\$-\$\$	+	+/-	Yes
Programs and Policies				
Access management overlay district	\$	+/-	+	Yes
Bike/ped supportive code language	\$	+	+	Yes
Design overlay zone	\$	+	+	No
Education programs	\$-\$\$	+	+	Yes
Enforcement	\$\$-\$\$\$	+	+	Yes
Maintenance program	\$\$-\$\$\$	+	+	Yes
Other pedestrians	\$	+	+	Yes
Program effectiveness measures	\$-\$\$	+	+	Yes
Residential speed watch program	\$	+	+	Yes
Security enhancements	\$-\$\$	+	+	Yes

Cost: \$ Low \$\$ Medium \$\$\$ High

Impact: + Positive - Negative +/- Mixed N None

DEWEY AVENUE CORRIDOR TRAFFIC CALMING STUDY

TABLE 8: DESIGN ELEMENTS FOR TRAFFIC CALMING													
		Cost Impacts	User Impacts						Sustainability Impacts				
DESIGN ELEMENT	DETAILS & BENEFITS	Estimated Costs	Pedestrians	Bicyclists	Motorists	Transit	Neighbors	Emergency Vehicles	Reduces Energy Consumption	Reduces Consumption of Material Resources	Reduces Impacts to Environmental Resources	Supports Healthy Communities	Supports Sustainability During Implementation
		\$-\$\$\$											
On-Street Alternatives													
Bicycle boulevards	<ul style="list-style-type: none">• A shared roadway intended for through-moving bicyclists• Limited to local motorized traffic by their geometric design• Traffic control features assign right-of-way to the boulevard at intersections encourages unimpeded bicycle traffic• Most beneficial when serving as an alternate parallel route to a high traffic, less bicycle-friendly arterial	\$	+	+	+	+	+	N	+	+	+	+	+
Bicycle boxes	<ul style="list-style-type: none">• A pavement marking- green box on road with a white bicycle symbol at intersections between the motor-vehicle stop line and the crosswalk• Implement consistently for every intersection in corridor• Brings cyclists into driver's sight• Allows cyclists a head start• Use only in conjunction with a bicycle lane. If not possible, use with a bicycle lane on the intersection approach	\$	+	+	+/-	+/-	N	+/-	+	+	+	+	+
Bicycle lanes/space	<ul style="list-style-type: none">• 5' minimum, both sides• Provide extra buffering, in combination with other elements• Takes bicyclists out of travel lanes, easing motorists' confusion• Use in conjunction with road diet• Use Share the Road signage, marked shoulders, and bicycle boulevards where road diet and bicycle lanes not possible• Provide appropriate MUTCD signage• Provide smooth roadway surfaces	\$-\$\$\$	+	+	+/-	+	+	+	+	+	+	+	+
Bus pullouts	<ul style="list-style-type: none">• Removes stopped buses from traffic• Bus drivers may find it difficult to re-merge into traffic	\$\$	+/-	+/-	+	+/-	+/-	+	+	+/-	N	+	+

\$ = Low Cost

\$\$ = Medium Cost

\$\$\$ = High Cost

+

= Positive Impact

-

= Negative Impact

+/-












= Mixed Impact

N

= No Impact












DEWEY AVENUE CORRIDOR TRAFFIC CALMING STUDY

TABLE 8: DESIGN ELEMENTS FOR TRAFFIC CALMING




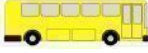







		Cost Impacts	User Impacts						Sustainability Impacts				
DESIGN ELEMENT	DETAILS & BENEFITS	Estimated Costs	Pedestrians	Bicyclists	Motorists	Transit	Neighbors	Emergency Vehicles	Reduces Energy Consumption	Reduces Consumption of Material Resources	Reduces Impacts to Environmental Resources	Supports Healthy Communities	Supports Sustainability During Implementation
		\$-\$\$\$											
On-Street Alternatives Cont'd													
Crosswalks – high visibility	<ul style="list-style-type: none">• Include pedestrian sign with supplemental arrow plaque; in-street pedestrian signs: MUTCD R1-6 (yield); and advance stop/ yield line signs: MUTCD R1-5 & R1-5a• Use saw tooth pavement markings in advance and place longitudinal markings where wheel tracks can be avoided to reduce wear, maintenance• Maintenance costs• Unsignalized crossings need further study and coordination with the County	\$-\$	+/-	+/-	+/-	+/-	+	+/-	+	+/-	N	+	+
Curb extensions	<ul style="list-style-type: none">• Reduces crossing distances and may reduce vehicular speeds• Creates protected parallel parking	\$	+	-	+/-	+/-	+/-	+/-	+	+	+/-	N	+
Drop bicycle lane at intersection	<ul style="list-style-type: none">• Achieves the same as bicycle box without the designated space• Casual cyclist may feel less comfortable, although safer to drop the lane and have cyclists merge earlier for left-turns if there is no bicycle box	\$	+	+/-	+/-	+/-	N	N	+	+/-	N	+	+
Leading bicycle signal	<ul style="list-style-type: none">• Allows cyclists a head start through intersection• Requires motorist and cyclist education• Requires bicyclists to be in own lane, which can be expensive to set up	\$-\$	+/-	+	-	-	N	-	+/-	+	+	+	+
Leading pedestrian intervals	<ul style="list-style-type: none">• Allows pedestrians a head start through crosswalk at intersection• WALK comes on 3 seconds prior to the vehicular green; pedestrians can enter crosswalk before turning vehicles arrive there• Requires motorist and pedestrian education	\$	+	+/-	-	-	N	-	+/-	+	+	+	+

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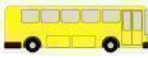







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DESIGN ELEMENT	DETAILS & BENEFITS	Estimated Costs	Pedestrians	Bicyclists	Motorists	Transit	Neighbors	Emergency Vehicles	Reduces Energy Consumption	Reduces Consumption of Material Resources	Reduces Impacts to Environmental Resources	Supports Healthy Communities	Supports Sustainability During Implementation
		\$-\$\$\$\$											
On-Street Alternatives Cont'd													
Mountable curbs on medians or corners	<ul style="list-style-type: none">Allows bus drivers to maneuver around corners, if curb radius is too tight	\$\$	-	N	N	+	+/-	+	+	+/-	+/-	+	+
Neckdowns or street narrowing	<ul style="list-style-type: none">Helps pedestrians by having less pavement to cross	\$\$-\$\$\$\$	+	+/-	+/-	+/-	+	+/-	+	+	+/-	+	+
No turn on red signs	<ul style="list-style-type: none">Bicyclist benefitsNeeds further study to measure impact on vehicle LOSHelps one crosswalk but hurts other	\$	+/-	+/-	-	-	+	N	+/-	+	+/-	+	+
On-street parking	<ul style="list-style-type: none">Shields pedestrians from moving trafficOpening car doors create potential hazard when used with bicycle lanes. Wide bicycle lanes help to alleviate this hazard. Reverse angle parking helps with bicyclist in driver's sightline, but requires more space and buffering than parallel parking.	\$\$-\$\$\$\$	+	-	+/-	+/-	+	-	-	+/-	+/-	+/-	+/-
Refuge islands	<ul style="list-style-type: none">Also known as medians when >1 blockUse in conjunction with marked crosswalks with ADT > 12,000- allows pedestrians and cyclists to cross halfway and waitProvides enhanced perception of safety for pedestrians and cyclistsShould be raised for increased visibilityShould be 6' min for pedestrians and 6-8' min for cyclists to provide sufficient space and separation from traffic lanesSeparate opposing traffic streams and minimize vehicle/vehicle and vehicle/pedestrian conflicts, but may increase traffic speedsNeed more right-of-way and can limit access to adjacent land	\$\$	+	+/-	+	+	+/-	+/-	+	+/-	+/-	+	+

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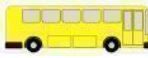







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DESIGN ELEMENT	DETAILS & BENEFITS	Estimated Costs	Pedestrians	Bicyclists	Motorists	Transit	Neighbors	Emergency Vehicles	Reduces Energy Consumption	Reduces Consumption of Material Resources	Reduces Impacts to Environmental Resources	Supports Healthy Communities	Supports Sustainability During Implementation
		\$-\$\$\$											
On-Street Alternatives Cont'd													
Road diet	<ul style="list-style-type: none">Allows for wider shoulder for cyclists or wider pedestrian areaReduces vehicular speedsProvides room for exclusive left turn lanesReduces frequency and severity of collisionsMay reduce traffic volumesReduces crossing width and exposure for pedestriansCan be used to provide on-street parking	\$-\$	+	+	+/-	+/-	+/-	+/-	+	+	+	+	+
Share the road signage	<ul style="list-style-type: none">A "Share The Road" plaque is mounted below a bicycle warning sign (MUTCD W11-1 with W16-1), creating a sign assembly that advises drivers to watch for bicycle travel on the roadway	\$	+	+	+/-	+/-	+/-	N	+	+	+	+	+
Signals-bicycle demand-actuated	<ul style="list-style-type: none">Allowing cyclists to trip the signal decreases unsafe movements	\$\$-\$\$\$	+	+	+/-	+/-	+	+/-	+	N	N	+	+
Signals-pedestrian countdowns	<ul style="list-style-type: none">Informs pedestrians of how much "crossing time" is remainingUse in combination with enhanced crosswalks and other featuresWill become mandatory in next MUTCD standards	\$	+	N	+/-	N	N	N	+	-	N	+	+
Signalization	<ul style="list-style-type: none">Signal controlled intersections help limit direct vehicle/vehicle and vehicle/pedestrian conflictsAssigns right-of-way at intersections	\$\$\$	+	+/-	+/-	+/-	N	+/-	+/-	-	N	+	+

DEWEY AVENUE CORRIDOR TRAFFIC CALMING STUDY












TABLE 8: DESIGN ELEMENTS FOR TRAFFIC CALMING													
		Cost Impacts	User Impacts						Sustainability Impacts				
DESIGN ELEMENT	DETAILS & BENEFITS	Estimated Costs	Pedestrians	Bicyclists	Motorists	Transit	Neighbors	Emergency Vehicles	Reduces Energy Consumption	Reduces Consumption of Material Resources	Reduces Impacts to Environmental Resources	Supports Healthy Communities	Supports Sustainability During Implementation
		\$-\$\$\$											
On-Street Alternatives Cont'd													
Signal timing, & phasing, progression	<ul style="list-style-type: none">• Signals can be phased and timed to reduce vehicular delay overall or by approach• Progression may help reduce delay for higher-volume areas	\$	+/-	+/-	+	+	+	N	+	+/-	N	+	+
Small curb radii at intersections	<ul style="list-style-type: none">• Reduces crossing distance and vehicle turning speeds by creating tighter turns	\$-\$	+	+/-	+/-	-	+/-	-	+	+	N	+/-	+
Smooth roadway surfaces	<ul style="list-style-type: none">• Provide smooth seams between asphalt and gutter• Drainage grates should be bicycle friendly (no parallel-running grates)	\$-\$	+	+	+	+	+	+	+/-	+/-	N	+/-	+
Turn lanes	<ul style="list-style-type: none">• Left turn lanes, in particular, allow through traffic to continue to move and reduce the potential for rear-end collisions• Use in conjunction with road diet• At signalized intersections, creating separate phases along with turn lanes may increase overall delay	\$-\$	+/-	+/-	+/-	+	+/-	+	+/-	-	N	+/-	+
Off-Street Alternatives													
ADA accessible bus stops	<ul style="list-style-type: none">• Provide ADA grades, transitions and surfaces at bus stop• Provide connection to sidewalk• Provide smooth, stable, and slip resistant surface	\$-\$	+	N	N	+	N	N	N	+/-	+	+	+
Arcades	<ul style="list-style-type: none">• Ground floor “promenades” can create sheltered outdoor areas	\$\$-\$\$\$	+	N	N	N	+	N	N	+/-	+	+	+

DEWEY AVENUE CORRIDOR TRAFFIC CALMING STUDY












TABLE 8: DESIGN ELEMENTS FOR TRAFFIC CALMING

		Cost Impacts	User Impacts						Sustainability Impacts				
DESIGN ELEMENT	DETAILS & BENEFITS	Estimated Costs	Pedestrians	Bicyclists	Motorists	Transit	Neighbors	Emergency Vehicles	Reduces Energy Consumption	Reduces Consumption of Material Resources	Reduces Impacts to Environmental Resources	Supports Healthy Communities	Supports Sustainability During Implementation
		\$-\$\$\$											
Off-Street Alternatives Cont'd													
Bicycle lockers	<ul style="list-style-type: none">Provides storage options at appropriate location and can determine whether a cyclist uses this mode or notNeeds to be accessible to surrounding land usesSee program section: Bicycle and Pedestrian supportive code language	\$	N	+	N	+	+/-	N	+	+	+	+	N
Bicycle racks	<ul style="list-style-type: none">Provides storage options at appropriate location and can determine whether a cyclist uses this mode or notNeeds to be accessible to surrounding land usesSee program section: Bicycle and Pedestrian supportive code language	\$	N	+	N	+	+/-	N	+	+	+	+	N
Buffer area	<ul style="list-style-type: none">Need a 6'-8' minimum planting strip or tree wells in amenity zone; 8' is the minimum for large maturing treesProvides extra separation between pedestrians and carsProvides a more attractive environmentCan serve as a windbreak, if evergreenProvides shade if deciduous in summer, & reduces heat island effectCan reduce motorist speed due to decreased sight distanceUtilities should be placed underground when possible	\$-\$	+	+	+	N	+	N	+	+	+	+	+
Buildings oriented onto the street	<ul style="list-style-type: none">Must include windows and doors facing street for more "eyes on the street"Reduce the "blank wall" effect and provide stopping opportunities	\$-\$\$\$	+	+	+/-	+	+/-	N	N	N	N	+	+
Building awnings	<ul style="list-style-type: none">Clusters of awnings can combine with trees to create shade and shelterProvides human-scale elements	\$	+	N	N	N	+	N	N	+/-	N	+	+












DEWEY AVENUE CORRIDOR TRAFFIC CALMING STUDY

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		\$-\$\$\$											
Off-Street Alternatives Cont'd													
Lighting-pedestrian scale	<ul style="list-style-type: none">Identifies a “pedestrian and cyclist area” and can fill gaps between street lightsProvides additional lightingUse in conjunction with sidewalk amenity zone	\$\$	+	+	+	+	+/-	+	-	-	+/-	+	+
Lighting-street	<ul style="list-style-type: none">Use where pedestrian scale lighting is not providedIncreases visibility and potential reduces conflicts for pedestrians, cyclists and motorists	\$\$	+	+	+	+	+/-	+	-	-	+/-	+/-	+
New or improved sidewalks	<ul style="list-style-type: none">Provides a separate space for pedestrians and way from travel lanes, particularly when combined with other buffers5’ wide minimum for two people to pass comfortably and ADA supported6’ + preferred in higher volume locations and to create more of bufferNo utility poles, street furnishings, or other obstructions in sidewalkMinimize grates and other uneven surfaces	\$\$	+	N	N	N	+	N	+	+/-	-	+	+
Pedestrian and bicycle-oriented parking lots	<ul style="list-style-type: none">Revise site plan review standards for commercial properties to provide for bicycle accommodations between the street and the storefrontProvides direct pedestrian pathsProvides covered, secure bike parkingProvides safe and comfortable access to commercial properties for bicyclists and pedestriansProvides seating near transit stops and corners	\$\$	+	+	+/-	+	+	N	+/-	-	+/-	+	+/-

DEWEY AVENUE CORRIDOR TRAFFIC CALMING STUDY




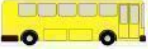







TABLE 8: DESIGN ELEMENTS FOR TRAFFIC CALMING													
		Cost Impacts	User Impacts						Sustainability Impacts				
DESIGN ELEMENT	DETAILS & BENEFITS	Estimated Costs	Pedestrians	Bicyclists	Motorists	Transit	Neighbors	Emergency Vehicles	Reduces Energy Consumption	Reduces Consumption of Material Resources	Reduces Impacts to Environmental Resources	Supports Healthy Communities	Supports Sustainability During Implementation
		\$-\$\$\$											
Off-Street Alternatives Cont'd													
Shared access driveways	<ul style="list-style-type: none">• Consolidate driveways by sharing access between users• Reduces potential conflicts between pedestrians and turning vehicles• Use in commercial & retail blocks• Provide incentives for driveway reductions, such as shared parking provisions, street trees or perennial planting programs• Maintain sidewalks as concrete, and separate from driveway	\$\$	+	+	+	+	+/-	N	+	+	+	+	+
Shared use path	<ul style="list-style-type: none">• Use where high pedestrian volumes are likely, & bicycle lanes not possible• Allows for pedestrians and bicyclists to share an off-street path• 10' minimum• Shared use path signage needed	\$\$	+	N	+	+	+	N	+	+/-	+/-	+	+
Sidewalk amenity zone	<ul style="list-style-type: none">• Use where high pedestrian volumes are likely, and when possible, in combination with on-street parking• Reduce monotony• 8' recommended (buffer area between road and sidewalk) not including sidewalk with amenities such as street trees, street lights, benches, fountains, kiosks, transit amenities, and trash receptacles (minimum size: 5' without trees or 6' with small mature trees)• Provide benches at bus stops- benches for bus passengers makes waiting for bus more comfortable• If necessary, locate utility poles in the amenity zone and avoid poles in the sidewalk• Use pedestrian scale lighting where possible	\$-\$	+	N	+	+	+	N	+	+/-	+/-	+	+

DEWEY AVENUE CORRIDOR TRAFFIC CALMING STUDY

TABLE 8: DESIGN ELEMENTS FOR TRAFFIC CALMING													
		Cost Impacts	User Impacts						Sustainability Impacts				
DESIGN ELEMENT	DETAILS & BENEFITS	Estimated Costs	Pedestrians	Bicyclists	Motorists	Transit	Neighbors	Emergency Vehicles	Reduces Energy Consumption	Reduces Consumption of Material Resources	Reduces Impacts to Environmental Resources	Supports Healthy Communities	Supports Sustainability During Implementation
		\$-\$\$\$											
Program & Policy Alternatives													
Access Management Overlay District	<ul style="list-style-type: none">Develop an access management overlay district to encourage businesses to share drivewaysProvide incentives such as street trees or inexpensive snow removal	\$	+	+	+/-	+	+/-	N	+	+	+	+	N
Bicycle and Pedestrian supportive code language	<ul style="list-style-type: none">Develop/augment zoning code and site planning language and guidance that enhances accessibility and safety for bicyclists and pedestrians	\$	+	+	+/-	+	+	N	+	+	+	+	N
Design Overlay Zone	<ul style="list-style-type: none">Develop overlay zone to supplement base zone standardsInclude special requirements that move towards the successful integration of land use and pedestrian amenities	\$	+	+	N	+	+	N	+/-	+	+	+	N
Education Programs	<ul style="list-style-type: none">Develop education programs for pedestrians, bicyclists and motoristsDesign programs to cater to different age groups	\$-\$	+	+	+	+	+	+	+	N	N	+	N
Enforcement	<ul style="list-style-type: none">Increase police enforcement for pedestrian, bicyclist and motorist actionsRespond to special needs (such as seniors or school areas)	\$-\$	+	+	+	+	+	+	N	N	N	+	N
Maintenance Program	<ul style="list-style-type: none">Plow and sweep regularlyEngage residents and businesses to participate in clean-up daysNeighborhood plantings or gardens	\$-\$	+	+	+	+	+	+	+	+	+	+	N
Other pedestrians	<ul style="list-style-type: none">Increases the number of “eyes on the street”; not a design element, but good street design encourages more pedestrian usage	\$	+	+	N	+	+	N	+	N	N	+	N

DEWEY AVENUE CORRIDOR TRAFFIC CALMING STUDY

TABLE 8: DESIGN ELEMENTS FOR TRAFFIC CALMING

		Cost Impacts	User Impacts						Sustainability Impacts				
DESIGN ELEMENT	DETAILS & BENEFITS	Estimated Costs	Pedestrians	Bicyclists	Motorists	Transit	Neighbors	Emergency Vehicles	Reduces Energy Consumption	Reduces Consumption of Material Resources	Reduces Impacts to Environmental Resources	Supports Healthy Communities	Supports Sustainability During Implementation
		\$-\$\$\$											
Program & Policy Alternatives Cont'd													
Program Effectiveness Measures	<ul style="list-style-type: none">• Develop measurement tools to track success of implemented recommendations• Possible measurements include:<ol style="list-style-type: none">1. # of crashes, injuries, fatalities2. Behaviors3. # of citations issued4. # of people walking5. Knowledge, opinions & attitudes6. Changes in organizational activity7. Monitor traffic volumes8. Monitor traffic speeds	\$-\$	+	+	+	+	+	+	N	N	N	+	N
Residential Speed Watch Program	<ul style="list-style-type: none">• Like neighborhood watch programs• Residents take active role in changing driver behavior• Residents borrow gun/trailer units to record speed data• Yard sign campaign, “Respect our neighborhood, drive responsibly, drive 25 mph”	\$	+	+	+/-	+	+	+	N	N	N	+	N
Security Enhancements	<ul style="list-style-type: none">• More building windows• Better lighting• Safer, more visible bus shelters	\$-\$	+	+	+	+	+	+	+	N	N	+	N

This section reviews the recommendations selected for the Dewey Avenue Corridor. Committee and public comments, cost, user and sustainability impacts, and appropriateness for the Dewey Avenue Corridor informed the selection of recommendations. The *Traffic Calming Recommendations Matrix* lists the preferred on-street, off-street, and program and policy alternatives and the corresponding issues and locations. The issues addressed by the recommendations include:

- No bicycle facilities, outside lane too narrow and no shoulders
- Pedestrian Level of Service (LOS) C or D
 - Lack of sufficient buffer
 - Poor sidewalk quality
 - High number of access drives introduce conflict and a lack of continuity for pedestrians
 - Inadequate crossing opportunities
 - Existing crossing needs enhancement
 - Lack of resting areas
 - No sidewalk
- Lack of pedestrian oriented, human scale environments in an area with high potential for walking
- Lack of bus stop comfort and safety amenities
 - Unsafe crossings
 - Lack of seating
 - No ADA access
- Resident/Pedestrian perception of high vehicle speed
- Concentration of bicyclist collisions with vehicles
- Concentration of pedestrian collisions with vehicles

To address these issues, the *Traffic Calming Recommendations Matrix* identifies preferred solutions. The following pages provide a detailed description and illustrations for each alternative that is recommended. The following solutions are recommended for the Dewey Avenue Corridor:

On-street

Recommendations

- Bicycle boulevards
- Bicycle boxes
- Bicycle lanes/space
- Curb extensions
- High visibility crosswalks
- Refuge islands
- Road diet
- Signage and signalization changes

Off-Street

Recommendations

- ADA-accessible bus stops
- Bicycle lockers
- Bicycle racks
- Sidewalk improvements
- Buffer areas
- Building changes
- Pedestrian-scale lighting
- Shared-access driveways
- Sidewalk amenity zone
- Coordinate with EBP
- Ped/bike oriented parking

Programs & Policies

- Access management overlay district
- Bike/ped supportive code language
- Education programs
- Maintenance programs
- Other pedestrians
- Program effectiveness measures
- Residential speed watch program

Just as there are already repeated elements along the corridor, it is important to remember that corridor solutions are repeatable, too. In fact, many of these recommendations will need to be used in multiple places to be effective.

Two figures, Figures 15 and 16, are included to illustrate the locations and dimensions for the recommended road diet, bicycle boulevards and crosswalks. Figure 17 illustrates the depaving concept suggested for the Eastman Business Park area.

DEWEY AVENUE CORRIDOR TRAFFIC CALMING STUDY

TABLE 9: TRAFFIC CALMING RECOMMENDATIONS				
ISSUES	SPECIFIC LOCATION	ON-STREET PREFERRED ALTERNATIVES**	OFF-STREET PREFERRED ALTERNATIVES**	PROGRAM & POLICY PREFERRED ALTERNATIVES**
Pedestrian Level of Service (LOS)* C or D				
Lack of sufficient buffer	Zone A	--	Buffer area	Maintenance program
Poor sidewalk quality	Zone A (East side, just north of Ridge Rd.) Zone 1 from Barnard St. to Shady Way	--	Sidewalks - improved	Maintenance program
No sidewalk	Zone C (East side) continuing into Zone 1 (East side until 170' south of Bennington)	--	Sidewalks - new	Maintenance program
Inadequate crossing opportunities	Zone 1 Florence Ave. intersection Zone 1 Eastland Rd. intersection Zone 3 Clark Pk. Intersection (south side) Zone 4 Sparling Dr. intersection Zone 6 Kaymar Rd. intersection	New high visibility crosswalks with refuge island ***	--	Pedestrian/bicyclist/motorist education Program effectiveness measures
Existing crossing needs enhancement	Zone A Ridge Rd. intersection Zone B Eastman Ave., and Merrill St. intersections Zone 1 Dalston Rd. intersection Zone 2 Stone Rd., and Maiden Ln. intersections Zone 5 Britton Rd., and English Rd. intersections and Northgate crossing Zone 6 Denise Rd. intersection Zone 7 Latta Rd. intersection	Improved high visibility crosswalks	--	Pedestrian/bicyclist/motorist education Program effectiveness measures
	Zone C McCall Rd. intersection Zone 1 Bennington Dr., and Ellington Rd., intersections	Improved high visibility crosswalks with curb bumpouts ***		
	Zone 3 Wildwood Rd. intersection Zone 4 Dorsey Rd. intersection	Improved high visibility crosswalks with curb bumpouts and refuge islands ***		
Lack of resting areas	Entire corridor at existing bus stops and/or every 1500'	--	Sidewalk amenity zone- benches	--
High number of access drives introduce conflict and a lack of continuity for pedestrians	Zone 5 (West side Britton Rd. to between English Rd. and Denise Rd.) Zone 6 (Just north of Denise, both sides)	--	Shared access driveways Pedestrian & bicycle-oriented parking lots	Create an Access Management Overlay Zone to consolidate driveways Pedestrian/motorist education
Resident and Pedestrian perception of high vehicle speed	Entire corridor unless specified	Road Diet (See Figure 15)	Buffer area where possible Pedestrian & bicycle-oriented parking lots	Residential Speed Watch Program Enforcement

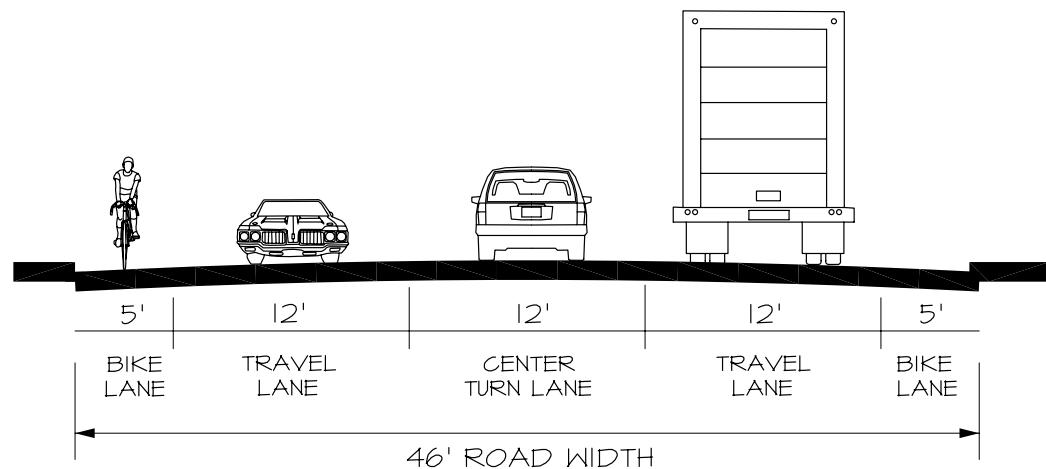
* Pedestrian LOS = Level of Service from “A” to “E,” with “A” representing ideal pedestrian conditions, “C” representing an unacceptable score with a significant number of factors impacting pedestrian safety and comfort, and “E” representing unsuitable conditions. Common factors lowering the LOS included: lack of sufficient buffer width, inadequate crossing opportunities, lack of support facilities, and poor sidewalk quality.
** See Table 8: Design Elements for Traffic Calming for a description of all the alternatives that were considered.
*** May require road widening but will be determined with further analysis.

DEWEY AVENUE CORRIDOR TRAFFIC CALMING STUDY

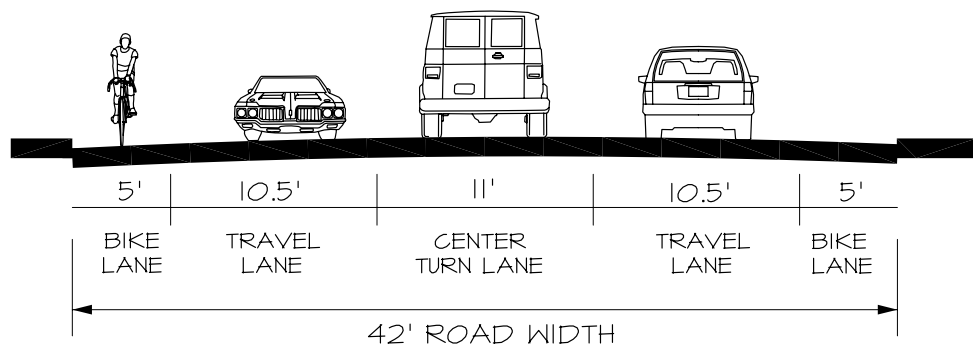
TABLE 9: TRAFFIC CALMING RECOMMENDATIONS				
ISSUES	SPECIFIC LOCATION	ON-STREET PREFERRED ALTERNATIVES**	OFF-STREET PREFERRED ALTERNATIVES**	PROGRAM & POLICY PREFERRED ALTERNATIVES**
No bicycle facilities, outside lane too narrow and no shoulders	Zone C, 1 from north of Winchester Street to north of Williston Road Zone 3, 4 from Clark Park To Mosley Road Zone 6 from McGuire Road to Rumson Road	Road diet with bicycle lanes (or shoulders where width too narrow) and where volume and continuity allow. See Fig 15 Bicycle boxes at every signal	Bicycle racks and/or lockers at every commercial/retail establishment Pedestrian & bicycle-oriented parking lots	Bicyclist/motorist education Bicycle supportive code language Program effectiveness measures
	Zone A, B from Ridge Road to McCall Road with side road usage (Ridge Road to Bernice Street to McCall Road) Zone 1 from Bennington Drive to Clark Park with side road usage (Bennington Drive, Willis Ave, Stone Road, Willmae Road to Clark Park) Zone 5 from Sparling Drive to McGuire Road with side road usage (Sparling Drive, Tait Ave to McGuire Road)	Share the Road signage with Bicycle Boulevards on specified side roads Bicycle boxes at every signal	--	--
	Zone 7 from Rumson Road to Latta Road	Share the Road signage Bicycle boxes at every signal	--	--
Lack of pedestrian oriented, human scale environments in an area with high potential for walking	Zone A (East and west sides from Ridge Rd. to Eastman Ave.) Zone B (East and west sides from Eastman Ave. to Velox St. Zone C (East side) Zone 1 (East side from Barnard St. to Shady Way) Zone 6 (West side from McGuire Rd. to Rumson Rd.) Zone 7 (Rumson Rd. to Latta Rd.	Leading Pedestrian Intervals (LPI) *** Pedestrian Countdown Signals	Sidewalk amenity zone Sidewalks– improved Buffer area Buildings oriented onto street Building awnings Lighting- pedestrian scale Pedestrian & bicycle-oriented parking lots	Security enhancements Pedestrian supportive code language Other pedestrians
Lack of bus stop comfort and safety amenities				
Inadequate crossings	Entire corridor – see inadequate crossing opportunities and existing crossing needs enhancement above	See “inadequate crossing opportunities and existing crossing needs enhancement” on previous page	--	Pedestrian/bicyclist/motorist education
Lack of seating	Entire corridor at existing bus stops	--	Sidewalk amenity zone - benches	--
No ADA access	Zone C (East side)	--	ADA accessible bus stop	--
Concentration of bicyclist collisions with vehicles	Zone 2 (Stone Rd. intersection) Zone 5 (Northgate area) (See Figure 9)	Signals- bicycle demand-actuated Investigate no turn on red	Pedestrian & bicycle-oriented parking lots	Bicyclist/motorist education Program effectiveness measures
Concentration of pedestrian collisions with vehicles	Zone A (Ridge Rd. intersection) Zone 2 (Stone Rd. intersection) Zone 5 (Northgate area) (See Figure 9)	Crosswalks- high visibility Leading Pedestrian Intervals (LPI) *** Pedestrian Countdown Signals	Pedestrian & bicycle-oriented parking lots	Pedestrian/motorist education Program effectiveness measures

** See Table 8: Design Elements for Traffic Calming for a description of all the alternatives that were considered.
*** Recommendation will need to be further evaluated with HCM.

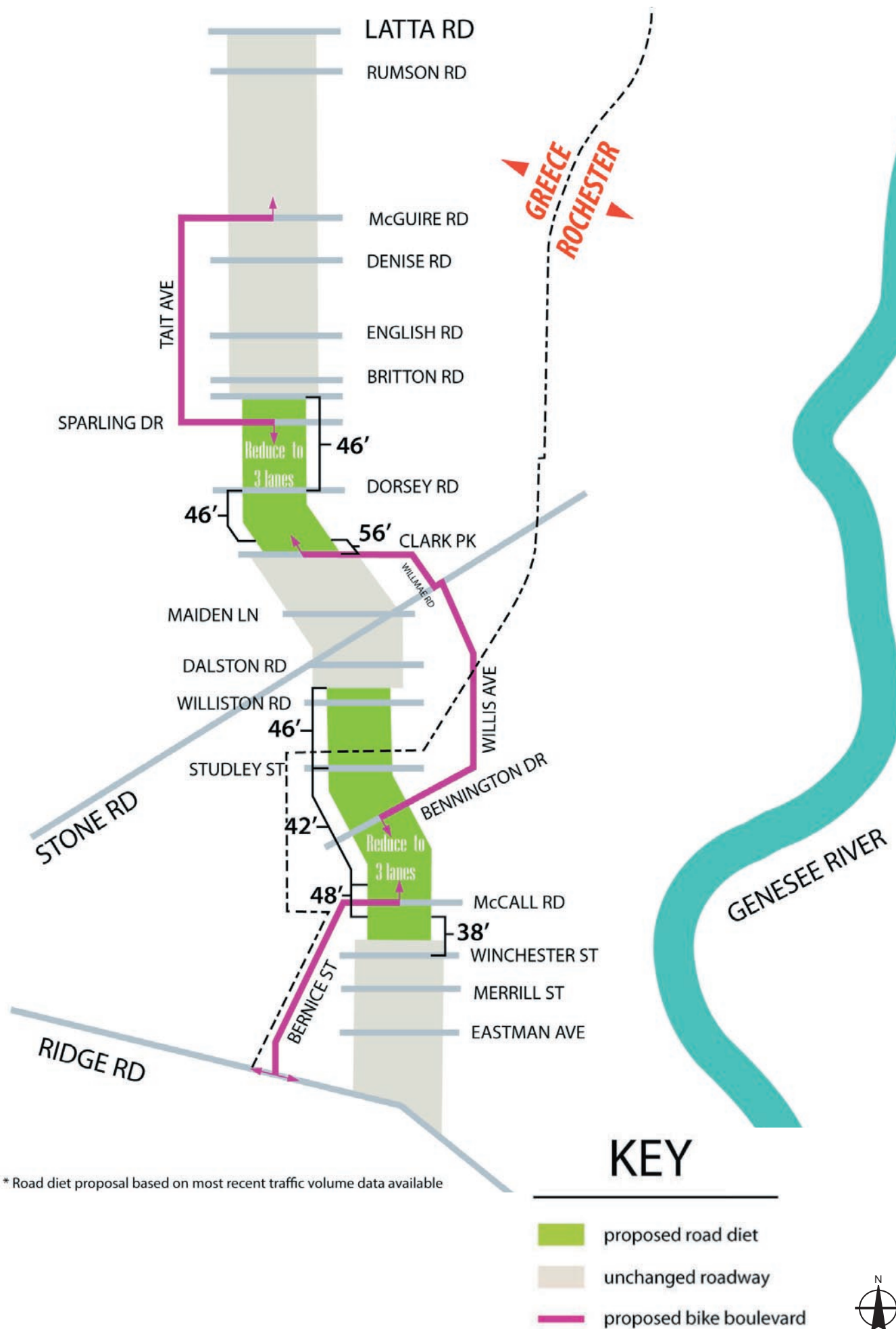
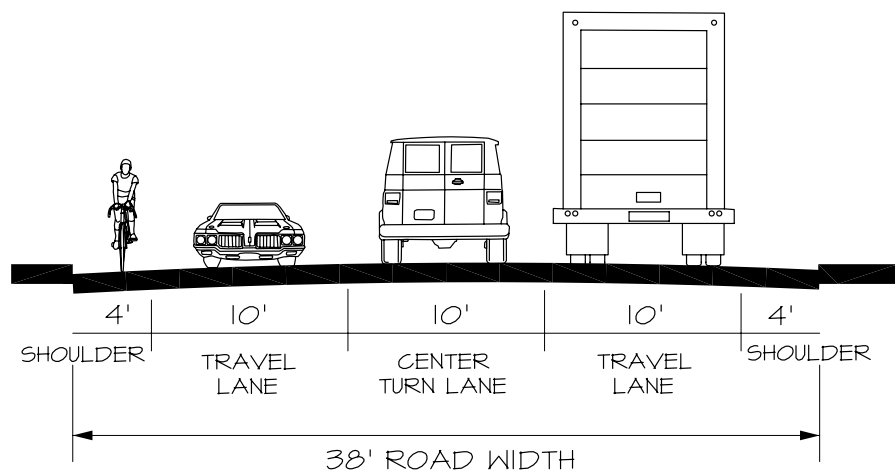
12' TRAVEL LANES, 12' CENTER TURN LANE, 5' BIKE LANES
 46' WIDTH: BRITTON RD. TO DORSEY RD.
 DORSEY RD. TO SOUTH OF BRIARCLIFF
 NORTH OF WILLISTON TO STUDLEY ST.



10.5' TRAVEL LANES, 11' CENTER TURN LANE, 5' BIKE LANES
 42' WIDTH: STUDLEY ST. TO NORTH OF MCCALL RD.



10' TRAVEL LANES, 10' CENTER TURN LANE, 4' SHOULDERS
 38' WIDTH: MCCALL RD. TO WINCHESTER ST.



DEWEY AVENUE CORRIDOR TRAFFIC CALMING STUDY

City of Rochester and Town of Greece, Monroe County, New York

Figure 15 - Proposed Road Diets and Bicycle Boulevards



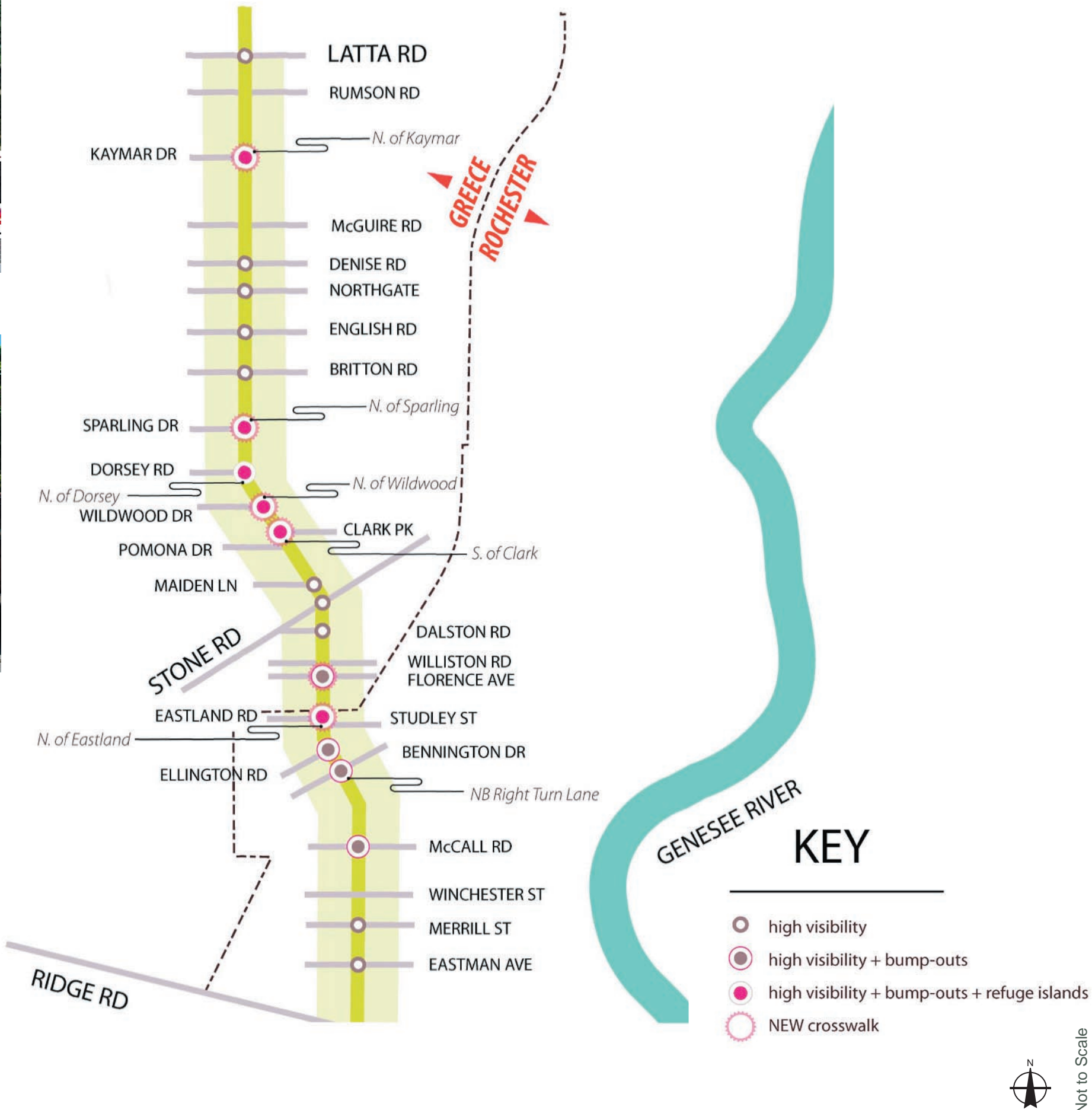
HIGH VISIBILITY CROSSWALK



HIGH VISIBILITY CROSSWALK + CURB BUMP-OUTS



HIGH VISIBILITY CROSSWALK + CURBS + REFUGE ISLAND



RECOMMENDED ON – STREET ALTERNATIVES

DESIGN ELEMENT 1: BICYCLE BOULEVARDS

Description: Bicycle boulevards are low-volume streets that have been optimized for bicycle travel through traffic calming and diversion, signage and pavement markings, and intersection crossing treatments. Bicycle boulevards are shared roadway facilities that are comfortable and attractive to cyclists with a wide range of abilities and ages but are inconvenient as through routes for automobiles. Bicycle boulevards should be located on routes that serve major origins, destinations and travel corridors (often paralleling an arterial), and should be as direct and intuitive as possible. Residential roadways with already low vehicle volumes are often selected for bicycle boulevards.

Bicycle boulevards use a variety of traffic calming elements to achieve greater comfort and safety for bicyclists and pedestrians. For example, diverters can direct cars to main thoroughfares, while allowing bicycles and pedestrians to safely continue along the route. At some intersections, motorists may be restricted to a “right turn only”, while pedestrians and bicyclists are allowed to travel straight. Barriers may restrict cars altogether, creating a cul-de-sac feel along part of the route. Traffic circles and speed humps can help to reduce vehicle speed through intersections.

At the very least, bike route signs could be used to indicate an alternative route that avoids the bottlenecks on Dewey Avenue. The signs would allow identification of the boulevards in a way that would be easily understood by bicyclists but that would not encourage motorists to use the boulevards as shortcuts even if the automobile discouragement features are not fully implemented.

Bicycle boulevards typically consist of one or more of the following conditions:

- low traffic volumes (or bike lanes where traffic volumes are medium);
- discouragement of non-local motor vehicle traffic;
- free-flow travel for bikes by assigning the right-of-way to the bicycle boulevard at intersections wherever possible;
- traffic control to help bicycles cross major arterial roads; and
- a distinctive look and/or ambiance such that cyclists become aware of the existence of the bike boulevard and motorists are alerted that the roadway is a priority route for bicyclists.

Illustrations:



Source: <http://www.bicyclinginfo.org>; <http://www.livablestreets.com>

Images: (L, R) David Baker & Partners Architects website, (C) City of Berkeley, CA website

RECOMMENDED ON – STREET ALTERNATIVES

DESIGN ELEMENT 2: BICYCLE BOXES

Description: A bicycle box is a colored area at a signalized intersection that allows bicyclists to pull in front of waiting traffic. Bicycle boxes are often used in conjunction with bike lanes, from which bicyclists pedal directly into the box. Designed for use only at red lights, bicycle boxes work best at intersections with a high volume of bicyclists. The boxes have no intended function when traffic is already in motion. Of particular concern is the “right hook” collision that can happen when drivers turn right as a bicycle starts straight through an intersection. Studies have found that bicycle boxes significantly reduce the number of crashes between right-turning motorists and bicyclists going straight. Bicycle boxes can be most effective when combined with a brightly colored lane continuing straight through the intersection to help alert right-turning motorists to the fact that bicycle riders may be traveling straight through the intersection along their right side.

A bicycle box is typically:

- A green 14-foot wide rectangular box on the road with a white bicycle symbol inside
- Marked in front of the stop line for motorists, but behind the pedestrian crosswalk
- Paired with a brightly colored (e.g. green) bike lane that extends through the intersection
- The width of one or more vehicular travel lanes and provides room for several bicyclists

A bicycle box has the following benefits:

- Improves bicyclists' visibility
- Enables bicyclists to get to the front of traffic at signalized intersections
- Allows a left-turning bicyclist to reach a better position for making a safe turn
- Reduces delay for bicyclists by providing space to "jump the queue" of waiting vehicles
- Thought to elevate the "status" of bicyclists relative to motor vehicles
- Distances motorists from crosswalks, providing a more pleasant crossing for pedestrians
- Allows bicyclists to reduce exposure to vehicle tailpipe emissions

While bicycle boxes are more common in other countries, it is still considered an experimental treatment in the United States, and has yet to be included in the MUTCD. Ideally, the controlling agency would apply for the use of bicycle boxes - at every signal on Dewey Avenue - as an experimental treatment through FHWA.

Illustrations:



Sources: Pedestrian & Bicycle Information Center; City of Portland Office of Transportation; www.livablestreets.com
 Images: (L) www.spokesandbeans.wordpress.com, (C) www.bikeportland.org, (R) www.livablestreets.com

RECOMMENDED ON – STREET ALTERNATIVES

DESIGN ELEMENT 3: BICYCLE LANES/SPACE

Description: Bicycle lanes consist of a portion of the roadway that has been designated by striping, signing and pavement marking for the preferential or exclusive use by bicyclists. Striped bicycle lanes make the movements of both motorists and bicyclists more predictable. Bicycle-friendly cities such as Madison and Eugene have extensive bike lane networks. More recently, large cities such as Chicago, Philadelphia, and Seattle have begun to stripe bike lanes on their arterial and collector streets as a way of encouraging bicycle use. Dewey Avenue will have bicycle lanes further south in the City of Rochester, and would benefit from continuous striping. At the very minimum, edge line pavement markings with a four-foot curb offset could be provided in lieu of an identified bike lane.

In general, bicycle lanes should always be:

- one-way, carrying bicyclists in the same direction as the adjacent travel lane
- on the right side of the roadway
- located between the parking lane (if there is one) and the travel lane

Critical Dimensions - Bicycle lane width (AASHTO Guide):

- 4 feet: minimum width of bike lane on roadways with no curb and gutter
- 5 feet: minimum width of bike lane when adjacent to parking, with the bike lane located between the travel lane and the parking lane
- 11 feet: total width for shared bike lane and parking area, no curb face
- 12 feet: shared bike lane and parking area with a curb face

Critical Dimensions - Bicycle lane stripe width:

- 6-inch: solid white line separating bike lane from motor vehicle lane (possibly increased to 8-inches where emphasis is needed)
- 4-inch: optional solid white line separating the bike lane from parking spaces

Illustrations:



Source: Pedestrian and Bicycle Information Center <<http://www.bicyclinginfo.org>>

Images: (L) City of Richmond, BC, Canada website, (R) www.pedbikeimages.com - Dan Burden

RECOMMENDED ON – STREET ALTERNATIVES

DESIGN ELEMENT 4: CURB EXTENSIONS

Description: Curb extensions—also known as bumpouts or neckdowns—extend the sidewalk or curb line out into the parking lane, which reduces the effective street width. Curb extensions significantly improve pedestrian crossings by reducing the pedestrian crossing distance, visually and physically narrowing the roadway, improving the ability of pedestrians and motorists to see each other, and reducing the time that pedestrians are in the street. Curb extensions have been constructed throughout the area, including nearby on Lake Avenue in the City of Rochester.

Curb extensions placed at an intersection essentially prevent motorists from parking in or too close to a crosswalk or from blocking a curb ramp or crosswalk. Motor vehicles parked too close to corners present a threat to pedestrian safety because they block sightlines, obscure visibility of pedestrians and other vehicles, and make turning particularly difficult for emergency vehicles and trucks. Curb extensions also provide an excellent place to locate stop signs that will be more visible since they cannot be easily blocked by parked cars. The restricted street width created by curb extensions sends a visual cue to motorists to travel more slowly. Turning speeds at intersections can be reduced with curb extensions (curb radii should be as tight as is practicable).

Curb extensions must not extend into travel lanes, bicycle lanes, or shoulders (curb extensions should not extend more than 6 feet from the curb). The turning needs of larger vehicles, such as school buses, need to be considered in curb extension design.

A curb extension is designed to:

- Improve safety for pedestrians and motorists at intersections.
- Increase visibility and reduce speed of turning vehicles.
- Encourage pedestrians to cross at designated locations.
- Prevent motor vehicles from parking at corners.
- Shorten crossing distance and reduce pedestrian exposure.

Illustrations:



Source: www.walkinginfo.org

Images: www.pedbikeimages.org - Carl Sundstrom (L), Dan Burden (R)

RECOMMENDED ON – STREET ALTERNATIVES

DESIGN ELEMENT 5: HIGH VISIBILITY CROSSWALKS

Description: A crosswalk is (a) the part of the roadway at an intersection between the sidewalks on opposite sides of the highway, measured from the curbs or, in the absence of curbs, from the edges of the traversable roadway, or (b) any portion of a roadway at an intersection or elsewhere distinctly indicated for pedestrian crossing by lines or other markings on the surface. There are marked and unmarked crosswalks.

Marked crosswalks highlight the right-of-way where motorists can expect pedestrians to cross and designate a stopping location. They can also indicate optimal or preferred locations for pedestrians to cross. Marked crosswalks should be installed in conjunction with other enhancements that physically reinforce crosswalks and reduce vehicle speeds, particularly at uncontrolled locations and on major roads. Other enhancements include advance vehicle stop lines, curb extensions, and refuge (crossing) islands. An unmarked crosswalk is merely the part of a roadway that is included within the extensions of the sidewalk lines between opposite sides of the roadway at an intersection.

Although the MUTCD provides options for crosswalk markings, the continental design is recommended because research indicates that it is the most visible to drivers. The ladder design is created with white longitudinal lines at a 90-degree angle to the line of the crosswalk. The lines should be approximately 12 to 24 inches wide and spaced 12 to 24 inches apart. The continental design can also be installed so that the primary paths for vehicular tires are between the crosswalk markings, which helps to reduce wear and maintenance. Use of the continental design for crosswalk markings also improves crosswalk detection for people with low vision and cognitive impairments. It is important to note that crosswalks can also create a false sense of security for pedestrians.

Crosswalks should not be slippery, create tripping hazards, or be difficult to traverse. Tape is one of the best materials for marking crosswalks because it is highly reflective, long lasting, slip-resistant, and does not require a high level of maintenance if installed properly. Although initially more costly than paint, both inlay tape and thermoplastic are more cost-effective in the long run. Inlay tape is recommended for new and resurfaced pavement, while thermoplastic may be better on rougher pavement surfaces. Tape and thermoplastic are more visible and less slippery than paint when wet.

Illustrations:



Source: www.walkinginfo.org; <http://www.fhwa.dot.gov/environment/sidewalk2/sidewalks208.htm>

Images: (L) www.neighborhoodaccess.org, www.pedbikeimages.com - Dan Burden (C), Carl Sundstrom (R)

RECOMMENDED ON – STREET ALTERNATIVES

DESIGN ELEMENT 6: REFUGE ISLANDS

Description: A refuge island, also known as a crossing island, center island, median refuge area, pedestrian island, or median slow point, is a raised island placed in the street at an intersection or mid-block to separate crossing pedestrians from motor vehicles. Center refuge islands allow pedestrians to deal with only one direction of traffic at a time, enabling them to stop partway across the street to wait for an adequate gap in traffic before crossing the second half of the street.

Where mid-block or intersection crosswalks are installed at uncontrolled locations (i.e. where no traffic signals or stop signs exist), refuge islands should be considered as a supplement to the crosswalk. They are also appropriate at signalized crossings, though they should never be used to create a two-phased pedestrian crossing at a signalized intersection (don't leave pedestrian stuck on a crossing island between moving lanes of traffic). If there is enough width, center crossing islands and curb extensions can be used together to create a highly improved pedestrian crossing, but care should be taken to maintain bicycle access. Detectable warnings are needed at cut-throughs.

This kind of facility has been demonstrated to significantly decrease the percentage of pedestrian crashes. The factors contributing to pedestrian safety include reduced conflicts, reduced vehicle speeds approaching the island (the approach can be designed to force a greater slowing of cars, depending on how dramatic the curvature is), greater attention called to the existence of a pedestrian crossing, opportunities for additional signs in the middle of the road, and reduced exposure time for pedestrians. Refuge islands have been successfully used throughout the region.

The FHWA recommends raised medians (or pedestrian refuge islands) be considered in curbed sections of multi-lane urban roadways, particularly where pedestrians, high traffic volumes (exceeding 12,000 average daily trips per day), and intermediate or high travel speeds occur together. Medians/refuge islands should be at least 6 feet wide, but preferably 8 feet for pedestrian comfort and safety. They should also be of adequate length to allow the anticipated number of pedestrians to stand and wait for gaps in traffic before crossing the second half of the street. Maintenance concerns, such as snow removal, can be a concern.

Illustrations:



Sources: www.livablestreets.com, www.walkinginfo.org
 Images: www.pedbikeimages.org / Dan Burden

RECOMMENDED ON – STREET ALTERNATIVES

DESIGN ELEMENT 7: ROAD DIET

Description: A road diet is a treatment given to an urban roadway in which the number of lanes is reduced, and the freed space converted to parking, bike lanes, landscaping, walkways, or medians. Road diets are implemented to provide additional pavement and safety for bicyclists and pedestrians, reduce speeding, and to make room for parking. Monroe County has successfully implemented other road diets in the vicinity, including one on Dewey Avenue. Recommended road cross-sections for Dewey Avenue are shown in Figure 15, although final design may differ slightly.

Road diets are anathema to traditional traffic engineering principles because they tend to reduce roadway capacity. However, in practice, road diets can cause vehicle speeds to readjust to a more optimal speed, increasing the throughput of vehicles per lane. For this reason, road diets sometimes reduce congestion, and generally always increase safety for all users of the roadway. The need for road diets comes from the fact that multi-lane urban roads are built to handle large volumes of traffic during the morning and evening rush hours. Generally, during the other 22 hours of the day, the road is larger than necessary. This abundance of pavement encourages speeding, and places bicyclists and pedestrians at far higher risk than a typical two-lane road.

The most frequent type of conversion is from four lanes to three, with the middle lane serving as a two-way turn lane (TWTL). Alternatively, the middle “lane” can be a raised median with breaks or left turn pockets for turns. Road diets involving streets serving up to 20,000 vehicles per day can substantially improve safety without significantly reducing roadway capacity. Most road diet projects result in the same or greater traffic volumes, but at a slower speed.

Dependent on the number of turning movements, the capacity of a three-lane road can be almost equivalent to that of a four-lane road, because it operates more efficiently, and because left-turning vehicles are removed from the flow of traffic, reducing delay. Three-lane roads are inherently safer because the most prudent driver sets the speed, there is only a single lane of on-coming traffic to monitor when turning left, and the two directions are separated by the TWTL or median.

Illustrations:



Sources: www.livablestreets.com, www.walkinginfo.org
 Images: www.pedbikeimages.org / Dan Burden

RECOMMENDED ON – STREET ALTERNATIVES

DESIGN ELEMENT 8: SIGNAGE AND SIGNALIZATION PRIORITIES

	<p>Leading Pedestrian Interval (LPI) - A pedestrian safety measure used at roadway intersections with traffic signals. Intersections with pedestrian and car traffic often experience conflict between these two groups, with potentially dangerous consequences for the pedestrians. The term LPI refers to when the 'walk' signal appears three or more seconds before the green traffic signal. The 'walk' signal then remains active for the duration of the green signal. This brief timing adjustment allows pedestrians more time to cross the street, and increases their visibility to drivers, especially those making turns. This does, however, reduce the intersection's capacity. LPIs are relatively simple and inexpensive to set up in intersections that already have traffic signals, requiring only a change in the phasing of the lights.</p>
	<p>'No Turn on Red' Signage – The Right-Turn-on-Red (RTOR) law requires motorists to come to a full stop and yield to cross-street traffic and pedestrians prior to turning right on red, but many motorists do not fully comply with the regulations. Prohibiting RTOR should be considered where and/or when there are high pedestrian volumes, where there is a proven problem with motorists conflicting with pedestrians, or where bicycle boxes are implemented. This can be just a simple sign posting, or there are some options that are more effective. For areas where a RTOR restriction is needed only during certain times, time-of-day restrictions may be appropriate. Prohibiting RTOR is simple and low-cost. However, it can help one crosswalk and hurt the other, for all right turns must occur while the light is green, at the same time pedestrians are crossing.</p>
	<p>'Share the Road' Signage – AASHTO describes signed shared roadways as "those that have been identified by signing as preferred bike routes" and recommends signing a shared signed roadway every 1/4 mile and at every turn (both to mark the turn and to confirm that the rider has made the correct turn). A "Share the Road" plaque is mounted below a bicycle warning sign, creating a sign assembly that advises drivers to watch for bicycle travel on the roadway.</p>
	<p>Bicycle Demand Actuated Signals - Demand-actuated traffic signals consist of an electrified loop of wire buried in the traffic lane approaches to the intersection, which sense the presence of traffic before changing signal phases in order to optimize traffic flow. Some loop configurations are more sensitive to bicycles than other configurations that are specifically designed for motorized traffic. Special pavement markings telling bicyclists where to stop can optimize the functioning of the demand-actuated signal. Requires dedicated bike space.</p>
	<p>Pedestrian Countdown Signals – Now required by MUTCD for all new installations, countdown signals provide pedestrians with information about the amount of time remaining in a crossing interval. Signals may be designed to begin counting down at the beginning of the walk phase (preferred) or at the beginning of the clearance (flashing DON'T WALK) interval. Countdown signals can be on fixed-time or pushbutton operation.</p>

Sources: www.bicyclinginfo.org, www.walkinginfo.org, www.livablestreets.com, www.bikeplan.com/signal.html
 Images: www.bicyclinginfo.org, www.pedbikeimages.org, www.colbyandstacy.files.wordpress.com

RECOMMENDED OFF – STREET ALTERNATIVES

DESIGN ELEMENT 1: ADA ACCESSIBLE BUS STOPS

Description: Both new and existing bus stops need to be ADA accessible. To be accessible, the following details need to be considered during design and construction:



- A firm, stable surface when new bus stop pads are constructed at bus stops where a lift or ramp is to be deployed
- A minimum clear length of 96" (measured from the curb or vehicle roadway edge) and a minimum clear width of 60" (measured parallel to the vehicle roadway) to the maximum extent allowed by legal or site constraints
- Connections to streets, sidewalks or pedestrian paths by an accessible route
- The slope of the pad parallel to the roadway should be the same as the roadway, and for water drainage, a maximum slope of 1:50 (2%) perpendicular to the roadway
- New or replaced bus shelters should be installed or positioned so as to permit a wheelchair or mobility aid user to enter from the public way and to reach a location, having a minimum clear floor area of 30" x 48", entirely within the perimeter of the shelter
- Shelters should be connected by an accessible route to the boarding area
- All new bus route identification signs should be appropriate in finish and contrast, character height and proportion

Sources: http://www.adata.org/adaportal/Facility_Access/ADAAG/Special_Occupancies/ADAAG_10.html

Images: <http://www.fhwa.dot.gov>, <http://dotlibrary.dot.gov>

DESIGN ELEMENT 2: BICYCLE PARKING

Description: More than 1.5 million bicycles are reported stolen every year in the United States, and fear of bicycle theft is recognized as a significant deterrent to bicycle use. The availability of safe and convenient parking is as critical to bicyclists as it is for motorists and yet it is frequently overlooked in the design and operation of shops, offices, schools, and other buildings.

Bicycle parking needs to be visible, accessible, easy to use, convenient, and plentiful. Racks need to support the whole bike (not just one wheel) and enable the user to lock the frame and wheels of the bike with a cable or U-shaped lock. Parking should preferably be covered, well lit, and in plain view without being in the way of pedestrians or motor vehicles. And if any of these criteria aren't met, there's a good chance cyclists won't use what is provided and will park wherever they think their bicycle will be safe.

Bicycle parking facilities are sometimes classified into Class 1 and Class 2 facilities; Class One being lockers or racks in enclosed areas (providing protection from theft), and Class Two being stands or racks in unsupervised areas. However, most communities divide parking facilities into those that provide acceptable long-term or short-term parking. Short-term bicycle parking is usually

defined as being two hours or less, such as might be necessary outside a store, or for visitors to an office building or park. Long term parking usually suggests that the bicyclist is leaving the bike all day, or overnight, or for an even longer duration.

Visibility to bicyclists is critical, and when there is bicycle parking, it should be publicized. The racks can be painted in bright colors so that pedestrians and bicyclists can see them easily. Signs can be used to direct cyclists to the parking area. A bicycle logo can be painted on the rack or on the ground. The availability and location of bicycle parking can be publicized in marketing, advertising and informational pamphlets.

Wherever possible, bicycle parking should be covered to protect the bike from rain, snow and other elements, particularly with the weather patterns of Western New York. Covered parking areas should have at least six or seven feet of clearance, but not so high as to allow rain and snow to easily blow under the roof.

2A. BICYCLE LOCKERS

Obviously the level of security and protection from the elements needs to be greater, but the immediate convenience of the parking facility may not be as important. For secure, all-day or overnight parking, for instance, the Portland guide assumes that riders will be willing to walk a short distance (e.g. 750 feet) to or from their destination.

Long-term parking options include:

- Lockers, individual lockers for one or two bicycles
- Racks in an enclosed, lockable room
- Racks in an area that is monitored by security cameras or guards (within 100 feet)
- Racks or lockers in an area always visible to employees

Perhaps the easiest solution is the bicycle locker. Generally they are as strong as the locks on the door. They are designed to be secure for individual bikes with panniers, computers, lights, etc, left on the bike. Some bike lockers are designed to be stacked so there is twice as much parking density. Good protection from the weather is another benefit. Bike lockers tend to be used most for long-term parking in areas without a lot of continuous oversight. On the downside, if lockers have coin-operated locks, they can be a target of theft, and may attract various non-intended uses.

Bicycle lockers are currently provided at several City of Rochester garages outside the study area.

Illustrations:



Images: http://www.transport.wa.gov.au/cycling/images/cycling_lockers.jpg, <http://www.mcclellanparktma.org>

2B. BICYCLE RACKS

Racks need to be sited and installed appropriately for them to be well used. Racks that are too close to the wall, or which don't have enough room between them, will end up sitting empty while nearby railings, trees and light poles continue to be used by bicyclists. Racks need to be clearly visible and accessible, yet shouldn't interfere with pedestrians or street furniture. Here are some considerations that have been identified by other municipalities. Racks should be:

- Installed in public space within municipal limits, usually on a wide sidewalk (ten feet wide or more) with five or more feet of clear sidewalk space remaining.
- Placed to avoid conflicts with pedestrians. They are usually installed near the curb and away from building entrances, crosswalks, fire hydrants, curb ramps, etc.
- Installed in bus stops or loading zones only if they do not interfere with boarding or loading patterns and there are no alternative sites.
- Visible to the cyclist.
- Only installed in concrete, as they cannot be securely anchored in asphalt. Racks cannot be installed on heated, vaulted, or architectural sidewalks.
- Within 50 feet of the main entrance to the building, or entrances that are used by cyclists.
- Well distributed (i.e., it is typically better to have four or five racks spread out along one city block rather than a group of four or five racks mid-block).
- Located in areas of high pedestrian activity to discourage would-be thieves.

Racks offer an opportunity for public art, but first and foremost must be functional for cyclists. Some municipalities specify that the inverted U-type bike rack is the required bicycle rack, although other racks may be proposed if they meet certain performance requirements. Every other current publication on bicycle parking follows essentially the same approach. Racks should:

- Support the frame of the bicycle and not just one wheel
- Allow the frame and one wheel to be locked to the rack when both wheels are left on the bike
- Allow the frame and both wheels to be locked to the rack if the front wheel is removed
- Allow the use of either a cable or U-shaped lock
- Be securely anchored
- Be usable by bikes with no kickstand
- Be usable by bikes with water bottle cages
- Be usable by a wide variety of sizes and types of bicycle

Illustrations:



Sources: <http://www.ibike.org/engineering/parking.htm>, <http://www.bicyclinginfo.org>
 Images: (L) <http://www.cyclesafe.com>, (C) <http://gothamist.com>, (R) <http://www.bikeride.com>

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DESIGN ELEMENTS 3 & 4: SIDEWALKS AND BUFFER AREAS

Description: Sidewalks are pedestrian lanes that provide people with space to travel within the public right-of-way that is separated from vehicles in the roadway. They also provide places for children to walk, run, skate, ride bikes, and play. Sidewalks are associated with significant reductions in pedestrian collisions with motor vehicles. Such facilities also improve mobility for pedestrians and provide access for all types of pedestrian travel: to and from home, work, parks, schools, shopping areas, transit stops, etc. Buffer areas can be developed in association with sidewalks to provide a pleasant and inviting walking area, and make sidewalks safer.

FHWA recommends a minimum width of 5 feet for a sidewalk, which allows two people to pass comfortably or to walk side-by-side. Wider sidewalks of six feet or more should be installed near schools, at bus stops, in commercial areas, or anywhere high concentrations of pedestrians exist. Sidewalks should be continuous along both sides of a street and sidewalks should be fully accessible to all pedestrians, including those in wheelchairs. Utility poles, street furnishings or other obstructions should not be placed in the sidewalk, and uneven surfaces, such as grates, should be minimized. New or improved sidewalks are recommended in corridor zones where there is a high potential for walking but a pedestrian-oriented human scale environment is lacking.

A buffer area of six to eight feet is desirable for Dewey Avenue and should be provided to separate pedestrians from the street. Eight feet is the minimum for large mature street trees. The buffer area will vary somewhat depending on the character zone of the corridor. In commercial districts, a sidewalk amenity zone is more appropriate. Parked cars and/or bicycle lanes can provide a functional buffer area, but neither offers the aesthetic improvements provided by vegetation. In residential areas, a landscape strip is more suitable. Careful planning of sidewalks is important in order to provide adequate safety and mobility. For example, there should be a flat sidewalk provided in areas where driveways slope to the roadway.

Illustrations:



Sources: <http://www.walkinginfo.org>

Images: Town of Greece Dewey Avenue Corridor Study, 2007

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DESIGN ELEMENT 5: BUILDINGS

Architectural proposals for any physical changes to a building or site should first begin with the issues of massing, scale and spatial definitions, and end with the development and refinement of architectural details. Special attention should be paid to adjacent buildings and the context of the project site with its surroundings. In general, commercial and institutional structures should be oriented to the sidewalk, pedestrians and the street. In certain locations, however, institutional buildings may be located in a campus setting with open space near the street. Saint Joseph's Villa is one such location where these recommendations don't apply.

5A. BUILDINGS ORIENTED ONTO THE STREET

Appropriate siting and visual elements create attractive commercial centers that reflect the desired neighborhood character. New buildings should be located close to the public street. Small parking areas may be located in front of commercial buildings, but any additional parking should be located behind the businesses. Buildings and plantings should form an attractive visual edge to the roadway instead of a dominance of pavement and parking lots. Variety in building types, massing and small variations in setbacks should be encouraged, yet the general consistency of a building edge at a consistent setback from the curb should be maintained in commercial areas.

Building design should creatively reflect appropriate elements of the neighborhood. Main entrance doors should face the main streets. Retail and other active uses should be incorporated on the first floor. Diversity that is in tune with the massing, proportion, decorative design elements, and street relationships of traditional buildings should be encouraged. Clusters of buildings with internal open spaces are desired, rather than single buildings separated by vast expanses of parking lots. Old and new structures should appear as a consistent sequence in size and shape. Architectural detailing can be used to create variety and interest on new buildings.

5B. BUILDING AWNINGS

When buildings are located adjacent to the street, building awnings can be combined with street trees to provide shade and shelter for pedestrians. Buildings that are located closer to the street make for a pedestrian-scaled environment, and the awnings can make a streetscape even more human in scale.



Source: Town of Greece Dewey Avenue Corridor Study, 2007

Images: <http://www.rochestercitynewspaper.com>

RECOMMENDED OFF – STREET ALTERNATIVES

DESIGN ELEMENT 6: PEDESTRIAN-SCALE LIGHTING

Description: Good quality and placement of lighting can enhance an environment as well as increase comfort and safety. Pedestrians often assume that motorists can see them at night; they are deceived by their own ability to see the oncoming headlights. Without sufficient overhead lighting, motorists may not be able to see pedestrians in time to stop.

In commercial areas with nighttime pedestrian activity, streetlights and building lights can enhance the ambiance of the area and the visibility of pedestrians by motorists. Lighting can signify a pedestrian and cyclist area and fill gaps between streetlights. It is best to place streetlights along both sides of arterial streets and to provide a consistent level of lighting along a roadway. Nighttime pedestrian crossing areas may be supplemented with brighter or additional lighting. This includes lighting pedestrian crosswalks and approaches to the crosswalks.

In commercial areas, specialty pedestrian-level lighting may be placed over the sidewalks to improve pedestrian comfort, security, and safety. Mercury vapor, incandescent, or less expensive high-pressure sodium lighting is often preferred as pedestrian-level lighting. Low-pressure sodium lights are low energy, but have a high level of color distortion. Pedestrian-scale lighting in the Dewey Avenue Corridor should be implemented in conjunction with the sidewalk amenity zones.

Purpose:

- Enhance safety of all roadway users, particularly pedestrians
- Enhance commercial districts
- Improve nighttime security

Considerations:

- Ensure that pedestrian walkways and crosswalks are well lit.
- Install lighting on both sides of wide streets and streets in commercial districts.
- Use uniform lighting levels.

Illustrations:



Source: <http://www.walkinginfo.org>

Images: <http://www.pedbikeimages.org> / Dan Burden

RECOMMENDED OFF – STREET ALTERNATIVES

DESIGN ELEMENT 7: SHARED ACCESS DRIVEWAYS

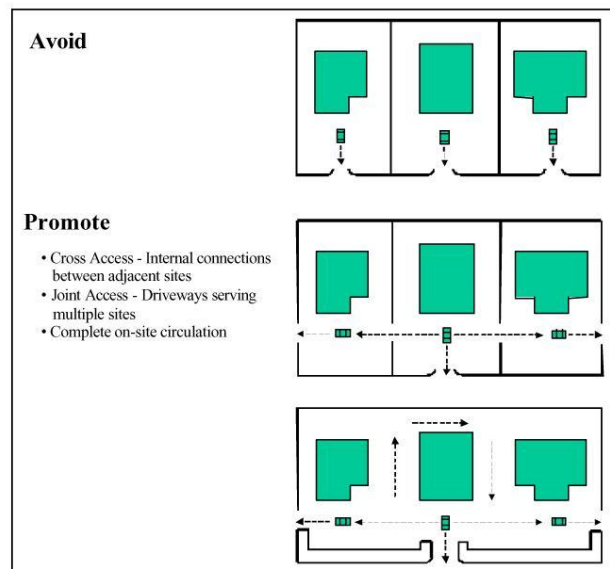
Description: Driveway spacing and driveway density are important considerations in managing access. When driveways are spaced too closely together or the number of driveways per block or mile becomes too large, a significant increase in traffic accident rates occurs. Traffic also tends to become congested more quickly in such situations. This is a concern on Dewey Avenue in Zones 5 and 6 in the Town of Greece, where a high number of access drives introduce conflict and a lack of continuity for pedestrians.

A shared driveway is when two or more adjacent properties use the same driveway for ingress and/or egress. Shared driveways are very common in newer commercial areas, for instance at strip malls, regional shopping centers, and office parks. Sharing driveways is good design practice since conflict points caused by motorists entering and leaving the businesses are reduced. This will, in turn, tend to reduce traffic accidents associated with turning traffic and improve the traffic flow on the main road.

Joint and cross access are formal, legal methods of ensuring that adjacent properties can share driveways. In the case of joint access, two adjacent property owners share a driveway along their common property line. In the case of cross access, one property owner has the legal right to access and use a driveway that is on the adjacent property owner's land. Joint and cross access can be built into private real estate titles through easements. They can also be encouraged or required in local planning or design standards or in municipal and county ordinances.

Sharing driveways is most valuable as an access management strategy when property frontages are short. For example, when the number of commercial properties along a typical 400 to 500 foot block face is more than three or four. A rule of thumb on driveway sharing in an urban or suburban area might be that properties with less than 50 to 60 feet of frontage along an arterial street should not have individual driveways. These properties would share driveways with neighboring properties. Three to four commercial driveways per block face is a desirable maximum standard for an urban or suburban arterial street. This means that when there are more than three or four parcels or commercial buildings on a block face, driveway sharing and cross access should be strongly encouraged. When the number of parcels and potential driveways along a block face is small, driveway sharing and joint and cross access are not needed.

Illustration:



Source: <http://www.ctre.iastate.edu/research/access/toolkit/14.pdf>

Images: <http://www.ctre.iastate.edu/research/access/toolkit/14.pdf>

RECOMMENDED OFF – STREET ALTERNATIVES**DESIGN ELEMENT 8: SIDEWALK AMENITY ZONE**

Description: The beauty and livability of a community depends greatly on the design of its streets. The character and quality of the space between the curb and the face of a building has a lot to do with the way people walking in the community feel about it. Creating comfort for the pedestrian is an important way to generate positive economic activity on the streets.

Streetscape is composed of two elements: the clear walking area - the pedestrian zone - and the area between the curb and the sidewalk – the amenity zone. These zones are typically distinguished by a change in materials, from hard materials to greenery, though in areas of high pedestrian traffic the amenity zone may include less planting and more paving.

The purpose of the amenity zone is to ensure that the pedestrian zone will be free of obstacles. Depending on the design of the sidewalk corridor, the amenity zone may or may not be paved. On sidewalk corridors where the sidewalk is set back from the street, such as when a planting strip is provided, the amenity zone consists of the width of the unpaved area. On sidewalks that are paved from the curb to the property line, the amenity zone is not as clearly defined.

Elements that should be located in the amenity zone include: street trees, streetlights, street furniture (benches, fountains, etc), trash receptacles, kiosks, utility poles, and parking meters. The size recommended for the sidewalk amenity zone along the Dewey Avenue Corridor is eight feet wide, not including the sidewalk.

Sidewalk amenity zones should be used where high pedestrian volumes are likely, and when possible, in combination with on-street parking. Benches, in particular, are recommended to address some of the issues found along the corridor. The Town of Greece has already started to develop attractive resting areas along the corridor, and this should be continued.

Illustrations:

Sources: Downtown Jacksonville, FL Master Plan, <http://www.fhwa.dot.gov/environment/sidewalk2/sidewalks204.htm>
Images: <http://www.pedbikeimages.org> / Dan Burden

RECOMMENDED OFF – STREET ALTERNATIVES**SOLUTION 9: COORDINATE WITH EASTMAN BUSINESS PARK**

Description: Eastman Business Park (EBP) is the redevelopment of portions of Kodak Park, Eastman Kodak Company's facilities near Ridge Road and Dewey Avenue. EBP is a self-sufficient manufacturing facility that consists of approximately 171 acres of land bounded by West Ridge Road, Dewey Avenue and Merrill Street. Roughly 50% of the buildings in the EBP have been demolished, and nearly 72 acres of land remain to be developed. The City of Rochester has been working with Eastman Kodak to identify action steps critical to redevelopment, including the rezoning of many parcels as a planned development district. This district will have flexible land use regulations, streamlined review processes, and prohibitions on non-profit and certain non-conforming businesses. The planned development district will have three sub areas: 1) heavy industrial/corporate headquarters, 2) lighter industrial/commercial, and 3) commercial/residential. Opportunities exist that overlap with the improvements planned for Eastman Kodak's property.

1. Eastman Trail

The Genesee Land Trust has proposed the "Eastman Trail" through the EBP representing a significant east/west connection between the City's Genesee Riverway Trail at Kings Landing and the State's Route 390 Trail in the Town of Greece.

- The Genesee Riverway Trail is an urban multi-use trail adjacent to the Genesee River, used primarily by bicyclists, pedestrians, and cross-country skiers, that runs through more than 16 miles of land in the City of Rochester.
- The Route 390 Trail is 4.7 miles long and runs parallel and separate from the Route 390 highway between Route 104 and the Lake Ontario State Parkway in the Town of Greece, with other sections being planned.

The Eastman Trail is proposed to begin at Kings Landing (Lake Avenue & Maplewood Drive), proceed west along Eastman Avenue, continue westerly through Eastman Business Park and eventually connect to the planned Route 390 Trail in the Town of Greece, just north of Ridgeway Avenue. This project, if realized, would support the regional and citywide trail and alternative transportation efforts as well as the ongoing marketing efforts of the Eastman Business Park to lure new employers to their park and the region. The trail would cross Dewey Avenue at Eastman Avenue, and provide connections from the corridor to the regional trail network.

Trail planners anticipate that this connection will require a new pedestrian bridge spanning Mt. Read Blvd, serving both trail users and Eastman Business Park employees. This trail would establish two significant urban/suburban loops: the north utilizing the Eastman Trail, Route 390 Trail, Lake Ontario State Parkway Trail and the Genesee Riverway Trail; and to the south utilizing the Eastman Trail, planned Route 390 Trail, Canalway Trail and the Genesee Riverway Trail.

The Genesee Land Trust, with the support of the Eastman Business Park, approached the City and the Town of Greece to spearhead a conceptual study of the trail. Although the conceptual study was not funded in the most recent version of the Unified Planning Work Program, funding opportunities will be sought in the future.

2. Depaving

Kodak has more than 43 acres of paved or unused areas that present opportunities for depaving excess parking capacity. Depaving is a relatively new term that denotes the act of removing asphalt

or concrete pavement and reclaiming the space for recreational or aesthetic uses such as a park or community garden. City Repair, a Portland, Oregon, nonprofit organization pioneered the concept in 2007, and it has spread to other U.S. communities. See Figure 17 for more information.

The benefits of depaving existing parking lots and adding urban vegetation include:

- Reduces “heat island effect” of increased summertime temperatures from heat generated off pavement
- Reduces pollutants entering watershed from stormwater runoff
- Adds aesthetic enhancement to areas and psychosocial benefits associated with green space
- Enhances air quality by removing particulate pollutants and carbon dioxide from the air while producing oxygen
- Restores habitat for birds, insects, and other wildlife
- Provides traffic calming effects when trees are planted along urban streets
- Provides ambient cooling from evapotranspiration of rain on the leaves





Existing Conditions (North of Ridge Road)



Depaving Opportunities

Kodak has approximately 43 acres of paved or unused areas that present opportunities to depave excess parking capacity. Any changes would need to be coordinated with plans for the Eastman Business Park.

Benefits of depaving existing parking lot and adding urban vegetation:

- Reduces "heat island effect" of increased summertime temperatures from heat generated off pavement
- Reduces pollutants entering watershed from stormwater runoff
- Aesthetic enhancement to areas and psychosocial benefits associated with green space
- Enhances air quality by removing particulate pollutants and carbon dioxide from the air while producing oxygen
- Restores habitat for birds, insects, and other wildlife
- Traffic calming effects when trees are planted along urban streets
- Ambient cooling from evapotranspiration of rain on the leaves



Proposed Conditions

RECOMMENDED OFF – STREET ALTERNATIVES**DESIGN ELEMENT 10: PEDESTRIAN AND BICYCLE-ORIENTED PARKING LOTS*****Description:***

The physical layout of a development, particularly the parking lot, can often make the difference in a person's choice to walk between stores or to adjacent developments. Careful attention should be given to the location of buildings as well as the configuration of parking lots. Site plan review standards should be developed for commercial properties to accommodate bicycles and pedestrians between the street and the storefront. Figure 18: Pedestrian and Bicycle Oriented Parking Lot provides a diagram of good parking lot practices. Several provisions can ensure a better walking environment in commercial and office developments.

Building Setbacks. Buildings should not automatically be separated from the street by parking lots—this discourages pedestrian access and primarily serves those who arrive by automobile. A maximum setback requirement of 15 to 25 feet can help to encourage pedestrian activity. Parking, driving, and maneuvering areas should not be located between the main building entrance and the street. Parking lots should be located on the side and rear yards of the property whenever possible.

Building Orientation and Facades. Main building entrances should be oriented to face the street designated as a bus route. Entrances and paved walkways should lead directly to a bus stop. Visual interest is very important to pedestrians—long, blank walls with no openings onto the street discourage walking. Building facades should maintain continuity of design elements such as windows, entries, storefronts, rooflines, materials, pedestrian spaces and amenities, and landscaping. Parking garages on streets with bus service should have ground-floor street frontage developed for office, retail, or other pedestrian-oriented uses.

Onsite Walkways. For developments with multiple buildings and/or outparcels, all building entrances on the site should be connected by walkways to encourage walking between buildings and to provide a safe means of travel for pedestrians. Sidewalks between the building edge and parking lots should allow pedestrians safe and convenient access to building entrances without having to walk within driving aisles of parking lots.

Pedestrian Access Between Adjacent Developments. To encourage walking instead of driving between uses, sidewalks should connect those uses to adjacent activity centers. Barriers such as fences or vegetation should not be placed so as to hinder access between developments.

Lighting. Pedestrian-scale lighting should be designed to light the walkway, thereby increasing pedestrian safety. Pedestrian lighting should be used in addition to lighting provided for motorists' safety. Time-Saver Standards for Landscape Architecture includes an excellent chapter on desirable lighting levels for pedestrian facilities.

Improvements Between the Building and the Street. Design elements in the area between the building and the street are critical to successful pedestrian spaces. The streetscape should provide visual interest for the pedestrian. The area should be landscaped if project budgets allow.

Bicycle Parking. Provision of bicycle parking at destinations is crucial—without it, bicycling becomes far less convenient. Bicycle parking ordinances can help to improve the situation.

Parking Lot Design. Parking lots with 50 or more spaces should be divided into separate areas with walkways and landscaped areas in between that are at least 10 feet in width. Pedestrian paths should be designed with minimal direct contact with traffic. Where pedestrian paths cross the traffic stream, raised speed tables that slow cars while providing an elevated pedestrian walkway should be provided. Additional recommendations for pedestrian-oriented parking lots include:

1. **Location.** Keep parking on one or two sides of the shopping center, away from the side that will generate the most pedestrian access. This pedestrian access point could be an office park, outparcel shopping or restaurant, or a residential area.
2. **Direct Pedestrian Paths.** Provide a direct pedestrian path from parking lots and parking decks to the buildings they serve. Clearly delineate this path by striping, using different paving materials, or situating the path through the center of a series of strategically placed parking islands.
3. **Use of Landscaping.** Landscaping can be used to channel and organize the traffic flow in parking lots as well as to provide pedestrian refuge areas. Avoid open parking lots that allow cars to move in any direction.

Illustrations:



Source: U.S. DOT Federal Highway Administration <http://www.tfhrc.gov/safety/pedbike/pubs/05085/chapt5.htm>
Images: <http://www.pedbikeimages.org> / Dan Burden

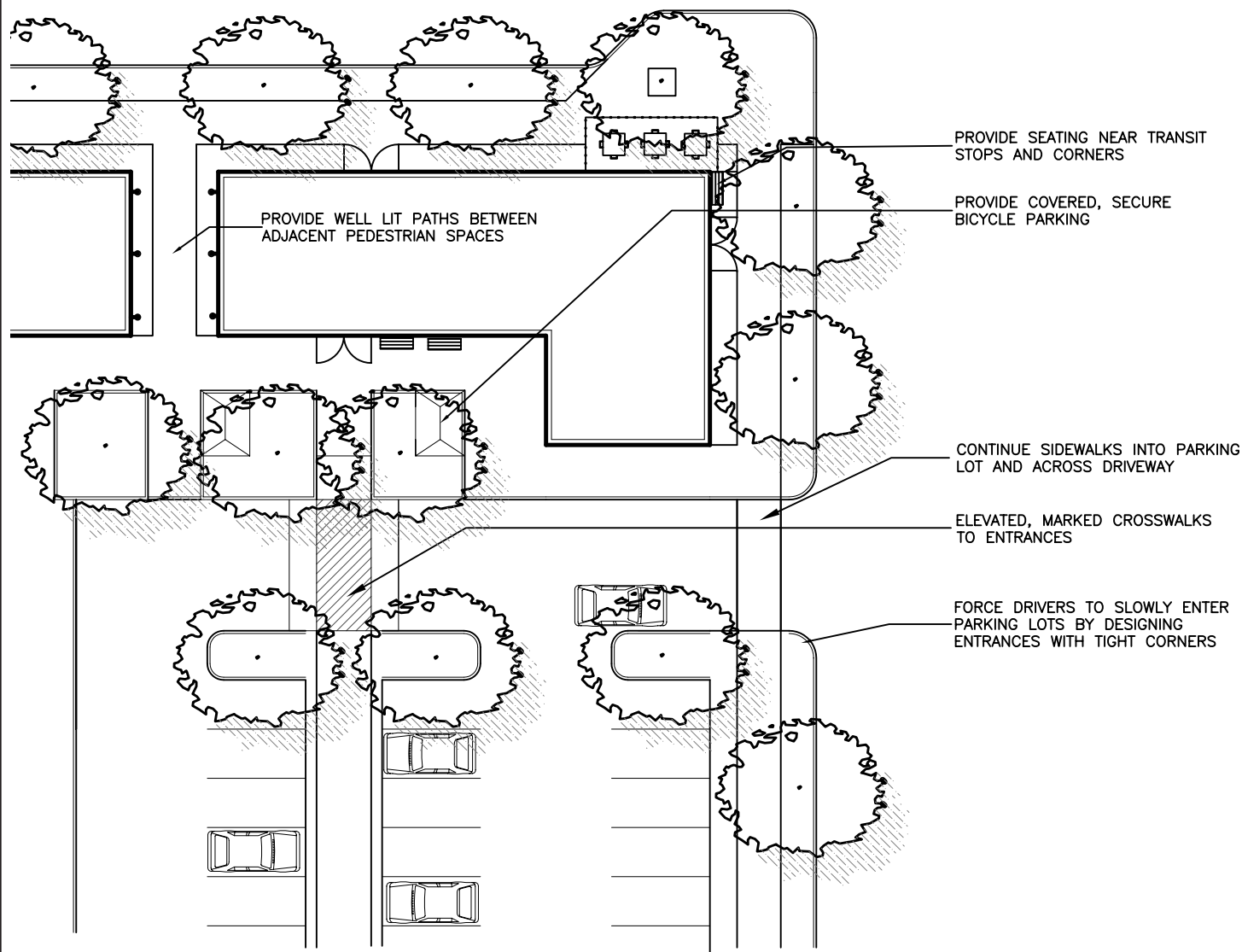


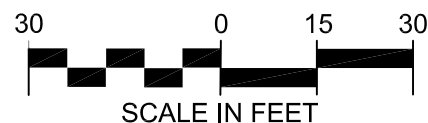
Table 5.2. Levels of Illumination for Sidewalks		
Location of Lighting	Lux (lx)	Footcandles (fc)
Sidewalks along Roadsides:		
Commercial Areas	10	0.9
Intermediate Areas	6	0.6
Residential Areas	2	0.2
Sidewalks distant from Roadsides	5	0.5
Pedestrian Tunnels	40	4.0

From "Timesaver Standards for Landscape Architects"

Notes:

- Parking should be confined to one or two sides of a shopping center or restaurant, away from the sides which generate the most pedestrian access.
- Provide direct pedestrian paths from parking areas to the buildings they serve, clearly delineating the path with paving or a raised bed.
- Adequate bicycle parking must be included – bicycling is inconvenient without it.

Adapted from FHWA Publication No. FHWA-HRT-05-133



Dewey Avenue Corridor Traffic Calming Study

City of Rochester and Town of Greece, Monroe County, New York

Figure 18: Pedestrian and Bicycle-Oriented Parking Lots

RECOMMENDED PROGRAMS AND POLICIES

An **Access Management Overlay District** adds special requirements to existing zoning districts in a corridor, intersection or interchange. The requirements of the underlying districts are retained. Overlay districts can be developed to fit the unique characteristics of a particular area or corridor. If overlay districts are not developed properly, they can lead to complex regulations and significant administrative costs. The overlay district must be adopted by the governing body of the municipality (e.g. the Town of Greece) and incorporated in the existing zoning ordinance. The affected area must be designated on a map and the limits described in the ordinance. The district must be large enough to ensure adequate separation of driveways from an intersection or interchange. The requirements of the overlay district are not restricted to properties with frontage along a particular roadway. The zoning overlay district can also contain provisions for safe and convenient pedestrian, bicycle and public transportation access to commercial uses. (This solution is recommended to address issues in the Town of Greece that are not a problem in the southern end of the corridor in the City of Rochester. In addition, access management is a concern in other areas of the Town of Greece, and the issue may warrant a town-wide approach instead of creating a corridor-specific overlay district.) *Any changes in zoning should be coordinated with the Town of Greece's Mixed-Use Zoning District Planning Initiative.*

Source: <http://www.smart-transportation.com/assets/download/BestPracticesinAccessManagement.pdf>

Bicycle and Pedestrian Supportive Code Language - The Genesee Transportation Council completed a study in 2007 regarding bicycle and pedestrian supportive code language. The project identified examples of noteworthy zoning code and site planning language and guidance that enhance accessibility and safety for bicyclists and pedestrians. Five key findings emerged as areas where revisions to land use codes could be considered in support of bicycle and pedestrian travel: 1) require that developers include sidewalks within residential subdivisions, 2) work to infill gaps in the existing sidewalk network within each community; 3) ensure that bicycle parking is provided within new commercial development; 4) improve the integration of pedestrian facilities within automobile parking lots; and 5) locate buildings to the front of lot lines and parking toward the rear in order to support pedestrian access to the site. Examples were identified that should be considered by the Town of Greece and the City of Rochester as they seek to improve bicycle and pedestrian safety, access and attractiveness along Dewey Avenue. The technical memorandum and fact sheets provide additional details regarding each of these key findings and examples from various communities. *Any changes in zoning should be coordinated with the Town of Greece's Mixed-Use Zoning District Planning Initiative.*

It is important to note that some of the code language recommendations may apply to both municipalities, while some may apply to one, but not the other. In addition, the recommendation will need to be tailored to the specific municipality. One example is the recommendation that bicycle parking be required by the municipal code. The City of Rochester code already includes such a provision, but the Town of Greece might need to strike a middle ground that is flexible but ensures a comprehensive review. The Town should consider requiring its Site Plan Review Committee to specifically evaluate the impacts to pedestrians and bicyclists when it undertakes development review and consider mitigations such as appropriate design for parking lots and the provision of bicycle racks.

<http://www.gtcmpr.org/Docs/PlansStudies.htm>

Education Programs – Some of the recommendations for the Dewey Avenue Corridor will require outreach to, and education of, pedestrians, bicyclists and motorists. Educational programs should address the following objectives: 1) improving safety for bicyclists, pedestrians and motorists; 2) promoting awareness and usage of the bicycle and pedestrian network and amenities; 3) increasing community partnerships in providing resources for bicyclists and pedestrians; and 4) measuring and communicating user benefits and community impact. Many education programs already exist, and could be tailored to address the improvements planned for Dewey Avenue, or for different age groups. Educational programs should be specific, measurable, and address identified problems.

Maintenance Programs – The availability of bicycle and pedestrian facilities is one of the components that can lead to increased riding and walking in a community. However, if you build something, it will also need to be maintained. Maintenance needs require planning and budgeting. Sample maintenance activities include keeping roadways and bike lanes clean and free of debris, identifying and correcting roadway surface hazards, keeping signs and pavement markings in good condition, maintaining adequate sight distance, and keeping separate shared-use paths in good condition. Maintenance is an area where planning and attention can provide significant benefits for bicyclists and pedestrians at relatively modest additional cost. Identification of maintenance needs for roadways, bicycle facilities, and pedestrian amenities, and institutionalization of good maintenance practices are key elements in providing safe facilities for bicyclists and pedestrians. Winter snow removal and year-round debris removal will be key maintenance concerns along the Dewey Avenue Corridor. The importance of good planning and initial design cannot be overstated with respect to long-term maintenance needs. It is easier to obtain outside funding for facilities construction than for on-going maintenance, so planning and building correctly at the outset will reduce future maintenance problems and expense. Residents and businesses can be engaged in clean-up days, or maintaining neighborhood plantings or gardens.

http://www.bicyclinginfo.org/bikesafe/countermeasure.cfm?CM_NUM=-4

Other Pedestrians – The term ‘eyes on the street’ was coined by urban sociologist Jane Jacobs in her book, *Death and Life of Great American Cities*. The term is used by neighborhood watch programs across the country and is familiar to law enforcement officials as well. She wrote, “There must be eyes on the street, eyes belonging to those we might call the natural proprietors of the street. The buildings on a street equipped to handle strangers and to insure the safety of both residents and strangers, must be oriented to the street. They cannot turn their backs or blank sides on it and leave it blind. The sidewalk must have users on it fairly continuously, both to add to the number of effective eyes on the street and to induce a sufficient number of people in buildings along the street to watch the sidewalks.”

<http://www.cooltownstudios.com/2005/06/30/eyes-on-the-street>

Program Effectiveness Measures can be used to determine if the recommended strategies have met their objectives, discover any areas that need change, justify funding, and provide guidance for similar programs. Baseline data is required prior to implementing recommendations. The Town or City could observe the outcomes or contract with a consultant to measure effectiveness on their behalf. Observable outcomes include: number of crashes, injuries, and fatalities; behaviors; number of citations issued; number of people walking or bicycling; knowledge, opinions and attitudes; changes in organizational activity; traffic volumes; and traffic speeds.

Residential Speed Watch Program - a public awareness program in which concerned citizens can take an active role in solving the problem of speeders in their own neighborhoods. Town/City residents can borrow radar guns or trailer units to record speeds and license numbers of cars traveling in excess of speed designations on neighborhood streets. Notification is sent from the Town/City to the registered owners of those vehicles. Often, drivers who speed through neighborhoods are unaware of the effect their actions have on the peace and safety of neighborhood streets. Notification from the Town or City encourages drivers to slow down. A Residential (or Neighborhood) Speed Watch Program encourages safe and prudent driving by motorists traveling on neighborhood streets.

An example of a speed watch program can be found at: <http://www.rockvillemd.gov/police/programs/speedwatch.html>

Security Enhancements – Based on the concepts of “defensible space” or “crime prevention through environmental design”, enhancements can be made to the Dewey Avenue Corridor that will improve security and address the lack of pedestrian-oriented, human-scale environments in areas with a high potential for walking. Crime prevention through environmental design (CPTED) is a multi-disciplinary approach to reducing crime and increasing perceived safety. CPTED strategies depend upon the ability to influence offender decisions that precede criminal acts. These strategies seek to dissuade offenders from committing crimes by manipulating the physical environment in which those crimes occur, often using natural opportunities presented by the environment. Research into criminal behavior shows that the decision to commit a crime is more influenced by cues to the perceived risk of being caught than by cues to reward or ease of entry. Consistent with this research, CPTED-based strategies emphasize enhancing the perceived risk of detection and apprehension and require an understanding of what about the environment influences offenders. CPTED relies upon five overlapping strategies: surveillance, access control, territoriality, image/maintenance and activity support. Possible strategies might include: more building windows, better lighting, and safer, more visible bus shelters.

This chapter discusses phasing, funding sources, and regulatory approvals needed to implement the recommended actions. An implementation matrix, Table 10, follows this section.

A. Phasing

The implementation of the recommended traffic calming strategies should be phased based on priority areas. The priority areas to be targeted are those with a high walk score and a low pedestrian LOS as shown in Figure 14: Walking Potential Vs. Deficiency. In addition, areas with a high incidence of pedestrian- and bicyclist-injury crashes should also be a priority in implementation.

High Priority Areas

- Ridge to Eastman (east side)
- Eastman to Velox (east side)
- Barnard to Shady Way (east side)
- Latta to Rumson (west side)
- Rumson to McGuire (west side)
- Velox to Ridge (west side)

The following locations have lower walk scores but also have low pedestrian LOS and should be considered next in terms of priority:

- Winchester to Bennington (east side)
- McGuire to Brookridge (west side) – this stretch spans several blocks
- Briarcliff to Maiden (west side)
- Beaumont to Dalston (west side)

The phasing of some of the physical improvements is contingent on the implementation of the Road Diet. That is, changes within the travel lanes, such as a bicycle lane, cannot happen until the Road Diet is approved and implemented. In addition, some of the recommendations will be most effective in conjunction with educational programs (e.g. bicycle boulevards).

The following distinctions have been made to identify appropriate timing:

- Short-term: Projects that will commence and be completed within 0-4 years.
- Long-term: Projects that will commence and be completed within 4-10 years.

The following lists identify the priorities and phasing of the recommended improvements.

On-Street Recommendations

High Priority, Short-Term

- Road Diet with bicycle lanes/shoulders (*see Figure 15*)
- High Visibility Crosswalks (*see Figure 16*)
- Share the Road signs
- Leading Pedestrian Intervals
- Pedestrian Countdown signals
- Bicycle Boulevards (*see Figure 15*)

High Priority, Long-Term

- High Visibility Crosswalk with curb bump-outs (*see Figure 16*)
- High Visibility Crosswalk with refuge island and curb bump-outs (*see Figure 16*)

Off-Street Recommendations

High Priority, Short-Term

- New Sidewalks and Sidewalk Improvements in high priority areas
- Bicycle Racks at Destinations
- Benches and Resting Points

High Priority, Long-Term

- Bicycle Lockers
- Pedestrian & Bicycle-Oriented Parking Lots
- Shared-Access Driveways
- Sidewalk Amenity Zones and Buffer Areas

Program and Policy Recommendations

High Priority, Short-Term

- Educational Programs
- Program Effectiveness Measures
- Maintenance Programs

High Priority, Long-Term

- Access Management Overlay District
- Bicycle and Pedestrian Supportive Code Language

Additional improvements are recommended in each category, but are of a lower priority and not listed above. All of the recommended actions are listed in Table 10.

B. Parking Concerns

On-street parking was discussed as a possibility for the Dewey Avenue Corridor. Several segments are not well suited to on-street parking. Much of the Corridor features single-family homes or other low-density residential and commercial uses, for which parking is adequately provided by private driveways or off-street lots. On-street parking in these areas would be underutilized and a poor use of vital right-of-way space.

There are two locations along the corridor where on-street parking would be desirable. These include the areas around Stone Road and Northgate Plaza, where there are several businesses, and many of the building setbacks are conducive to on-street parking. However, an analysis of roadway capacity has indicated that the existing and future traffic volumes are too high to reduce travel lanes in these segments of Dewey Avenue. Therefore, the roadway width is insufficient to provide a parking lane in these segments without physically widening the width of the travel way.

Access management, however, is still a concern and may require additional analysis. There is not a lack of parking; in fact, in areas, there is too much parking and excess pavement. However, as changes are made to the corridor, there may be a need to re-structure parking. Many of the small, existing parking lots are inefficient, creating sections of the corridor that are riddled with curb cuts. These areas are less safe for pedestrians and bicyclists, as well as vehicles.

The *Dewey Avenue Corridor Study* identified a number of issues and recommended strategies for the Town of Greece to consider in relationship to access management. These recommendations included shared parking strategies, municipal parking lots, codifying changes to minimum/maximum

parking requirements, and researching parking strategies in other successful mixed-use areas. Some of these recommendations may be pertinent to the section of the corridor in the City of Rochester, too. This study recommends an access management overlay district and pedestrian & bicycle-oriented parking lots to address some of the access management and safety concerns. The Town of Greece may want to address access management zoning issues on a town-wide basis, rather than on a corridor basis. Any changes to zoning in the Town of Greece should be coordinated with the mixed-use zoning revisions that are currently underway (at the time of printing).

C. Potential Funding Sources

1. Federal Sources

SAFETEA-LU (Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users, formerly TEA-21 and ISTEA) – This program, which has been extended until December 31, 2010, is the latest multi-year, federal transportation legislation with many different funding programs for bicycle and pedestrian improvements. The following table shows a brief summary of the areas funded within the various programs. Please note that program requirements are likely to change when Congress takes action on the next surface transportation authorization. Additional information may be found at: <http://www.fhwa.dot.gov/environment/bikeped/bp-guid.htm#bp4>.

	NHS	STP	HSIP	SRTS	TEA	CMAQ	RTP	FTA	TE	BRI	402	PLA	TCSP	JOBS	FLH	BYW
Bicycle and pedestrian plan		*				*						*	*			
Paved Shoulders	*	*	*	*	*	*				*					*	*
Signed bike route	*	*		*	*	*									*	*
Shared use path/trail	*	*		*	*	*	*			*					*	*
Single track hike/bike trail							*									
Spot improvement program		*	*	*	*	*										
Bicycle lanes on roadway	*	*	*	*	*	*		*	*	*					*	*
Bike racks on buses		*			*	*		*	*							
Bicycle parking facilities		*		*	*	*		*	*							*
Trail/highway intersection	*	*	*	*	*	*	*								*	*
Bike storage/ service center		*		*	*	*		*	*				*	*		
Sidewalks, new or retrofit	*	*	*	*	*	*		*	*	*					*	*
Crosswalks, new or retrofit	*	*	*	*	*	*		*	*						*	*

IMPLEMENTATION

7

	NHS	STP	HSIP	SRTS	TEA	CMAQ	RTP	FTA	TE	BRI	402	PLA	TCSP	JOBS	FLH	BYW
Maps		*		*		*					*					
Signal improvements	*	*	*	*	*	*										
Curb cuts and ramps	*	*	*	*	*	*										
Traffic calming		*	*	*									*			
Coordinator position		*		*		*							*			
Safety/ edu position		*		*		*					*					
Police Patrol		*		*							*					
Helmet Promotion		*		*	*						*					
Safety brochure/book		*		*	*	*	*				*					
Training		*		*	*	*	*				*					

KEY

NHS	National Highway System	BRI	Highway Bridge Program
STP	Surface Transportation Program	402	State and Community Traffic Safety Program
HSIP	Highway Safety Improvement Program	PLA	State/Metropolitan Planning Funds
SRTS	Safe Routes to School Program	TCSP	Transportation and Community and System Preservation Pilot Program
TEA	Transportation Enhancement Activities	JOBS	Access to Jobs/Reverse Commute Program
CMAQ	Congestion Mitigation/Air Quality Program	RTP	Recreational Trails Program
FLH	Federal Lands Highway Program	FTA	Federal Transit Capital, Urban & Rural Funds
BYW	Scenic Byways	TE	Transit Enhancements

An example of one of these programs is the Congestion Mitigation and Air Quality (CMAQ) program. CMAQ is a Federal-Aid reimbursement program that provides funding for surface transportation and other related projects that contribute to air quality improvements and reduce congestion. Funding is available for areas that do not meet the National Ambient Air Quality Standards (non-attainment areas) as well as former non-attainment areas that are now in compliance (maintenance areas).

Examples of transportation control measures that qualify for funding include:

- improved public transit,
- traffic flow improvements and high-occupancy vehicle lanes,
- shared-ride services,
- bicycle/pedestrian facilities, and
- flexible work schedules.

2. State Sources

Recreational Trails Program – The Recreational Trails Program is a State-administered, Federal assistance program to provide and maintain recreational trails for both motorized and non-motorized recreational trail use. This program is administered by the New York State Office of Parks, Recreation and Historic Preservation, but funds for the Recreational Trails Program are provided by SAFETEA-LU. The RTP legislation requires that States use 40% of their funds apportioned in a fiscal year for diverse recreational trail use, 30% for motorized recreation, and 30% for non-motorized recreation. This grant requires a 20% matching fund commitment from the applicant at the time of application. <http://nysparks.state.ny.us/grants/programs/recreation.asp>.

3. Local & Private Sources

Bonding – Bonds generate immediate financing and are appropriate for large-scale, permanent types of capital projects. General obligation bonds involve the taxing power of a municipality as it is pledged to pay the interest and principal to retire the debt.

Donations – Local clubs, interest groups, private developers and individuals should all be viewed as potential sources of money, services and labor for the development of new facilities and/or programs. The donor(s) determine what the funds would be used for. Property owners may also wish to donate land for public use/access.

Real Estate Taxes – The acquisition, development, operation and maintenance of the facilities may be partially supported by real estate tax revenue. Local tax revenues are the primary sources of maintenance and operating funds.

Sales Tax Increase – Municipalities may consider establishing a sales tax increase to generate general revenue for the acquisition and development of the facilities. In most areas, a tax increase for this purpose would require a public referendum and voter approval. This increase could be short-term or permanent.

The Foundation Center – The Foundation Center is the primary source of information on private funding sources, with information on over 40,000 foundations offering private monies. Grant information is delineated by geography, types of support, affiliations to facilitate research. Corporate giving and government funding sources can also be researched through the Foundation Center. For more information, please go to <http://foundationcenter.org>.

D. Regulatory Approvals

Many of the recommendations for the Dewey Avenue Corridor require the approval of different agencies and municipal boards. For on-street recommendations, any reduction in pavement width or changes to curb lines on Dewey Avenue within the City limits requires Traffic Control Board review and approval by City Council. Dewey Avenue is under the jurisdiction of Monroe County Department of Transportation (DOT) in the Town of Greece, and those same changes to the pavement in the Town portions of the corridor would need Monroe County DOT approval. All of the on-street recommendations may, in fact, require approval by the Monroe County DOT. New York State DOT approval is needed for improvements at intersections with State Roads.

Changes to adjacent streets in the Town of Greece, such as those that would be required for the bicycle boulevards, would require the approval of the Town of Greece Traffic Advisory Council and

the Greece Town Board. Any changes to public and private utilities may require review and/or approval by the utility provider. Review and approval by NYS Department of Environmental Conservation may also be required for certain recommendations, depending on the manner in which the recommendation is implemented.

For off-street recommendations, many of the actions do not require agency or municipal review and approval. Some may require review by the Town of Greece Planning Board or the City of Rochester Planning Commission. Most of the program and policy recommendations do not require regulatory approvals. However, code-related changes would need review and approval by the appropriate municipal boards and would be subject to the SEQR process. Regulatory approvals for each recommended action are specified in Table 10. Please note that the regulatory approvals specified is subject to change based on timing, municipal procedures, and the approach that each municipality takes to implement the recommended action.

E. Responsible Parties

The actions recommended by this planning study will involve a number of responsible parties. All of the on-street improvements are under the jurisdiction of the Monroe County DOT and/or the municipality. Off-street improvements related to sidewalks fall under the jurisdiction of the Town of Greece Department of Public Works, or the City of Rochester Department of Environmental Services. Most of the other off-street improvements and program/policy recommendations, however, provide opportunities for a number of partners to be involved in corridor improvements.

The *Dewey Avenue Corridor Study* (2007) recommended that corridor improvements be implemented through public-private partnerships coordinated by a business association or a business improvement district. Many of the off-street and program/policy recommendations identified in this study could also be implemented in this way. A business improvement district (BID) is a formal public/private partnership in which property and business owners elect to make a collective contribution to the maintenance, development, and promotion of their commercial district. A BID is typically formed to improve business conditions in a specific area, attract and retain businesses, generate jobs, and improve the quality of life for those who use the district. A BID enables stakeholders to decide which services to provide in order to meet the district's unique needs. BID programs and services are funded by a special assessment collected from property owners in the district, and would require the agreement of these property owners.

The *Dewey Avenue Corridor Study* recommended in 2007 that prior to the creation of a BID, a less formal business association could be established as an offshoot of the Chamber of Commerce or a neighborhood association. By partnering the business expertise of the Chamber with the local knowledge of the neighborhood association(s), an effective organization that is specifically focused on corridor revitalization could be developed. Over time, a business association would be able to communicate the usefulness of a business improvement district, and slowly transition into a more formal BID arrangement if the desire is present to do so. A basic business association was recommended in 2007 to get momentum started in the corridor.

Responsible parties for each recommended action are specified in Table 10. A few of the recommendations are the responsibility of the municipality and could be accomplished by representatives of the municipality, or by hiring a consultant to perform the tasks for them. Please note that the responsible parties identified in Table 10 are subject to change based on timing, municipal procedures, and the approach that each municipality takes to implement the recommended action.

DEWEY AVENUE CORRIDOR TRAFFIC CALMING STUDY

TABLE 10: IMPLEMENTATION MATRIX - ON-STREET RECOMMENDATIONS						
Recommended Action	Priority	Timing	Municipality	Location	Regulatory Approvals Needed*	Responsible Parties*
Road Diet with bike lanes/shoulders	High	Long	Greece	Mosley Road to Clark Park	MCDOT	MCDOT
Road Diet with bike lanes/shoulders	High	Short	Greece	North of Williston Road to Studley Street	MCDOT	MCDOT
Road Diet with bike lanes/shoulders	High	Short	Rochester	Studley Street to North of Winchester Street	City of Rochester, MCDOT	City of Rochester, MCDOT
High Visibility Crosswalks (5 are new crosswalk locations)**	High	Short	Greece	14 intersections	Town of Greece	Town of Greece
High Visibility Crosswalks (1 is a new crosswalk location)**	High	Short	Rochester	6 intersections	City of Rochester, MCDOT	City of Rochester, MCDOT
Share the Road signs	High	Short	Greece	Various locations	MCDOT	MCDOT
Share the Road signs	High	Short	Rochester	Various locations	MCDOT	MCDOT
Leading Pedestrian Intervals and Pedestrian Countdown Signals	High	Short	Greece	East side, Barnard Street to Shady Way	MCDOT	MCDOT
Leading Pedestrian Intervals and Pedestrian Countdown Signals	High	Short	Greece	Stone Road intersection	MCDOT	MCDOT
Leading Pedestrian Intervals and Pedestrian Countdown Signals	High	Short	Greece	Northgate Plaza area	MCDOT	MCDOT
Leading Pedestrian Intervals and Pedestrian Countdown Signals	High	Short	Greece	Both sides, Rumson Road to Latta Road	MCDOT, NYSDOT (at Latta Road)	MCDOT, NYSDOT
Leading Pedestrian Intervals and Pedestrian Countdown Signals	High	Short	Rochester	Both sides, Ridge Road to Velox Street	MCDOT, NYSDOT (at Ridge Road)	City of Rochester, MCDOT, NYSDOT
Bicycle Boulevard**	High	Short	Greece	McGuire Road to Tait Ave to Sparling Drive	Town of Greece	Town of Greece
Bicycle Boulevard**	High	Short	Greece	Clark Park to Willmae Rd to Stone Rd to Willis Ave	Town of Greece	Town of Greece
Bicycle Boulevard**	High	Short	Rochester	Willis Ave to Bennington Drive	City of Rochester	City of Rochester, MCDOT
Bicycle Boulevard**	High	Short	Rochester	McCall Road to Bernice Street	City of Rochester	City of Rochester, MCDOT
Curb Bumpouts**	High	Long	Greece	6 intersections (see Figure 16)	MCDOT	MCDOT
Curb Bumpouts**	High	Long	Rochester	4 intersections (see Figure 16)	City of Rochester, MCDOT	City of Rochester
Refuge Islands**	High	Long	Greece	5 intersections (see Figure 16)	MCDOT	MCDOT
Refuge Islands**	High	Long	Rochester	1 intersection (see Figure 16)	City of Rochester, MCDOT	City of Rochester
Investigate no turn on red	Low	Short	Greece	Stone Road intersection	MCDOT	MCDOT
Investigate no turn on red	Low	Short	Greece	Northgate Plaza intersection	MCDOT	MCDOT
Bicycle Boxes**	Low	Long	Greece	All traffic signals in corridor	MCDOT, NYSDOT (at State intersections)	MCDOT, NYSDOT
Bicycle Boxes**	Low	Long	Rochester	All traffic signals in corridor	City of Rochester, MCDOT	City of Rochester, MCDOT

On-Street Recommendations

Timing: Short-term - Projects that will commence and be completed within 0-4 years, and Long-term - Projects that will commence and be completed within 4-10 years.
* Subject to change based on timing, municipal procedures, and the approach that each municipality takes to implement the recommendation.
** These particular measures may require additional planning, design review, and community input prior to implementation.

DEWEY AVENUE CORRIDOR TRAFFIC CALMING STUDY

TABLE 10: IMPLEMENTATION MATRIX - OFF-STREET RECOMMENDATIONS						
Recommended Action	Priority	Timing	Municipality	Location	Regulatory Approvals Needed*	Responsible Parties*
Sidewalk improvements in area of poor sidewalk quality	High	Short	Greece	Barnard Street to Shady Way	None	Town Department of Public Works
Sidewalk improvements in area of poor sidewalk quality	High	Short	Rochester	East side, just north of Ridge Road	None	City Department of Environmental Services
New sidewalk	High	Short	Greece	East side, Town line until 170' south of Bennington Drive	Town Planning Board	Town Department of Public Works
New sidewalk	High	Short	Rochester	East side, along Holy Sepulchre Cemetery	City Planning Commission	City Department of Environmental Services
Bicycle racks	High	Short	Greece	Commercial and retail establishments	None	Public-private partnership
Bicycle racks	High	Short	Rochester	Commercial and retail establishments	None	Public-private partnership
Benches and resting points	High	Short	Greece	Entire corridor at existing bus stops and/or every 1500'	None (if located in ROW)	Town or Public-private partnership
Benches and resting points	High	Short	Rochester	Entire corridor at existing bus stops and/or every 1500'	None (if located in ROW)	City or Public-private partnership
Bicycle lockers	High	Long	Greece	Commercial and retail establishments	None	Public-private partnership
Bicycle lockers	High	Long	Rochester	Commercial and retail establishments	None	Public-private partnership
Pedestrian & bicycle-oriented parking lots	High	Long	Greece	Commercial and retail establishments	Town Planning Board	Public-private partnership
Pedestrian & bicycle-oriented parking lots	High	Long	Rochester	Commercial and retail establishments	City Planning Commission	Public-private partnership
Sidewalk amenity zone and buffer area	High	Long	Greece	East side, Barnard Street to Shady Way	Town Planning Board	Public-private partnership
Sidewalk amenity zone and buffer area	High	Long	Greece	West side, McGuire Road to Rumson Road	Town Planning Board	Public-private partnership
Sidewalk amenity zone and buffer area	High	Long	Greece	Both sides, Rumson Road to Latta Road	Town Planning Board	Public-private partnership
Sidewalk amenity zone and buffer area	High	Long	Rochester	Both sides, Ridge Road to Velox Street	City Planning Commission	Public-private partnership
Sidewalk amenity zone and buffer area	High	Long	Rochester	East side, Velox Street to City line	City Planning Commission	Public-private partnership
Shared access driveways	High	Long	Greece	West side, Britton Road to between English and Denise	Town Planning Board	Public-private partnership
Shared access driveways	High	Long	Greece	Both sides, Just north of Denise Road	Town Planning Board	Public-private partnership
ADA accessible bus stop	Low	Short	Rochester	East side, along Holy Sepulchre Cemetery	City Planning Commission	RGRTA
Sidewalk improvements	Low	Long	Greece	West side, McGuire Road to Rumson Road	None	Town Department of Public Works
Sidewalk improvements	Low	Long	Greece	Both sides, Rumson Road to Latta Road	None	Town Department of Public Works
Sidewalk improvements	Low	Long	Rochester	Both sides, Ridge Road to Velox Street	None	City Department of Environmental Services
Buildings oriented to street, building awnings, pedestrian scale lighting	Low	Long	Greece	East side, Barnard Street to Shady Way	Town Planning Board	Public-private partnership
Buildings oriented to street, building awnings, pedestrian scale lighting	Low	Long	Greece	West side, McGuire Road to Rumson Road	Town Planning Board	Public-private partnership
Buildings oriented to street, building awnings, pedestrian scale lighting	Low	Long	Greece	Both sides, Rumson Road to Latta Road	Town Planning Board	Public-private partnership
Buildings oriented to street, building awnings, pedestrian scale lighting	Low	Long	Rochester	Both sides, Ridge Road to Velox Street	City Planning Commission	Public-private partnership
Pedestrian scale lighting	Low	Long	Rochester	East side, Velox Street to City line	City Planning Commission	Public-private partnership
Buffer area	Low	Long	Greece	Entire corridor unless otherwise specified	Town Planning Board	Public-private partnership
Buffer area	Low	Long	Rochester	Entire corridor unless otherwise specified	City Planning Commission	Public-private partnership

Off-Street Recommendations

Timing: Short-term - Projects that will commence and be completed within 0-4 years, and Long-term - Projects that will commence and be completed within 4-10 years.
* Subject to change based on timing, municipal procedures, and the approach that each municipality takes to implement the recommendation.
** These particular measures may require additional planning, design review, and community input prior to implementation.

DEWEY AVENUE CORRIDOR TRAFFIC CALMING STUDY

TABLE 10: IMPLEMENTATION MATRIX - PROGRAM AND POLICY RECOMMENDATIONS							Program and Policy Recommendations
Recommended Action	Priority	Timing	Municipality	Location	Regulatory Approvals Needed*	Responsible Parties*	
Educational Programs	High	Short	Greece	Related to corridor improvements and safety issues	None	Public-Private Partnership	
Educational Programs	High	Short	Rochester	Related to corridor improvements and safety issues	None	Public-Private Partnership	
Program Effectiveness Measures	High	Short	Greece	Related to corridor changes and improvements	None	Municipality/Hire Consultant	
Program Effectiveness Measures	High	Short	Rochester	Related to corridor changes and improvements	None	Municipality/Hire Consultant	
Maintenance Programs	High	Short	Greece	Entire corridor, particularly Zone 1	None	Public-Private Partnership	
Maintenance Programs	High	Short	Rochester	Entire corridor, particularly Zones A and C	None	Public-Private Partnership	
Access Management Overlay District**	High	Long	Greece	West side, Britton Road to between English and Denise	Planning, Zoning & Town Boards, NYSDEC	Municipality/Hire Consultant	
Access Management Overlay District**	High	Long	Greece	Both sides, Just north of Denise Road	Planning, Zoning & Town Boards, NYSDEC	Municipality/Hire Consultant	
Bicycle and Pedestrian Supportive Code Language	High	Long	Greece	Entire corridor	Planning, Zoning & Town Boards, NYSDEC	Municipality/Hire Consultant	
Bicycle and Pedestrian Supportive Code Language	High	Long	Rochester	Entire corridor	City Planning Commission, City Council, NYSDEC	Municipality/Hire Consultant	
Security enhancements, other pedestrians	Low	Long	Greece	East side, Barnard Street to Shady Way	None	Public-Private Partnership	
Security enhancements, other pedestrians	Low	Long	Greece	West side, McGuire Road to Rumson Road	None	Public-Private Partnership	
Security enhancements, other pedestrians	Low	Long	Greece	Both sides, Rumson Road to Latta Road	None	Public-Private Partnership	
Security enhancements, other pedestrians	Low	Long	Rochester	Both sides, Ridge Road to Velox Street	None	Public-Private Partnership	
Security enhancements, other pedestrians	Low	Long	Rochester	East side, Velox Street to City line	None	Public-Private Partnership	
Residential Speed Watch Program	Low	Long	Greece	Entire corridor unless otherwise specified	None	Public-Private Partnership	
Residential Speed Watch Program	Low	Long	Rochester	Entire corridor unless otherwise specified	None	Public-Private Partnership	

Timing: Short-term - Projects that will commence and be completed within 0-4 years, and Long-term - Projects that will commence and be completed within 4-10 years.

* Subject to change based on timing, municipal procedures, and the approach that each municipality takes to implement the recommendation.

** These particular measures may require additional planning, design review, and community input prior to implementation.

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DEWEY AVENUE CORRIDOR TRAFFIC CALMING STUDY

APPENDICES

PUBLIC INPUT SUMMARY

A

ALTERNATIVE TRANSPORTATION BENEFITS

B

COMPLETE STREETS

C

EXISTING CONDITIONS PHOTOS

D

COLLECTED TRAFFIC DATA *(Available Upon Request)*

E

PUBLIC INPUT SUMMARY



274 N. Goodman Street
Rochester, NY 14607
585.271.0040
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www.edrpc.com

MINUTES OF MEETING

Date: September 28, 2009

Reference: Dewey Avenue Corridor Traffic Calming Public Meeting

EDR Project No. 08066

Present: Town of Greece and City of Rochester residents and business owners, Ron Sassone, Town of Greece; Erik Frisch, City of Rochester; Scott Leathersich, Monroe County Dept of Transportation; Robert Torzynski, Genesee Transportation Council; Amy Dake, SRF Associates; Tom Robinson, EDR; Sage Gerling, EDR

Issues / Comments:

Zone A

Issues Presented at Meeting:

- No bicycle facilities
- Places to walk, but poor pedestrian conditions (Poor sidewalk quality and maintenance- especially East side just North of Ridge Rd, and sidewalk located next to curb)
- Concentration of bicyclist collisions (Ridge Rd intersection) and pedestrian collisions (Eastman Ave intersection) with vehicles

Public Comments:

"Ride your bike on the sidewalk, giving way to pedestrians"

"This is unacceptable! Bicycling on the sidewalk is more dangerous than the road. A bicycle lane is needed"

"Put up a 'No Turn on Red' sign, possibly with restricted hours. Should help bikers"

"Consider a 'Bike Box' at intersections for bikes to move in front of cars"

"Many residences within walking/driving distance of the stores in this zone, but pedestrian/bicycle access is so poor that I'm sure residents would rather drive 3 blocks. I recommend placing physical barriers of some kind between sidewalks and road, so that pedestrians feel protected."

"Open up Eastman Ave between Dewey and Lake Ave, attract high-tech businesses and shopping"

Zone B

Issues Presented at Meeting:

- No bicycle facilities
- Places to walk, but unacceptable pedestrian conditions (both sides from Eastman Ave. to Velox St. and Merrill St. to Winchester St.)
- Motorist speed appears fast to pedestrians

Public Comments:

"Why so much emphasis on pedestrian traffic? I don't walk well so I need easy parking access to buildings I wish to shop at or whatever."

"Zoning: Stop turning single family homes into rental properties."

Zone C

Environmental Design & Research,
Landscape Architecture, Planning,
Environmental Services,
Engineering and Surveying, P.C.

Issues Presented at Meeting:

- No bicycle facilities
- Unacceptable pedestrian conditions (no sidewalk on East side)
- Bus stops lack ADA access (East side)

Public Comments:

"Walk on West side"

"No light to cross when sidewalk disappears"

"Crosswalk at intersection of Dewey and Eglantine/Florida Ave. by Kwik Fill"

"Thank you for looking into this issue:

- A walk way separated by trees would be nice. It can be frightening to walk on the sidewalk the way it is because the cars are going so fast.
- Less lanes for cars may be nice – one lane each way to prevent people going so fast.
- Better sidewalk area near the rail-road tracks would be safer.
- The cars make a lot of noise, even for people on side streets. More trees – slower traffic may help.

Thanks!"

"Do NOT want 3 lanes. Streets to close together cause more traffic, a lot of people turning into these streets."

"Holy Sepulchre is a recreational / walking opportunity for many residents on the West side of Dewey, but lack of sidewalk and access points is a problem. Maybe cross walks might be the answer."

Zone 1

Issues Presented at Meeting:

- No bicycle facilities
- No on-street parking, outside lane too narrow
- Places to walk, but unacceptable pedestrian conditions (both sides. No sidewalk East side from 170' South of Bennington to Barnard St.)
- Distance between marked crosswalks exceeds NYS guidelines (0.4 km or 1300') (Barnard St. to Bennington Dr. ~1500', Ellington Dr. to Dalston Rd. ~2200')

Public Comments:

"Pedestrian crosswalk needed at Barnard Crossing Library"

"Need family friendly, cost efficient restaurant (McDonalds, etc)"

"Would like to bring back village feel around Stone Rd."

"Pappas Park – need cameras!"

"Turning into businesses an issue (No left turn off Dalston – certain hours – hard for businesses – need to remove) * Parking is not an issue for businesses because have public lots"

Zone 2

Issues Presented at Meeting:

- No bicycle facilities
- No on-street parking, outside lane too narrow
- Unacceptable pedestrian conditions
- No marked pedestrian crosswalks, and distance between marked crosswalks exceeds NYS guidelines (0.4 km or 1300') (Maiden Ln. to Briarcliff Rd. in Zone 3)
- Concentration of pedestrian and bicyclist collisions with vehicles (Stone Rd. area)

Public Comments:

"Recommend funding for business façade improvements and amenities, including signage and entrances, pedestrian friendly lighting and village appearance to be updated."

"Landscaping is a plus – control landlords to not over saturate a neighborhood"

"Transitional parking is a plus"

"Dewey / Stone intersection has many small businesses that would benefit from improved pedestrian / bicycle facilities. Parking / sidewalk situation is so hazardous that you have to be a thrill seeker to want to walk to the bakery or butcher shop. A covered 'bike parking' area would be nice, and possibly a gazebo for pedestrians to rest after shopping."

Zone 3

Issues Presented at Meeting:

- No bicycle facilities
- Unacceptable pedestrian conditions
- Unsignalized marked crosswalk (just North of Briarcliff Rd across from St. Joseph's Villa)
- Distance between marked crosswalks exceeds NYS guidelines (0.4 km or 1300') (Maiden Ln. in Zone 2 to Briarcliff Rd. ~1500', Briarcliff Rd. to Dorsey Rd., 1500')

Public Comments:

"Bus stop across street from St. Joseph's Villa needs crosswalk, Villa kids and staff need better / safer access."

"Cars traveling too fast – problem for traffic driving into or exiting S.J.V."

"Lake Ave. speed limit is 30 MPH (people still speed). Consider reducing speed limit."

Zone 4

Issues Presented at Meeting:

- No bicycle facilities
- Places to walk, but unacceptable pedestrian conditions (both sides between Dorsey Rd. and Britton Rd., not including Britton Rd. intersection)
- Motorist speed appears fast to pedestrians

Public Comments:

"uneven sidewalks"

"Driveway and bicyclist conflicts"

"Dewey Ave. is the new Indy 500! Control Speeders!"

"Vintage is a 5 lane road, get to Dewey, it's a 2 lane, narrow. Not properly maintained. Plug. Needs to be 5 lanes; All roads should never be 2 lanes in 2009, all roads should be a minimum of 3 lanes"

(In highly populated areas). Since the Town of Greece can't afford to plow sidewalks on both sides of a street, they should only install 1 sidewalk. Every road does not need curbs, both of these suggestions would save cost in putting in a new road."

Zone 5

Issues Presented at Meeting:

- No Bicycle Facilities
- No on-street parking, outside lane too narrow
- Poor pedestrian conditions (West side of Britton Rd to between English Rd and Denise Rd, and both sides of Denise Rd. Intersection)
- High number of conflict points for pedestrians and vehicles alike (Especially access drives from Britton Rd to Denise Rd)
- Concentration of pedestrian and bicyclist collisions with vehicles (Northgate area)

Public Comments:

"With the way people drive today, as 'bikers' we don't even ride in 'Bike Lanes' when they are present. We ride on sidewalks. Consider widening those"

"Bicycle facilities at both Wegmans and Northgate would be very helpful. E.g.; secure racks in covered areas, bike lanes in driveways (entry ways)"

"Timed pedestrian crosswalk signs (all corridor). Control speeders!"

"Northgate Plaza was the first plaza in Monroe County! Put up a plaque or sign!"

"No, leave Northgate for local businesses. Not Wal-Mart or the interests of Wide Water"

"Since biking and walking are popular and healthy fitness, I think it is critical that more room is made for both events. Widening sidewalks with a lot of green space would enhance all neighborhoods and businesses along Dewey Avenue"

Zone 6

Issues Presented at Meeting:

- No bicycle facilities
- Places to walk, but unacceptable pedestrian conditions (West side from Rumson Rd. to McGuire Rd.)
- High number of conflicts for pedestrians and vehicles alike (especially access drives from Denise Rd. to McGuire Rd., both sides)
- Distance between marked crosswalks exceeds NYS guidelines (0.4 km or 1300') (Denise Rd. to Latta Rd. ~3900')

Public Comments:

"Wider shoulder not bicycle friendly. Not clean of debris, no liability if vehicles hit bicyclists."

"Woodcraft – current cut through and spill-off traffic."

"Safety issue from heading north to turn right into driveway causing backup of traffic behind, since cars don't cross solid yellow to go around."

"Leaving driveway on Dewey is more difficult with the new striping configuration because the traffic is now compressed into one lane."

"Traffic back up due to bus stopping"

"Lawson – turning left onto Dewey Ave., parking on both sides of street, group home on corner – people park on corner – congested."

"Need pedestrian crosswalk"

"What about a pedestrian bridge over Dewey? (possibly 2 or 3)"

Zone 7

Issues Presented at Meeting:

- No bicycle facilities
- No on-street parking, outside lane too narrow
- Places to walk, but unacceptable pedestrian conditions (especially West side from Latta Rd. to Rumson Rd. Few pedestrian amenities – bus shelters, benches, trash receptacles, pedestrian scale lighting, signage)
- Distance between marked crosswalks exceeds NYS guidelines (0.4 km or 1300') (Denise Rd. to Latta Rd. ~3900')

Public Comments:

"Reducing a 4-lane to 2-lane. Why? First, there was no warning of a change. At one time 2 lanes was considered out-of-date and 4 lanes were created. Now we're going back to 2-lanes again with accident-prone center turning lane – what does solid yellow line mean – it used to mean 'Don't cross ever.' More traffic on 2 lanes will wear road down faster!"

These meeting minutes have been prepared by **Evan Brady** of Environmental Design & Research. If there are any discrepancies, please notify our office within three business days of receipt.

Dewey Avenue Corridor Traffic Calming Study
Public Meeting Comment Form

September 28, 2009

On behalf of the Town of Greece, EDR and SRF consultants are collecting data and developing recommendations for the Dewey Avenue Corridor Traffic Calming Study. During this process, we are hoping to understand the different opportunities and concerns of which we may not be aware. Please take a few minutes and let us know if you have any ideas or suggestions.

Ideas, Suggestions, Opportunities, Concerns?

The Lake Avenue "calming" measures have not appeared to work - speaking as a bicyclist that uses Lake Ave.

I strongly recommend bike lanes, bike boxes and increased number of crosswalks to make motorists more cautious around bicyclists and pedestrians. Dewey is a heavily residential area for much of its length - houses directly front onto it. However, its fast traffic flow acts as a "moat" that discourages pedestrians from walking next to it or across it. This depresses the value of the houses close to it. Easy ~~for~~ and attractive access to the commercial clusters along Dewey for pedestrians and bicyclists would reduce ^{local} traffic and increase commercial foot traffic.

Please e-mail me when the next meeting is scheduled! - Bill Collins
bcollins@crossroadsabstract.com

Please return comments tonight or send them to Tom Robinson at Environmental Design and Research
274 North Goodman Street - Rochester, NY 14607
Phone: 271-0040 Fax: 271-0042 trobinson@edrpc.com
Or drop off at: The Town of Greece, Attn: Ron Sassone, One Vince Tofany Blvd., Greece, 14612



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Ideas, Suggestions, Opportunities, Concerns? East Side

I live at 2662 Dewey. Across the street, going south, there is a manhole cover, when trucks go over it, it is extremely noisy. This has been for years!

Catherine Hoyer

Young people dragging down the street from Wilson Farm.
(south of Barnard St.)

Sidewalks not in great shape

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Ideas, Suggestions, Opportunities, Concerns?

*I think there
should be a traffic light on
the ~~corner of~~ corner of Dewey and
Eggarine by Okwik Fill by Florida Ave.
(For pedestrians)*

Resident on scooter @ corner

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Ideas, Suggestions, Opportunities, Concerns?

Please Return Dewey Ave
North of Denise to a 1/4 lane
RD.

The Traffic 1/4 lane Reduction
is poorly marked and I have
witnessed several near accidents at
that lane Reduction.

With Wal-Mart to Build in
Northgate in the near future, I
would think you would want to direct
the higher volume of traffic (via
4 lane) to the Parkway.

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Ideas, Suggestions, Opportunities, Concerns? I walked over on bc to be here

today. I walk, drive & ride this area everyday. I walk in the
am, 5:00 traffic & 2:00 pm. This is the best corridor to walk
in Greece. Please do not hinder the walkers & bikes. If you put
trees on right of way it will hinder drivers more, they will not see the
pedestrians & bikes. This is open & a highly visible walking path & I
feel safer here, than any other area in Greece. I walk it all !!!
Put Fluores out if you want to beautify it. Cut Wheat Grass lower at
Wegmans (Brithn) where right turn out of lot onto Dewey is. Possibly, with
all the technology you have an extra Flasher for right hand ^(drivers) turners on Red
all over corridor, to give an extra warning to Drivers to look for
pedestrians. We do not need any more done to this area. It will cause
more pissed off Drivers if you stop them longer & more - then, they
will not give pedestrians a second look, they will be trying to beat rights
& say "screw the walkers & riders". Longer cross walk signs to cross
Ridge at Lake & Dewey. Possibly an extra signal at Railroad area, by
curve, to slow those drivers - Nothing ELSE it will ruin this
walking & riding route. People actually look out of their driveway & sidewalks
here on this corridor because it once was the main walking area.

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now, more kids & people are driving & not walking. Bikes have increased due to gas prices, but over all it is a good area with the best areas to cross. The lights are exceptional for length for crossing. If you good with this area you will ruin the best diag for walking & crossing the road. I understand you are doing this study due to Wal-Mart & I've been at everyone of those meetings, so I know what those plans are as well. I am not talking out of School, but live & walk this area shopping it regularly. I walk all year round & have found no other area safer to cross than Dewey. You ruined Latta with bike lanes & hindered walkers because no one looks for them because of bikes in the Rd. You made people forget about pedestrians. Don't do this to the Dewey Ave Corridor. It is well lit, well open for visibility & well lengthed with crossing signals. Please consider these things. People are more aware of bikes & walkers in this area & look - I can't say that for the west of Greece. Again, I walk this area at any hour year round & I ~~am~~ am not running off at the mouth, but am speaking out of experience. Your people here representing this study do not live here & do not walk this daily. I drive, am handicapped, but Choose to walk this area, as I have to be here today - please hear my plea for this area. Thank you.



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Ideas, Suggestions, Opportunities, Concerns?

There is no problems with the Dewey Ave Corridor. I have lived on California Dr. for 40+ years and I travel Dewey Ave on a daily basis. To change this 4 lane road would be a big mistake.

The 4 lanes are needed for many reasons, rush hour for one and Bus runs. If a bus stops for pickup or drop off the traffic would come to a halt with 3 lanes.

Please, please, please - Don't Fix What's Not Broken.

If and when Wal Mart goes into North State plaza we will have a nightmare, with the change.

Lynne Ford

110 California Dr.

Rock. NY 14616

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Ideas, Suggestions, Opportunities, Concerns?

Concerned of having a traffic light exiting
Wal Mart across from Satoris Drive.

People would easily use this as a
cut through to get to English Rd. (From Tait)

Need to block entrance to Satoris - or funnel
traffic strictly in a north or south direction on
Dewey.

(Or Dead End Satoris Drive)

Thanks -

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Public Meeting Comment Form**

September 28, 2009

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Ideas, Suggestions, Opportunities, Concerns?

- 1.) TRANSITIONAL PARKING IN FRONT OF STORES IS A PLUS!
- 2.) LIMIT THE HOURS TO BUSINESS HOURS - ENFORCED PARKING HOURS
- 3.) PEDESTRIAN FRIENDLY LIGHTING - "VILLAGE LIKE" IS NICE
- 4.) LANDSCAPING WOULD ENHANCE THE CORRIDOR - MAYBE A "NEIGHBORHOOD PROJECT" OF SORTS TO BUILD COMMUNITY AWARENESS AND PRIDE.
- 5.) CONSIDER NEW "SIGNAGE + FACADE" ENHANCEMENTS TO UNIFY ALL BUSINESSES IN THE AREA TO APPEAR FRIENDLY AND SAFE, WITH NEW SIGNAGE + WASTE BASKETS.
- 6.) MIXED USE WITH ZONING REGULATIONS MAY BE A PROBLEM IF LANDLORDS ARE NOT ATTENTIVE TO PROPERTY UPKEEP OR TENANT COMPLIANCE ISSUES. * ZONING ENFORCEMENT FOR THE SPECIAL DISTRICT WITH REGARDS TO MAINTENANCE ISSUES,
- 8.) INCREASE SAFETY IN THE AREA SO SHOPPERS "FEEL SAFE",
- 10.) DO NOT PUT TREES ALONG ROADSIDE AS THEY RARELY GET WATERED AND DO NOT SURVIVE LONG DUE TO SALT + DAMAGE
- 11.) ENFORCE SKATEBOARDING ORDINANCE - TO IMPROVE SAFETY.
- 12.) KEEP IN MIND ALL BUSINESSES NEED PARKING AND ABILITY TO

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MAINTAIN THEIR PROPERTY WITH REGARDS TO SNOW REMOVAL.



- 21) IN SOME CASES THERE IS NOT ENOUGH PARKING TO CONDUCT BUSINESS. WHERE OTHER BUSINESSES ENCROACH UPON NEIGHBORING BUSINESSES, THIS MAKES IT MORE DIFFICULT TO MAINTAIN PROPERTY IN AN ORDERLY FASHION.
- 14.) IMPROVE STORE SIGNAGE WITH BLOCK GRANT MONEY.
- 15.) INVITE RESIDENTS TO ASSIST IN PLANTINGS - COMMEMORATE SOME AREAS.
- 16.) RESTRICT COLOR USES IN THE BUSINESS DISTRICT TO APPEAR MORE VILLAGE LIKE, MAYBE SMALL SHOPS WITH CHARM, NO BODEGAS NO NAIL SHOPS. THE CITY OF ROCHESTER ON LAKE AVE, DRIVING PARK AND DENVER TO DRIVING PARK, ARE OVERTAKEN NOW BY SHODDY LANDSCAPE. RESTRICT THE MULTIFAMILY USE AND ENFORCE IT.
- 17.) BASEMENT LIVING IS NOT PERMITTED YET IT OCCURS AND PUTS A BURDEN WITH REGARDS TO PARKING.
- 18.) RELAX SOME ZONING ISSUES TO ALLOW OWNERS TO MAKE UPDATES TO PROPERTY
- 19.) ZONE A, B, ARE COST TO DECAYING HOMES. WHY?
- 20.) DOES ST JOSEPHS VILLAGE GENERATE ENOUGH TAX REVENUE TO REQUIRE A TRAFFIC LIGHT FOR A CROSSWALK?

THANKS FOR THE OPPORTUNITY TO INPUT.
I WORK IN ZONE 2 AREA

ANTHONY FURFFER
293 MT. RIDGE CIRCLE
ROCHESTER NY 14616

Dewey Avenue Corridor Traffic Calming Study
Public Meeting Comment Form

September 28, 2009

On behalf of the Town of Greece, EDR and SRF consultants are collecting data and developing recommendations for the Dewey Avenue Corridor Traffic Calming Study. During this process, we are hoping to understand the different opportunities and concerns of which we may not be aware. Please take a few minutes and let us know if you have any ideas or suggestions.

Ideas, Suggestions, Opportunities, Concerns?

I really feel it would be a mistake to change Dewey Ave into a 3 lane road. We need to keep traffic moving, 1) the streets (side streets) are too close together people are going to have a hard time making lefts on it.

2) ~~the~~ People will be road raging down the side streets, where kids are playing.

3) Fear more traffic will be on Bennington, Willis, Oakwood, again where more kids are

4) We^{you} already improved the sidewalks for pedestrian's. And the 6 nice rest stations.

5) It's a bus route, don't want to be stuck with no way around.

Robin Walton

17 Barnard St

Roch. NY 14616

Please don't fix what
Not Broke.

Please return comments tonight or send them to Tom Robinson at Environmental Design and Research
274 North Goodman Street - Rochester, NY 14607

Phone: 271-0040 Fax: 271-0042 trobinson@edrpc.com

Or drop off at: The Town of Greece, Attn: Ron Sassone, One Vince Tofany Blvd., Greece, 14612

RECEIVED

OCT 02 2009



FRONT COUNTER
TOWN OF GREECE



On behalf of the Town of Greece, EDR and SRF consultants are collecting data and developing recommendations for the Dewey Avenue Corridor Traffic Calming Study. During this process, we are hoping to understand the different opportunities and concerns of which we may not be aware. Please take a few minutes and let us know if you have any ideas or suggestions.

Ideas, Suggestions, Opportunities, Concerns?

Concern: The cars go above the speed limit on Dewey. I live on a side street near the Holy Sepulcher Cemetery. Braid road tracks and the Greece Town line. There is a long curve in the road and the speeding cars generate a lot of traffic noise. In addition it can be frightening to walk/bike ride along Dewey Ave ~~and~~ due to fast traffic. The area has the potential to be a nice residential area but is more of a drive thru. It seems that it has become difficult for this area to remain permanent residential and more and more rental homes are popping up, and people are leaving instead of investing in the area.

① - ~~Can~~ Can you look at speed bumps, humps along the big curve in the road to help slow the cars down? Several years ago Slade Gertru was killed by a car speeding in this area. Slade was on his bike. ⊕

② ~~Can~~ the idea of making Dewey Ave in

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⊕ there have also been accidents due to cars losing control while speeding around this curve.



In the past 18 years I remember at least 4.



the city into a 2 lane road ^(instead of 4) (2)
considered. It appears that this has been
done on lower Deny an in Greece.

Turning lanes could be established as needed
for side streets.

Can the second or removed lane be used
as a "Green Area" (think Seneca Hwy but
smaller) between traffic lanes - or could a
"Green Area, w/ trees etc. be established on
the road side of each side walk, thus
creating a ~~buffer~~ ^{walkers} buffer area between ~~walkers~~
and traffic.

It would be good to bring some 'charm'
and neighbor hood feel back to this area of
the city.

Thank you

Lia Doe

36 Beavert Ave

Rock. Ny 14616

585-461-8870

P.S. also with more traffic tickets for speeding

☺

Dewey Avenue Corridor Traffic Calming Study
2nd Public Meeting
Comment Form

April 26, 2010

On behalf of the Town of Greece, EDR and SRF consultants are collecting the public's comments on the proposals contained in the draft Dewey Avenue Corridor Traffic Calming Study, prior to the study's finalization. Please take a few minutes to let us know if you have any suggestions or concerns.

Suggestions and Concerns:

TRAFFIC CALMING MUST INCLUDE
DRIVER RE-EDUCATION - THRU FINES
AND STIFF PENALTIES! -

A DEWEY AVE RESIDENT DIDN'T WANT
TO WAIT BEHIND THE LINE OF CARS
WAITING IN THE SOUTHBOUND LANE
OF DEWEY AT LATTA - SO HE RACED
UP THE RIGHT-TURN ONLY LANE
RODE UP THE BIKE LANE ALMOST
TO BURGER KING BEFORE CUTTING
IN LINE AND THEN MADE A
LEFT TURN INTO HIS DRIVEWAY.

MIKE PARKER, MANYHATS24@GMAIL.COM

Please return comments tonight or send them to:
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274 North Goodman Street Rochester, New York 14607
Phone: 271-0040 Fax: 271-0041 trobenson@edrpc.com
or drop off at:
Town of Greece
Attention Ron Sassone
One Vince Tofany Blvd. Greece, New York 14612

Dewey Avenue Corridor Traffic Calming Study
2nd Public Meeting
Comment Form

April 26, 2010

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Suggestions and Concerns:

Would Love to see the Eckerd building used as a library / community center. Barnard Crossing library is too small and that would really make that building a cornerstone for the community.

Korana Kelly 621-8167

Also Equestrian having the bike path zig zag somewhat. Many bicyclists may choose to stay on Dewey for faster route.

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Dewey Avenue Corridor Traffic Calming Study
2nd Public Meeting
Comment Form

April 26, 2010

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Re: Road "Diet" Actions

Suggestions and Concerns:

CHANGING from 4 lanes to 2 lanes and
a 3rd turning lane has worked well on both
Mt Road near Latta Rd, and newly on Dewey
between Denise and Latta. This would keep
auto traffic further away from sidewalks and
bike lanes, BUT when the "extra" traffic
going to Wal-Mart at Northstar Plaza
piles up, will there be enough capacity
to handle the Dewey Ave traffic, without
"pile up" bumper to bumper at Rush
hours?

I suspect the answer will be no
problem, but "slowing" traffic will make
those travelling to Wal-Mart somewhat
frustrated, on occasion

Surprise! Surprise!

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Phone: 271-0040 Fax: 271-0041 trobinson@edrpc.com

or drop off at:

Town of Greece

Attention Ron Sassone

One Vince Tofany Blvd. Greece, New York 14612

Down here

Dewey Avenue Corridor Traffic Calming Study
2nd Public Meeting
Comment Form

April 26, 2010

On behalf of the Town of Greece, EDR and SRF consultants are collecting the public's comments on the proposals contained in the draft Dewey Avenue Corridor Traffic Calming Study, prior to the study's finalization. Please take a few minutes to let us know if you have any suggestions or concerns.

Suggestions and Concerns:

Bike path - Bennington Drive is a
short cut - speed - Rest of streets
on path rather quiet - good

D. Merkel

Please return comments tonight or send them to:
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Phone: 271-0040 Fax: 271-0041 trobinson@edrpc.com
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Attention Ron Sassone
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Dewey Avenue Corridor Traffic Calming Study
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April 26, 2010

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Suggestions and Concerns:

the islands - do not
like the way they look
on Ridge Rd - do not think
it is a good idea on Dewey
many trees are dead &
are not cared for very well
on Ridge litter accumulates
not attractive

Please return comments tonight or send them to:
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ALTERNATIVE TRANSPORTATION BENEFITS

Alternative Transportation Benefits

Transportation accounts for more than 30 percent of U.S. carbon dioxide emissions (West, 2007). However, there are a number of alternative transportation possibilities, such as walking, bicycling, and taking public transportation. According to the American Public Transportation Association (APTA), public transportation in the United States saves approximately 1.4 billion gallons of gasoline and about 1.5 million tons of carbon dioxide annually (APTA, 2007). Walking and bicycling as a means of transportation reduces those figures even further. Walking, bicycling and public transportation offer benefits to the global environment as well as to personal health, finances, time, and stress.

A. Environmental Benefits

Only 14 million Americans use public transportation daily while 88 percent of all trips in the United States are made by car—and many of those cars carry only one person (West, 2007). Switching to alternative transportation reduces emissions of greenhouse gases and other pollutants that contribute to global warming, smog, and acid rain. Greenhouse gases are atmospheric gases, primarily carbon dioxide, methane and nitrous oxide, which trap the sun's heat, making the Earth a greenhouse. Emissions of greenhouse gases enhance the Earth's greenhouse effect contributing to climate change. Air pollution includes ground level ozone and fine airborne particles, as well as carbon monoxide, nitrogen oxides and sulphur oxides. This mix of substances is often called smog. (SES, 2007)

Half of the average person's greenhouse gas emissions are from transportation. Choosing alternative transportation is an easy way to reduce greenhouse gas emissions. Shorter trips, which are most suited to alternative transportation, are the least fuel-efficient and generate the most pollution per mile when a motor vehicle is used. (SES, 2007)

B. Health Benefits

The most valuable natural resource of any community is the health of the residents. In 2005, the Centers for Disease Control and Prevention (CDC) reported the following statistics:

- Obesity has risen significantly among adults in the last 20 years
- 30% of U.S. adults age 20 and older – over 60 million people – are obese
- The percentage of young people who are overweight has more than tripled since 1980
- 16% of young people age 6-19 years – over 9 million people – are considered overweight

In Upstate New York, children obesity trends exceed or match national trends. For example in 2004, twenty-one percent of Upstate New York 3rd graders were obese, which exceeds the national rate of 16% (Upstate NY, 2004). Childhood overweight and obesity is a precursor for adult obesity. The *Strategic Plan for The Prevention of Childhood Overweight and Obesity in Monroe County, NY 2007-2017*, cites “the physical environment and the lack of affordable and safe recreational venues for many children,” as a factor in childhood overweight and obesity. The *Greater Rochester Health Foundation* and its task force has set the following goal to decrease childhood obesity:

- Reduce the prevalence of overweight and obesity, as measured by Body Mass Index (BMI), from 12,244 (15%) to 4,081 (5%) of Monroe County children ages 2-10 by 2017.

Increased physical activity and creating safe environments are strategies that will be employed to meet the goal.

Health care costs and insurance rates are escalating, causing serious impacts to the local economy. In 2000, health care costs associated with physical inactivity topped \$76 billion (CDC, 2005). Lack of physical activity is a contributing factor to a growing number of serious illnesses and health problems among all age groups. Land use and building patterns exacerbate the problem by providing new neighborhoods that have few opportunities for walking or biking. Lifestyles have become increasingly sedentary in a post-industrial society.

Despite the proven benefits, more than 50% of American adults do not get enough physical activity to provide health benefits (CDC, 2005). With this in mind, opportunities for exercise and healthful outdoor activity are more than expendable extras. Parks, trails, and open space resources take on new meaning and value. Opportunities for recreation and active transportation support the health and wellness of local residents, and have significant and quantifiable economic impacts. Active transportation, such as walking and bicycling, provides an opportunity to incorporate regular physical activity into the daily routine.

Regular physical activity has the benefit of looking and feeling better, but also reducing the risk of disease. Unhealthy diet and physical inactivity can cause or aggravate many chronic diseases and conditions, including type 2 diabetes, hypertension, heart disease, stroke, and some cancers (CDC, 2005). Regular physical activity is an important component of a healthy lifestyle, and aids in the prevention of many chronic diseases, disabling conditions and chronic disease risk factors (CDC, 2007).

In addition, research studies have found that overweight and obese children have lowered academic achievement in standardized test scores (CA Dept of Ed, 2005). Also, findings in other studies show that children who are physically active perform better academically and miss fewer days of school (Dwyer, 1996). Bicycling provides an opportunity to simultaneously obtain the benefits of transportation and physical exercise.

C. Financial Benefits

In addition to health-related costs, operating a personal automobile is very expensive. Of every dollar earned, the average household spends 18 cents on transportation, 94% of which is for buying, maintaining and operating cars, the largest source of household debt after mortgages (APTA, 2007). The average vehicular commuter spends over \$7,500 per year on commuting expenses, which include the cost of gas, vehicle wear and tear, vehicle maintenance, and insurance. In contrast, the average transit rider spends between \$200 and \$2600 annually on public transportation, depending on mileage traveled and other factors, such as transfers, distance, and parking charges (APTA, 2007).

For some households, alternative transportation can even reduce the need for additional cars, which can be a yearly expense between \$5,000 and \$11,800 (APTA, 2007). With the money saved on a vehicle, or even just the additional parking, fuel and maintenance required to commute in a vehicle, an active commuter can pay for transit expenses, purchase a good quality bicycle, or buy new walking shoes, with money left over.

D. Time and Stress Benefits

Alternative transportation can save time and reduce stress. Carpooling or taking a bus allows commuters to use the HOV lanes and by-pass traffic. Carpooling and mass transit also provide the passengers a break from driving and allow them to use their time in other ways like sleeping,

reading, or doing work. Riding a bicycle allows a commuter to choose a less busy route and by-pass traffic lights. Walkers and cyclists see more of their community than stoplights, white lines and car bumpers, and benefit from the stress relief that accompanies physical exercise.

Studies have shown that the longer the regular commute, the greater amount of stress that a commuter feels. Stress often leads to fatigue, headaches, and irritable moods, which can subsequently affect work performance and household dynamics. Active transportation increases social interaction with the community. It is easier and less expensive to park a bike than a car, which further reduces the stress of commuting.

Sources:

American Public Transportation Association (APTA), May 2007, *Public Transportation Fact Book*, 58th Edition.

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<http://www.apta.com/media/facts.cfm>

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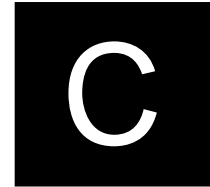
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Published by About.com, part of the New York Times Company.

COMPLETE STREETS



Complete Streets

In addition to understanding the opportunities and constraints specific to the study area, we can look to the complete streets¹ concept for solutions. According to the National Complete Streets Coalition (NCSC), complete streets are roadways designed and operated to enable safe, attractive, and comfortable access and travel for all users². Pedestrians, bicyclists, motorists and public transport users of all ages and abilities are able to safely and comfortably move along and across a complete street³. Complete streets also create a sense of place, improve social interaction, and generally increase land values of adjacent property.

Complete streets look different in different places. They must fit with their context and to the transportation modes expected⁴. Although no singular formula exists for a complete street, an effective one includes at least some of the following features⁵:

- | | |
|------------------------|----------------------------------|
| - sidewalks | - bus pullouts |
| - bike lanes | - special bus lanes |
| - wide shoulders | - raised crosswalks |
| - plenty of crosswalks | - audible pedestrian signals |
| - refuge medians | - sidewalk bump-outs (bulb-outs) |

These features make a street safer and more pleasant for pedestrians and vehicles. A Federal Highway Administration safety review found that designing a street for pedestrian travel by installing raised medians and redesigning intersections and sidewalks reduced pedestrian risk by 28%⁶. The practice of complete streets is not only about allocation of street space, but also about selecting a design speed that is appropriate to the street typology and location, and that allows for safe movements by all road users⁷.

Complete streets have a number of different benefits, primarily related to⁸:

- | | |
|---------------------------|----------------------------|
| - gas prices | - people with disabilities |
| - climate change | - older people |
| - economic revitalization | - health |
| - safety | - transit |
| - children | - transportation costs |

Gas Prices

Walking, biking and using public transit saves money and reduces the United States' dependence on oil. Walking and bicycling require no gasoline usage and transit's fuel usage is more efficient than automobiles. Almost fifty percent of all trips in metropolitan areas are three miles or less and 28

¹ <http://www.completestreets.org>

² National Complete Streets Coalition website, <http://www.completestreets.org>, December 2008.

³ Ibid.

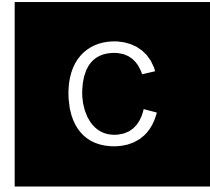
⁴ John Laplante and Barbara McCann. "Complete streets: We can get there from here," ITE Journal, May 2008.

⁵ National Complete Streets Coalition brochure. March 2009.

⁶ Ibid.

⁷ John Laplante and Barbara McCann. "Complete streets: We can get there from here," ITE Journal, May 2008.

⁸ National Complete Streets Coalition website, <http://www.completestreets.org>, December 2008.



percent are one mile or less, which are distances that many people can cover by foot or bicycle if streets are safe. T⁹ If each American substituted driving with walking or bicycling for the distance recommended for daily exercise, oil consumption in the U.S. could be reduced by 35 to 38 percent.¹⁰

Climate Change

Currently, the transportation sector is the fastest growing carbon dioxide source in the U.S. with emission rates rising 2 percent every year. By 2030, carbon emissions from transportation are projected to be 41 percent above today's level if driving is not curbed.¹¹ Complete streets encourage Americans to drive less and use streets for walking, bicycling, and using public transit. In part due to streets that are unsafe for walking, bicycling or taking transit, automobiles currently account for 65 percent of trips less than one mile. Developing complete streets would help convert these short automobile trips to multi-modal travel. Other studies have found that using non-motorized transport could eliminate five to ten percent of urban automobile trips.¹²

Economic Revitalization

Business owners and residents can benefit economically from infrastructure for non-motorized transportation and lowering automobile speeds by changing road conditions. Creating complete streets in retail and commercial areas accommodates customers and employees that lack transportation or do not feel safe walking, bicycling or using public transit in an automobile-centric environment. When San Francisco's Mission District reduced traffic lanes to slow down cars and accommodate other users, merchants reported a 40 percent increase in sales, a 60 percent increase in local resident shoppers, and a significant increase in pedestrian and bicycling activity.¹³ In addition, complete streets contribute to an increase in property values, including residential properties, due to a willingness to pay more to live and work in walkable communities.

Safety

Streets lacking safe places to walk, cross, catch a bus, or operate a bicycle are a safety hazard. Almost 5,000 pedestrians and bicyclists die and more than 70,000 are injured each year on U.S. roads.¹⁴ Pedestrian crashes are more than twice as likely to occur in places without sidewalks.¹⁵ Designing streets for pedestrians with sidewalks, raised medians, better bus stop placement, traffic calming measures, and accommodations for disabled travelers contribute to improved pedestrian safety.¹⁶ Some design features, such as medians, improve safety for all users. Medians enable pedestrians to cross busy roads in two stages and reduce bicyclist injuries from left-turning motorists. Speed reductions created through enlarging sidewalks, installing medians, and adding

⁹ 2001 National Personal Transportation Survey.

¹⁰ Higgins, Pat. Exercise Based Transportation Reduces Oil Dependence, Carbon Emissions and Obesity Environmental Conservation 2005

¹¹ Ewing, Reid. Growing Cooler: The Evidence on Urban Development and Climate Change. Urban Land Institute/Smart Growth America, 2007.

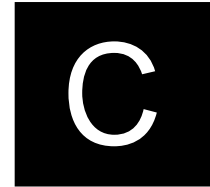
¹² Litman, Todd. TDM Encyclopedia (ADONIS, 1999; Mackett, 2000; Socialdata Australia, 2000; Cairns et al, 2004).

¹³ Drennen, Emily. *Economic Effects of Traffic Calming on Urban Small Businesses*. 2003. http://www.emilydrennen.org/TrafficCalming_full.pdf.

¹⁴ Michelle Ernst, *Mean Streets 2004: How Far Have We Come?*, Surface Transportation Policy Project (2004).

¹⁵ B.J. Campbell and others, *A Review of Pedestrian Safety Research in the United States and Abroad*, Federal Highway Administration Publication # FHWA-RD-03-042 (January 2004).

¹⁶ Ibid.



bicycle lanes, help to lower fatality rates. Eighty percent of pedestrians struck by an automobile going 40 mph will die, however the fatality rates decrease with speed. Forty percent will die when hit by a vehicle traveling 30 mph and only 5 percent will die when hit at 20 mph¹⁷. Also, bicyclists are safer riding with traffic in bicycle lanes than on sidewalks due to unexpected conflicts at driveways and intersections.

Children

A lack of complete streets inhibits children from walking or bicycling to school and playing in their neighborhoods. Pedestrian injury is a leading cause of unintentional, injury-related death among children, ages 5 to 14.¹⁸ Currently, only 17 percent of children walk or ride their bicycles to school compared to 71 percent of their parents when they were children.¹⁹ Sidewalks, footpaths, safe street crossings, and reduced vehicle speeds in school zones contribute to an increase in children walking and bicycling to school.²⁰ In addition, complete street policies can augment Safe Routes to School (SRTS) programs, to help communities implement complete street design elements into their roadway improvements.

People with Disabilities

Incomplete streets often create unsafe conditions, inhibit use or are a source of frustration for people with disabilities. For example, unpaved surfaces and disconnected, narrow, or deteriorated sidewalks provide unstable or poor conditions for wheelchair travel. High-speed traffic through wide intersections limits mobility for older persons. WALK signals that are solely visual provide no cues to visually impaired pedestrians. Bus stops without adequately paved surfaces and seating are often inaccessible and uncomfortable. Complete street programs provide communities with transportation investments that accommodate all users. For example, complete street designs incorporate inclusive details, such as curb ramps and retimed signals to account for slower movement at intersections, smooth sidewalks free of obstacles, with usable benches along pedestrian routes and ample space to approach, wait, and board safely at transit stops.

Older People

By 2025, the U.S. Census Bureau projects that the portion of Americans over 65 will increase from 12 percent to nearly 20 percent, totaling 62 million Americans. Many older adults prefer not to drive for safety reasons; however, many roads do not provide safe alternatives to driving. In 2005, older Americans made up 20 percent of all pedestrian fatalities. A national poll found that 47 percent of Americans over 50 could not safely cross main roads near their homes, 40 percent did not have adequate neighborhood sidewalks, and 48 percent had no comfortable place to wait for the bus.²¹ Also, incomplete streets contribute to older Americans' isolation at home due to a lack of transportation options. Over 50 percent of older adults who reported unsafe walking, bicycling, and transit facilities near their home said they would walk, bicycle, or take transit more often if their

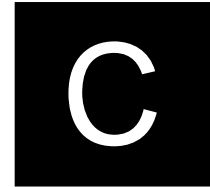
¹⁷ W.A. Leaf and D.F. Preusser, "Literature Review on Vehicle Travel Speeds and Pedestrian Injuries Among Selected Racial/Ethnic Groups," US Department of Transportation, National Highway Traffic Safety Administration (1999).

¹⁸ *Surface Transportation Policy Project (2004) Mean Streets.*

¹⁹ Appleyard, B. (2005), *Livable Streets for Schoolchildren*. NCBW Forum.

²⁰ Ewing, R. Will Schroeder, William Greene. *School location and student travel: Analysis of factors affecting TRB*, National Research Council, Washington, D.C., 2004, pp. 55-63.

²¹ AARP, *Fighting Gas Prices, Nearly A Third of American sage 50+ Hang Up Their Keys To Walk But Find Streets Inhospitable, Public Transportation Inaccessible*. http://www.aarp.org/research/press-center/presscurrentnews/aarp_poll_fighting_gas_prices_nearly_a_third_of_am.html



streets were improved. Examples of complete street designs include retiming signals to account for slower walking speed, constructing median refuges or sidewalk bulb-outs to shorten crossing distances, and installing curb ramps, sidewalk seating and bus shelters with seating. Also, improved lighting, signage, and pavement markings are among the measures that can benefit drivers of any age, but particularly older drivers.

Health

Obesity is a major American health issue. A recent study found that 32 percent of American adults are obese²², and the number of overweight or obese American children almost tripled from 1980 to 2004.²³ According to health experts, inactivity is a major contributor to obesity and other diseases, such as diabetes, heart disease, and stroke. Fifty-five percent of American adults fall short of recommended activity guidelines, and approximately 25 percent report being completely inactive.²⁴ Complete streets encourage active travel by providing a network of safe sidewalks and bikeways. A study found that 43 percent of people with safe places to walk within 10 minutes of home met recommended activity levels and among those without safe places to walk just 27 percent met the recommendation.²⁵

Transit

Incomplete streets are barriers to transit riders. Poor street design hinders many pedestrians, seniors, and people with disabilities from getting to transit stops in a safe and convenient manner. Communities providing complete streets understand that buses and trains carry more people at a lower cost than automobiles, and help reduce congestion and air pollution. Complete streets accommodate buses moving through traffic and provide accessible bus stops and sidewalks. For example, since 2000 Los Angeles uses a priority signal system that allows buses to shorten red lights and extend green lights. As a result, ridership has increased over 30 percent and travel time has decreased by 25 percent.²⁶ Also, improving access to transit aids in reducing usage of more costly transportation alternatives, such as paratransit or private transportation services. The Maryland Transit Administration calculated that a daily paratransit commuter costs about \$38,500 a year for one person while basic improvements to a transit stop cost approximately \$7,000, and extensive improvements (lighted shelter, bench, new sidewalk) cost around \$58,000.

Transportation Costs

Transportation costs are the second largest expense for American households. On average, automobile purchases, operation, and maintenance account for 98 percent of the money spent for transportation by American households. Families living in auto-reliant communities without sidewalks, bicycle lanes, and convenient public transit cannot choose less expensive transportation options. Households in auto-reliant communities spend 20 percent more on transportation than in

²² U.S. CDC. (2006) *Physical Activity and Good Nutrition: Essential Elements to Prevent Chronic Disease and Obesity*.

²³ U.S. CDC. (2004) *Physical Activity and the Health of Young People*.

²⁴ U.S. Department of Health and Human Services (2000) *Healthy people 2010*. 2nd edition. Washington, DC: U.S. Government Printing Office.

²⁵ Powell, K.E., Martin, L., & Chowdhury, P.P. (2003). Places to walk: convenience and regular physical activity. *American Journal of Public Health*, 93, 1519-1521.

²⁶ Los Angeles County Metropolitan Transportation Authority. *Metro Rapid Demonstration Program, Final Report*. March 2002.

complete street communities.²⁷ Complete streets encourage families to choose bicycling, walking, or taking public transit over driving. Households residing near public transit drive an average of 16 fewer miles per day compared to households without public transportation options. When residents can reduce their transportation costs, they often invest more in the local economy, which in turn creates new jobs and more tax revenue.²⁸ In addition, property values increase in pedestrian-friendly communities and communities with convenient transit stops. For example, in Chicago, houses within a half-mile of a suburban rail station sell on average for \$36,000 more than homes located farther away.²⁹

²⁷ McCann, Barbara. *Driven to Spend: Sprawl and Household Transportation Expenses*. STPP, March 2000. <<http://www.transact.org/report.asp?id=36>>

²⁸ Bekka, Khalid. *Economic Benefits of Public Transit*. Wisconsin Department of Transportation, November 2003. <<http://on.dot.wi.gov/wisdotresearch/database/briefs/03-07transitbenefits-b.pdf>>

²⁹ *What Happens to a Capital Investment in Public Transportation?* American Public Transportation Association. <http://publictransportation.org/reports/asp/pub_business.asp>

EXISTING CONDITIONS PHOTOS

Zone A
Area of Dewey Avenue and
Ridge Road Intersection
City of Rochester



Dewey Avenue Corridor Traffic Calming Study

City of Rochester and Town of Greece, Monroe County, New York

Appendix D: Existing Conditions Photos

Zone B
Eastman Avenue to Winchester Street
City of Rochester



Dewey Avenue Corridor Traffic Calming Study

City of Rochester and Town of Greece, Monroe County, New York

Appendix D: Existing Conditions Photos

Zone C
Holy Sepulchre Cemetery
Winchester Street to Railroad Tracks
City of Rochester



Zone 1
Railroad Tracks to Haviland Park
City of Rochester & Town of Greece



Dewey Avenue Corridor Traffic Calming Study

City of Rochester and Town of Greece, Monroe County, New York

Appendix D: Existing Conditions Photos

Zone 2
Area of Dewey Avenue and
Stone Road Intersection
Town of Greece



■ Dewey Avenue Corridor Traffic Calming Study

City of Rochester and Town of Greece, Monroe County, New York

Appendix D: Existing Conditions Photos

Zone 3
St. Joseph's Villa Area
Clark Park to Dorsey Road
Town of Greece

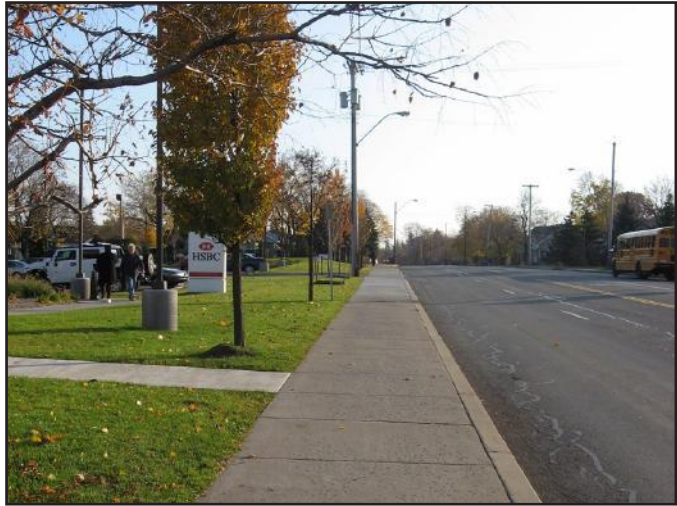


Dewey Avenue Corridor Traffic Calming Study

City of Rochester and Town of Greece, Monroe County, New York

Appendix D: Existing Conditions Photos

■ **Zone 4**
Dorsey Road to Britton Road
Town of Greece



■ **Dewey Avenue Corridor Traffic Calming Study**

City of Rochester and Town of Greece, Monroe County, New York

Appendix D: Existing Conditions Photos

Zone 5
Northgate Plaza Area
Britton Road to McGuire Road
Town of Greece



Dewey Avenue Corridor Traffic Calming Study

City of Rochester and Town of Greece, Monroe County, New York

Appendix D: Existing Conditions Photos

Zone 6
Lawson Road to Rumson Road
Town of Greece



Dewey Avenue Corridor Traffic Calming Study

City of Rochester and Town of Greece, Monroe County, New York

Appendix D: Existing Conditions Photos

Zone 7
Area of Dewey Avenue and
Latta Road Intersection
Town of Greece



Dewey Avenue Corridor Traffic Calming Study

City of Rochester and Town of Greece, Monroe County, New York

Appendix D: Existing Conditions Photos



COLLECTED TRAFFIC DATA

**COLLECTED
TRAFFIC VOLUME
DATA**

SRF & Associates
3495 Winton Place, Bldg E, Suite 110
Rochester, NY 14623

File Name : Dewey_Latta_AM
Site Code : 00280351
Start Date : 12/11/2008
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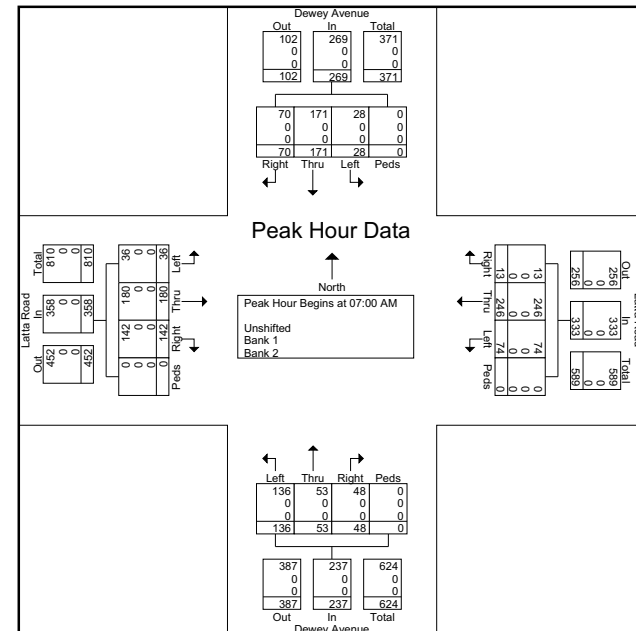
Groups Printed- Unshifted - Bank 1 - Bank 2

	Dewey Avenue Southbound				Latta Road Westbound				Dewey Avenue Northbound				Latta Road Eastbound				Int. Total
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
07:00 AM	14	49	6	0	4	69	18	0	10	15	39	0	30	45	6	0	305
07:15 AM	19	34	3	0	2	53	17	0	12	6	19	0	44	39	8	0	256
07:30 AM	17	54	4	0	7	52	20	0	12	18	43	0	28	51	9	0	315
07:45 AM	20	34	15	0	0	72	19	0	14	14	35	0	40	45	13	0	321
Total	70	171	28	0	13	246	74	0	48	53	136	0	142	180	36	0	1197
08:00 AM	18	37	12	0	2	44	23	0	16	8	34	0	25	58	10	0	287
08:15 AM	19	42	4	0	3	37	25	0	14	12	24	0	21	41	5	0	247
08:30 AM	9	30	5	0	5	64	19	0	28	19	40	0	26	48	11	0	304
08:45 AM	9	40	16	0	12	67	23	0	18	23	35	0	22	47	15	0	327
Total	55	149	37	0	22	212	90	0	76	62	133	0	94	194	41	0	1165
Grand Total	125	320	65	0	35	458	164	0	124	115	269	0	236	374	77	0	2362
Apprch %	24.5	62.7	12.7	0	5.3	69.7	25	0	24.4	22.6	53	0	34.4	54.4	11.2	0	
Total %	5.3	13.5	2.8	0	1.5	19.4	6.9	0	5.2	4.9	11.4	0	10	15.8	3.3	0	
Unshifted	125	320	65	0	35	458	164	0	124	115	269	0	236	374	77	0	2362
% Unshifted	100	100	100	0	100	100	100	0	100	100	100	0	100	100	100	0	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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File Name : Dewey_Latta_AM
Site Code : 00280351
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	Dewey Avenue Southbound					Latta Road Westbound					Dewey Avenue Northbound					Latta Road Eastbound						
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																						
Peak Hour for Entire Intersection Begins at 07:00 AM																						
07:00 AM	14	49	6	0	69	4	69	18	0	91	10	15	39	0	64	30	45	6	0	81	305	
07:15 AM	19	34	3	0	56	2	53	17	0	72	12	6	19	0	37	44	28	51	9	0	88	315
07:30 AM	17	54	4	0	75	7	52	20	0	79	12	18	43	0	73	28	51	9	0	88	321	
07:45 AM	20		15				72				14							13		98	321	
Total Volume	70	171	28	0	269	13	246	74	0	333	48	53	136	0	237	142	180	36	0	358	1197	
% App. Total	26	63.6	10.4	0		3.9	73.9	22.2	0		20.3	22.4	57.4	0		39.7	50.3	10.1	0			
PHF	.875	.792	.467	.000	.897	.464	.854	.925	.000	.915	.857	.736	.791	.000	.812	.807	.882	.692	.000	.913	.932	
Unshifted	70	171	28	0	269	13	246	74	0	333	48	53	136	0	237	142	180	36	0	358	1197	
% Unshifted	100	100	100	0	100	100	100	100	0	100	100	100	100	0	100	100	100	100	0	100	100	
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
% Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	



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Rochester, NY 14623

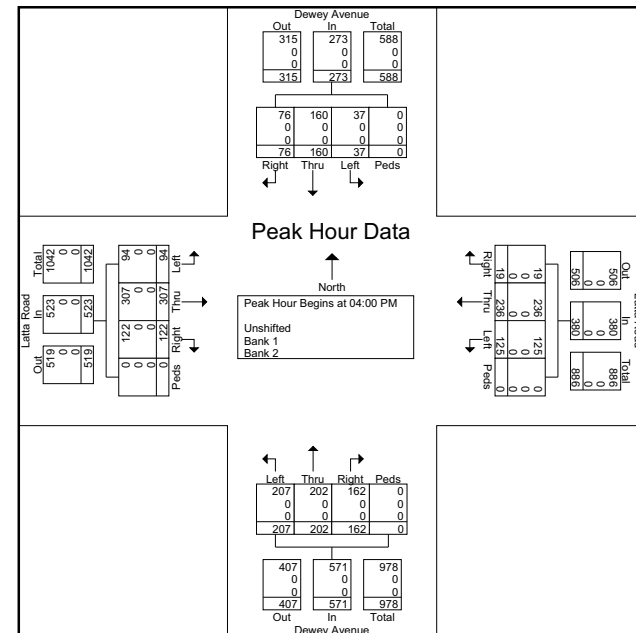
File Name : Dewey_Latta_PM
Site Code : 00280351
Start Date : 12/11/2008
Page No : 1

Groups Printed- Unshifted - Bank 1 - Bank 2																
	Dewey Avenue Southbound				Latta Road Westbound				Dewey Avenue Northbound				Latta Road Eastbound			
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds
04:00 PM	16	46	11	0	6	64	27	0	41	57	55	0	28	72	21	0
04:15 PM	17	35	9	0	2	69	27	0	41	33	64	0	29	84	29	0
04:30 PM	32	41	8	0	5	45	40	0	38	55	41	0	33	92	23	0
04:45 PM	11	38	9	0	6	58	31	0	42	57	47	0	32	59	21	0
Total	76	160	37	0	19	236	125	0	162	202	207	0	122	307	94	0
05:00 PM	15	30	13	0	5	47	32	0	43	59	51	0	30	75	27	0
05:15 PM	12	34	9	0	4	60	29	0	34	46	59	0	26	69	27	0
05:30 PM	16	48	13	0	5	52	22	0	33	38	44	0	33	60	28	0
05:45 PM	20	49	11	0	5	54	20	0	36	60	46	0	25	73	19	0
Total	63	161	46	0	19	213	103	0	146	203	200	0	114	277	101	0
Grand Total	139	321	83	0	38	449	228	0	308	405	407	0	236	584	195	0
Apprch %	25.6	59.1	15.3	0	5.3	62.8	31.9	0	27.5	36.2	36.3	0	23.3	57.5	19.2	0
Total %	4.1	9.5	2.4	0	1.1	13.2	6.7	0	9.1	11.9	12	0	7	17.2	5.7	0
Unshifted	139	321	83	0	38	449	228	0	308	405	407	0	236	584	195	0
% Unshifted	100	100	100	0	100	100	100	0	100	100	100	0	100	100	100	0
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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File Name : Dewey_Latta_PM
Site Code : 00280351
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	Dewey Avenue Southbound					Latta Road Westbound					Dewey Avenue Northbound					Latta Road Eastbound				
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																				
Peak Hour for Entire Intersection Begins at 04:00 PM																				
04:00 PM	16	46	11	0		6	64	27	0	97	41	57			153	28	72	21	0	121
04:15 PM	17	35	9	0	61	2	69			98	41	33	64	0	138	29	84	29	0	439
04:30 PM	32	41	8	0	81	5	45	40	0	90	38	55	41	0	134	33	92	23	0	453
04:45 PM	11	38	9	0	58	6	58	31	0	95	42									
Total Volume	76	160	37	0	273	19	236	125	0	380	162	202	207	0	571	122	307	94	0	523
% App. Total	27.8	58.6	13.6	0		5	62.1	32.9	0		28.4	35.4	36.3	0		23.3	58.7	18	0	
PHF	.594	.870	.841	.000	.843	.792	.855	.781	.000	.969	.964	.886	.809	.000	.933	.924	.834	.810	.000	.883
Unshifted	76	160	37	0	273	19	236	125	0	380	162	202	207	0	571	122	307	94	0	523
% Unshifted	100	100	100	0	100	100	100	100	0	100	100	100	100	0	100	100	100	100	0	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



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File Name : Dewey_Maiden_AM
Site Code : 00280352
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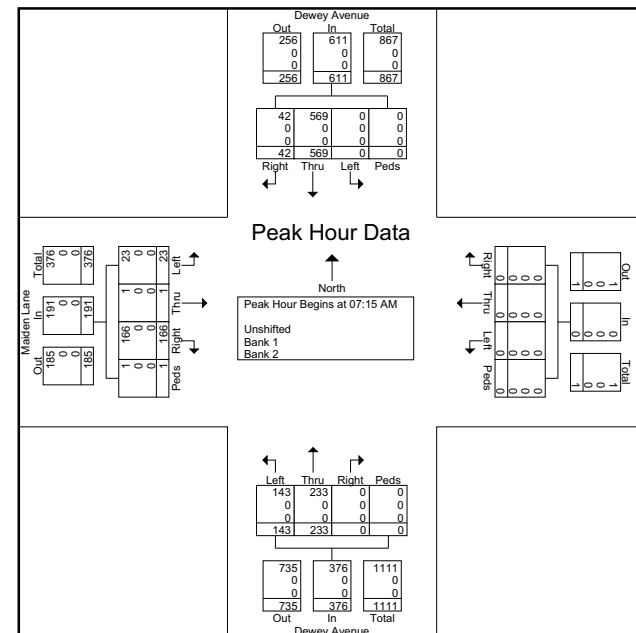
Groups Printed- Unshifted - Bank 1 - Bank 2

Start Time	Dewey Avenue Southbound				Westbound				Dewey Avenue Northbound				Maiden Lane Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
07:00 AM	10	100	0	0	0	0	0	0	0	47	36	0	27	0	7	0	227
07:15 AM	11	128	0	0	0	0	0	0	0	58	30	0	46	0	7	1	281
07:30 AM	12	179	0	0	0	0	0	0	0	60	35	0	30	1	5	0	322
07:45 AM	10	152	0	0	0	0	0	0	0	72	57	0	48	0	4	0	343
Total	43	559	0	0	0	0	0	0	0	237	158	0	151	1	23	1	1173
08:00 AM	9	110	0	0	0	0	0	0	0	43	21	0	42	0	7	0	232
08:15 AM	11	109	0	0	0	0	0	0	0	50	20	0	35	0	2	0	227
08:30 AM	5	109	0	0	0	0	0	0	0	62	21	0	20	0	7	0	224
08:45 AM	11	109	0	0	0	0	0	0	0	53	20	0	25	0	9	0	227
Total	36	437	0	0	0	0	0	0	0	208	82	0	122	0	25	0	910
Grand Total	79	996	0	0	0	0	0	0	0	445	240	0	273	1	48	1	2083
Apprch %	7.3	92.7	0	0	0	0	0	0	0	65	35	0	84.5	0.3	14.9	0.3	
Total %	3.8	47.8	0	0	0	0	0	0	0	21.4	11.5	0	13.1	0	2.3	0	
Unshifted	79	996	0	0	0	0	0	0	0	445	240	0	273	1	48	1	2083
% Unshifted	100	100	0	0	0	0	0	0	0	100	100	0	100	100	100	100	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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File Name : Dewey_Maiden_AM
Site Code : 00280352
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Start Time	Dewey Avenue Southbound					Westbound					Dewey Avenue Northbound					Maiden Lane Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	11	128	0	0	139	0	0	0	0	0	0	58	30	0	88	46	0	7	1	54	281
07:30 AM	12	179	0	0	191	0	0	0	0	0	0	60	35	0	95	30	1	5	0	36	322
07:45 AM	10	152	0	0	162	0	0	0	0	0	0	72	57	0	129	48					343
08:00 AM	9	110	0	0	119	0	0	0	0	0	0	43	21	0	64	42	0	7	0	49	232
Total Volume	42	569	0	0	611	0	0	0	0	0	0	233	143	0	376	166	1	23	1	191	1178
% App. Total	6.9	93.1	0	0		0	0	0	0	0	0	62	38	0		86.9	0.5	12	0.5		
PHF	.875	.795	.000	.000	.800	.000	.000	.000	.000	.000	.000	.809	.627	.000	.729	.865	.250	.821	.250	.884	.859
Unshifted	42	569	0	0	611	0	0	0	0	0	0	233	143	0	376	166	1	23	1	191	1178
% Unshifted	100	100	0	0	100	0	0	0	0	0	0	100	100	0	100	100	100	100	100	100	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



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File Name : Dewey_Maiden_PM
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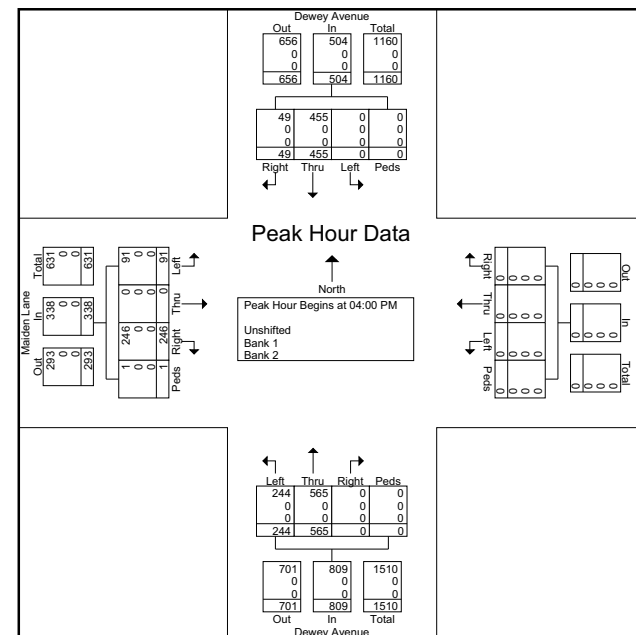
Groups Printed- Unshifted - Bank 1 - Bank 2

Start Time	Dewey Avenue Southbound				Westbound				Dewey Avenue Northbound				Maiden Lane Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
04:00 PM	14	92	0	0	0	0	0	0	0	147	56	0	66	0	17	0	392
04:15 PM	15	119	0	0	0	0	0	0	0	131	62	0	49	0	28	1	405
04:30 PM	16	118	0	0	0	0	0	0	0	135	62	0	56	0	22	0	409
04:45 PM	4	126	0	0	0	0	0	0	0	152	64	0	75	0	24	0	445
Total	49	455	0	0	0	0	0	0	0	565	244	0	246	0	91	1	1651
05:00 PM	11	91	0	0	0	0	0	0	1	147	49	0	61	4	13	0	377
05:15 PM	7	108	0	0	0	0	0	0	0	163	55	0	57	2	20	0	412
05:30 PM	15	94	0	0	0	0	0	0	0	161	64	0	45	0	24	0	403
05:45 PM	22	112	0	0	0	0	0	0	0	107	60	0	62	3	23	0	389
Total	55	405	0	0	0	0	0	0	1	578	228	0	225	9	80	0	1581
Grand Total	104	860	0	0	0	0	0	0	1	1143	472	0	471	9	171	1	3232
Apprch %	10.8	89.2	0	0	0	0	0	0	0.1	70.7	29.2	0	72.2	1.4	26.2	0.2	
Total %	3.2	26.6	0	0	0	0	0	0	0	35.4	14.6	0	14.6	0.3	5.3	0	
Unshifted	104	860	0	0	0	0	0	0	1	1143	472	0	471	9	171	1	3232
% Unshifted	100	100	0	0	0	0	0	0	100	100	100	0	100	100	100	100	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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	Dewey Avenue Southbound					Westbound					Dewey Avenue Northbound					Maiden Lane Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	14	92	0	0	106	0	0	0	0	0	0	147	56	0	203	66	0	17	0	83	392
04:15 PM	15	119	0	0	134	0	0	0	0	0	0	131	62	0	193	49	0	28	1		
04:30 PM	16	118	0	0	134	0	0	0	0	0	0	135	62	0	197	56	0	22	0	78	409
04:45 PM	4	126	0	0	130	0	0	0	0	0	0	152	64	0	216	75	0	24	0	99	445
Total Volume	49	455	0	0	504	0	0	0	0	0	0	565	244	0	809	246	0	91	1	338	1651
% App. Total	9.7	90.3	0	0		0	0	0	0	0	0	69.8	30.2	0		72.8	0	26.9	0.3		
PHF	.766	.903	.000	.000	.940	.000	.000	.000	.000	.000	.000	.929	.953	.000	.936	.820	.000	.813	.250	.854	.928
Unshifted	49	455	0	0	504	0	0	0	0	0	0	565	244	0	809	246	0	91	1	338	1651
% Unshifted	100	100	0	0	100	0	0	0	0	0	0	100	100	0	100	100	0	100	100	100	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



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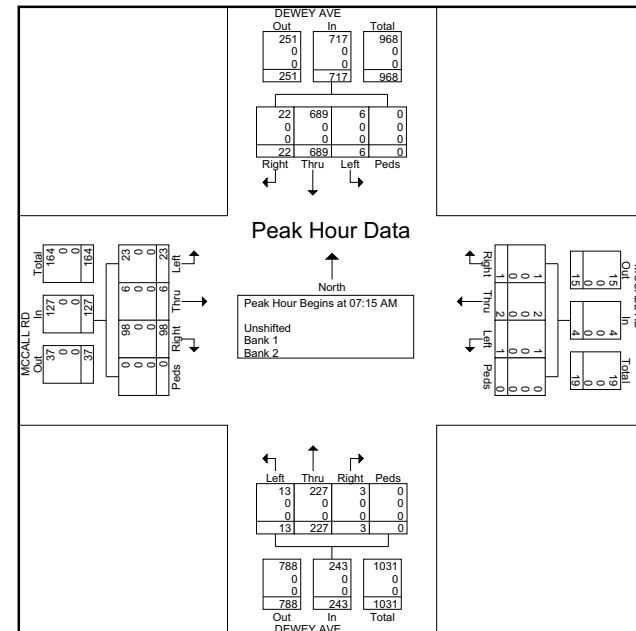
File Name : Dewey_McCall_AM
Site Code : 00000000
Start Date : 1/22/2009
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Groups Printed- Unshifted - Bank 1 - Bank 2																	
	DEWEY AVE Southbound				MCCALL RD Westbound				DEWEY AVE Northbound				MCCALL RD Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
07:00 AM	3	146	3	0	1	0	0	0	2	46	4	0	22	1	2	0	230
07:15 AM	9	159	2	0	0	0	0	0	0	45	1	0	26	1	4	0	247
07:30 AM	2	204	1	0	0	2	0	0	0	53	5	0	25	3	4	0	299
07:45 AM	9	198	1	0	0	0	0	0	1	73	3	0	20	2	6	0	313
Total	23	707	7	0	1	2	0	0	3	217	13	0	93	7	16	0	1089
08:00 AM	2	128	2	0	1	0	1	0	2	56	4	0	27	0	9	0	232
08:15 AM	3	141	1	0	1	0	1	0	2	70	4	0	9	0	2	0	234
08:30 AM	14	120	1	0	1	0	2	0	0	57	3	0	16	1	8	0	223
08:45 AM	5	114	2	0	0	3	1	0	3	67	5	0	18	1	5	1	225
Total	24	503	6	0	3	3	5	0	7	250	16	0	70	2	24	1	914
Grand Total	47	1210	13	0	4	5	5	0	10	467	29	0	163	9	40	1	2003
Apprch %	3.7	95.3	1	0	28.6	35.7	35.7	0	2	92.3	5.7	0	76.5	4.2	18.8	0.5	
Total %	2.3	60.4	0.6	0	0.2	0.2	0.2	0	0.5	23.3	1.4	0	8.1	0.4	2	0	
Unshifted	47	1210	13	0	4	5	5	0	10	467	29	0	163	9	40	1	2003
% Unshifted	100	100	100	0	100	100	100	0	100	100	100	0	100	100	100	100	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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File Name : Dewey_McCall_AM
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Start Time	DEWEY AVE Southbound					MCCALL RD Westbound					DEWEY AVE Northbound					MCCALL RD Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	9		2			0	2	0	0	2	0	53	5	0	58	25	3	4	0	32	299
07:30 AM	2	204	1	0	207	0	0	0	0	0	1	73			77	20	2	6	0	28	313
07:45 AM	9	198	1	0	208	0	0	0	0	0											
08:00 AM	2	128	2	0	132	1	0	1			2					27	9			36	232
Total Volume	22	689	6	0	717	1	2	1	0	4	3	227	13	0	243	98	6	23	0	127	1091
% App. Total	3.1	96.1	0.8	0		25	50	25	0		1.2	93.4	5.3	0		77.2	4.7	18.1	0		
PHF	.611	.844	.750	.000	.862	.250	.250	.250	.000	.500	.375	.777	.650	.000	.789	.907	.500	.639	.000	.882	.871
Unshifted	22	689	6	0	717	1	2	1	0	4	3	227	13	0	243	98	6	23	0	127	1091
% Unshifted	100	100	100	0	100	100	100	100	0	100	100	100	100	0	100	100	100	100	0	100	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



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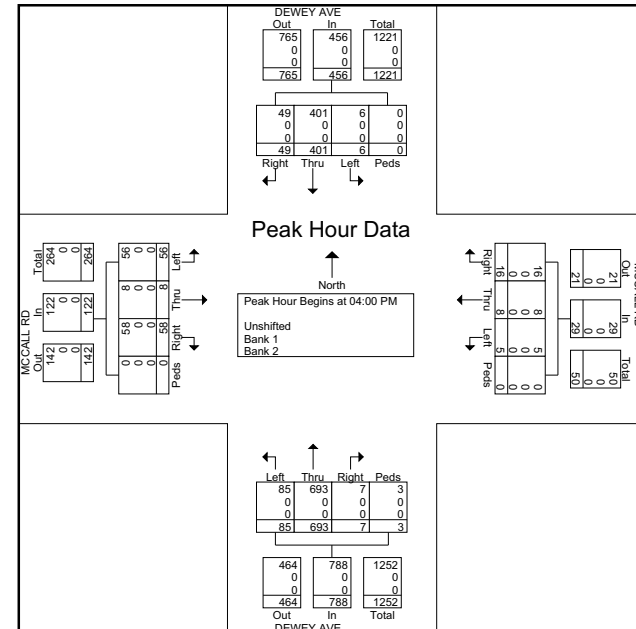
File Name : Dewey_McCall_PM
Site Code : 00000000
Start Date : 1/21/2009
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Groups Printed- Unshifted - Bank 1 - Bank 2																	
Start Time	DEWEY AVE Southbound				MCCALL RD Westbound				DEWEY AVE Northbound				MCCALL RD Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
04:00 PM	14	106	2	0	3	3	1	0	2	200	28	0	18	3	20	0	40
04:15 PM	9	77	3	0	6	1	1	0	2	194	17	0	6	2	10	0	328
04:30 PM	13	112	0	0	5	1	2	0	2	144	21	3	23	1	15	0	342
04:45 PM	13	106	1	0	2	3	1	0	1	155	19	0	11	2	11	0	325
Total	49	401	6	0	16	8	5	0	7	693	85	3	58	8	56	0	1395
05:00 PM	8	110	1	0	0	1	0	0	0	166	21	0	11	0	18	0	336
05:15 PM	11	110	0	0	0	0	0	0	0	199	30	1	14	0	19	0	384
05:30 PM	8	97	0	0	0	0	1	0	0	144	15	0	9	0	16	1	291
05:45 PM	8	89	0	0	1	0	0	0	0	129	21	0	9	0	6	0	263
Total	35	406	1	0	1	1	1	0	0	638	87	1	43	0	59	1	1274
Grand Total	84	807	7	0	17	9	6	0	7	1331	172	4	101	8	115	1	2669
Apprch %	9.4	89.9	0.8	0	53.1	28.1	18.8	0	0.5	87.9	11.4	0.3	44.9	3.6	51.1	0.4	
Total %	3.1	30.2	0.3	0	0.6	0.3	0.2	0	0.3	49.9	6.4	0.1	3.8	0.3	4.3	0	
Unshifted	84	807	7	0	17	9	6	0	7	1331	172	4	101	8	115	1	2669
% Unshifted	100	100	100	0	100	100	100	0	100	100	100	100	100	100	100	100	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Start Time	DEWEY AVE Southbound					MCCALL RD Westbound					DEWEY AVE Northbound					MCCALL RD Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	14					6	3				2	200	28	0	230	18	3	20		41	400
04:15 PM	9	77	3			2	1	1	0	8	2	194	17	0	213	6	2	10	0	18	328
04:30 PM	13	112	0	0	125	5	1	2						3		23					
04:45 PM	13	106	1	0	120	2	3	1	0	6	1	155	19	0	175	11	2	11	0	24	325
Total Volume	49	401	6	0	456	16	8	5	0	29	7	693	85	3	788	58	8	56	0	122	1395
% App. Total	10.7	87.9	1.3	0		55.2	27.6	17.2	0		0.9	87.9	10.8	0.4		47.5	6.6	45.9	0		
PHF	.875	.895	.500	.000	.912	.667	.667	.625	.000	.906	.875	.866	.759	.250	.857	.630	.667	.700	.000	.744	.872
Unshifted	49	401	6	0	456	16	8	5	0	29	7	693	85	3	788	58	8	56	0	122	1395
% Unshifted	100	100	100	0	100	100	100	100	0	100	100	100	100	100	100	100	100	100	0	100	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



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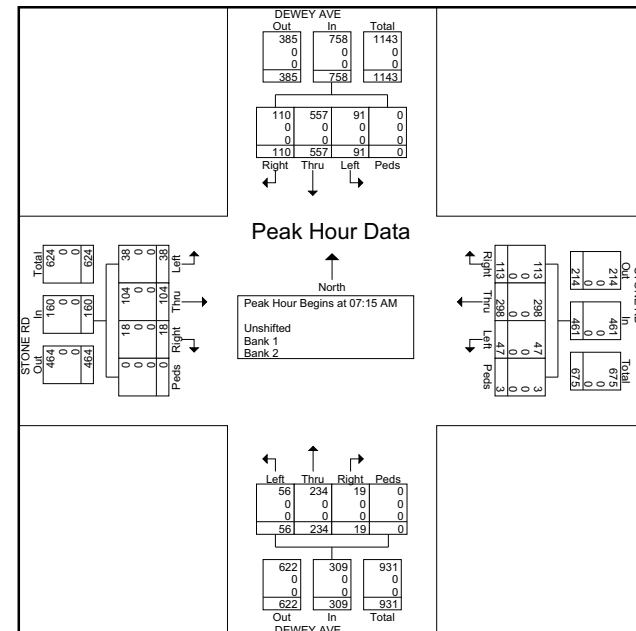
Groups Printed- Unshifted - Bank 1 - Bank 2

	DEWEY AVE Southbound				STONE RD Westbound				DEWEY AVE Northbound				STONE RD Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
07:00 AM	13	96	23	1	31	80	10	1	7	42	10	0	2	21	6	0	343
07:15 AM	31	123	35	0	23	84	16	0	4	54	15	0	5	27	7	0	424
07:30 AM	33	160	16	0	32	77	12	0	6	63	12	0	5	32	4	0	452
07:45 AM	21	158	20	0	36	81	10	1	6	66	10	0	2	26	19	0	456
Total	98	537	94	1	122	322	48	2	23	225	47	0	14	106	36	0	1675
08:00 AM	25	116	20	0	22	56	9	2	3	51	19	0	6	19	8	0	356
08:15 AM	15	112	26	0	15	46	11	0	7	44	14	1	15	18	7	1	332
08:30 AM	18	82	15	3	27	53	5	1	7	47	11	0	9	29	13	0	320
08:45 AM	25	104	24	3	16	54	2	1	9	43	9	1	9	35	14	0	349
Total	83	414	85	6	80	209	27	4	26	185	53	2	39	101	42	1	1357
Grand Total	181	951	179	7	202	531	75	6	49	410	100	2	53	207	78	1	3032
Apprch %	13.7	72.2	13.6	0.5	24.8	65.2	9.2	0.7	8.7	73.1	17.8	0.4	15.6	61.1	23	0.3	
Total %	6	31.4	5.9	0.2	6.7	17.5	2.5	0.2	1.6	13.5	3.3	0.1	1.7	6.8	2.6	0	
Unshifted	181	951	179	7	202	531	75	6	49	410	100	2	53	207	78	1	3032
% Unshifted	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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	DEWEY AVE Southbound					STONE RD Westbound					DEWEY AVE Northbound					STONE RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	31	123	35			32	77	12	0	121	6	63	12	0	81	5	32	4	0	41	452
07:30 AM	33	160	16	0	209	36	81	10	1	128	6	66			82	2	26	19		47	456
07:45 AM	21	158	20	0	199	22	56	9	2	89	3	51	19	0	73	6					
08:00 AM	25	116	20	0	161	22	56	9	2	89	3	51	19	0	73	6					
Total Volume	110	557	91	0	758	113	298	47	3	461	19	234	56	0	309	18	104	38	0	160	1688
% App. Total	14.5	73.5	12	0		24.5	64.6	10.2	0.7		6.1	75.7	18.1	0		11.2	65	23.8	0		
PHF	.833	.870	.650	.000	.907	.785	.887	.734	.375	.900	.792	.886	.737	.000	.942	.750	.813	.500	.000	.851	.925
Unshifted	110	557	91	0	758	113	298	47	3	461	19	234	56	0	309	18	104	38	0	160	1688
% Unshifted	100	100	100	0	100	100	100	100	100	100	100	100	100	0	100	100	100	100	0	100	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



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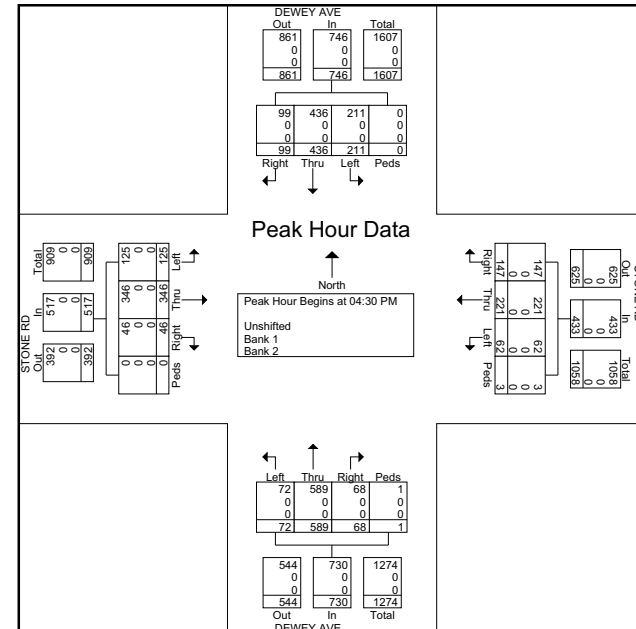
Groups Printed- Unshifted - Bank 1 - Bank 2

	DEWEY AVE Southbound				STONE RD Westbound				DEWEY AVE Northbound				STONE RD Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
04:00 PM	14	122	57	0	35	44	13	0	11	149	29	0	16	64	22	0	576
04:15 PM	22	98	41	0	43	53	13	1	17	135	27	2	15	92	32	1	592
04:30 PM	29	95	47	0	39	63	22	0	15	143	22	0	17	88	27	0	607
04:45 PM	27	125	69	0	43	58	17	1	17	143	17	1	10	78	26	0	632
Total	92	440	214	0	160	218	65	2	60	570	95	3	58	322	107	1	2407
05:00 PM	19	108	39	0	30	46	10	0	23	156	22	0	7	78	39	0	577
05:15 PM	24	108	56	0	35	54	13	2	13	147	11	0	12	102	33	0	610
05:30 PM	22	92	35	0	43	53	8	0	11	159	18	0	20	68	29	0	558
05:45 PM	26	111	51	0	39	49	8	0	19	118	19	0	15	79	31	0	565
Total	91	419	181	0	147	202	39	2	66	580	70	0	54	327	132	0	2310
Grand Total	183	859	395	0	307	420	104	4	126	1150	165	3	112	649	239	1	4717
Apprch %	12.7	59.8	27.5	0	36.8	50.3	12.5	0.5	8.7	79.6	11.4	0.2	11.2	64.8	23.9	0.1	
Total %	3.9	18.2	8.4	0	6.5	8.9	2.2	0.1	2.7	24.4	3.5	0.1	2.4	13.8	5.1	0	
Unshifted	183	859	395	0	307	420	104	4	126	1150	165	3	112	649	239	1	4717
% Unshifted	100	100	100	0	100	100	100	100	100	100	100	100	100	100	100	100	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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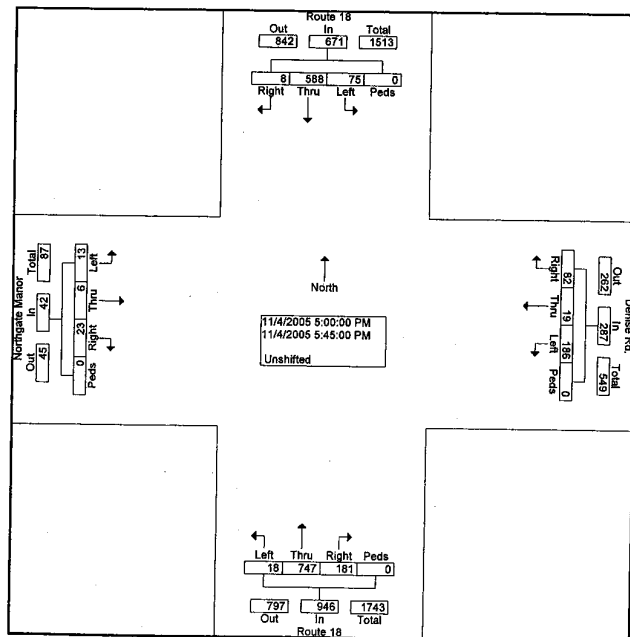
	DEWEY AVE Southbound					STONE RD Westbound					DEWEY AVE Northbound					STONE RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	29					63	22			124	15	143	22	0	180	17					
04:45 PM	27	125	69	0	221	43	58	17	1	119	17	143	17	1	178	10	78	26	0	114	632
05:00 PM	19	108	39	0	166	30	46	10	0	86	23	156			201	7	78	39			
05:15 PM	24	108	56	0	188	35	54	13	2	104	13	147	11	0	171	12	102	33	0	147	610
Total Volume	99	436	211	0	746	147	221	62	3	433	68	589	72	1	730	46	346	125	0	517	2426
% App. Total	13.3	58.4	28.3	0		33.9	51	14.3	0.7		9.3	80.7	9.9	0.1		8.9	66.9	24.2	0		
PHF	.853	.872	.764	.000	.844	.855	.877	.705	.375	.873	.739	.944	.818	.250	.908	.676	.848	.801	.000	.879	.960
Unshifted	99	436	211	0	746	147	221	62	3	433	68	589	72	1	730	46	346	125	0	517	2426
% Unshifted	100	100	100	0	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	100	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



SRF & Associates
 3495 Winton Place, Bldg E, Suite 110
 Rochester, New York 14623
 Phone: 585.272.4660

File Name : Route18.Denise.PM
 Site Code : 00025070
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	Route 18 Southbound					Denise Rd. Westbound					Route 18 Northbound					Northgate Manor Eastbound					
Start Time	Rig ht	Thru u	Left	Ped s	App. Total	Rig ht	Thru u	Left	Ped s	App. Total	Rig ht	Thru u	Left	Ped s	App. Total	Rig ht	Thru u	Left	Ped s	App. Total	Int. Total
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Intersection on 05:00 PM																					
Volume	8	588	75	0	671	82	19	186	0	287	181	747	18	0	946	23	6	13	0	42	1946
Percent	1.2	87.6	11.2	0.0		28.6	6.6	64.8	0.0		19.7	79.1	1.9	0.0		54.8	14.3	31.0	0.0		
05:30 Volume	2	171	17	0	190	15	6	44	0	65	48	193	6	0	247	6	3	3	0	12	514
Peak Factor																					0.946
High Int. Volume	05:30 PM					05:00 PM					05:15 PM					05:30 PM					
Peak Factor	2	171	17	0	190	24	2	50	0	76	58	199	4	0	261	6	3	3	0	12	



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 Rochester, New York 14623
 Phone: 585.272.4660

File Name : Route18.Denise.PM
 Site Code : 00025070
 Start Date : 11/4/2005
 Page No : 1

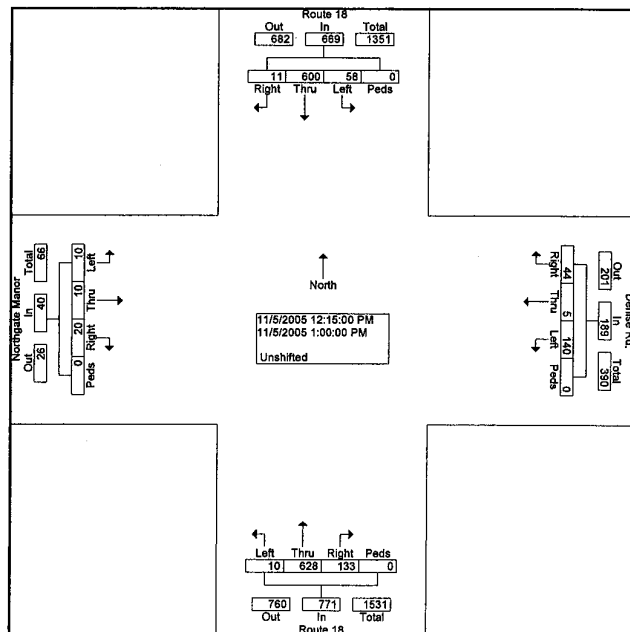
Groups Printed- Unshifted

Start Time	Route 18 Southbound				Denise Rd. Westbound				Route 18 Northbound				Northgate Manor Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
04:00 PM	5	120	19	0	22	7	35	0	40	180	5	0	4	2	2	0	441
04:15 PM	2	131	20	0	19	2	35	0	42	174	6	0	7	0	1	0	439
04:30 PM	0	122	19	0	21	0	31	0	47	168	4	0	5	4	3	0	424
04:45 PM	3	136	13	0	20	1	32	0	45	166	7	0	2	1	6	0	432
Total	10	509	71	0	82	10	133	0	174	688	22	0	18	7	12	0	1736
05:00 PM	1	135	15	0	24	2	50	0	41	178	3	0	4	0	6	0	459
05:15 PM	2	141	21	0	20	3	50	0	58	199	4	0	6	2	3	0	509
05:30 PM	2	171	17	0	15	6	44	0	48	193	6	0	6	3	3	0	514
05:45 PM	3	141	22	0	23	8	42	0	34	177	5	0	7	1	1	0	464
Total	8	588	75	0	82	19	186	0	181	747	18	0	23	6	13	0	1946
Grand Total	18	1097	146	0	164	29	319	0	355	1435	40	0	41	13	25	0	3682
Apprch %	1.4	87.0	11.6	0.0	32.0	5.7	62.3	0.0	19.4	78.4	2.2	0.0	51.9	16.5	31.6	0.0	
Total %	0.5	29.8	4.0	0.0	4.5	0.8	8.7	0.0	9.6	39.0	1.1	0.0	1.1	0.4	0.7	0.0	

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File Name : Route18.Denise.SAT
 Site Code : 00025070
 Start Date : 11/5/2005
 Page No : 2

	Route 18 Southbound					Denise Rd. Westbound					Route 18 Northbound					Northgate Manor Eastbound													
Start Time	Rig ht	Thru	Left	Ped s	App. Total	Rig ht	Thru	Left	Ped s	App. Total	Rig ht	Thru	Left	Ped s	App. Total	Rig ht	Thru	Left	Ped s	App. Total	Int. Total								
Peak Hour From 11:30 AM to 01:15 PM - Peak 1 of 1																													
Intersection	12:15 PM																												
Volume	11	600	58	0	669	44	5	140	0	189	133	628	10	0	771	20	10	10	0	40	1669								
Percent	1.6	89.7	8.7	0.0		23.3	2.6	74.1	0.0		17.3	81.5	1.3	0.0		50.0	25.0	25.0	0.0										
01:00 Volume	3	147	18	0	168	11	1	38	0	50	40	162	3	0	205	5	5	0	0	10	433								
Peak Factor																					0.964								
High Int. Volume	12:15 PM	1	164	16	0	181	12:30 PM	11	2	41	0	54	01:00 PM	40	162	3	0	205	12:15 PM	5	2	4	0	11					
Peak Factor																					0.92	0.87	0.94				0.90		
																										4	5	0	9



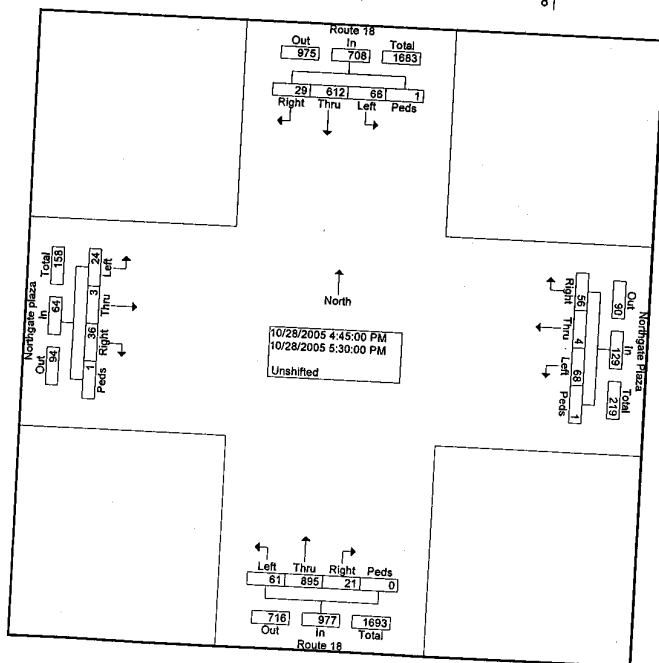
SRF & Associates
 3495 Winton Place, Bldg E, Suite 110
 Rochester, New York 14623
 Phone: 585.272.4660

File Name : Route18.Denise.SAT
 Site Code : 00025070
 Start Date : 11/5/2005
 Page No : 1

Groups Printed- Unshifted																	
	Route 18 Southbound				Denise Rd. Westbound				Route 18 Northbound				Northgate Manor Eastbound				Int. Total
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
11:30 AM	2	140	14	0	16	2	41	0	27	152	4	0	5	1	6	0	
11:45 AM	2	143	12	0	16	0	42	0	32	152	3	0	4	1	4	0	
Total	4	283	26	0	32	2	83	0	59	304	7	0	9	2	10	0	
12:00 PM	1	152	12	0	20	1	31	0	39	135	0	0	2	0	2	0	
12:15 PM	1	164	16	0	14	0	32	0	36	150	4	0	5	2	4	0	
12:30 PM	5	132	10	0	11	2	41	0	35	162	2	0	5	2	1	0	
12:45 PM	2	157	14	0	8	2	29	0	22	154	1	0	5	1	5	0	
Total	9	605	52	0	53	5	133	0	132	601	7	0	17	5	12	0	
01:00 PM	3	147	18	0	11	1	38	0	40	162	3	0	5	5	0	0	
01:15 PM	2	128	8	0	14	2	47	0	31	134	3	0	1	1	6	0	
Grand Total	18	1163	104	0	110	10	301	0	262	1201	20	0	32	13	28	0	
Approch %	1.4	90.5	8.1	0.0	26.1	2.4	71.5	0.0	17.7	81.0	1.3	0.0	43.8	17.8	38.4	0.0	
Total %	0.6	35.7	3.2	0.0	3.4	0.3	9.2	0.0	8.0	36.8	0.6	0.0	1.0	0.4	0.9	0.0	

SRF & Associates
 3495 Winton Place, Bldg E, Suite 110
 Rochester, New York 14623 File Name : Route18.Northgate.PM
 Phone: 585.272.4660 Site Code : 00025070
 Start Date : 10/28/2005
 Page No : 2

Start Time	Route 18 Southbound					Northgate Plaza Westbound					Route 18 Northbound					Northgate plaza Eastbound					Int. Total
	Rig ht	Thru	Left	Peds	App. Total	Rig ht	Thru	Left	Peds	App. Total	Rig ht	Thru	Left	Peds	App. Total	Rig ht	Thru	Left	Peds	App. Total	
Peak Hour	From 04:00 PM to 05:45 PM - Peak 1 of 1																				
Intersect on	04:45 PM																				
Volume	29	612	66	1	708	56	4	68	1	129	21	895	61	0	977	36	3	24	1	64	1878
Percent	4.1	86.4	9.3	0.1		43.3	3.1	52.7	0.8		2.1	91.6	6.2	0.0		3.4	4.7	37.5	1.6		
05:30 Volume	5	158	18	1	182	11	2	22	0	35	2	247	17	0	266	12	0	6	0	18	501
Peak Factor	04:45 PM																				
High Int. Volume	3	163	17	0	183	11	2	22	0	35	2	247	17	0	266	11	2	7	1	21	0.937
Peak Factor	0.96																				

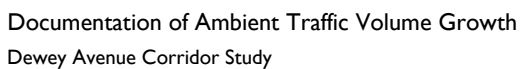


APPENDIX

SRF & Associates
 3495 Winton Place, Bldg E, Suite 110
 Rochester, New York 14623 File Name : Route18.Northgate.PM
 Phone: 585.272.4660 Site Code : 00025070
 Start Date : 10/28/2005
 Page No : 1

Start Time	Route 18 Southbound				Northgate Plaza Westbound				Route 18 Northbound				Northgate plaza Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
04:00 PM	5	152	19	0	15	3	11	0	3	188	19	0	5	1	3	0	424
04:15 PM	10	149	17	0	16	2	18	0	4	198	15	0	10	0	6	0	446
04:30 PM	7	183	12	0	19	0	9	0	2	210	7	0	8	0	1	0	458
04:45 PM	3	163	17	0	15	1	16	0	9	224	12	0	5	0	6	0	471
Total	25	647	65	0	65	6	54	0	18	821	53	0	28	1	16	0	1799
05:00 PM	11	138	17	0	15	0	14	1	5	209	15	0	11	2	7	1	446
05:15 PM	10	153	14	0	15	1	16	0	5	215	17	0	8	1	5	0	460
05:30 PM	5	158	18	1	11	2	22	0	2	247	17	0	12	0	6	0	501
05:45 PM	8	166	20	0	16	0	11	1	1	190	12	0	12	1	4	1	443
Total	34	615	69	1	57	3	63	2	13	861	61	0	43	4	22	2	1850
Grand Total	59	1262	134	1	122	9	117	2	31	1682	114	0	71	5	38	2	3649
Approch %	4.1	86.7	9.2	0.1	48.8	3.6	46.8	0.8	1.7	92.1	6.2	0.0	61.2	4.3	32.8	1.7	
Total %	1.6	34.6	3.7	0.0	3.3	0.2	3.2	0.1	0.8	46.1	3.1	0.0	1.9	0.1	1.0	0.1	

**MISCELLANEOUS
TRAFFIC DATA
AND CALCULATIONS**



GTC Model Projections
2031
9500
14290
11190
13540
20150
22540

SRF & Associates
3495 Winton Place, Bldg E, Suite 110
Rochester, NY 14623

File Name : 2.Ronald.Pomona
Site Code : 00000000
Start Date : 6/1/2009
Page No : 1

Class	Vehicle Count	85 Percentile	10 MPH Pace Speed	Number in Pace	Percent in Pace	Number of Vehicles Over 35 MPH	Percent of Vehicles Over 35 MPH	Average Speed	Number of Vehicles Over 35 MPH	Percent of Vehicles Over 35 MPH
Northbound	50	38	30 - 39	46	92	24	48	36	24	48
Southbound	50	42	33 - 42	43	86	34	68	38	34	68
Summary	100	40	31 - 40	85	85	58	58	37	58	58

SRF & Associates
3495 Winton Place, Bldg E, Suite 110
Rochester, NY 14623

File Name : 1.Rumson.McGuire
Site Code : 00000000
Start Date : 6/1/2009
Page No : 1

Class	Vehicle Count	85 Percentile	10 MPH Pace Speed	Number in Pace	Percent in Pace	Number of Vehicles Over 35 MPH	Percent of Vehicles Over 35 MPH	Average Speed	Number of Vehicles Over 35 MPH	Percent of Vehicles Over 35 MPH
Northbound	50	37	28 - 37	39	78	15	30	34	15	30
Southbound	50	37	31 - 40	45	90	16	32	35	16	32
Summary	100	38	28 - 37	80	80	31	31	34	31	31

SRF & Associates
3495 Winton Place, Bldg E, Suite 110
Rochester, NY 14623

File Name : 3.haviland.eastman
Site Code : 00000000
Start Date : 6/1/2009
Page No : 1

Class	Vehicle Count	85 Percentile	10 MPH Pace Speed	Number in Pace	Percent in Pace	Number of Vehicles Over 30 MPH	Percent of Vehicles Over 30 MPH	Average Speed	Number of Vehicles Over 30 MPH	Percent of Vehicles Over 30 MPH
Northbound	50	34	27 - 36	48	96	33	66	32	33	66
Southbound	50	35	26 - 35	44	88	29	58	31	29	58
Summary	100	35	27 - 36	92	92	62	62	32	62	62

Node: 81462
 Britton Rd.
 Derry Ave. Prof
 Chan A=EB, Chan B=WB

LOCHNER ENGINEERING
 181 GUNDSBEE ST
 OWEN, N.Y. 13661
 MORRIS COUNTY 2005 TRAFFIC DATA
 Direction 1
 Page 1

Site Code: 000008146231
 Start Date: 10/10/2005
 File I.D.: 81462

Time	10/12	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	10/13	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	9	24	12	39	21	63		8	37	10	63	18	100	
12:15	10	37	8	46	18	83		8	*	5	*	13	*	
12:30	5	31	16	43	21	74		6	*	6	*	12	*	
12:45	2	46	4	55	6	101		7	*	4	*	11	*	
01:00	6	37	7	53	13	90		6	*	6	*	12	*	
01:15	6	45	7	49	13	94		2	*	2	*	4	*	
01:30	1	35	3	61	4	96		1	*	1	*	2	*	
01:45	3	32	1	59	4	91		2	*	3	*	5	*	
02:00	4	36	1	50	5	86		1	*	1	*	2	*	
02:15	2	47	0	65	2	112		1	*	3	*	4	*	
02:30	2	40	3	61	5	101		2	*	3	*	5	*	
02:45	3	55	1	64	4	119		4	*	5	*	9	*	
03:00	4	48	4	46	8	94		2	*	2	*	4	*	
03:15	3	50	6	71	9	121		1	*	1	*	2	*	
03:30	1	48	1	70	2	118		3	*	3	*	6	*	
03:45	4	60	4	65	8	125		4	*	2	*	6	*	
04:00	0	54	0	67	0	121		1	*	3	*	4	*	
04:15	3	52	5	70	8	122		2	*	6	*	8	*	
04:30	2	57	2	70	4	127		2	*	3	*	5	*	
04:45	2	47	4	85	6	132		0	*	6	*	6	*	
05:00	4	82	7	88	11	170		4	*	6	*	10	*	
05:15	6	79	4	85	10	164		6	*	13	*	19	*	
05:30	10	68	15	97	25	165		10	*	15	*	25	*	
05:45	16	80	20	98	36	178		11	*	24	*	35	*	
06:00	13	66	24	87	37	153		12	*	22	*	34	*	
06:15	21	65	30	70	51	135		21	*	30	*	51	*	
06:30	22	56	48	80	70	136		39	*	48	*	87	*	
06:45	32	57	57	68	89	125		33	*	43	*	76	*	
07:00	32	58	66	60	98	118		26	*	60	*	86	*	
07:15	39	57	78	68	117	125		39	*	73	*	112	*	
07:30	36	37	78	51	114	88		41	*	87	*	128	*	
07:45	39	40	73	31	112	71		42	*	65	*	107	*	
08:00	35	48	69	43	104	91		45	*	57	*	102	*	
08:15	28	29	49	38	77	67		44	*	73	*	117	*	
08:30	34	44	57	30	91	74		32	*	58	*	90	*	
08:45	39	48	54	37	93	85		43	*	56	*	99	*	
09:00	31	42	51	30	82	72		31	*	59	*	90	*	
09:15	25	38	58	25	83	63		17	*	51	*	69	*	
09:30	28	21	64	17	92	38		24	*	40	*	64	*	
09:45	28	32	43	16	71	48		24	*	48	*	72	*	
10:00	24	26	36	19	60	45		31	*	28	*	59	*	
10:15	33	27	36	28	69	55		21	*	49	*	70	*	
10:30	33	19	42	18	75	37		32	*	44	*	76	*	
10:45	30	21	44	16	64	37		27	*	48	*	75	*	
11:00	38	9	49	15	87	24		23	*	45	*	68	*	
11:15	33	13	56	16	89	29		28	*	40	*	68	*	
11:30	21	18	40	8	61	26		32	*	47	*	79	*	
11:45	21	5	54	10	75	15		32	*	49	*	81	*	
Totals	813	2066	1391	2438	2204	4504		833	37	1353	63	2186	100	
Day Totals	2879		3829		6708			870		1416		2286		
% Total	12.1%	30.8%	20.7%	36.3%				36.4%	1.6%	59.1%	2.7%			
Peaks	07:15	05:00	07:15	05:00	07:15	05:00		07:30	12:00	07:00	12:00	07:30	12:00	
Volume	149	309	298	368	447	677		172	37	285	63	454	100	
P.H.F.	.95	.94	.95	.93	.95	.95		.95	.25	.81	.25	.88	.25	

Node: 81462
 Britton Rd.
 Derry Ave. Prof
 Chan A=EB, Chan B=WB

LOCHNER ENGINEERING
 181 GUNDSBEE ST
 OWEN, N.Y. 13661
 MORRIS COUNTY 2005 TRAFFIC DATA
 Direction 1
 Page 1

Site Code: 000008146231
 Start Date: 10/10/2005
 File I.D.: 81462

Time	10/10	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	10/11	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	35	*	58	*	93		10	32	4	47	14	79	
12:15	*	50	*	51	*	101		6	40	11	37	17	77	
12:30	*	33	*	60	*	93		8	43	7	54	15	97	
12:45	*	58	*	51	*	109		7	34	7	57	14	91	
01:00	*	38	*	58	*	96		4	31	3	52	7	83	
01:15	*	31	*	61	*	92		4	33	6	46	10	79	
01:30	*	37	*	56	*	93		4	28	3	62	7	90	
01:45	*	27	*	62	*	89		3	30	2	62	5	92	
02:00	*	34	*	58	*	92		2	47	5	57	7	104	
02:15	*	44	*	58	*	102		4	55	3	48	7	103	
02:30	*	46	*	68	*	114		2	43	4	57	6	100	
02:45	*	51	*	67	*	118		2	44	3	64	5	108	
03:00	*	64	*	59	*	123		3	61	3	67	6	128	
03:15	*	47	*	63	*	110		3	41	2	68	5	109	
03:30	*	46	*	74	*	120		2	51	3	65	5	116	
03:45	*	58	*	66	*	124		4	75	3	58	7	133	
04:00	*	51	*	72	*	123		2	68	2	68	4	136	
04:15	*	46	*	74	*	120		3	52	3	73	6	125	
04:30	*	53	*	73	*	126		1	65	4	65	5	130	
04:45	*	54	*	82	*	136		2	69	5	79	7	148	
05:00	*	75	*	77	*	152		6	75	5	70	11	145	
05:15	*	75	*	81	*	156		9	47	13	104	22	151	
05:30	*	63	*	84	*	147		7	87	13	84	20	171	
05:45	*	63	*	69	*	132		14	70	17	91	31	161	
06:00	*	66	*	84	*	150		8	62	30	89	38	151	
06:15	*	55	*	78	*	133		24	38	28	89	52	127	
06:30	*	43	*	71	*	114		31	50	53	84	84	134	
06:45	*	44	*	61	*	105		36	49	49	79	85	128	
07:00	*	53	*	53	*	106		22	64	59	63	81	127	
07:15	*	47	*	59	*	106		51	37	79	60	120	97	
07:30	*	47	*	48	*	95		52	38	75	62	127	100	
07:45	*	47	*	42	*	89		35	48	78	57	113	105	
08:00	*	40	*	40	*	80		39	44	61	41	100	85	
08:15	*	36	*	30	*	66		30	40	48	33	78	73	
08:30	*	39	*	20	*	59		54	36	45	38	99	74	
08:45	*	26	*	35	*	61		33	38	51	42	84	80	
09:00	*	28	*	27	*	55		42	21	54	32	96	53	
09:15	*	21	*	38	*	59		30	39	63	30	93	69	
09:30	*	31	*	38	*	69		27	35	54	30	81	65	
09:45	*	25	*	21	*	46		35	25	49	24	84	49	
10:00	*	29	*	21	*	50		37	24	35	31	72	55	
10:15	*	15	*	13	*	28		18	21	41	16	59	37	
10:30	*	22	*	15	*	37		35	17	45	16	80	33	
10:45	*	11	*	11	*	22		25	11	63	23	88	34	
11:00	26	12	50	14	76	26		17	13	40	14	57	27	
11:15	36	13	45	6	81	19		37	14	44	16	81	30	
11:30	36	15	57	11	93	26		25	13	48	11	73	24	
11:45	37	7	54	3	91	10		38	14	50	8	88	22	
Totals	135	1951	206	2421	341	4372		893	2012	1373	2523	2266	4535	
Day Totals	2086		2627		4713			2905		3896		6801		
% Total	2.8%	41.4%	4.3%	51.3%				13.1%	29.5%	20.1%	37.1%			
Peaks	11:00	05:00	11:00	04:45	11:00	04:45		07:15	05:00	07:15	05:15	07:15	05:15	
Volume	135	276	206	324	341	591		177	279	293	368	470	634	
P.H.F.	.91	.92	.90	.96	.91	.94		.85	.80	.92	.88	.90	.92	

Location: 86461: Dewey Ave - N of Britton Rd
Unit ID: FA31
Study Date: Tuesday - November 11, 2008

H:\Projects\085007-2008_GTC_Counts\Eng\Traffic\Downloaded Files\Monroe\11-10-08 Recounts\86461.tvd Page 1 of 3

Daily Vehicle Volume Report

Location: 86461: Dewey Ave - N of Britton Rd
Unit ID: FA31
Study Date: Thursday - November 13, 2008

Time	South Bound Volume	North Bound Volume	Total Volume
00:00 - 00:59	107	121	228
01:00 - 01:59	59	54	113
02:00 - 02:59	19	41	60
03:00 - 03:59	29	31	60
04:00 - 04:59	20	18	38
05:00 - 05:59	48	34	82
06:00 - 06:59	154	64	218
07:00 - 07:59	363	179	542
08:00 - 08:59	641	266	907
09:00 - 09:59	491	307	798
10:00 - 10:59	430	368	798
11:00 - 11:59	407	368	775
12:00 - 12:59	450	419	869
13:00 - 13:59	484	438	922
14:00 - 14:59	58	52	110
15:00 - 15:59	-	-	-
16:00 - 16:59	-	-	-
17:00 - 17:59	-	-	-
18:00 - 18:59	-	-	-
19:00 - 19:59	-	-	-
20:00 - 20:59	-	-	-
21:00 - 21:59	-	-	-
22:00 - 22:59	-	-	-
23:00 - 23:59	-	-	-
ADT	3760	2760	6520
AM Peak Time	08:00 - 08:59	10:15 - 11:14	08:00 - 08:59
AM Peak Volume	641	381	907
PM Peak Time	12:30 - 13:29	12:45 - 13:44	12:45 - 13:44
PM Peak Volume	494	451	939

Daily Vehicle Volume Report

Location: 86461: Dewey Ave - N of Britton Rd
Unit ID: FA31
Study Date: Wednesday - November 12, 2008

Time	South Bound Volume	North Bound Volume	Total Volume
00:00 - 00:59	78	110	188
01:00 - 01:59	56	72	128
02:00 - 02:59	27	34	61
03:00 - 03:59	28	33	61
04:00 - 04:59	20	19	39
05:00 - 05:59	51	33	84
06:00 - 06:59	152	68	220
07:00 - 07:59	406	200	606
08:00 - 08:59	644	284	928
09:00 - 09:59	528	326	854
10:00 - 10:59	456	361	817
11:00 - 11:59	428	367	795
12:00 - 12:59	433	492	925
13:00 - 13:59	537	530	1067
14:00 - 14:59	512	485	997
15:00 - 15:59	549	555	1104
16:00 - 16:59	541	737	1278
17:00 - 17:59	572	718	1290
18:00 - 18:59	562	803	1365
19:00 - 19:59	503	613	1116
20:00 - 20:59	402	396	798
21:00 - 21:59	325	349	674
22:00 - 22:59	250	283	533
23:00 - 23:59	183	178	361
ADT	8243	8046	16289
AM Peak Time	08:15 - 09:14	10:15 - 11:14	08:15 - 09:14
AM Peak Volume	653	373	929
PM Peak Time	17:30 - 18:29	17:45 - 18:44	17:45 - 18:44
PM Peak Volume	597	837	1422

DEWEY AVE.
LATTA RD.N.OF
CHAN 1=NB,CHAN 1=SB

LOCHNER ENGINEERING
181 GENESEE ST
UTICA, N.Y 13501

Site Code : 000000075121
Start Date: 10/18/2004
File I.D. : 75121

Direction 1

Begin Time	Wed. 10/20	1 A.M.	2 P.M.	Combined A.M. P.M.	Thur. 10/21	1 A.M.	2 P.M.	Combined A.M. P.M.
12:00	4	72	5	81	13	53	14	76
12:15	13	59	13	48	17	67	15	77
12:30	8	50	13	44	13	60	8	48
12:45	9	62	4	55	7	67	13	66
01:00	7	51	5	53	5	73	6	47
01:15	6	41	6	59	8	50	7	57
01:30	2	52	2	53	2	42	1	62
01:45	6	39	5	61	5	40	2	66
02:00	3	64	3	55	4	60	2	74
02:15	3	77	2	52	4	72	3	67
02:30	0	66	1	62	5	74	11	54
02:45	2	72	6	62	5	70	5	63
03:00	3	73	3	67	3	66	4	73
03:15	2	84	2	70	3	78	0	68
03:30	3	80	2	94	3	60	2	82
03:45	3	82	2	63	1	99	4	57
04:00	1	84	2	75	2	88	3	91
04:15	3	92	2	71	3	75	2	68
04:30	3	95	7	67	4	109	4	58
04:45	5	84	8	75	5	84	10	68
05:00	2	83	6	67	4	74	13	65
05:15	7	115	17	73	3	94	17	75
05:30	5	95	29	79	9	94	30	89
05:45	11	86	42	72	13	105	35	70
06:00	31	92	29	81	16	90	27	91
06:15	25	71	48	81	23	86	40	76
06:30	25	74	39	77	39	80	61	75
06:45	43	59	72	81	48	71	80	71
07:00	39	58	75	61	35	66	54	64
07:15	44	57	83	48	36	70	81	53
07:30	35	79	79	44	41	54	97	62
07:45	39	49	95	51	45	81	86	46
08:00	52	53	87	55	40	57	59	66
08:15	36	58	58	54	35	58	74	48
08:30	32	46	58	19	40	55	76	50
08:45	51	46	86	40	44	52	67	48
09:00	42	56	49	26	51	57	59	28
09:15	48	34	63	41	37	43	46	31
09:30	49	32	52	24	43	32	58	28
09:45	33	43	50	29	47	34	35	30
10:00	30	40	34	34	41	32	50	28
10:15	48	39	52	34	37	27	52	31
10:30	39	28	40	27	46	26	51	30
10:45	43	13	61	20	40	30	75	22
11:00	39	18	58	9	57	23	60	26
11:15	41	22	43	21	53	25	52	17
11:30	46	13	71	16	57	13	56	10
11:45	56	12	67	9	81	14	56	6
Totals	1077	2850	1636	2540	1173	2930	1663	2658
Day Totals	3927	4176	8103	4103	4321	8424		
% Total	13.2%	35.1%	20.1%	31.3%	13.9%	34.7%	19.7%	31.5%
Peaks	08:45	05:15	07:15	06:00	07:15	05:15		
Volume	190	388	344	320	514	693		
P.H.F.	.93	.84	.90	.98	.92	.92		

NOTE: 75121
DEWEY AVE.
LATTA RD.N.OF
CHAN 1=NB,CHAN 1=SB

LOCHNER ENGINEERING
181 GENESEE ST
UTICA, N.Y 13501

Site Code : 000000075121
Start Date: 10/18/2004
File I.D. : 75121

Direction 1

Begin Time	Mon. 10/18	1 A.M.	2 P.M.	Combined A.M. P.M.	Tues. 10/19	1 A.M.	2 P.M.	Combined A.M. P.M.
12:00	*	*	*	*	13	48	7	51
12:15	*	*	*	*	9	67	14	57
12:30	*	*	*	*	11	56	4	67
12:45	*	*	*	*	8	53	6	57
01:00	*	*	*	*	3	59	5	53
01:15	*	*	*	*	2	50	1	60
01:30	*	*	*	*	6	56	6	61
01:45	*	*	*	*	1	55	1	64
02:00	*	*	*	*	4	54	7	75
02:15	*	*	*	*	4	77	1	75
02:30	*	*	*	*	2	56	5	49
02:45	*	*	*	*	1	77	4	60
03:00	*	*	*	*	4	61	0	57
03:15	*	*	*	*	3	80	3	56
03:30	*	*	*	*	3	64	3	72
03:45	*	*	*	*	3	101	4	62
04:00	*	*	*	*	2	79	3	80
04:15	*	*	*	*	1	76	3	64
04:30	*	*	*	*	3	100	7	61
04:45	*	106	*	71	2	94	9	62
05:00	*	94	*	69	2	87	10	65
05:15	*	88	*	68	4	114	15	78
05:30	*	87	*	76	9	110	24	101
05:45	*	78	*	94	11	101	33	71
06:00	*	81	*	63	23	92	36	71
06:15	*	76	*	69	24	97	43	87
06:30	*	78	*	94	32	93	50	113
06:45	*	79	*	70	54	82	72	96
07:00	*	67	*	84	36	76	76	63
07:15	*	77	*	56	39	79	84	71
07:30	*	59	*	48	31	72	76	76
07:45	*	48	*	36	43	50	76	28
08:00	*	40	*	47	30	54	73	50
08:15	*	55	*	48	37	55	80	49
08:30	*	42	*	33	47	53	57	58
08:45	*	36	*	30	38	49	68	25
09:00	*	37	*	37	47	39	55	39
09:15	*	44	*	31	48	29	55	32
09:30	*	38	*	23	37	29	59	24
09:45	*	23	*	19	38	37	50	20
10:00	*	28	*	37	42	30	61	37
10:15	*	22	*	15	44	35	57	22
10:30	*	13	*	20	39	19	52	25
10:45	*	15	*	12	43	21	46	19
11:00	*	9	*	24	35	25	60	12
11:15	*	25	*	14	64	16	65	17
11:30	*	15	*	12	51	16	60	20
11:45	*	10	*	13	40	19	58	10
Totals	0	1470	0	1313	1073	2942	1644	2622
Day Totals	1470	1313	2783	4015	4266	2717	5564	8281
% Total	.0%	52.8%	.0%	47.1%	12.9%	35.5%	19.8%	31.6%
Peaks	04:45	05:45	04:45	10:45	05:15	07:00	06:00	06:45
Volume	193	320	659	193	417	312	367	468
P.H.F.	.88	.85	.93	.75	.91	.92	.81	.92

Tok

Monroe County
Dept. of Transportation
Traffic Engineering

Site Code : 000009209111
Start Date: 05/11/2004
File I.D. : 92091
Page : 1

Page : 1

Begin Time	1				2				Combined			
	A.M.		P.M.		A.M.		P.M.		A.M.		P.M.	
12:00 05/11	29		147		26		151		55		298	
12:15	32		134		12		137		44		271	
12:30	17		142		13		130		35		272	
12:45	28	106	113	536	17	74	111	529	45	180	224	1065
01:00	17		112		13		131		30		243	
01:15	13		133		10		102		23		235	
01:30	4		130		10		106		12		236	
01:45	17	51	108	483	6	37	121	460	12	88	239	943
02:00	7		130		5		100		12		230	
02:15	10		133		8		104		18		237	
02:30	13		125		8		119		21		244	
02:45	11	41	161	549	13	34	91	414	21	75	252	963
03:00	4		189		6		92		10		289	
03:15	5		169		7		99		12		268	
03:30	7		201		7		107		14		308	
03:45	5	21	240	799	7	29	73	379	14	50	313	1178
04:00	8		206		9		75		17		281	
04:15	4		264		18		88		22		352	
04:30	7		266		24		142		31		408	
04:45	6	27	268	1002	37	88	150	432	31	115	405	1434
05:00	6		260		18		150		54		410	
05:15	8		299		52		144		60		443	
05:30	27		263		110		115		137		376	
05:45	11	52	203	1023	147	357	143	552	158	409	346	1575
06:00	38		210		114		129		156		339	
06:15	37		190		140		140		186		330	
06:30	47		150		191		126		238		276	
06:45	77	199	131	681	237	691	128	523	314	890	259	1204
07:00	74		130		137		133		200		310	
07:15	85		117		246		115		331		232	
07:30	82		117		305		94		387		211	
07:45	81	322	101	465	272	1075	97	439	353	1397	198	904
08:00	72		104		100		104		204		209	
08:15	87		116		191		88		278		204	
08:30	86		103		197		111		283		214	
08:45	93	338	106	429	178	765	100	399	271	1103	206	828
09:00	100		218		180		157		212		212	
09:15	82		87		124		94		206		185	
09:30	83		88		128		79		211		167	
09:45	79	344	69	362	131	540	63	334	210	884	132	696
10:00	89		77		125		60		214		144	
10:15	83		58		115		50		198		108	
10:30	114		64		109		45		223		109	
10:45	108	394	49	248	123	472	45	207	231	866	94	455
11:00	144		38		125		46		269		94	
11:15	98		16		110		46		200		82	
11:30	126		49		124		20		250		67	
11:45	122	490	37	170	133	492	30	142	255	982	67	312
Totals	2385		6747		4654		4810		7039		11557	
Day Totals		9132				9464				18596		
Split %	33.8%		58.3%		66.1%		41.6%					
Peak Hour	11:00		04:30		07:00		04:30		07:00		04:30	
Volume	490		1509		1397		563		1654		1654	
P.H.F.	.85		.91		.88		.93		.90		.93	

NODE: 75121
'DEWEY AVE.
LATTA RD.N.OF
CHAN 1=NB,CHAN 1=SB

LOCHNER ENGINEERING
181 GENESEE ST
UTICA, N.Y 13501

Site Code : 000000075121
Start Date: 10/18/2004
File I.D. : 75121

File I.D. : 75121

File I.D. : 75121

Page : 3

Direction 1														Page	3	
Beg.	Fri.	1		2		Combined		1		2		Combined				
Time	10/22	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	10/23	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		
12:00	11	*		10	*	21	*		*	*	*	*	*	*	*	*
12:15	15	*		7	*	32	*		*	*	*	*	*	*	*	*
12:30	12	*		12	*	24	*		*	*	*	*	*	*	*	*
12:45	7	*		10	*	17	*		*	*	*	*	*	*	*	*
01:00	8	*		2	*	10	*		*	*	*	*	*	*	*	*
01:15	2	*		6	*	8	*		*	*	*	*	*	*	*	*
01:30	10	*		4	*	14	*		*	*	*	*	*	*	*	*
01:45	9	*		4	*	13	*		*	*	*	*	*	*	*	*
02:00	5	*		5	*	10	*		*	*	*	*	*	*	*	*
02:15	5	*		1	*	6	*		*	*	*	*	*	*	*	*
02:30	0	*		2	*	2	*		*	*	*	*	*	*	*	*
02:45	6	*		4	*	10	*		*	*	*	*	*	*	*	*
03:00	0	*		2	*	2	*		*	*	*	*	*	*	*	*
03:15	3	*		4	*	7	*		*	*	*	*	*	*	*	*
03:30	4	*		8	*	12	*		*	*	*	*	*	*	*	*
03:45	2	*		4	*	6	*		*	*	*	*	*	*	*	*
04:00	5	*		5	*	10	*		*	*	*	*	*	*	*	*
04:15	4	*		4	*	8	*		*	*	*	*	*	*	*	*
04:30	3	*		10	*	13	*		*	*	*	*	*	*	*	*
04:45	4	*		8	*	12	*		*	*	*	*	*	*	*	*
05:00	4	*		12	*	16	*		*	*	*	*	*	*	*	*
05:15	6	*		12	*	18	*		*	*	*	*	*	*	*	*
05:30	8	*		23	*	31	*		*	*	*	*	*	*	*	*
05:45	13	*		43	*	56	*		*	*	*	*	*	*	*	*
06:00	21	*		28	*	49	*		*	*	*	*	*	*	*	*
06:15	16	*		41	*	57	*		*	*	*	*	*	*	*	*
06:30	30	*		51	*	81	*		*	*	*	*	*	*	*	*
06:45	50	*		75	*	125	*		*	*	*	*	*	*	*	*
07:00	52	*		60	*	112	*		*	*	*	*	*	*	*	*
07:15	44	*		68	*	112	*		*	*	*	*	*	*	*	*
07:30	41	*		78	*	119	*		*	*	*	*	*	*	*	*
07:45	28	*		89	*	117	*		*	*	*	*	*	*	*	*
08:00	41	*		79	*	120	*		*	*	*	*	*	*	*	*
08:15	35	*		73	*	108	*		*	*	*	*	*	*	*	*
08:30	45	*		67	*	112	*		*	*	*	*	*	*	*	*
08:45	42	*		56	*	98	*		*	*	*	*	*	*	*	*
09:00	54	*		49	*	103	*		*	*	*	*	*	*	*	*
09:15	43	*		64	*	107	*		*	*	*	*	*	*	*	*
09:30	51	*		95	*	106	*		*	*	*	*	*	*	*	*
09:45	44	*		50	*	94	*		*	*	*	*	*	*	*	*
10:00	40	*		50	*	90	*		*	*	*	*	*	*	*	*
10:15	41	*		53	*	94	*		*	*	*	*	*	*	*	*
10:30	43	*		69	*	112	*		*	*	*	*	*	*	*	*
10:45	*	*		*	*	*	*		*	*	*	*	*	*	*	*
11:00	*	*		*	*	*	*		*	*	*	*	*	*	*	*
11:15	*	*		*	*	*	*		*	*	*	*	*	*	*	*
11:30	*	*		*	*	*	*		*	*	*	*	*	*	*	*
11:45	*	*		*	*	*	*		*	*	*	*	*	*	*	*
Totals	907	0		1367	0	2274	0		0	0	0	0	0	0	0	0
Day Totals	907			1367		2274			0		0		0		0	
% Total	39.8%			60.1%		100%			*	*	*	*	*	*	*	*
Peaks	09:00			07:30		06:45										
Volume	192			319		468										
P.H.F.	.88			.89		.93										

Daily Vehicle Volume Report

Location: 92131: Dewey Ave - N of Ridge Rd
Unit ID: FA30
Study Date: Wednesday - November 12, 2008

Time	South Bound Volume	North Bound Volume	Total Volume
00:00 - 00:59	85	108	193
01:00 - 01:59	48	74	122
02:00 - 02:59	33	37	70
03:00 - 03:59	17	23	40
04:00 - 04:59	19	8	27
05:00 - 05:59	55	28	83
06:00 - 06:59	225	51	276
07:00 - 07:59	480	132	612
08:00 - 08:59	806	250	1056
09:00 - 09:59	610	249	859
10:00 - 10:59	372	254	626
11:00 - 11:59	394	253	647
12:00 - 12:59	375	320	695
13:00 - 13:59	412	369	781
14:00 - 14:59	393	306	699
15:00 - 15:59	418	438	856
16:00 - 16:59	453	608	1061
17:00 - 17:59	457	602	1059
18:00 - 18:59	448	684	1132
19:00 - 19:59	367	446	813
20:00 - 20:59	296	333	629
21:00 - 21:59	224	275	499
22:00 - 22:59	205	249	454
23:00 - 23:59	154	168	322
ADT	7346	6265	13611
AM Peak Time	08:15 - 09:14	10:45 - 11:44	08:15 - 09:14
AM Peak Volume	809	269	1060
PM Peak Time	16:45 - 17:44	17:45 - 18:44	17:45 - 18:44
PM Peak Volume	481	698	1158

Daily Vehicle Volume Report

Location: 92131: Dewey Ave - N of Ridge Rd
Unit ID: FA30
Study Date: Tuesday - November 11, 2008

Time	South Bound Volume	North Bound Volume	Total Volume
00:00 - 00:59	0	0	0
01:00 - 01:59	0	0	0
02:00 - 02:59	0	0	0
03:00 - 03:59	0	0	0
04:00 - 04:59	0	0	0
05:00 - 05:59	0	0	0
06:00 - 06:59	0	0	0
07:00 - 07:59	0	0	0
08:00 - 08:59	0	0	0
09:00 - 09:59	0	0	0
10:00 - 10:59	0	0	0
11:00 - 11:59	293	223	516
12:00 - 12:59	417	356	773
13:00 - 13:59	398	356	754
14:00 - 14:59	387	348	735
15:00 - 15:59	447	411	858
16:00 - 16:59	377	485	862
17:00 - 17:59	400	586	986
18:00 - 18:59	413	598	1011
19:00 - 19:59	330	453	783
20:00 - 20:59	271	351	622
21:00 - 21:59	262	249	511
22:00 - 22:59	190	229	419
23:00 - 23:59	125	154	279
ADT	4310	4799	9109
AM Peak Time	11:00 - 11:59	11:00 - 11:59	11:00 - 11:59
AM Peak Volume	293	223	516
PM Peak Time	15:00 - 15:59	17:30 - 18:29	17:30 - 18:29
PM Peak Volume	447	645	1090

NODE: 91983
 DENEY AVE.
 BENNINGTON DR. S. OF
 CHAN 1=SB, CHAN 2=NB
 T, W, T, A, O, K
 LOCHNER ENGINEERING
 181 GENESEE ST
 UTICA, N.Y 13501
 MONROE COUNTY
 Site Code : 000009198351
 Start Date: 05/10/2004
 File I.D. : 91983

Direction 1														Page	
Begin Time	Mon.	1		2		Combined		Tues.	1		2		Combined		
	05/10	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	05/11	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	
12:00		*	*	*	*	*	*		24	147	24	144	48	291	
12:15		*	*	*	*	*	*		15	132	27	147	42	279	
12:30		*	*	*	*	*	*		17	144	18	133	35	277	
12:45		*	*	*	*	*	*		20	143	28	134	48	277	
01:00		*	*	*	*	*	*		14	166	17	117	31	283	
01:15		*	*	*	*	*	*		15	105	18	109	33	214	
01:30		*	*	*	*	*	*		9	155	4	140	13	295	
01:45		*	*	*	*	*	*		6	132	15	144	21	276	
02:00		*	*	*	*	*	*		4	123	6	168	10	291	
02:15		*	*	*	*	*	*		11	155	11	160	22	315	
02:30		*	*	*	*	*	*		9	134	11	188	20	322	
02:45		*	*	*	*	*	*		11	150	10	189	21	339	
03:00		*	*	*	*	*	*		6	156	7	212	13	368	
03:15		*	*	*	*	*	*		7	156	5	190	12	346	
03:30		*	*	*	*	*	*		6	173	4	234	10	407	
03:45		*	*	*	*	*	*		9	163	5	232	14	395	
04:00		*	*	*	*	*	*		10	156	7	231	17	387	
04:15		*	*	*	*	*	*		15	143	6	261	21	404	
04:30		*	*	*	*	*	*		16	151	4	236	20	387	
04:45		*	*	*	*	*	*		32	182	8	243	40	425	
05:00		*	162	*	232	*	394		43	152	4	279	47	431	
05:15		*	163	*	273	*	436		43	139	7	258	50	397	
05:30		*	133	*	217	*	350		99	136	23	252	122	388	
05:45		*	124	*	204	*	328		124	145	21	203	145	348	
06:00		*	135	*	180	*	315		94	146	36	184	130	330	
06:15		*	130	*	186	*	316		141	150	38	181	179	331	
06:30		*	124	*	153	*	277		159	138	50	178	209	316	
06:45		*	125	*	136	*	261		220	128	84	162	304	290	
07:00		*	136	*	130	*	266		207	126	69	122	276	248	
07:15		*	112	*	123	*	235		224	133	84	123	308	256	
07:30		*	99	*	121	*	220		260	108	88	112	348	220	
07:45		*	100	*	85	*	185		252	118	88	117	340	235	
08:00		*	105	*	115	*	220		191	118	81	99	272	217	
08:15		*	102	*	110	*	212		182	107	91	107	273	214	
08:30		*	123	*	107	*	230		181	122	82	94	263	216	
08:45		*	115	*	93	*	208		150	130	100	99	250	229	
09:00		*	93	*	118	*	211		152	102	97	106	249	208	
09:15		*	108	*	85	*	193		122	82	77	99	199	181	
09:30		*	89	*	91	*	180		136	85	90	83	226	168	
09:45		*	63	*	63	*	126		142	61	86	76	228	137	
10:00		*	68	*	79	*	147		126	68	93	91	219	159	
10:15		*	58	*	63	*	121		124	65	94	72	218	137	
10:30		*	45	*	64	*	109		100	60	100	47	200	107	
10:45		*	47	*	52	*	99		146	32	110	71	256	103	
11:00		*	51	*	47	*	98		118	48	126	50	244	98	
11:15		*	44	*	34	*	78		108	39	101	48	209	87	
11:30		*	23	*	48	*	71		134	41	128	37	262	78	
11:45		*	24	*	33	*	57		127	28	139	45	266	73	
Totals		0	2701	0	3242	0	5943		4361	5773	2422	7007	6783	12780	
Day Totals			2701		3242		5943		10134		9429		19563		
% Total		.0%	45.4%	.0%	54.5%				22.2%	29.5%	12.3%	35.8%			
Peaks		05:00		05:00		05:00			07:00	03:00	11:00	04:45	07:00	04:15	
Volume		582		926		1508			943	648	494	1032	1272	1647	
P.H.P.		.89		.84		.86			.90	.93	.88	.92	.91	.95	

Printed: 11/24/08 at 13:12
 TrafficViewer v1.4.0.6

ROADRUNNER V2.08 (s/n# RD91807)

Daily Vehicle Volume Report

Location: 92131: Dewey Ave - N of Ridge Rd
 Unit ID: FA30
 Study Date: Thursday - November 13, 2008

Time	South Bound Volume	North Bound Volume	Total Volume
00:00 - 00:59	105	116	221
01:00 - 01:59	37	72	109
02:00 - 02:59	38	42	80
03:00 - 03:59	27	33	60
04:00 - 04:59	24	13	37
05:00 - 05:59	49	25	74
06:00 - 06:59	207	50	257
07:00 - 07:59	466	123	589
08:00 - 08:59	813	228	1041
09:00 - 09:59	563	230	793
10:00 - 10:59	343	251	594
11:00 - 11:59	377	281	658
12:00 - 12:59	380	306	686
13:00 - 13:59	250	214	464
14:00 - 14:59	-	-	-
15:00 - 15:59	-	-	-
16:00 - 16:59	-	-	-
17:00 - 17:59	-	-	-
18:00 - 18:59	-	-	-
19:00 - 19:59	-	-	-
20:00 - 20:59	-	-	-
21:00 - 21:59	-	-	-
22:00 - 22:59	-	-	-
23:00 - 23:59	-	-	-
ADT	3679	1984	5663
AM Peak Time	08:00 - 08:59	10:45 - 11:44	08:00 - 08:59
AM Peak Volume	813	284	1041
PM Peak Time	12:30 - 13:29	12:30 - 13:29	12:30 - 13:29
PM Peak Volume	411	318	729

NODE: 91983
DEWEY AVE.
BENNINGTON DR. S. OF
CHAN 1=SB,CHAN 2=NB

LOCHNER ENGINEERING
181 GENESEE ST
UTICA, N.Y 13501
MONROE COUNTY

Site Code : 000009198351
Start Date: 05/10/2004
File I.D. : 91983
Page : 3

Begin Time	Fri. 05/14		1		2		Combined		Sat. 05/15		1		2		Combined	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00			28	*	45	*	73	*			*	*	*	*	*	*
12:15			21	*	32	*	53	*			*	*	*	*	*	*
12:30			15	*	39	*	54	*			*	*	*	*	*	*
12:45			24	*	33	*	57	*			*	*	*	*	*	*
01:00			13	*	12	*	25	*			*	*	*	*	*	*
01:15			17	*	15	*	32	*			*	*	*	*	*	*
01:30			10	*	20	*	30	*			*	*	*	*	*	*
01:45			14	*	14	*	28	*			*	*	*	*	*	*
02:00			7	*	13	*	20	*			*	*	*	*	*	*
02:15			4	*	16	*	20	*			*	*	*	*	*	*
02:30			8	*	27	*	35	*			*	*	*	*	*	*
02:45			10	*	9	*	19	*			*	*	*	*	*	*
03:00			8	*	9	*	17	*			*	*	*	*	*	*
03:15			13	*	9	*	22	*			*	*	*	*	*	*
03:30			5	*	5	*	10	*			*	*	*	*	*	*
03:45			6	*	6	*	12	*			*	*	*	*	*	*
04:00			10	*	9	*	19	*			*	*	*	*	*	*
04:15			18	*	5	*	23	*			*	*	*	*	*	*
04:30			31	*	12	*	43	*			*	*	*	*	*	*
04:45			27	*	8	*	35	*			*	*	*	*	*	*
05:00			41	*	7	*	48	*			*	*	*	*	*	*
05:15			68	*	13	*	81	*			*	*	*	*	*	*
05:30			85	*	11	*	96	*			*	*	*	*	*	*
05:45			108	*	25	*	133	*			*	*	*	*	*	*
06:00			131	*	37	*	168	*			*	*	*	*	*	*
06:15			144	*	41	*	185	*			*	*	*	*	*	*
06:30			174	*	50	*	224	*			*	*	*	*	*	*
06:45			211	*	78	*	289	*			*	*	*	*	*	*
07:00			207	*	61	*	268	*			*	*	*	*	*	*
07:15			196	*	84	*	280	*			*	*	*	*	*	*
07:30			250	*	92	*	342	*			*	*	*	*	*	*
07:45			229	*	114	*	343	*			*	*	*	*	*	*
08:00			197	*	96	*	293	*			*	*	*	*	*	*
08:15			184	*	85	*	269	*			*	*	*	*	*	*
08:30			180	*	88	*	268	*			*	*	*	*	*	*
08:45			160	*	98	*	258	*			*	*	*	*	*	*
09:00			138	*	98	*	236	*			*	*	*	*	*	*
09:15			137	*	101	*	238	*			*	*	*	*	*	*
09:30			119	*	79	*	198	*			*	*	*	*	*	*
09:45			*	*	*	*	*	*			*	*	*	*	*	*
10:00			*	*	*	*	*	*			*	*	*	*	*	*
10:15			*	*	*	*	*	*			*	*	*	*	*	*
10:30			*	*	*	*	*	*			*	*	*	*	*	*
10:45			*	*	*	*	*	*			*	*	*	*	*	*
11:00			*	*	*	*	*	*			*	*	*	*	*	*
11:15			*	*	*	*	*	*			*	*	*	*	*	*
11:30			*	*	*	*	*	*			*	*	*	*	*	*
11:45			*	*	*	*	*	*			*	*	*	*	*	*
Totals			3248		0	1596		4844			0	0	0	0	0	0
Day Totals				3248		1596		4844			0	0	0	0	0	0
% Total			67.0%		.0%	32.9%		.0%			*	*	*	*	*	*
Peaks			07:00		07:30		07:15									
Volume			882		387		1258									
P.H.F.			.88		.84		.91									

NODE: 91983
DEWEY AVE.
BENNINGTON DR. S. OF
CHAN 1=SB,CHAN 2=NB

LOCHNER ENGINEERING
181 GENESEE ST
UTICA, N.Y 13501
MONROE COUNTY

Site Code : 000009198351
Start Date: 05/10/2004
File I.D. : 91983
Page : 2

Begin Time	Wed. 05/12		1		2		Combined		Thur. 05/13		1		2		Combined	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00			23	137	39	162	62	299			31	127	31	131	62	258
12:15			27	142	30	130	57	272			26	134	30	145	56	279
12:30			17	141	18	145	35	286			17	171	30	126	47	297
12:45			6	125	22	104	28	229			21	115	18	115	39	230
01:00			15	135	20	142	35	277			12	139	23	127	35	266
01:15			11	135	18	112	29	247			9	123	18	114	27	237
01:30			6	130	6	150	12	280			11	150	7	100	18	250
01:45			6	128	14	146	20	274			6	117	12	108	18	225
02:00			9	112	15	129	24	241			12	142	16	142	28	284
02:15			9	135	6	151	15	286			8	170	11	164	19	334
02:30			6	138	12	178	18	316			6	143	12	207	18	350
02:45			4	157	8	183	12	340			5	151	17	178	22	329
03:00			8	131	12	221	20	352			8	145	13	210	21	355
03:15			9	153	4	196	13	349			6	137	9	200	15	337
03:30			7	191	5	200	12	391			13	169	11	236	24	405
03:45			9	154	2	235	11	389			12	169	6	267	18	436
04:00			15	145	11	234	26	379			14	145	7	227	21	372
04:15			13	148	9	268	22	416			18	152	13	213	31	365
04:30			27	139	5	248	32	387			19	153	4	228	23	381
04:45			29	145	5	244	34	389			36	143	8	264	44	407
05:00			41	138	2	223	43	361			48	134	7	266	55	400
05:15			54	166	20	262	74	428			52	155	17	271	69	426
05:30			101	151	13	247	114	398			99	164	25	252	124	416
05:45			118	140	27	220	145	360			119	130	23	203	142	333
06:00			118	145	34	210	152	355			116	116	34	173	150	289
06:15			145	128	42	180	187	308			143	142	43	175	186	317
06:30			182	134	44	153	226	287			177	133	51	157	228	290
06:45			211	119	71	164	282	283			218	115	74	155	292	270
07:00			219	145	68	123	287	268			218	112	70	144	288	256
07:15			238	89	84	139	322	228			210	109	68	109	278	218
07:30			243	90	89	122	332	212			247	109	80	126	327	235
07:45			224	113	113	119	337	232			255	127	96	141	351	268
08:00			220	136	92	113	312	249			207	113	105	125	312	238
08:15			189	97	90	133	279	230			172	113	92	108	264	221
08:30			164	128	69	120	233	248			166	110	84	121	250	231
08:45			196	88	107	100	303	188			164	101	98	121	262	222
09:00			138	115	99	100	237	215			150	104	97	124	247	228
09:15			117	83	102	104	219	187			135	98	83	113	218	211
09:30			131	74	111	86	242	160			115	88	93	117	208	205
09:45			124	83	65	73	189	156			105	82	107	94	212	176
10:00			114	78	75	75	189	153			115	86	103	87	218	173
10:15			126	62	107	68	233	130			135	61	92	50	227	111
10:30			106	57	121	72	227	129			133	50	89	69	222	119
10:45			117	51	121	51	238	102			106	53	109	64	215	117
11:00			118	40	113	57	231	97			119	48	109	48	228	96
11:15			125	38	95	45	220	83			144	49	143	41	287	90
11:30			138	28	137	35	275	63			124	39	139	49	263	88
11:45			141	23	124	38	265	61			140	29	132	45	272	74
Totals			4414	5560	2496	7010	6910	12570			4422	5665	2559	7050	6981	12715
Day Totals				9974		9506		19480				10087		9609		19696
% Total			22.6%	28.5%	12.8%	35.9%					22.4%	28.7%	12.9%	35.7%		
Peaks			07:15	03:15	11:00	04:00	07:15	04:45			07:00	03:30	11:00	04:45	07:15	04:45
Volume			925	643	469	994	1303	1576			930	635	523	1053	1268	1649
P.H.F.			.95	.84	.85	.92	.96	.92			.91	.93	.91	.97	.90	.96

Greece

Dave Jensen

Monroe County
Dept. of Transportation
Traffic EngineeringSite Code : 142/143
Start Date: 09/26/2000
File I.D. : 81461A
Page : 2

Street name :Dewey Ave Cross street:Britton Rd. South of													Page 1.D. : 11/01/02	
Begin	Time	NB		P.M.		A.M.		SB		Combined		Wednesday		
12:00	09/27	22		177		15		126		37		303		
12:15		21		166		9		154		30		320		
12:30		15		165		8		142		23		307		
12:45		8	66	168	676	12	44	143	565	20	110	311	1241	
01:00		18		136		5		151		23		287		
01:15		13		143		6		151		19		294		
01:30		9		161		5		141		14		302		
01:45		11	51	152	592	2	18	153	596	13	69	305	1188	
02:00		6		162		6		138		12		300		
02:15		4		184		5		163		4		347		
02:30		3		173		5		130		8		303		
02:45		6	19	197	716	5	16	144	575	11	35	341	1291	
03:00		8		189		4		149		12		338		
03:15		7		196		5		152		12		348		
03:30		4		228		2		133		6		361		
03:45		3	22	207	820	10	21	160	594	13	43	367	1414	
04:00		8		221		13		146		21		367		
04:15		5		227		12		129		17		356		
04:30		6		225		19		130		25		355		
04:45		7	26	238	911	36	80	155	560	43	106	393	1471	
05:00		17		257		40		170		57		427		
05:15		13		240		71		170		84		410		
05:30		18		258		77		146		95		404		
05:45		27	75	241	996	74	262	171	657	101	337	412	1653	
06:00		22		202		96		164		118		366		
06:15		43		220		123		149		166		369		
06:30		56		202		119		170		175		372		
06:45		83	204	195	819	156	494	144	627	239	698	339	1446	
07:00		84		174		181		109		265		283		
07:15		70		151		216		113		286		264		
07:30		75		120		174		100		249		220		
07:45		95	324	119	564	143	714	103	425	238	1038	222	989	
08:00		96		121		121		100		217		221		
08:15		102		104		130		84		232		188		
08:30		115		98		113		76		228		174		
08:45		96	409	83	406	123	487	81	341	219	896	164	747	
09:00		100		85		118		82		218		167		
09:15		120		78		115		101		235		179		
09:30		127		78		123		64		250		142		
09:45		106	453	60	301	117	473	44	291	223	926	104	592	
10:00		119		61		124		45		243		106		
10:15		121		59		107		40		228		99		
10:30		113		31		133		27		246		58		
10:45		134	487	33	184	136	500	28	140	270	987	61	324	
11:00		132		36		141		27		273		63		
11:15		150		33		166		27		316		60		
11:30		137		37		121		17		258		54		
11:45		152	571	30	136	160	588	14	85	312	1159	44	221	
Totals		2707		7121		3697		5456		6404		12577		
Day Totals		9828				9153				18981				
Split %		42.2%		56.6%		57.7%		43.3%						
Peak Hour	11:00		05:00	06:45		05:00		11:00		05:00				
Volume		571		996		727		657		1159		1653		
P.H.F.	.93		.96	.84		.96		.91		.96				

Greece

Dave Jensen

Monroe County
Dept. of Transportation
Traffic EngineeringSite Code : 142/143
Start Date: 09/26/2000
File I.D. : 81461A
Page : 1

Street name : Dewey Ave Cross street: Britton Rd. South of												
Begin	Time	NB	P.M.	A.M.	SB	P.M.	A.M.	Combined	Tuesday			
12:00	09/26	*	*	*	*	*	*	*				
12:15		*	*	*	*	*	*	*				
12:30		*	*	*	*	*	*	*				
12:45		*	0	*	*	9	9	*	*	9		
01:00		*	117	*	*	136	*	*	253			
01:15		*	166	*	*	130	*	*	296			
01:30		*	134	*	*	132	*	*	266			
01:45		*	134	551	*	138	536	*	272	1087		
02:00		*	153	*	*	188	*	*	341			
02:15		*	187	*	*	148	*	*	335			
02:30		*	188	*	*	133	*	*	321			
02:45		*	176	704	*	149	618	*	325	1322		
03:00		*	183	*	*	176	*	*	359			
03:15		*	226	*	*	164	*	*	390			
03:30		*	221	*	*	148	*	*	369			
03:45		*	236	866	*	118	606	*	354	1472		
04:00		*	220	*	*	151	*	*	371			
04:15		*	207	*	*	156	*	*	363			
04:30		*	243	*	*	149	*	*	392			
04:45		*	245	913	*	160	616	*	405	1531		
05:00		*	238	*	*	132	*	*	370			
05:15		*	234	*	*	185	*	*	419			
05:30		*	233	*	*	141	*	*	374			
05:45		*	243	948	*	144	602	*	387	1550		
06:00		*	212	*	*	143	*	*	355			
06:15		*	215	*	*	157	*	*	372			
06:30		*	212	*	*	145	*	*	357			
06:45		*	186	825	*	141	586	*	327	1411		
07:00		*	174	*	*	136	*	*	310			
07:15		*	163	*	*	123	*	*	286			
07:30		*	168	*	*	116	*	*	284			
07:45		*	137	642	*	115	490	*	252	1132		
08:00		*	127	*	*	93	*	*	220			
08:15		*	122	*	*	84	*	*	206			
08:30		*	95	*	*	76	*	*	171			
08:45		*	98	442	*	65	318	*	163	760		
09:00		*	105	*	*	84	*	*	189			
09:15		*	110	*	*	98	*	*	208			
09:30		*	80	*	*	67	*	*	147			
09:45		*	59	354	*	64	313	*	123	667		
10:00		*	65	*	*	52	*	*	117			
10:15		*	57	*	*	44	*	*	101			
10:30		*	34	*	*	26	*	*	60			
10:45		*	48	204	*	30	152	*	78	356		
11:00		*	37	*	*	31	*	*	68			
11:15		*	39	*	*	32	*	*	71			
11:30		*	35	*	*	17	*	*	52			
11:45		*	20	131	*	16	96	*	36	227		
Totals		0	6582		0	4942		11524				
Day Totals		6582			4942							
Split %		57.1%			42.8%							
Peak Hour	04:30		02:45		04:30							
Volume	960		637		1586							
P.H.F.	.97		.90		.94							

Greece

Dave Jensen

Monroe County
Dept. of Transportation
Traffic EngineeringSite Code : 142/143
Start Date: 09/26/2000
File I.D. : 81461A
Page : 4

Street name : Dewey Ave Cross street: Britton Rd. South of									
Begin	Time	NB	P.M.	SB	Combined	P.M.	Friday		
12:00	09/29	20		15	35				
12:15		26		18	44				
12:30		25		7	32				
12:45		7	78		16				
01:00		5		12	17				
01:15		11		16	27				
01:30		20		5	25				
01:45		9		10	19				
02:00		7	45		9	88			
02:15		14		3	17				
02:30		5		10	15				
02:45		9		4	13				
03:00		10	35		17	54			
03:15		12		2	14				
03:30		11		8	19				
03:45		7	40		12	69			
04:00		3		15	18				
04:15		4		17	21				
04:30		4		20	24				
04:45		7	20		31	103			
05:00		10		45	55				
05:15		18		78	96				
05:30		18		75	93				
05:45		33	79		86	330			
06:00		28		53	82				
06:15		40		126	166				
06:30		61		129	190				
06:45		92	221		152	710			
07:00		71		194	265				
07:15		94		212	306				
07:30		74		173	247				
07:45		81	320		131	1030			
08:00		86		142	228				
08:15		103		0	103				
08:30		114		0	114				
08:45		108	411		108	553			
09:00		119		0	119				
09:15		125		0	125				
09:30		*		*	*				
09:45		*	*	*	*	244			
10:00		*		*	*				
10:15		*		*	*				
10:30		*		*	*				
10:45		*	*	*	*				
11:00		*		*	*				
11:15		*		*	*				
11:30		*	*	*	*				
11:45		*	*	*	*				
Totals		1493		1815	3308				
Day Totals		1493		1815	3308				
Split %		45.1%		54.8%					
Peak Hour	08:30			06:45					
Volume	466			731					
P.H.F.	.93			.86					

Greece

Dave Jensen

Monroe County
Dept. of Transportation
Traffic EngineeringSite Code : 142/143
Start Date: 09/26/2000
File I.D. : 81461A
Page : 3

Street name : Dewey Ave Cross street: Britton Rd. South of									
Begin	Time	NB	P.M.	SB	Combined	P.M.	Thursday		
12:00	09/28	33		9	42				
12:15		24		3	27				
12:30		15		11	26				
12:45		14	86	672	13	663	122		1335
01:00		12		4	13				
01:15		8		3	11				
01:30		7		6	13				
01:45		10	37	677	6	621	56		1298
02:00		10		1	11				
02:15		5		6	11				
02:30		6		10	16				
02:45		3	24	685	5	646	46		1331
03:00		6		6	12				
03:15		9		4	13				
03:30		6		3	9				
03:45		5	26	902	6	723	45		1625
04:00		3		18	17				
04:15		2		15	16				
04:30		4		20	141				
04:45		4	14	986	33	618	100		1604
05:00		12		39	164				
05:15		16		74	195				
05:30		27		72	167				
05:45		21	76	966	62	700	83		1666
06:00		26		84	164				
06:15		48		147	174				
06:30		56		134	190				
06:45		87	217	859	151	516	733		1433
07:00		87		184	170				
07:15		75		206	108				
07:30		80		187	115				
07:45		100	342	631	157	734	528		1159
08:00		95		134	119				
08:15		98		142	101				
08:30		119		124	77				
08:45		112	424	457	124	524	383		840
09:00		102		129	80				
09:15		110		111	104				
09:30		110		144	66				
09:45		120	442	71	58	308	952		676
10:00		116		131	62				
10:15		111		139	44				
10:30		128		126	43				
10:45		135	490	32	40	189	1008		373
11:00		142		122	24				
11:15		169		158	33				
11:30		162		162	15				
11:45		167	640	161	147	589	93		254
Totals		2818		3820	6046				
Day Totals		10366		9866	20232				
Split %		42.4%		57.5%					
Peak Hour	11:00			04:45					
Volume	640			734					
P.H.F.	.94			.89					

NODE: 81413
DENEY AVE.
DENISE RD. S.OF
CHAN 1-NB, CHAN 2-SB

LOCHNER ENGINEERING
181 GENESEE ST
UTICA, N.Y 13501
MONROE COUNTY
Direction 1

Site Code : 000000081413
Start Date: 10/04/2004
File I.D. : 81413
Page : 2

Begin Time	Wed. 10/06		1 A.M.		2 P.M.		Combined A.M. P.M.		Thurs. 10/07		1 A.M.		2 P.M.		Combined A.M. P.M.	
12:00	24	156	22	147	46	303	33	162	21	160	54	322				
12:15	20	173	13	131	33	304	16	171	24	166	40	337				
12:30	14	148	7	187	21	335	23	173	27	151	50	324				
12:45	12	175	7	164	19	339	8	136	18	152	26	288				
01:00	8	127	11	138	19	265	2	173	4	158	6	331				
01:15	10	159	6	165	16	324	10	167	10	137	20	304				
01:30	10	142	10	158	20	300	5	159	7	132	12	291				
01:45	7	147	5	139	12	286	17	165	12	147	29	312				
02:00	5	155	5	154	10	309	3	159	5	180	8	339				
02:15	9	138	1	197	10	335	6	182	7	186	13	368				
02:30	11	171	6	170	17	341	5	194	5	161	10	355				
02:45	4	171	9	142	13	313	10	200	6	179	16	379				
03:00	9	198	5	140	14	338	11	203	5	157	16	360				
03:15	8	192	6	180	14	372	6	204	3	182	9	386				
03:30	4	208	0	150	4	358	3	188	5	175	8	363				
03:45	8	249	5	193	13	442	6	214	2	179	8	393				
04:00	6	236	7	167	13	403	7	241	9	169	16	410				
04:15	5	223	13	165	18	388	11	218	18	179	29	397				
04:30	5	174	22	179	27	353	9	229	15	199	24	428				
04:45	7	196	21	172	28	368	5	227	16	193	21	420				
05:00	11	243	31	163	42	406	10	235	20	188	30	423				
05:15	9	251	31	179	40	430	13	247	38	179	51	426				
05:30	14	240	55	196	69	436	10	234	53	191	63	425				
05:45	18	230	83	172	101	402	23	251	76	216	99	467				
06:00	23	237	73	201	96	438	30	269	77	225	107	494				
06:15	45	234	85	198	130	432	38	260	100	214	138	474				
06:30	63	192	116	198	179	390	52	221	137	189	189	410				
06:45	78	193	136	176	214	369	75	190	122	183	197	373				
07:00	86	185	136	161	222	346	86	225	161	187	247	412				
07:15	76	168	163	162	239	330	67	213	165	183	232	396				
07:30	61	180	186	144	247	324	78	196	192	179	270	375				
07:45	86	144	158	115	244	259	98	168	159	149	257	317				
08:00	80	135	154	133	234	268	111	192	154	175	265	367				
08:15	78	150	151	150	229	300	96	172	144	177	240	349				
08:30	98	141	159	127	257	268	93	144	166	97	259	241				
08:45	122	111	123	106	245	217	104	124	157	108	261	232				
09:00	91	102	129	97	220	199	103	126	129	106	232	232				
09:15	99	91	115	95	214	186	101	97	131	107	232	204				
09:30	141	93	137	100	278	193	105	91	144	83	249	174				
09:45	105	87	142	61	247	148	112	102	152	106	264	208				
10:00	101	52	133	52	234	104	107	71	124	70	231	141				
10:15	111	36	126	53	237	89	106	71	138	70	244	141				
10:30	122	41	127	48	249	89	113	44	150	54	263	98				
10:45	121	42	125	34	246	76	156	44	137	42	293	86				
11:00	123	43	132	44	255	87	135	54	143	47	278	101				
11:15	126	32	131	25	257	57	147	50	153	48	300	98				
11:30	133	33	167	29	300	62	158	48	161	34	319	82				
11:45	148	28	145	24	293	52	153	38	153	35	306	73				
Totals	2555	7252	3630	6481	6185	13733	2676	7942	3855	6984	6531	14926				
Day Totals		9807		10111		19918		10618		10839		21457				
% Total	12.8%	36.4%	18.2%	32.5%			12.4%	37.0%	17.9%	32.5%						
Peaks	11:00	05:00	07:15	06:00	11:00	05:30	10:45	05:30	07:00	05:30	11:00	05:30				
Volume	530	964	661	773	1105	1708	596	1014	677	846	1203	1860				
P.H.F.	.89	.96	.88	.96	.92	.97	.94	.94	.88	.94	.94	.94				

NODE: 81413
DENEY AVE.
DENISE RD. S.OF
CHAN 1-NB, CHAN 2-SB

LOCHNER ENGINEERING
181 GENESEE ST
UTICA, N.Y 13501
MONROE COUNTY
Direction 1

Site Code : 000000081413
Start Date: 10/04/2004
File I.D. : 81413
Page : 1

Begin Time	Mon.	1		2		Combined		Tues.	1		2		Combined	
	10/04	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	10/05	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		*	*	*	*	*	*		14	155	17	172	31	327
12:15		*	*	*	*	*	*		31	152	20	150	51	302
12:30		*	*	*	*	*	*		18	147	12	149	30	296
12:45		*	*	*	*	*	*		11	174	14	166	25	340
01:00		*	*	*	*	*	*		8	120	5	158	13	278
01:15		*	*	*	*	*	*		9	161	9	131	18	292
01:30		*	*	*	*	*	*		8	129	7	149	15	278
01:45		*	*	*	*	*	*		7	132	6	118	13	250
02:00		*	*	*	*	*	*		3	140	3	149	6	289
02:15		*	*	*	*	*	*		8	154	2	160	10	314
02:30		*	*	*	*	*	*		5	167	4	172	9	339
02:45		*	*	*	*	*	*		6	182	1	143	7	325
03:00		*	*	*	*	*	*		8	180	2	144	10	324
03:15		*	*	*	*	*	*		3	181	6	144	9	325
03:30		*	*	*	*	*	*		2	182	2	162	4	344
03:45		*	*	*	*	*	*		3	231	5	164	8	395
04:00		*	*	*	*	*	*		5	204	8	143	13	347
04:15		*	*	*	*	*	*		4	221	8	170	12	391
04:30		*	168	*	155	*	323		11	176	19	155	30	331
04:45		*	206	*	160	*	366		4	232	28	161	32	393
05:00		*	207	*	165	*	372		7	263	26	179	33	442
05:15		*	203	*	155	*	358		11	250	46	155	57	405
05:30		*	216	*	161	*	377		7	211	47	176	54	387
05:45		*	223	*	154	*	377		29	253	73	178	102	431
06:00		*	212	*	164	*	376		20	234	62	206	82	440
06:15		*	196	*	173	*	369		40	220	79	165	119	385
06:30		*	176	*	155	*	331		53	216	129	193	182	409
06:45		*	157	*	158	*	315		62	181	129	182	191	363
07:00		*	144	*	128	*	272		83	160	165	145	248	305
07:15		*	170	*	140	*	310		71	155	163	157	234	312
07:30		*	119	*	128	*	247		74	147	172	162	246	309
07:45		*	122	*	109	*	231		102	148	141	134	243	282
08:00		*	127	*	105	*	232		85	152	120	159	205	311
08:15		*	107	*	103	*	210		72	122	147	115	219	237
08:30		*	109	*	101	*	210		100	122	158	102	258	224
08:45		*	98	*	80	*	178		111	119	155	89	266	208
09:00		*	92	*	94	*	186		104	91	116	86	220	177
09:15		*	79	*	93	*	172		97	90	118	81	215	171
09:30		*	89	*	54	*	143		99	86	128	75	227	161
09:45		*	61	*	51	*	112		105	71	135	77	240	148
10:00		*	62	*	49	*	111		96	60	138	62	234	122
10:15		*	41	*	39	*	80		115	45	134	56	249	101
10:30		*	41	*	33	*	74		101	46	131	40	232	86
10:45		*	38	*	31	*	69		115	42	127	22	242	64
11:00		*	42	*	29	*	71		117	38	144	23	261	61
11:15		*	39	*	36	*	75		128	47	140	37	268	84
11:30		*	29	*	30	*	59		136	36	146	34	282	70
11:45		*	23	*	12	*	35		167	28	132	21	299	49
Totals		0	3596	0	3045	0	6641		2475	7053	3579	6171	6054	13224
Day Totals			3596		3045		6641			9528		9750		19278
% Total		.0%	54.1%	.0%	45.8%				12.8%	36.5%	18.5%	32.0%		
Peaks			05:15		05:30		05:30		11:00	05:00	07:00	06:00	11:00	05:00
Volume			854		652		1499		548	977	641	746	1110	1665
P.H.F.			.95		.94		.99		.82	.92	.93	.90	.92	.94

Node: 01553

Dewey Ave.

Dorsey Rd.S.of

Chan A=SB, Chan B=NB

LOCHNER ENGINEERING

181 GENESEE ST

UTICA, N.Y 13501

MONROE COUNTY 2005 TRAFFIC DATA

Direction 1

Site Code : 000055305181

Start Date: 11/07/2005

File I.D. : 81553

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Begin Time	Mon. 11/07	1 A.M.	2 A.M.	Combined A.M.	Tues. 11/08	1 A.M.	2 A.M.	Combined A.M.
12:00	*	*	*	*	23	150	22	129
12:15	*	*	*	*	14	113	19	122
12:30	*	*	*	*	7	147	8	116
12:45	*	*	*	*	12	130	16	105
01:00	*	121	*	110	7	120	7	105
01:15	*	112	*	104	5	136	9	102
01:30	*	103	*	110	11	106	9	111
01:45	*	116	*	108	6	138	8	115
02:00	*	120	*	121	2	119	9	131
02:15	*	111	*	128	3	149	2	122
02:30	*	119	*	128	2	136	5	131
02:45	*	129	*	146	2	139	4	159
03:00	*	119	*	152	5	125	2	170
03:15	*	135	*	160	6	149	5	160
03:30	*	132	*	178	7	152	10	186
03:45	*	151	*	171	7	133	4	174
04:00	*	116	*	150	8	152	7	179
04:15	*	137	*	147	7	172	5	170
04:30	*	148	*	170	31	174	8	170
04:45	*	169	*	174	26	154	6	176
05:00	*	151	*	167	37	150	19	191
05:15	*	142	*	168	51	135	22	205
05:30	*	147	*	157	61	145	24	169
05:45	*	165	*	159	65	147	34	172
06:00	*	137	*	159	78	147	34	153
06:15	*	127	*	127	77	148	44	190
06:30	*	134	*	124	132	136	56	148
06:45	*	115	*	102	132	122	69	158
07:00	*	89	*	104	144	111	57	156
07:15	*	109	*	92	167	84	59	106
07:30	*	97	*	91	182	91	67	96
07:45	*	63	*	80	179	86	65	85
08:00	*	80	*	67	145	103	68	108
08:15	*	79	*	65	123	89	85	78
08:30	*	61	*	80	138	86	82	86
08:45	*	73	*	77	148	79	98	69
09:00	*	58	*	75	114	63	88	70
09:15	*	74	*	79	106	49	72	68
09:30	*	47	*	53	97	60	80	72
09:45	*	45	*	48	117	79	97	62
10:00	*	41	*	44	108	44	82	53
10:15	*	39	*	33	109	33	89	41
10:30	*	35	*	28	100	35	81	35
10:45	*	27	*	28	102	36	112	23
11:00	*	32	*	49	103	27	94	27
11:15	*	30	*	26	103	30	100	31
11:30	*	20	*	30	119	25	124	22
11:45	*	23	*	29	134	14	112	23
Totals	0	4278	0	4598	3362	5148	2179	5530
Day Totals	4278		4598	8876	8510		7709	16219
% Total	.0%	48.2%	.0%	51.8%	20.7%	31.7%	13.4%	34.1%
Peaks	04:30		04:30		07:15	04:00	10:45	04:30
Volume	610		679		673	652	430	742
P.H.F.	.90		.97		.92	.93	.86	.90

1WP-707

Node: 81413

DEWEY AVE.

DÉNEISE RD. S.OF

CHAN 1=NB, CHAN 2=SB

LOCHNER ENGINEERING

181 GENESEE ST

UTICA, N.Y 13501

MONROE COUNTY

Direction 1

Site Code : 000000081413

Start Date: 10/04/2004

File I.D. : 81413

Page : 3

Begin Time	Fri. 10/08	1 A.M.	2 A.M.	Combined A.M.	Sat. 10/09	1 A.M.	2 A.M.	Combined A.M.
12:00	36	208	23	193	59	401	*	*
12:15	24	211	18	173	42	384	*	*
12:30	19	*	26	*	45	*	*	*
12:45	19	*	12	*	31	*	*	*
01:00	17	*	13	*	30	*	*	*
01:15	11	*	16	*	27	*	*	*
01:30	15	*	7	*	22	*	*	*
01:45	9	*	7	*	16	*	*	*
02:00	8	*	12	*	20	*	*	*
02:15	10	*	5	*	15	*	*	*
02:30	6	*	5	*	11	*	*	*
02:45	12	*	7	*	19	*	*	*
03:00	20	*	11	*	31	*	*	*
03:15	7	*	5	*	12	*	*	*
03:30	9	*	7	*	16	*	*	*
03:45	3	*	11	*	14	*	*	*
04:00	4	*	6	*	10	*	*	*
04:15	6	*	12	*	18	*	*	*
04:30	9	*	23	*	32	*	*	*
04:45	11	*	24	*	35	*	*	*
05:00	11	*	30	*	41	*	*	*
05:15	9	*	35	*	44	*	*	*
05:30	17	*	46	*	63	*	*	*
05:45	20	*	67	*	87	*	*	*
06:00	25	*	72	*	97	*	*	*
06:15	27	*	80	*	107	*	*	*
06:30	47	*	106	*	153	*	*	*
06:45	66	*	121	*	187	*	*	*
07:00	68	*	116	*	184	*	*	*
07:15	70	*	134	*	204	*	*	*
07:30	71	*	140	*	211	*	*	*
07:45	89	*	156	*	245	*	*	*
08:00	78	*	120	*	198	*	*	*
08:15	72	*	122	*	194	*	*	*
08:30	65	*	131	*	196	*	*	*
08:45	86	*	121	*	207	*	*	*
09:00	80	*	139	*	219	*	*	*
09:15	102	*	161	*	263	*	*	*
09:30	120	*	136	*	256	*	*	*
09:45	106	*	153	*	259	*	*	*
10:00	125	*	133	*	258	*	*	*
10:15	119	*	175	*	294	*	*	*
10:30	136	*	160	*	296	*	*	*
10:45	136	*	151	*	287	*	*	*
11:00	148	*	152	*	300	*	*	*
11:15	175	*	165	*	340	*	*	*
11:30	167	*	152	*	319	*	*	*
11:45	162	*	179	*	341	*	*	*
Totals	2652	419	3703	366	6355	785	0	0
Day Totals	3071		4069	7140	0		0	0
% Total	37.1%	5.8%	51.8%	5.1%	*	*	*	*
Peaks	11:00	12:00	11:00	12:00	11:00	12:00		
Volume	652	419	648	366	1300	785		
P.H.F.	.93	.49	.90	.47	.95	.48		

Node: 75123

Dewey Ave.

LATTA RD. S.OF

Chan 1=SB, Chan 2=NB

LOCHNER ENGINEERING

181 GENESEE ST

UTICA, N.Y 13501

MONROE COUNTY

Direction 1

Site Code : 000000075123

Start Date: 10/04/2004

File I.D. : 75123

Page : 1

Begin Time	Mon. 10/04	1 A.M.	2 P.M.	Combined A.M. P.M.	Tues. 10/05	1 A.M.	2 P.M.	Combined A.M. P.M.
12:00	*	*	*	*	13	126	9	112 22 238
12:15	*	*	*	*	14	139	19	121 33 260
12:30	*	*	*	*	12	97	14	102 26 199
12:45	*	103	*	109	9	129	8	120 17 249
01:00	*	89	*	106	4	111	5	105 9 216
01:15	*	95	*	99	7	91	11	137 18 228
01:30	*	120	*	115	4	108	3	109 7 217
01:45	*	100	*	124	6	90	8	113 14 203
02:00	*	109	*	114	2	111	5	113 7 224
02:15	*	110	*	129	3	135	6	123 9 258
02:30	*	98	*	114	2	120	5	120 7 240
02:45	*	106	*	149	4	120	4	152 8 272
03:00	*	96	*	140	2	102	6	160 8 262
03:15	*	94	*	136	4	120	2	168 6 288
03:30	*	130	*	156	2	133	5	154 7 287
03:45	*	127	*	171	2	119	4	179 6 298
04:00	*	144	*	162	6	119	6	170 12 289
04:15	*	115	*	159	8	132	5	187 13 319
04:30	*	118	*	142	16	120	5	165 21 285
04:45	*	115	*	150	15	113	7	162 22 275
05:00	*	128	*	193	16	127	6	173 22 300
05:15	*	104	*	175	32	117	6	185 38 302
05:30	*	130	*	167	38	141	8	180 46 321
05:45	*	125	*	178	47	136	23	201 70 337
06:00	*	119	*	163	37	161	30	189 67 350
06:15	*	139	*	170	55	135	36	194 91 329
06:30	*	136	*	164	73	143	44	161 117 304
06:45	*	116	*	147	98	130	74	157 172 287
07:00	*	115	*	113	114	124	74	146 188 270
07:15	*	107	*	125	117	119	78	130 195 249
07:30	*	102	*	90	126	143	55	115 181 258
07:45	*	100	*	90	98	118	92	114 190 232
08:00	*	80	*	97	103	135	95	113 198 248
08:15	*	81	*	75	104	96	74	119 178 215
08:30	*	93	*	84	96	81	87	79 183 160
08:45	*	67	*	79	112	67	96	98 208 165
09:00	*	77	*	64	102	73	88	73 190 146
09:15	*	65	*	53	95	75	86	75 181 150
09:30	*	43	*	54	105	64	70	65 175 129
09:45	*	48	*	41	94	56	91	47 185 103
10:00	*	37	*	53	94	45	75	37 169 82
10:15	*	29	*	31	105	47	90	31 195 78
10:30	*	25	*	26	101	22	88	32 189 54
10:45	*	28	*	27	98	22	83	31 181 53
11:00	*	18	*	33	95	15	106	25 201 40
11:15	*	28	*	29	99	25	97	30 196 55
11:30	*	24	*	26	104	21	117	27 221 48
11:45	*	10	*	15	95	21	145	16 240 37
Totals	0	4043	0	4837	2588	4794	2151	5615 4739 10409
Day Totals	4043		4837		7382		7766	15148
% Total	.0%	45.5%	.0%	54.4%	17.0%	31.6%	14.2%	37.0%
Peaks		05:45		05:00		06:45	05:45	11:00 05:30 11:00 05:30
Volume		519		713		455	575	465 764 858 1337
P.H.F.		.93		.92		.90	.89	.80 .95 .89 .95

T, W OK

Node: 81553

Dewey Ave.

Dorsey Rd.S.of

Chan A=SB, Chan B=NB

LOCHNER ENGINEERING

181 GENESEE ST

UTICA, N.Y 13501

MONROE COUNTY 2005 TRAFFIC DATA

Direction 1

Site Code : 000055305181

Start Date: 11/07/2005

File I.D. : 81553

Page : 2

Begin Time	Wed. 11/09	1 A.M.	2 P.M.	Combined A.M. P.M.	Thurs. 11/10	1 A.M.	2 P.M.	Combined A.M. P.M.
12:00	13	106	24	96 37 202	24	135	19	147 43 282
12:15	13	116	21	106 34 222	28	*	13	* 41 *
12:30	8	93	13	103 21 196	16	*	13	* 29 *
12:45	16	126	14	100 30 226	10	*	10	* 20 *
01:00	11	105	6	97 17 202	7	*	15	* 22 *
01:15	2	99	6	120 8 219	10	*	11	* 21 *
01:30	6	118	4	94 10 212	2	*	5	* 7 *
01:45	6	110	5	97 11 207	4	*	6	* 10 *
02:00	6	95	8	96 14 191	6	*	11	* 17 *
02:15	6	120	11	87 17 207	2	*	16	* 18 *
02:30	4	97	16	132 20 229	3	*	11	* 14 *
02:45	4	123	3	132 7 255	6	*	7	* 13 *
03:00	6	144	2	150 8 294	4	*	9	* 13 *
03:15	4	104	2	158 6 262	6	*	3	* 9 *
03:30	5	136	2	154 7 290	0	*	6	* 6 *
03:45	6	126	4	157 10 283	13	*	4	* 17 *
04:00	8	100	8	148 16 248	5	*	8	* 13 *
04:15	16	122	9	172 25 294	13	*	4	* 17 *
04:30	21	134	6	129 27 263	18	*	9	* 27 *
04:45	13	142	5	138 18 280	22	*	10	* 32 *
05:00	31	114	4	216 35 330	36	*	8	* 44 *
05:15	38	111	9	190 47 301	43	*	9	* 52 *
05:30	67	142	24	186 91 328	65	*	22	* 87 *
05:45	66	156	17	147 83 303	63	*	30	* 93 *
06:00	65	106	23	157 88 263	68	*	26	* 94 *
06:15	91	110	36	127 127 237	83	*	46	* 129 *
06:30	130	108	59	120 189 228	115	*	55	* 170 *
06:45	113	112	58	123 171 235	121	*	57	* 178 *
07:00	133	101	50	111 183 212	143	*	51	* 194 *
07:15	161	119	58	81 219 200	142	*	49	* 191 *
07:30	194	81	63	92 257 173	172	*	53	* 225 *
07:45	167	62	68	70 235 132	169	*	64	* 233 *
08:00	135	68	62	90 197 158	153	*	62	* 215 *
08:15	132	68	73	78 205 146	119	*	78	* 197 *
08:30	150	63	73	77 223 140	142	*	77	* 219 *
08:45	150	76	91	80 241 156	111	*	73	* 184 *
09:00	111	73	72	80 183 153	123	*	92	* 215 *
09:15	74	72	83	54 157 126	126	*	73	* 199 *
09:30	86	58	92	51 178 109	97	*	75	* 172 *
09:45	107	60	63	46 170 106	84	*	88	* 172 *
10:00	95	49	82	44 177 93	105	*	93	* 198 *
10:15	97	28	80	29 177 57	111	*	76	* 187 *
10:30	103	25	84	36 187 61	127	*	93	* 220 *
10:45	95	31	82	21 177 52	104	*	95	* 199 *
11:00	105	32	78	36 183 68	130	*	97	* 227 *
11:15	90	14	107	31 197 45	113	*	118	* 231 *
11:30	122	21	115	25 237 46	118	*	130	* 248 *
11:45	132	19	119	22 251 41	144	*	117	* 261 *
Totals	3214	4395	1994	4886 5208 9281	3326	135	2097	147 5423 282
Day Totals	7609		6880		3461		2244	5705
% Total	22.1%	30.3%	13.7%	33.7%	58.3%	2.3%	36.7%	2.5%
Peaks	07:15	05:00	11:00	05:00	07:15	05:00	07:15	12:00 11:00 12:00 11:00 12:00
Volume	657	523	419	739	908	1262	636	135 462 147 967 202
P.H.F.	.84	.83	.88	.85	.88	.95	.92	.25 .88 .25 .92 .25

WP-843

NODE: 75123
DEWEY AVE.
LATTA RD. S.OF
CHAN 1=SB,CHAN 2=NB

LOCHNER ENGINEERING
181 GENESEE ST
UTICA, N.Y 13501
MONROE COUNTY

Site Code : 000000075123
Start Date: 10/04/2004
File I.D. : 75123
Page : 3

Begin	Pri.	1	2	Combined	Sat.	1	2	Combined	
Time	10/08	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		29	230	26	111	55	341		
12:15		18	*	10	*	28	*		
12:30		21	*	12	*	33	*		
12:45		18	*	19	*	37	*		
01:00		18	*	8	*	26	*		
01:15		15	*	6	*	21	*		
01:30		9	*	10	*	19	*		
01:45		7	*	2	*	9	*		
02:00		12	*	6	*	18	*		
02:15		9	*	10	*	19	*		
02:30		8	*	3	*	11	*		
02:45		7	*	10	*	17	*		
03:00		15	*	6	*	21	*		
03:15		4	*	4	*	8	*		
03:30		13	*	1	*	14	*		
03:45		9	*	2	*	11	*		
04:00		7	*	2	*	9	*		
04:15		13	*	7	*	20	*		
04:30		17	*	5	*	22	*		
04:45		22	*	9	*	31	*		
05:00		26	*	4	*	30	*		
05:15		24	*	7	*	31	*		
05:30		33	*	10	*	43	*		
05:45		47	*	15	*	62	*		
06:00		48	*	26	*	74	*		
06:15		73	*	21	*	94	*		
06:30		75	*	28	*	103	*		
06:45		92	*	48	*	140	*		
07:00		87	*	56	*	143	*		
07:15		115	*	45	*	160	*		
07:30		135	*	37	*	172	*		
07:45		133	*	71	*	204	*		
08:00		102	*	43	*	145	*		
08:15		120	*	52	*	172	*		
08:30		106	*	34	*	140	*		
08:45		117	*	58	*	175	*		
09:00		125	*	59	*	184	*		
09:15		142	*	59	*	201	*		
09:30		137	*	54	*	191	*		
09:45		135	*	55	*	190	*		
10:00		131	*	64	*	195	*		
10:15		163	*	78	*	241	*		
10:30		162	*	60	*	222	*		
10:45		132	*	61	*	193	*		
11:00		162	*	94	*	256	*		
11:15		190	*	83	*	273	*		
11:30		170	*	90	*	260	*		
11:45		203	*	94	*	297	*		
Totals		3456	230	1564	111	5020	341		
Day Totals			3686		1675		5361		
% Total		64.4%	4.2%	29.1%	2.0%				
Peaks	11:00	12:00	11:00	12:00	11:00	12:00			
Volume	725	230	361	111	1086	341			
P.H.F.	.89	.25	.96	.25	.91	.25			

NODE: 75123
DEWEY AVE.
LATTA RD. S.OF
CHAN 1=SB,CHAN 2=NB

LOCHNER ENGINEERING
181 GENESEE ST
UTICA, N.Y 13501
MONROE COUNTY

Site Code : 000000075123
Start Date: 10/04/2004
File I.D. : 75123
Page : 2

Begin	Wed.	1	2	Combined	Thur.	1	2	Combined	
Time	10/06	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		22	114	17	126	39	240		
12:15		8	97	12	130	20	227		
12:30		7	141	12	126	19	267		
12:45		7	118	12	128	19	246		
01:00		9	125	6	108	15	233		
01:15		2	98	5	123	7	221		
01:30		5	113	10	102	15	215		
01:45		2	113	6	117	8	230		
02:00		4	121	6	132	10	253		
02:15		2	159	7	111	9	270		
02:30		5	122	9	154	14	276		
02:45		7	120	6	142	13	262		
03:00		6	119	4	156	10	275		
03:15		3	126	5	169	8	295		
03:30		2	137	5	170	7	307		
03:45		5	155	5	207	10	362		
04:00		5	153	6	184	11	337		
04:15		7	139	10	187	17	326		
04:30		13	147	4	153	17	300		
04:45		10	141	5	165	15	306		
05:00		23	116	6	171	29	287		
05:15		22	159	10	204	32	363		
05:30		45	145	10	200	55	345		
05:45		50	134	18	198	68	332		
06:00		36	154	24	196	60	350		
06:15		59	163	43	194	102	357		
06:30		72	140	51	186	123	326		
06:45		95	158	78	152	173	310		
07:00		83	145	96	132	179	277		
07:15		119	125	66	136	185	261		
07:30		143	115	62	138	205	253		
07:45		113	94	79	130	192	224		
08:00		127	124	60	108	187	232		
08:15		113	112	72	119	185	231		
08:30		101	95	76	112	177	207		
08:45		98	95	108	101	206	196		
09:00		100	84	85	85	185	169		
09:15		92	74	78	77	170	151		
09:30		93	73	107	74	200	147		
09:45		114	53	92	55	206	108		
10:00		113	39	93	46	206	85		
10:15		88	37	97	22	185	59		
10:30		92	40	99	29	191	69		
10:45		95	28	107	34	202	62		
11:00		92	30	98	31	190	61		
11:15		96	17	107	25	203	42		
11:30		117	33	122	24	239	57		
11:45		111	18	140	26	251	44		
Totals		2633	5158	2236	5895	4869	11053		
Day Totals			7791		8131		15922		
% Total		16.5%	32.4%	14.0%	37.0%				
Peaks	07:15	06:00	11:00	05:15	11:00	05:15			
Volume	502	615	467	798	883	1390			
P.H.F.	.87	.94	.83	.97	.87	.95			

NODE: 81634
 STONE RD. GREECE
 DENBY AVE. W. OF
 SIGN 1-WB, CHAN J-EB
 LOCHNER ENGINEERING
 181 GENESEE ST
 UTICA, N.Y. 13501
 MONROE COUNTY
 Direction 1
 Site Code: 000000081634
 Start Date: 10/04/2009
 File P.B. 81634

Begin	Mon.	1	2	Combined	2	2	Combined	2	2	Combined	2	2	Combined
Time	10/08	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	76	*	74	*	150	12	76	16	88	28	164	
12:15	*	71	*	67	*	138	5	75	11	95	16	170	
12:30	*	87	*	65	*	152	3	78	9	77	12	155	
12:45	*	80	*	85	*	165	2	84	9	72	11	156	
01:00	*	80	*	74	*	154	1	76	8	83	9	159	
01:15	*	81	*	68	*	149	6	82	7	67	13	149	
01:30	*	81	*	64	*	145	1	74	3	81	4	155	
01:45	*	81	*	80	*	161	5	94	4	65	9	159	
02:00	*	84	*	69	*	153	3	82	2	77	5	159	
02:15	*	81	*	81	*	162	3	80	4	94	7	174	
02:30	*	90	*	92	*	182	2	91	3	90	5	181	
02:45	*	82	*	83	*	165	1	88	5	116	6	204	
03:00	*	99	*	97	*	196	3	104	8	93	11	197	
03:15	*	91	*	112	*	203	6	94	3	118	9	212	
03:30	*	90	*	98	*	188	9	94	1	148	10	242	
03:45	*	84	*	113	*	197	4	86	0	127	4	213	
04:00	*	74	*	106	*	180	5	101	3	97	8	198	
04:15	*	101	*	114	*	215	6	97	2	138	8	235	
04:30	*	71	*	125	*	196	16	101	1	126	17	227	
04:45	*	87	*	121	*	208	12	106	3	141	15	247	
05:00	*	98	*	114	*	212	20	101	6	131	26	232	
05:15	*	97	*	134	*	231	33	112	7	143	40	255	
05:30	*	91	*	117	*	208	44	91	7	135	51	226	
05:45	*	89	*	128	*	217	40	115	13	124	53	239	
06:00	*	74	*	97	*	171	39	91	15	115	54	206	
06:15	*	76	*	109	*	185	72	88	15	112	87	200	
06:30	*	81	*	91	*	172	114	112	32	94	146	206	
06:45	*	72	*	81	*	153	92	85	43	91	135	176	
07:00	*	64	*	88	*	152	107	79	43	93	150	172	
07:15	*	53	*	85	*	138	139	69	39	99	178	168	
07:30	*	61	*	52	*	113	128	75	47	64	175	139	
07:45	*	57	*	67	*	124	136	48	59	70	195	118	
08:00	*	59	*	57	*	116	96	64	46	72	142	136	
08:15	*	48	*	59	*	107	81	60	45	67	126	127	
08:30	*	33	*	58	*	91	97	45	46	67	143	112	
08:45	*	25	*	47	*	72	66	42	55	65	121	107	
09:00	*	40	*	49	*	89	71	40	44	57	115	97	
09:15	*	34	*	40	*	74	75	35	57	39	132	74	
09:30	*	25	*	49	*	74	51	27	52	42	103	69	
09:45	72	22	62	25	134	47	68	28	65	34	133	62	
10:00	74	23	57	35	131	58	89	20	60	31	149	51	
10:15	62	25	56	31	118	56	58	23	48	24	106	47	
10:30	64	19	57	24	121	43	66	16	61	25	127	41	
10:45	60	12	70	31	130	43	72	18	65	24	137	42	
11:00	59	13	81	25	140	38	76	24	77	32	153	56	
11:15	76	13	74	22	150	35	70	18	74	24	144	42	
11:30	85	16	60	27	145	43	83	14	69	27	152	41	
11:45	60	13	65	19	125	32	79	14	78	22	157	36	
Totals	612	3004	582	3549	1194	6553	2267	3317	1370	3916	3637	7233	
Day Totals		3616		4131		7747		5584		5286		10870	
% Total	7.9%	38.7%	7.5%	45.8%			20.8%	30.5%	12.6%	36.0%			
Peaks	10:45	05:00	10:45	04:30	10:45	05:00	07:00	04:30	11:00	04:45	07:00	04:30	
Volume	280	375	285	494	565	868	510	420	298	550	698	961	
P.H.F.	.82	.95	.87	.92	.94	.93	.91	.93	.95	.96	.89	.94	

Node: 81633
 Stone Rd: 8.01
 Stone Rd: 8.01
 Monroe County
 Dept. of Transportation
 Traffic Engineering
 Site Code: 000000081633
 Start Date: 11/08/2009
 File P.B. 81633

Time	11/08	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	11/08	15	124	21	132	36	256						
12:15		16	125	14	133	30	258						
12:30		14	124	8	132	22	256						
12:45		18	63	125	498	9	52	133	530	27	115	258	1028
01:00		8	181	7	118	15	299						
01:15		7	181	5	119	12	300						
01:30		7	116	10	103	17	219						
01:45		6	28	112	590	3	25	103	443	9	53	215	1033
02:00		6	126	2	97	8	223						
02:15		9	111	3	91	12	202						
02:30		1	146	3	104	4	250						
02:45		6	22	152	535	0	8	97	389	6	30	249	924
03:00		2	167	5	114	7	281						
03:15		3	132	5	116	8	248						
03:30		4	159	9	125	13	284						
03:45		4	13	168	626	3	22	122	477	7	35	290	1103
04:00		3	153	9	115	12	268						
04:15		6	181	8	112	14	293						
04:30		5	170	21	138	26	308						
04:45		4	18	202	706	27	65	106	471	31	83	308	1177
05:00		13	173	35	126	48	299						
05:15		26	190	41	138	67	328						
05:30		25	163	69	116	94	279						
05:45		28	172	68	213	111	491	96	305	283	1189		
06:00		26	125	82	111	108	236						
06:15		48	125	90	91	138	216						
06:30		54	106	130	109	184	215						
06:45		74	202	105	461	131	433	92	403	205	635	197	864
07:00		81	91	141	61	222	152						
07:15		61	83	140	76	201	159						
07:30		72	67	175	72	247	139						
07:45		73	287	160	616	233	903	129	579				
08:00		61	69	137	57	198	126						
08:15		85	60	126	50	211	110						
08:30		78	62	119	59	197	121						
08:45		102	63	111	65	213	819	128	485				
09:00		85	60	109	44	194	104						
09:15		88	62	110	59	198	121						
09:30		76	41	98	39	174	80						
09:45		77	34	93	41	170	736	75	380				
10:00		82	25	88	35	170	60						
10:15		84	30	91	38	175	68						
10:30		99	25	110	25	209	50						
10:45		116	34	93	31	209	65						
11:00		95	37	85	35	180	72						
11:15		123	28	123	22	246	50						
11:30		124	23	124	23	248	46						
11:45		123	23	123	14	246	37						
Totals	2223	465	5098	3174	4112	5397	14607	9210					
Day Totals			7321		7286								
Split %	41.1%		55.3%		58.8%		44.6%						
Peak Hour	11:00		04:30		07:00		12:00		11:00		04:30		
Volume	465		735		616		530		920		1243		
P.H.F.	.93		.90		.88		.99		.92		.94		

Direction 1										Page 1			
Begin Time	Left		Thru		Combined		Left		Thru		Combined		
	Vol	WT	Vol	WT	Vol	WT	Vol	WT	Vol	WT	Vol	WT	
12:00	30	189	0	4	30	193	*	*	*	*	*	*	
12:15	25	186	0	10	25	196	*	*	*	*	*	*	
12:30	22	165	0	11	22	176	*	*	*	*	*	*	
12:45	20	187	0	4	20	191	*	*	*	*	*	*	
01:00	15	178	1	1	16	179	*	*	*	*	*	*	
01:15	12	159	0	6	12	165	*	*	*	*	*	*	
01:30	15	173	0	2	15	175	*	*	*	*	*	*	
01:45	7	193	0	4	7	197	*	*	*	*	*	*	
02:00	12	*	0	*	12	*	*	*	*	*	*	*	
02:15	7	*	0	*	7	*	*	*	*	*	*	*	
02:30	7	*	0	*	7	*	*	*	*	*	*	*	
02:45	11	*	0	*	11	*	*	*	*	*	*	*	
03:00	11	*	2	*	13	*	*	*	*	*	*	*	
03:15	6	*	0	*	6	*	*	*	*	*	*	*	
03:30	13	*	0	*	13	*	*	*	*	*	*	*	
03:45	9	*	0	*	9	*	*	*	*	*	*	*	
04:00	9	*	0	*	9	*	*	*	*	*	*	*	
04:15	3	*	0	*	3	*	*	*	*	*	*	*	
04:30	21	*	1	*	22	*	*	*	*	*	*	*	
04:45	20	*	0	*	20	*	*	*	*	*	*	*	
05:00	24	*	0	*	24	*	*	*	*	*	*	*	
05:15	33	*	1	*	34	*	*	*	*	*	*	*	
05:30	40	*	1	*	41	*	*	*	*	*	*	*	
05:45	55	*	3	*	58	*	*	*	*	*	*	*	
06:00	62	*	2	*	64	*	*	*	*	*	*	*	
06:15	94	*	1	*	95	*	*	*	*	*	*	*	
06:30	110	*	0	*	110	*	*	*	*	*	*	*	
06:45	111	*	8	*	119	*	*	*	*	*	*	*	
07:00	143	*	9	*	152	*	*	*	*	*	*	*	
07:15	162	*	4	*	166	*	*	*	*	*	*	*	
07:30	153	*	1	*	154	*	*	*	*	*	*	*	
07:45	167	*	9	*	176	*	*	*	*	*	*	*	
08:00	127	*	6	*	133	*	*	*	*	*	*	*	
08:15	135	*	4	*	139	*	*	*	*	*	*	*	
08:30	121	*	6	*	127	*	*	*	*	*	*	*	
08:45	141	*	8	*	149	*	*	*	*	*	*	*	
09:00	103	*	3	*	106	*	*	*	*	*	*	*	
09:15	155	*	0	*	155	*	*	*	*	*	*	*	
09:30	142	*	3	*	145	*	*	*	*	*	*	*	
09:45	146	*	2	*	148	*	*	*	*	*	*	*	
10:00	130	*	4	*	134	*	*	*	*	*	*	*	
10:15	128	*	7	*	135	*	*	*	*	*	*	*	
10:30	139	*	3	*	142	*	*	*	*	*	*	*	
10:45	151	*	2	*	153	*	*	*	*	*	*	*	
11:00	161	*	1	*	162	*	*	*	*	*	*	*	
11:15	170	*	3	*	173	*	*	*	*	*	*	*	
11:30	188	*	2	*	190	*	*	*	*	*	*	*	
11:45	175	*	12	*	187	*	*	*	*	*	*	*	
Totals	3741	1430	109	42	3850	1472	0	0	0	0	0	0	
Day Totals	5171	151	5322	0	0	0	0						
% Total	70.2%	26.8%	2.0%	.7%	*	*	*	*					

Peaks	11:00	12:00	07:45	12:00	11:00	12:00
Volume	694	727	25	29	712	756
P.H.F.	.92	.96	.69	.65	.93	.96

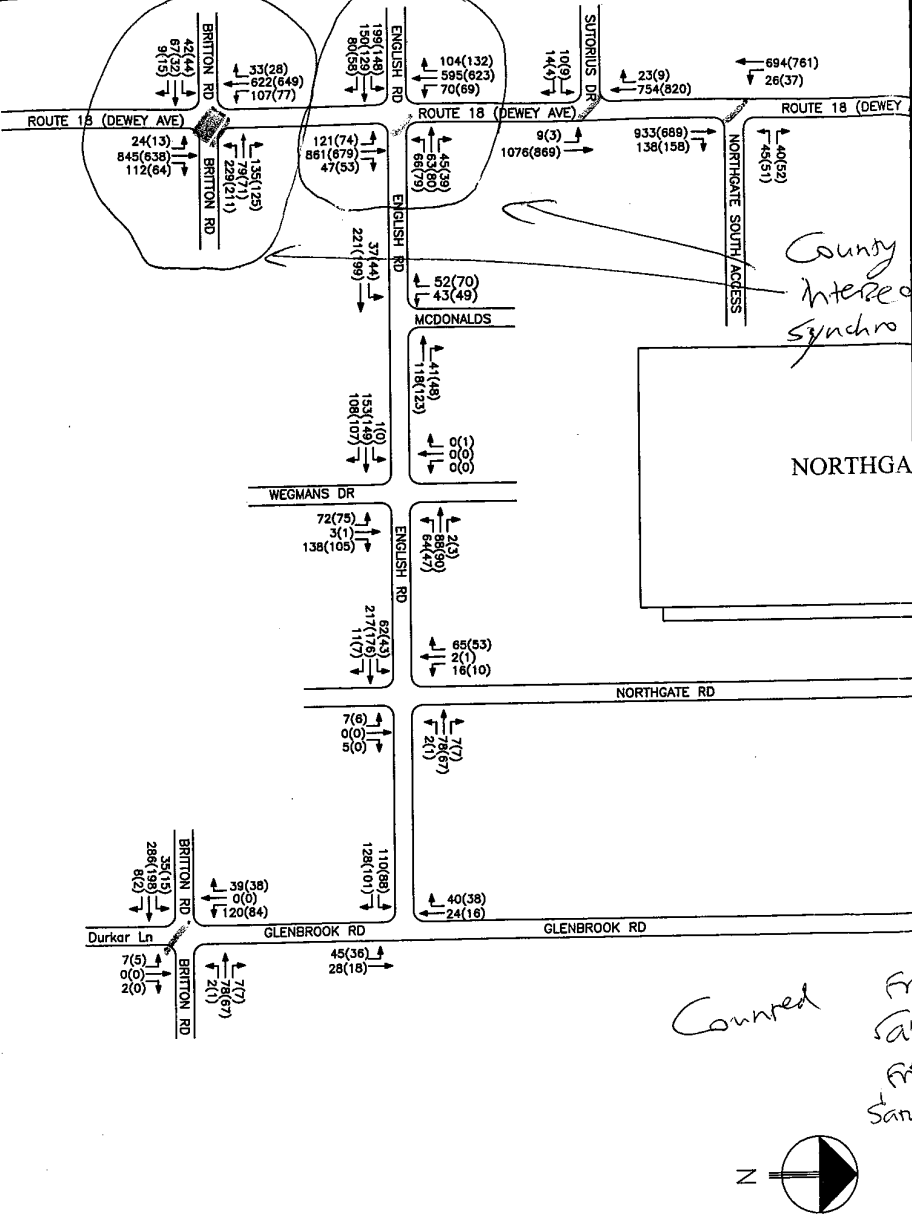
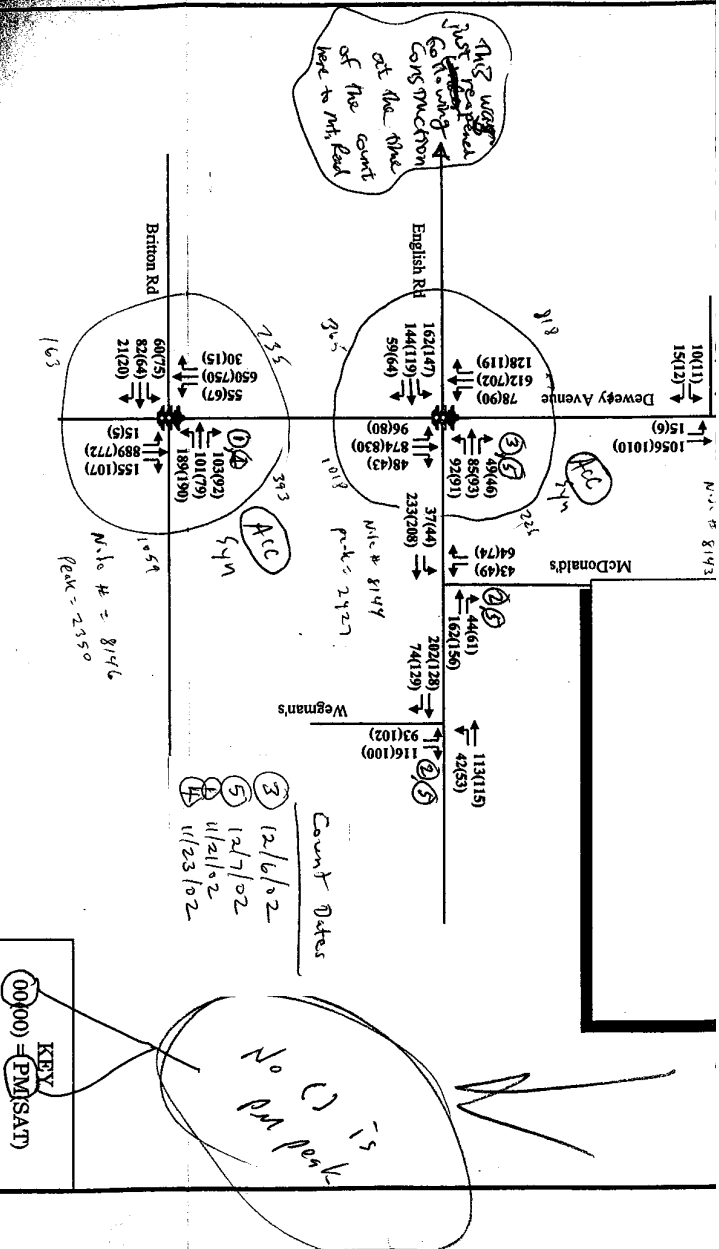
Direction 1										Page 1 2			
Begin Time	Med. 10:00	Med. 11:00	Med. 12:00	Med. 13:00	Med. 14:00	Med. 15:00	Med. 16:00	Med. 17:00	Med. 18:00	Med. 19:00	Med. 20:00		
12:00	8	68	20	85	28	153		7	80	19	79	26	159
12:15	7	86	12	89	19	175		4	85	13	75	17	160
12:30	5	85	7	83	12	168		12	76	7	80	19	156
12:45	9	80	5	67	14	147		11	81	9	74	20	155
01:00	3	60	5	67	8	127		6	83	7	77	13	160
01:15	2	94	5	70	7	164		2	70	9	71	11	141
01:30	4	100	6	84	10	184		6	78	9	78	15	156
01:45	3	70	6	67	9	137		6	85	3	76	9	161
02:00	4	84	7	88	11	172		2	93	4	89	6	182
02:15	2	99	11	81	13	180		4	93	8	81	12	174
02:30	4	94	5	94	9	188		2	91	3	92	5	183
02:45	2	91	4	99	6	190		0	94	3	108	3	202
03:00	2	99	5	89	7	188		2	91	4	103	6	194
03:15	1	78	4	138	5	216		3	91	6	121	9	212
03:30	11	105	0	105	11	210		10	108	3	104	13	212
03:45	4	90	6	133	10	223		6	95	1	127	7	222
04:00	8	108	3	109	11	217		5	87	7	118	12	205
04:15	5	84	3	130	8	214		7	87	0	126	7	213
04:30	12	107	3	133	15	240		11	80	1	121	12	201
04:45	18	85	5	132	23	217		12	98	2	124	14	222
05:00	19	106	6	128	25	234		20	103	6	128	26	231
05:15	23	99	5	129	28	228		24	90	7	152	31	242
05:30	41	100	8	112	49	212		44	105	8	144	52	249
05:45	41	103	10	122	51	225		48	100	20	121	68	221
06:00	53	73	17	138	70	211		41	77	17	101	58	178
06:15	65	107	16	90	81	197		68	89	16	94	84	183
06:30	103	93	28	99	131	192		106	104	33	99	139	203
06:45	99	95	36	84	135	179		101	107	33	87	134	194
07:00	115	77	35	90	150	167		105	63	31	86	136	149
07:15	133	72	34	84	167	156		137	143	45	46	182	189
07:30	122	78	41	91	163	169		116	154	45	5	161	159
07:45	139	56	42	68	181	124		112	123	42	3	154	126
08:00	100	55	53	61	153	116		92	138	56	2	148	140
08:15	96	46	49	69	145	115		103	133	53	1	156	134
08:30	95	55	61	48	156	103		77	103	42	3	119	106
08:45	87	43	51	73	138	116		71	113	38	3	109	116
09:00	65	50	57	61	122	111		61	122	51	1	112	123
0													

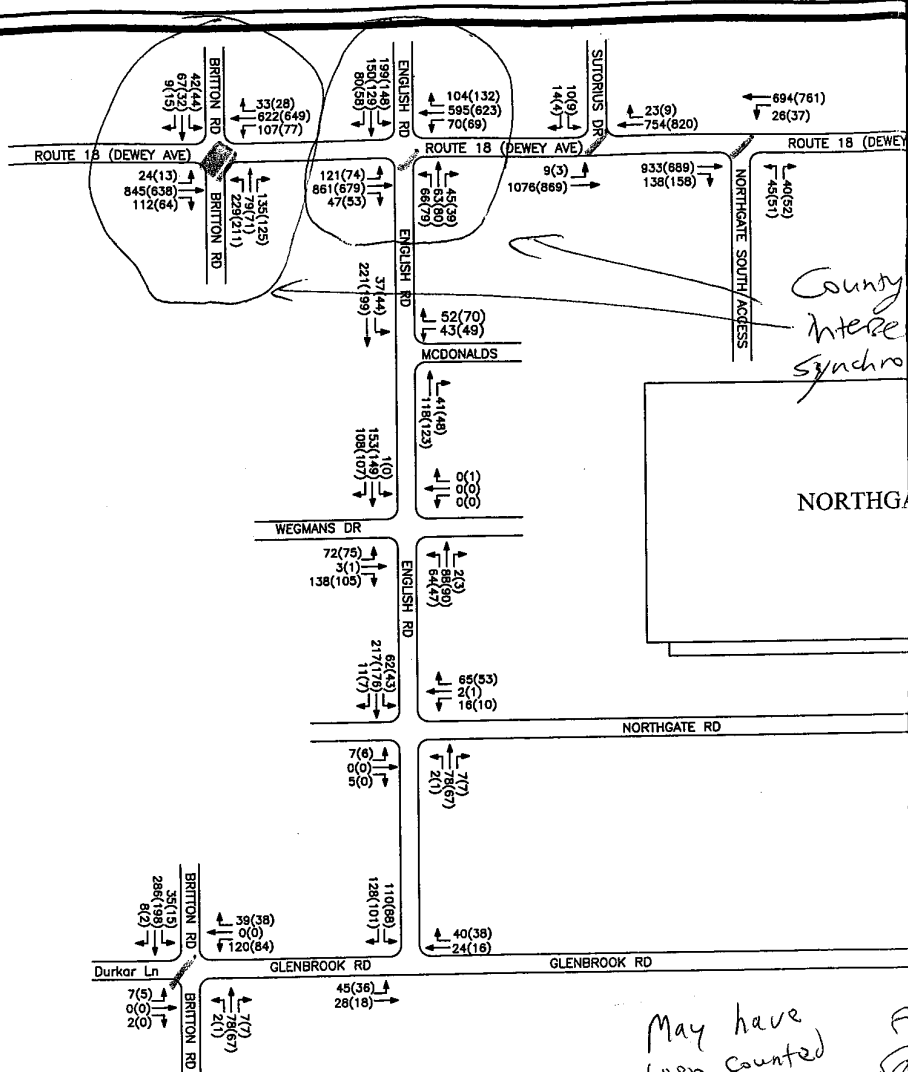
Peaks	07:00	05:00	10:45	04:15	07:15	04:30	07:00	07:15	11:00	04:45	07:15	04:45
Volume	509	408	322	523	664	919	470	558	322	548	645	944
P.H.F.	.91	.96	.91	.98	.91	.95	.85	.90	.92	.90	.88	.94

Star Mart Supercenter
Northgate Plaza
Rochester, New York

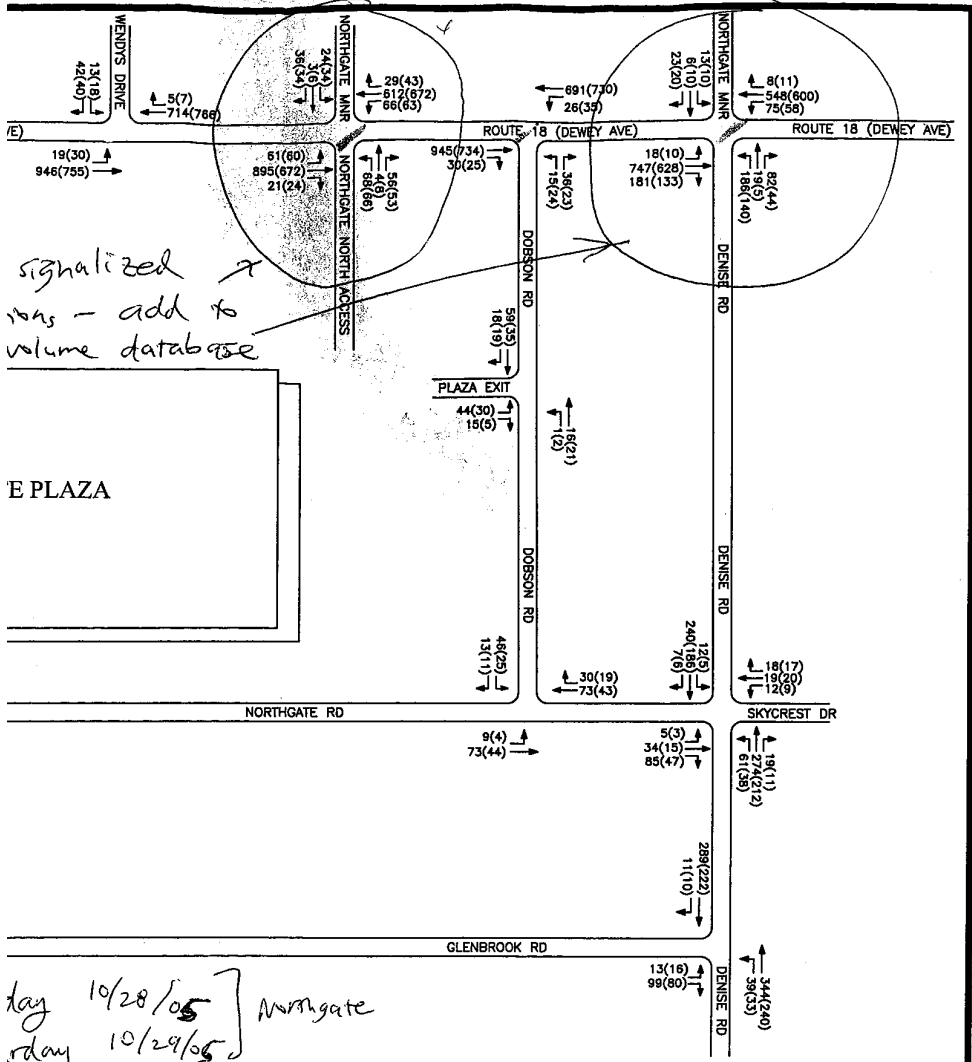
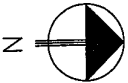
Peak Hour Volumes Existing Conditions

Figure 2





May have been counted in 2005 by SRF



signalized
has - add to
volume database

day 10/28/05 } Northgate
day 10/29/05 }

day 11/4/05 } Denise
day 11/5/05 }

KEY

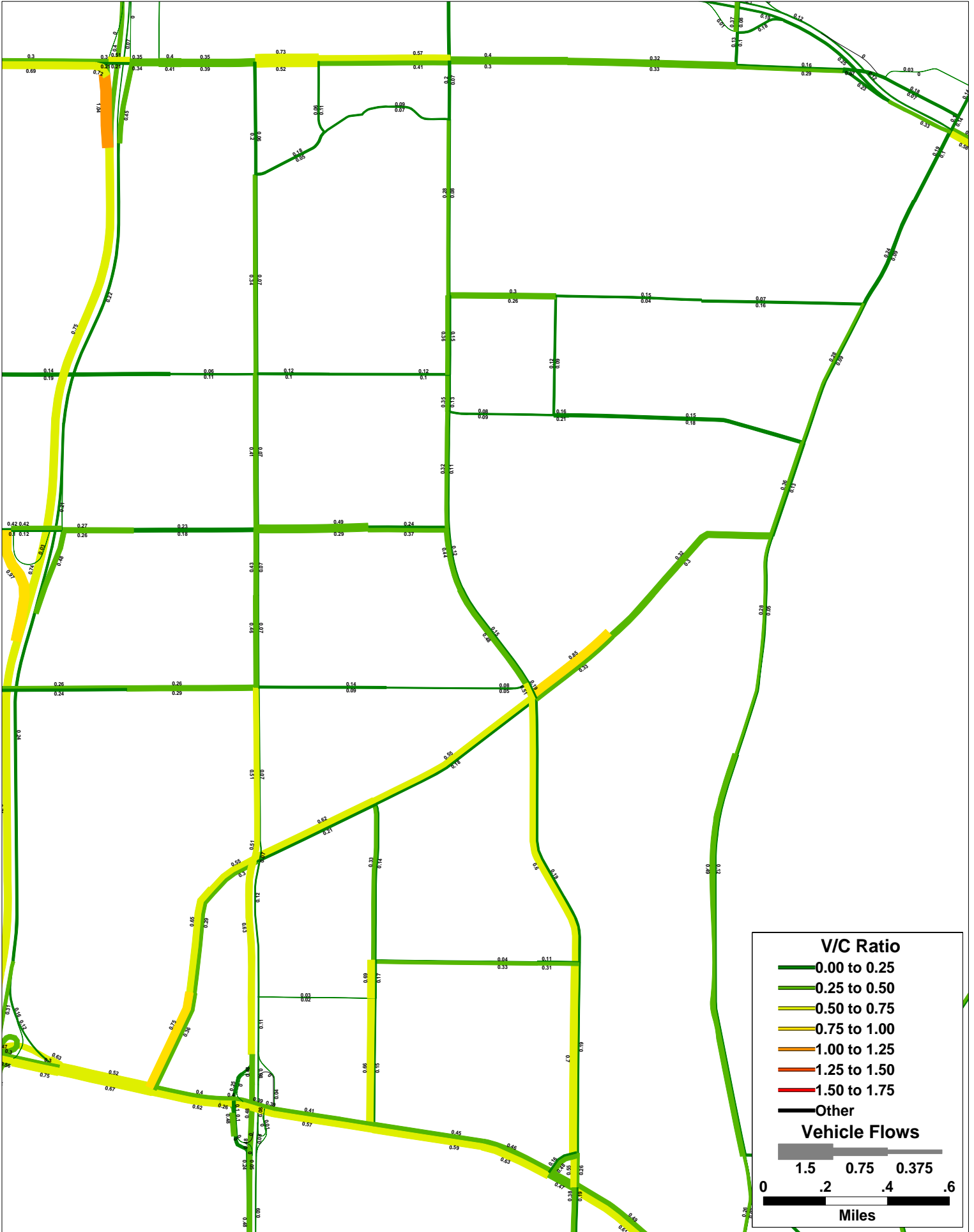
00(00) = PM(SAT)

FIGURE 4
PEAK HOUR VOLUMES
EXISTING CONDITIONS
WALMART NORTHGATE
TOWN OF GREECE, NY



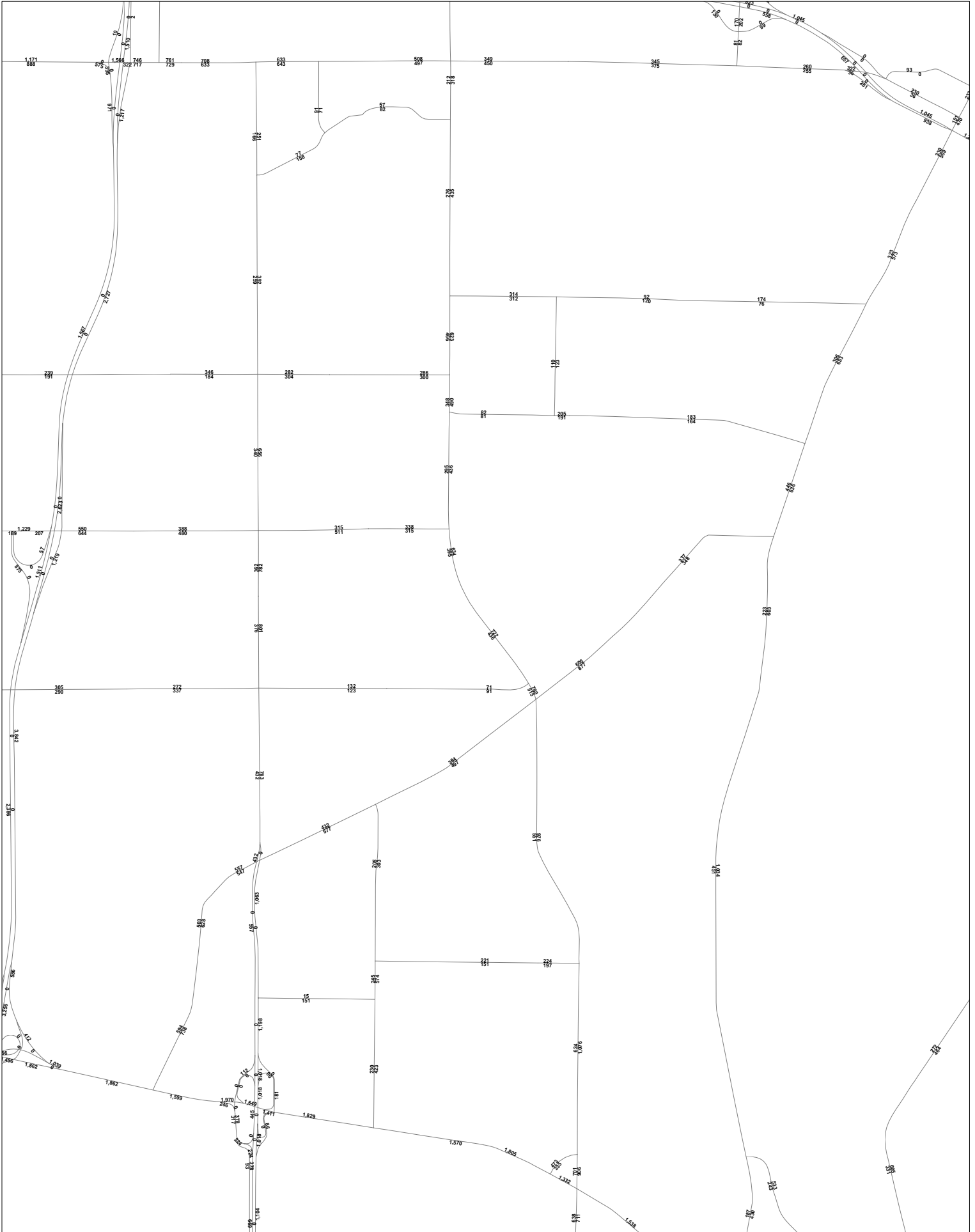
Dewey Avenue- 2019 No Build- AM Peak Hour Traffic Volumes

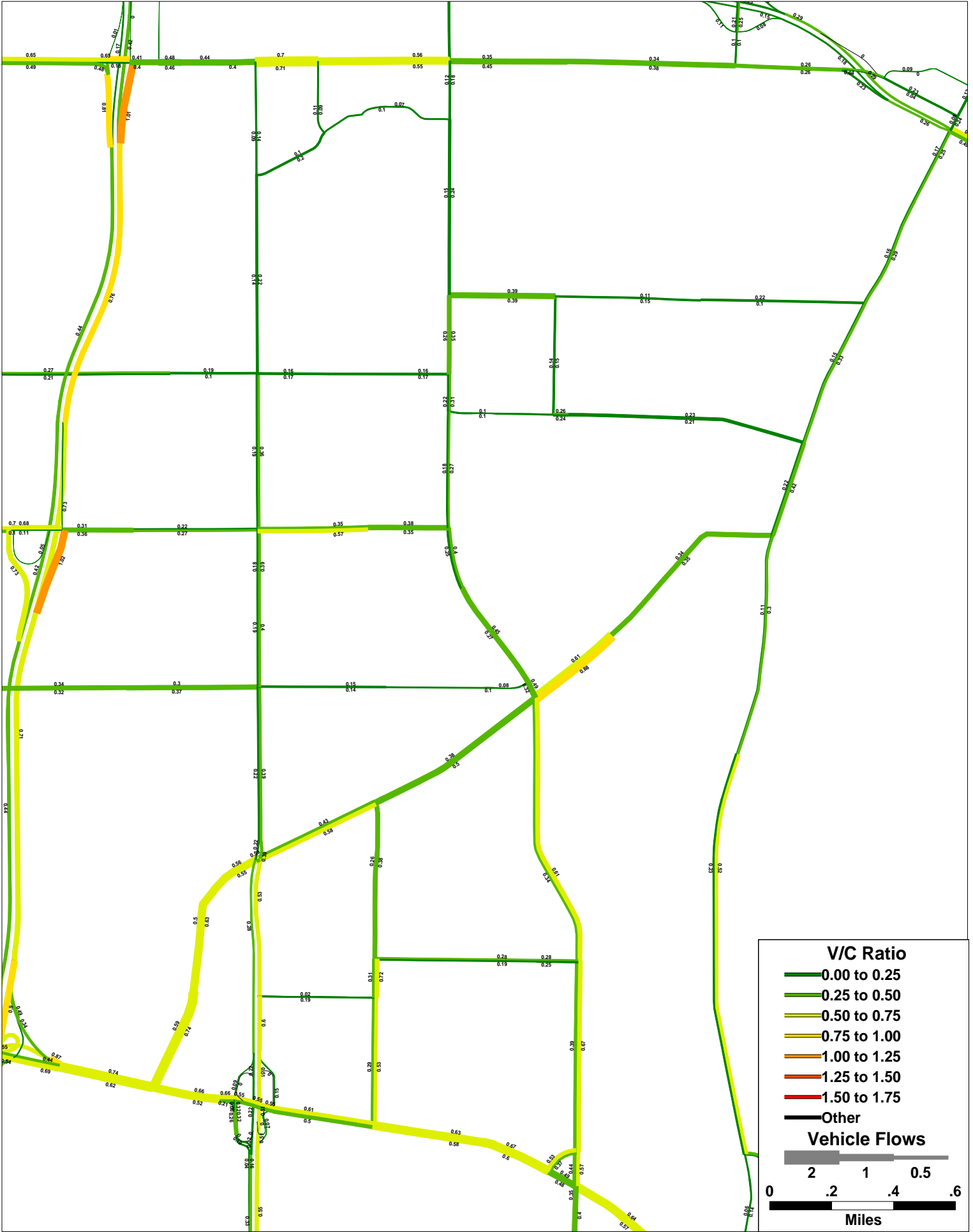
GTC, February 2009



Dewey Avenue- 2019 No Build- PM Peak Hour Volumes

GTC, February 2009



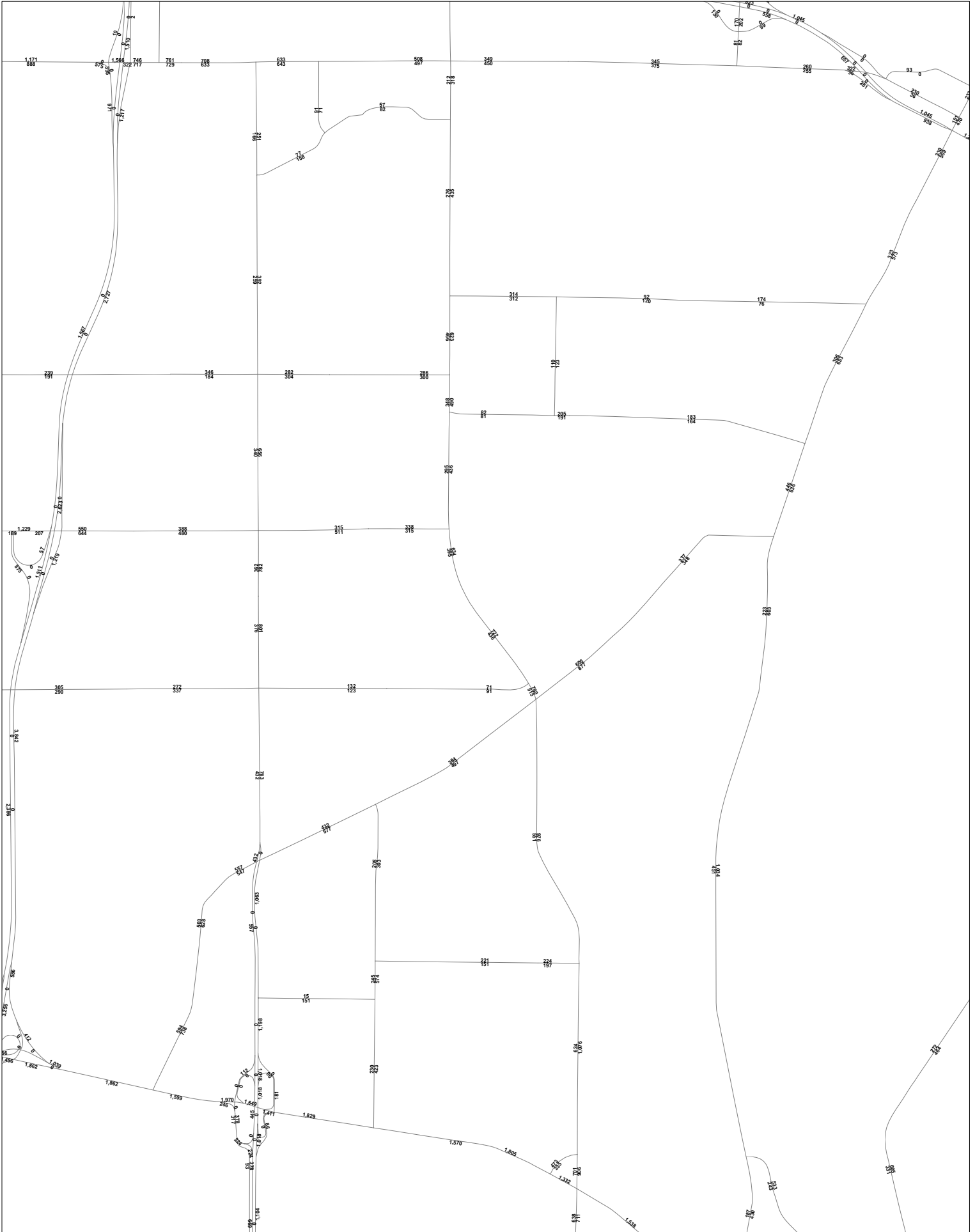


Dewey Avenue- 2019 No Build- AM Peak Hour Traffic Volumes

GTC, February 2009

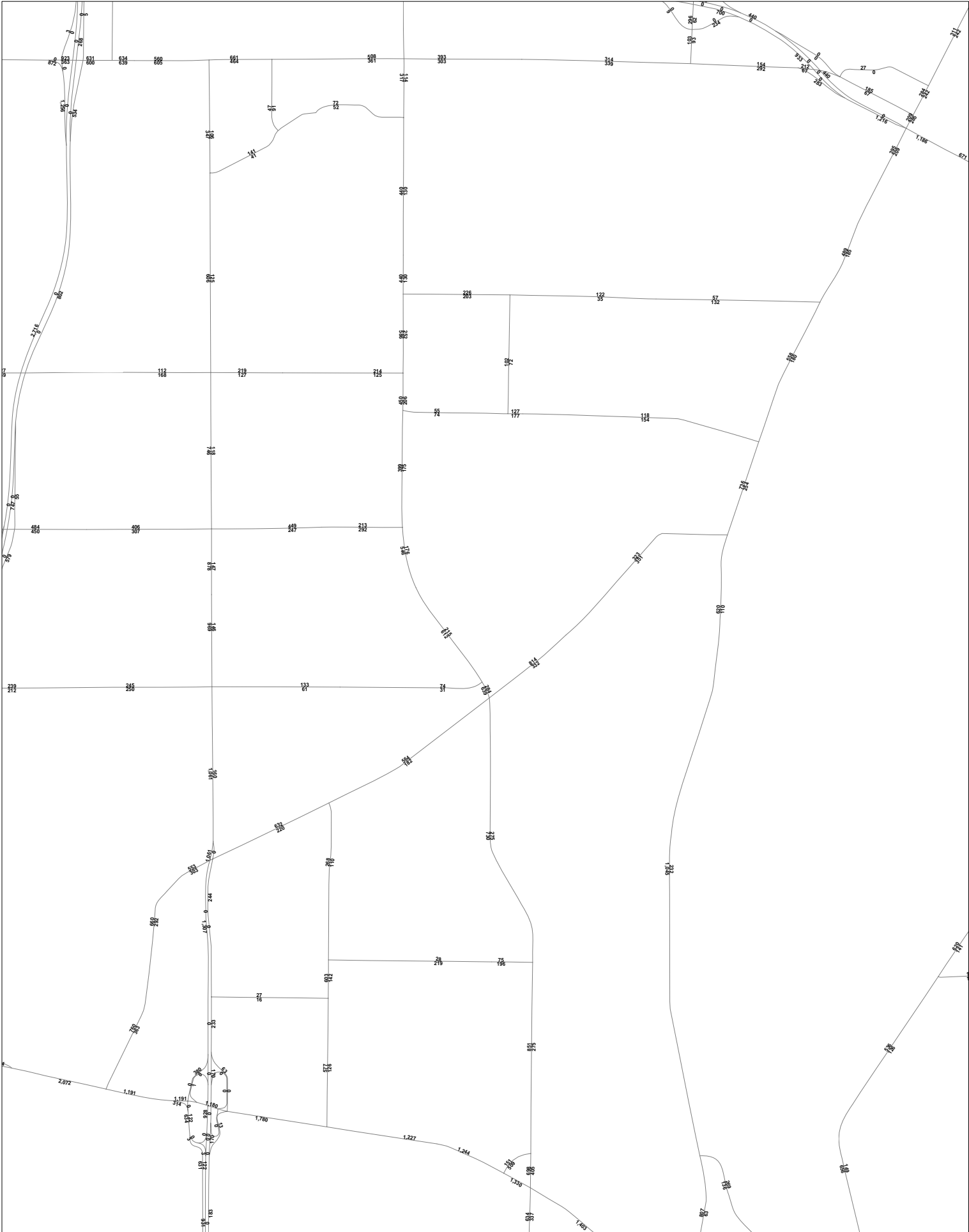
Dewey Avenue- 2019 No Build- PM Peak Hour Volumes

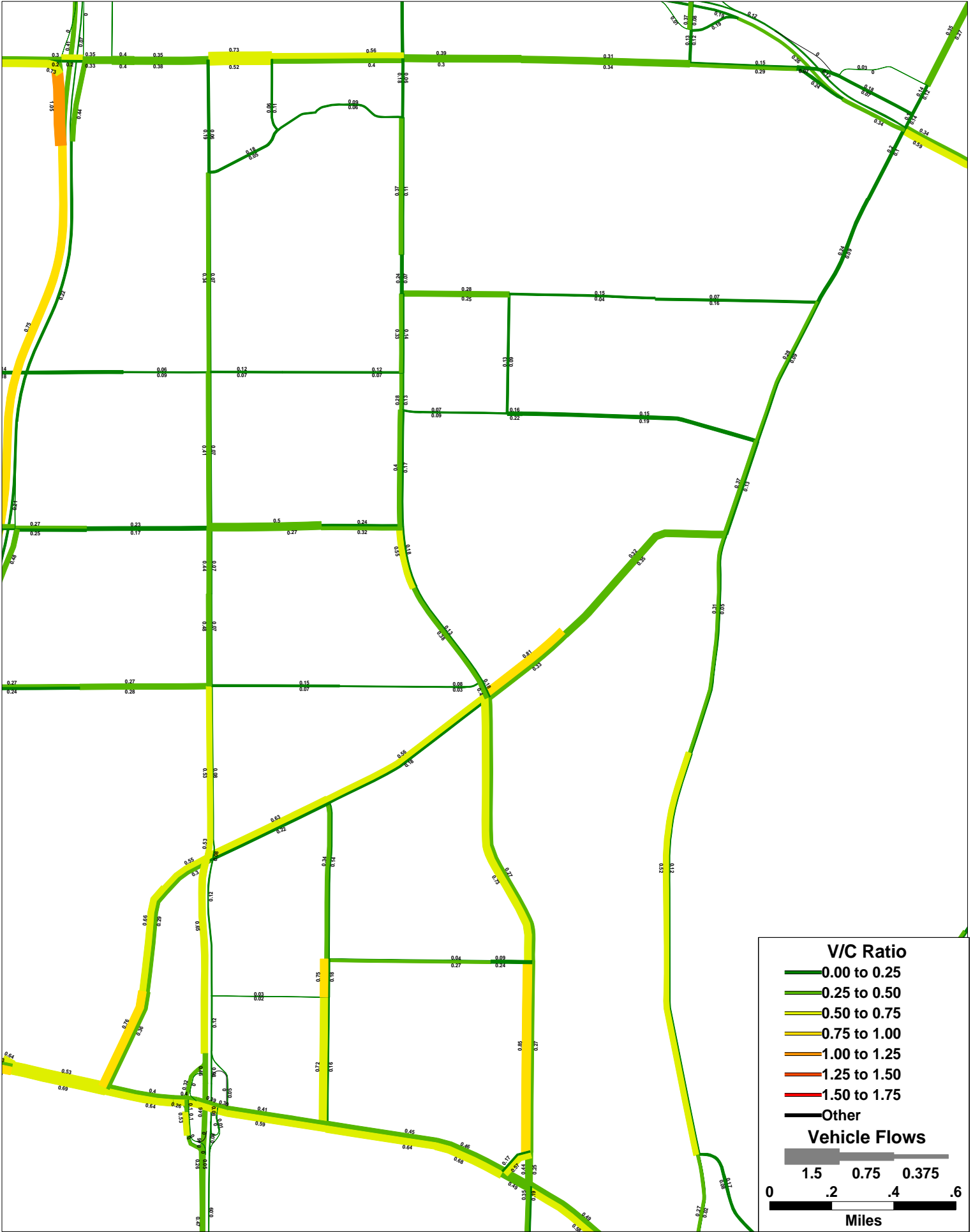
GTC, February 2009



Dewey Avenue- 2019 w/ Lane Reduction- AM Peak Hour Volumes

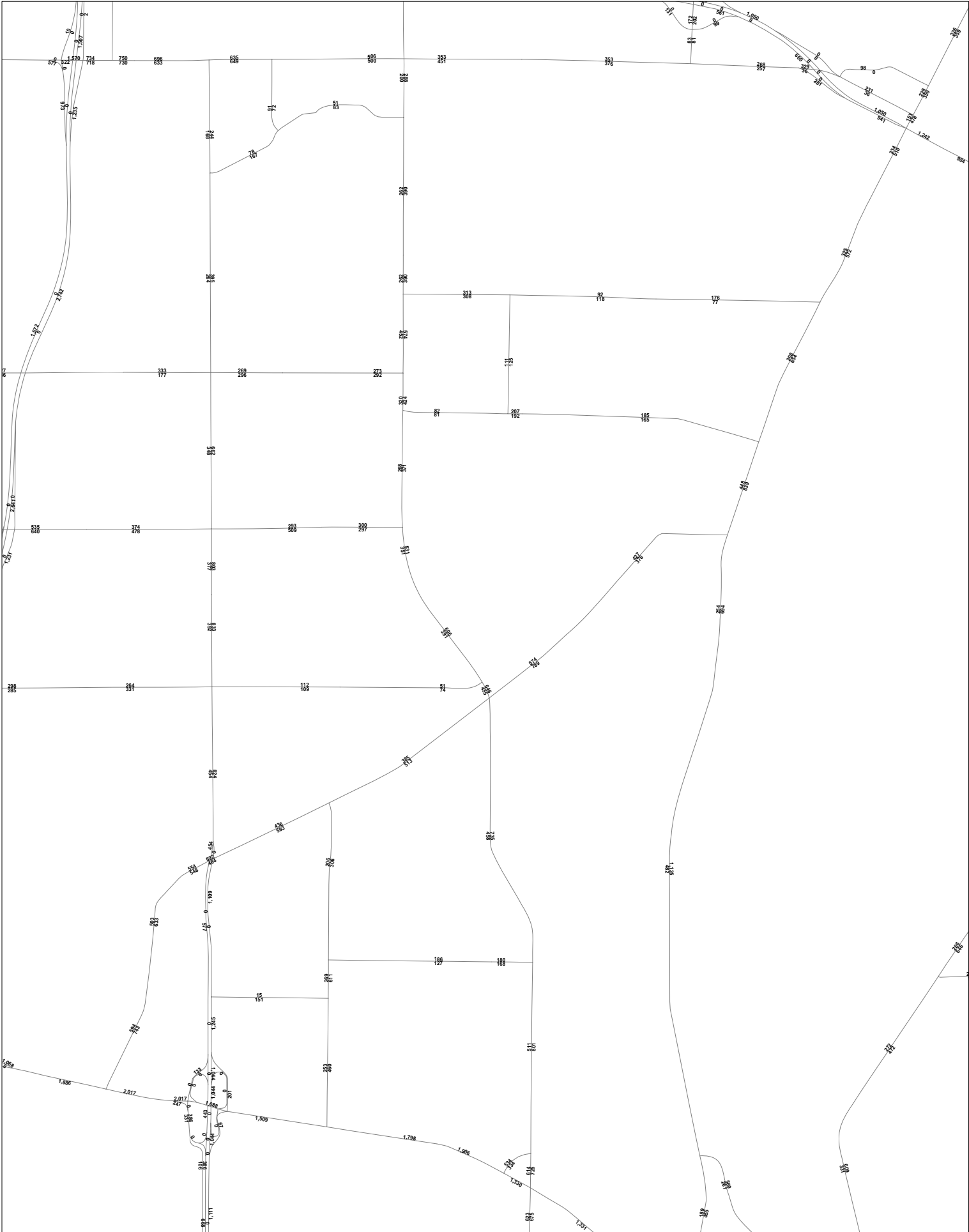
GTC, February 2009

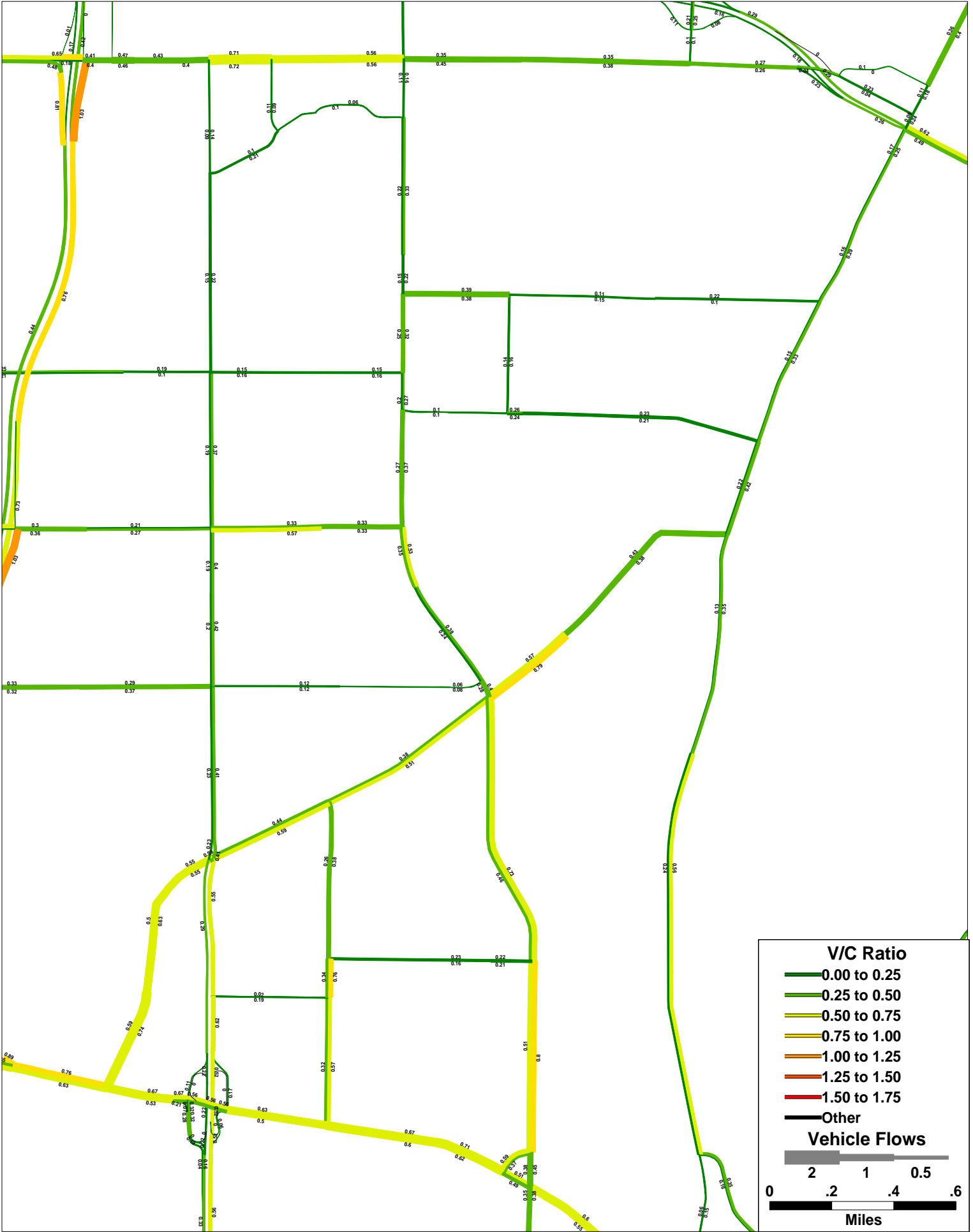




Dewey Avenue- 2019 w/ Lane Reduction- PM Peak Hour Volumes

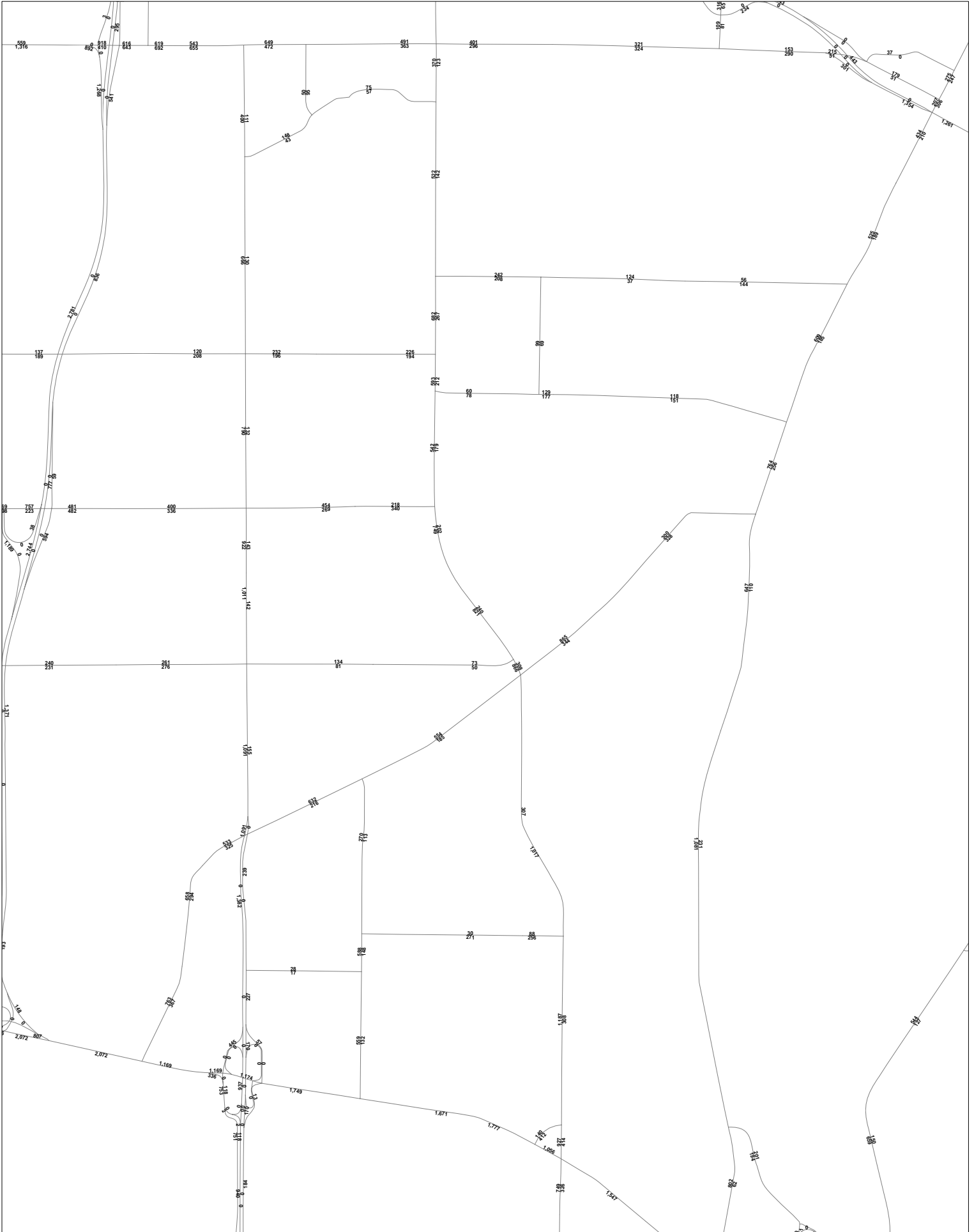
GTC, February 2009

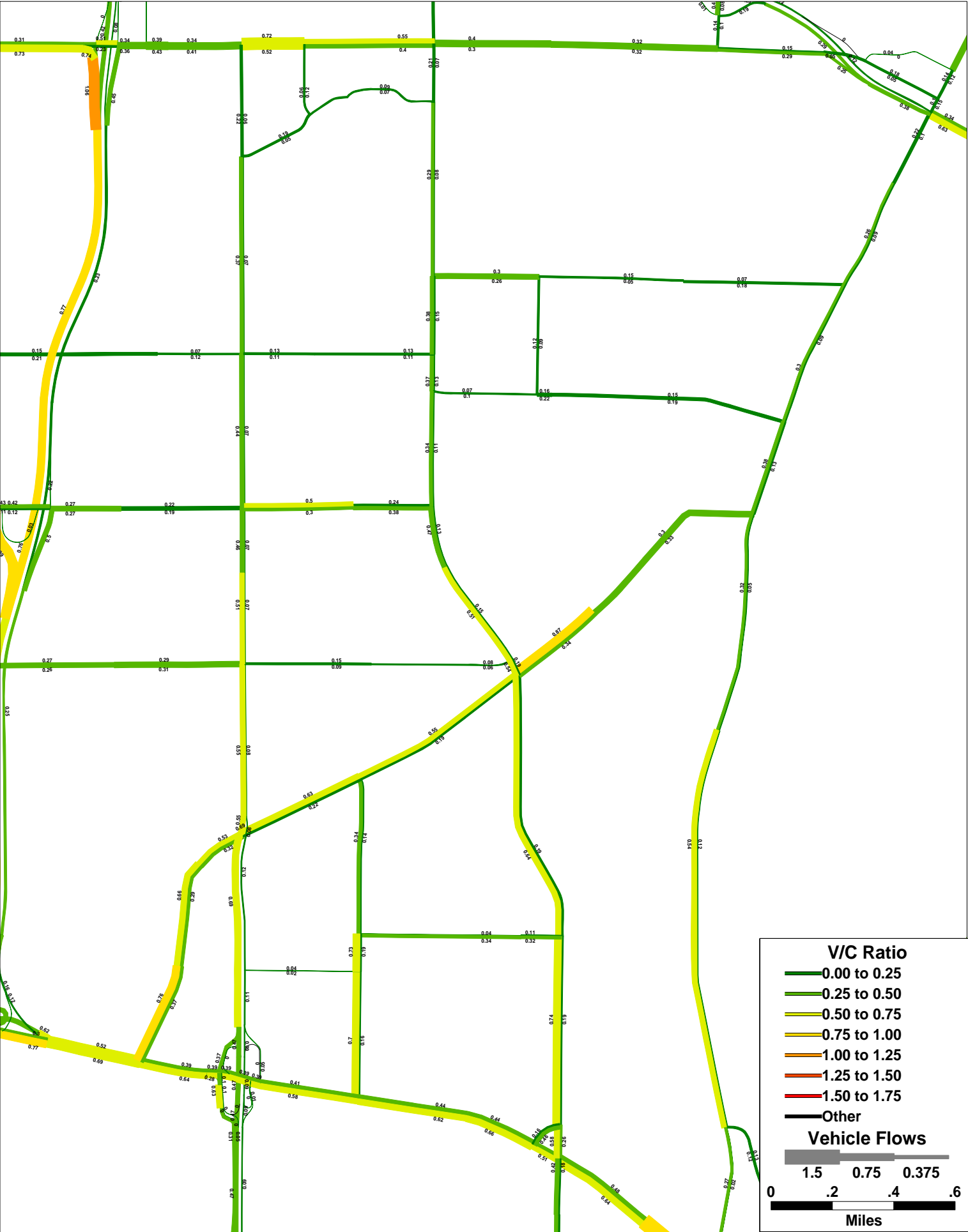




Dewey Avenue- 2031 No Build- AM Peak Hour Volumes

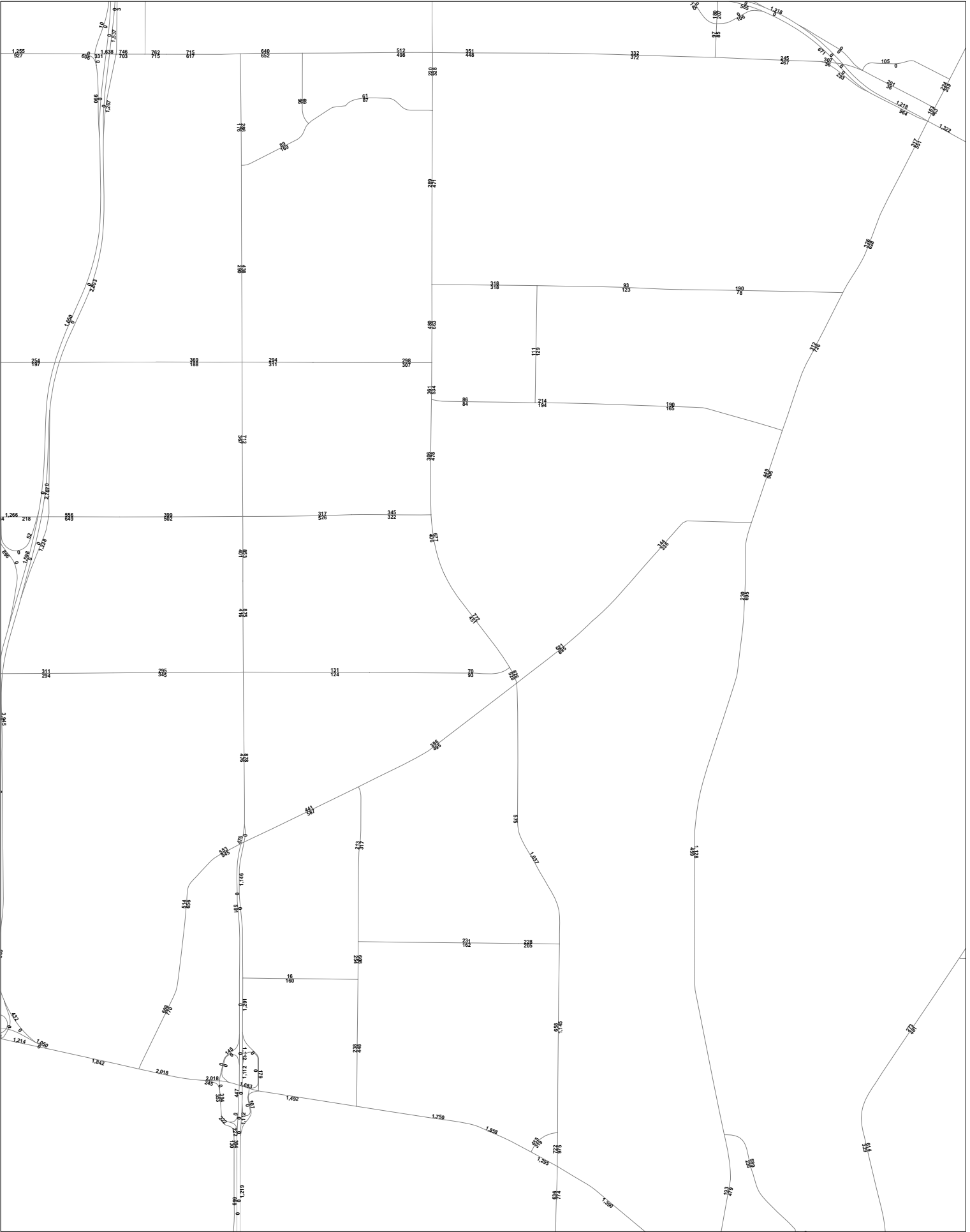
GTC, February 2009





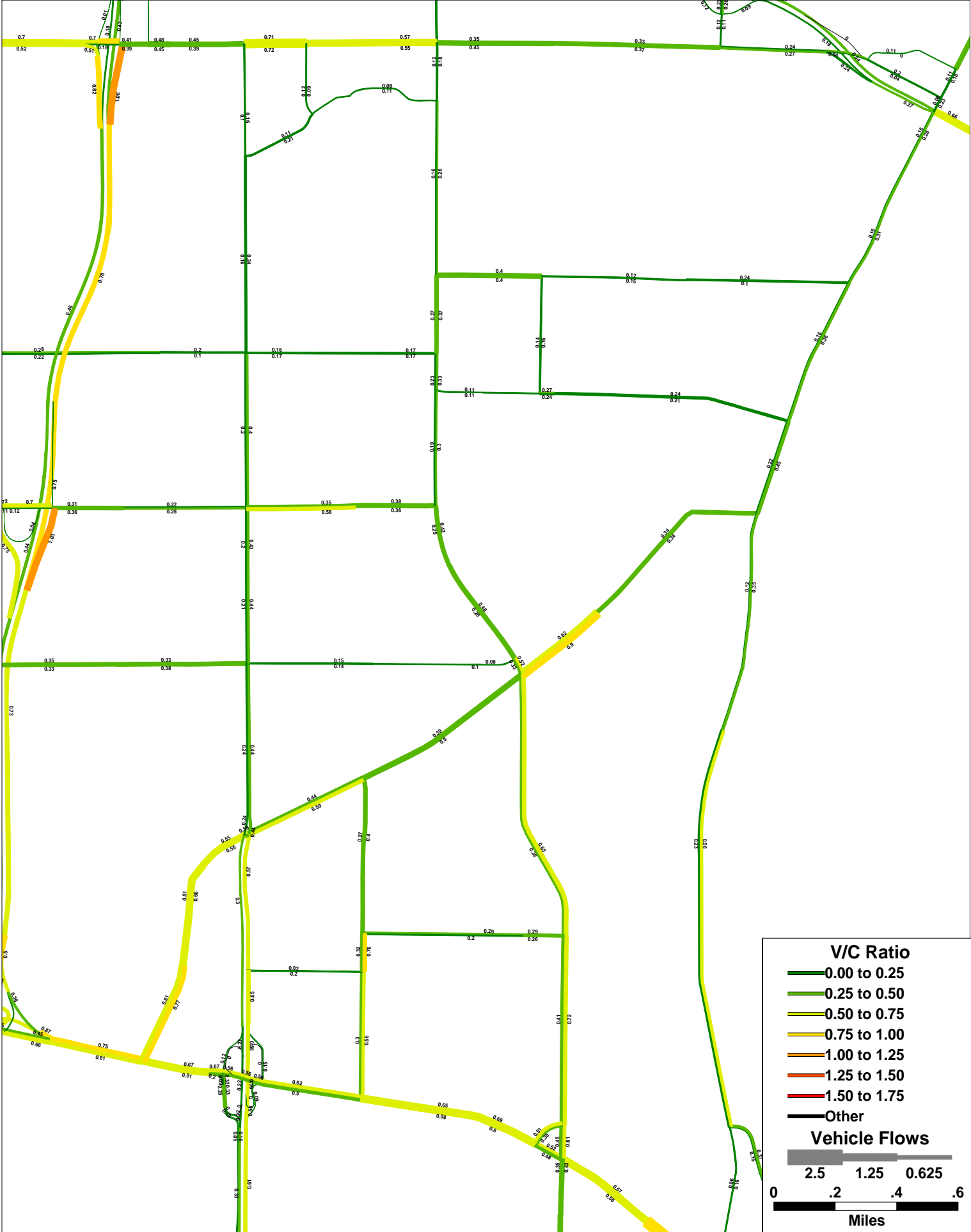
Dewey Avenue- 2031 No Build- PM Peak Hour Volumes

GTC, February 2009



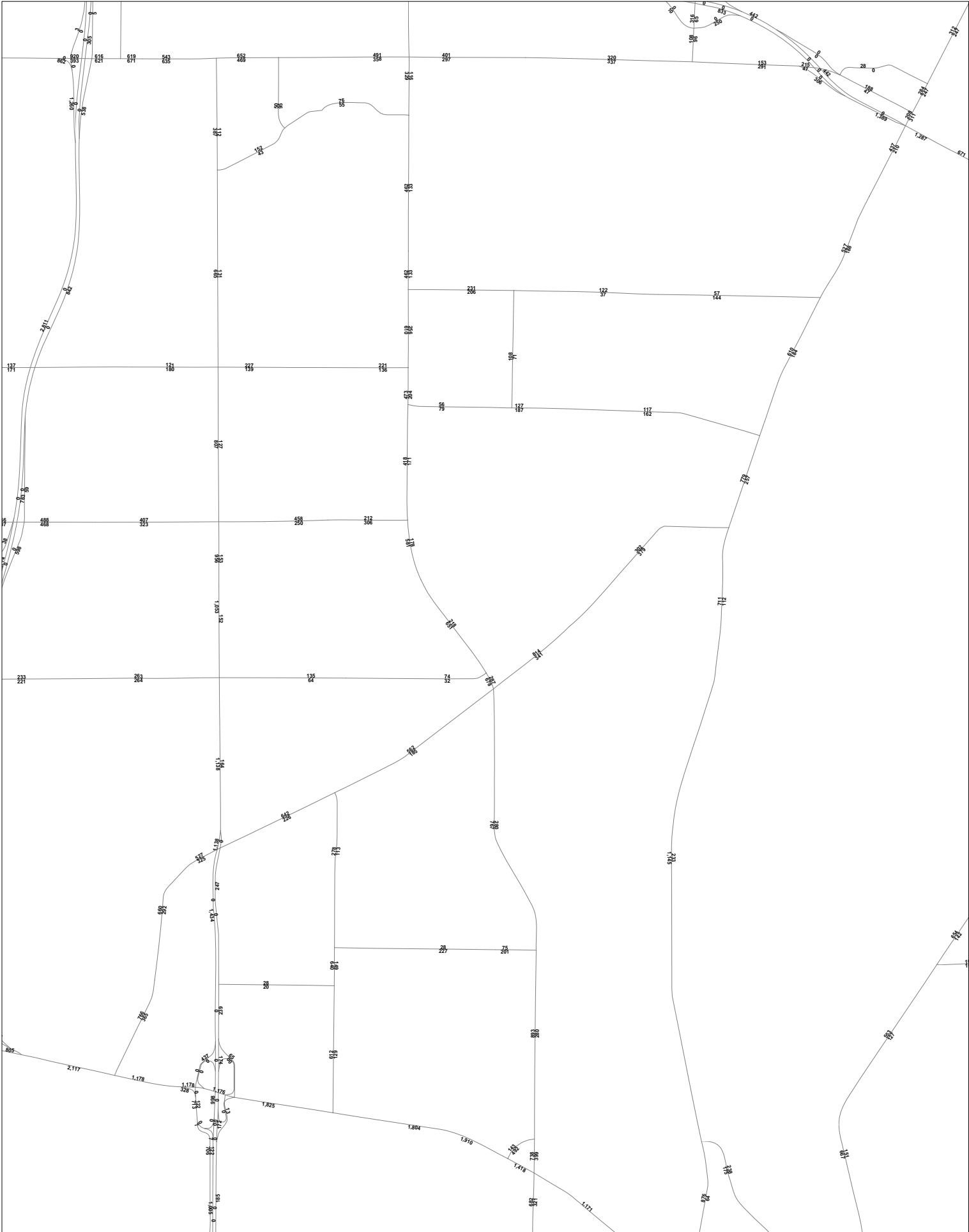
Dewey Avenue- 2031 No Build- PM Peak Hour Volume/Capacity Ratios

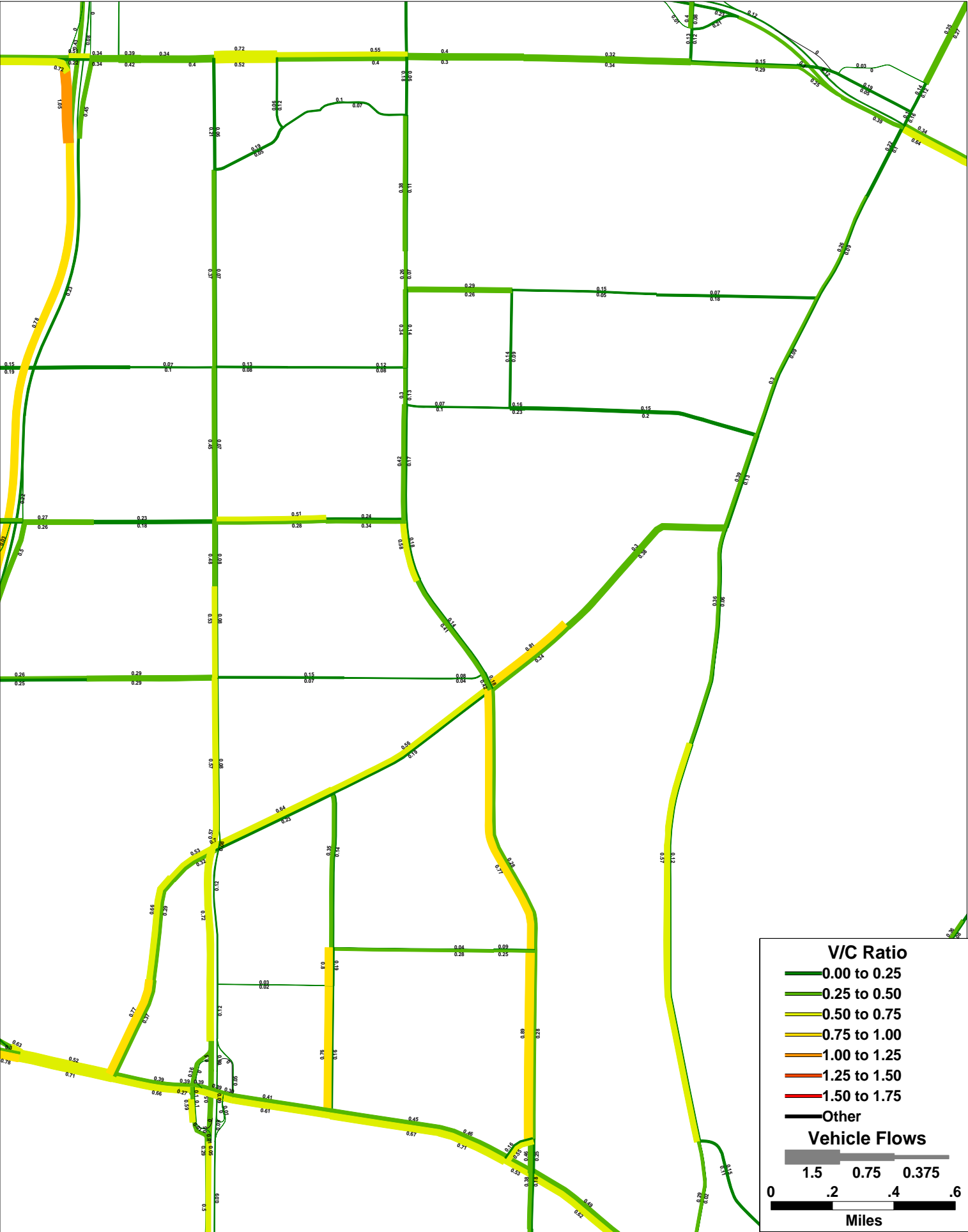
GTC, February 2009



Dewey Avenue- 2031 w/ Lane Reduction- AM Peak Hour Volumes

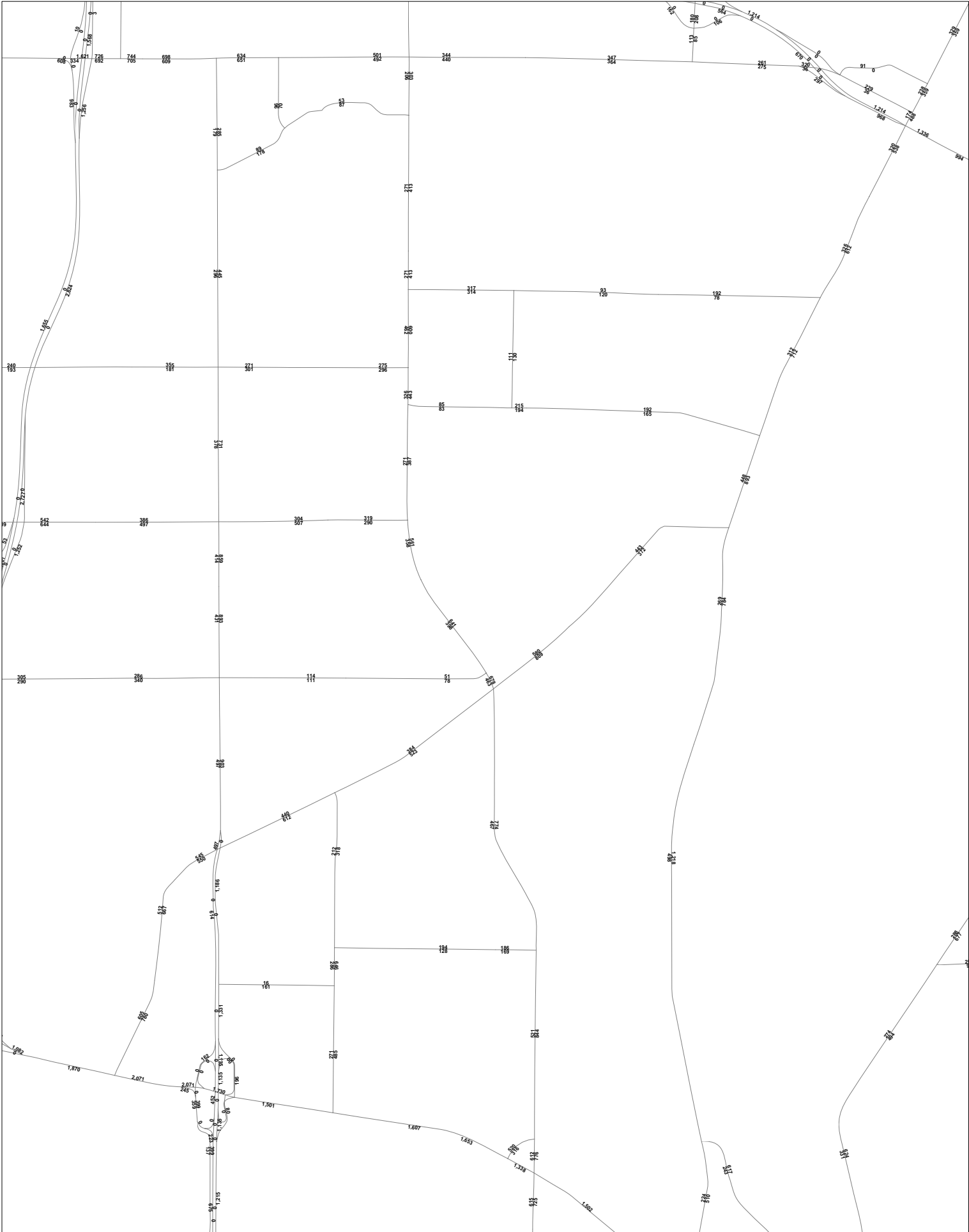
GTC, February 2009

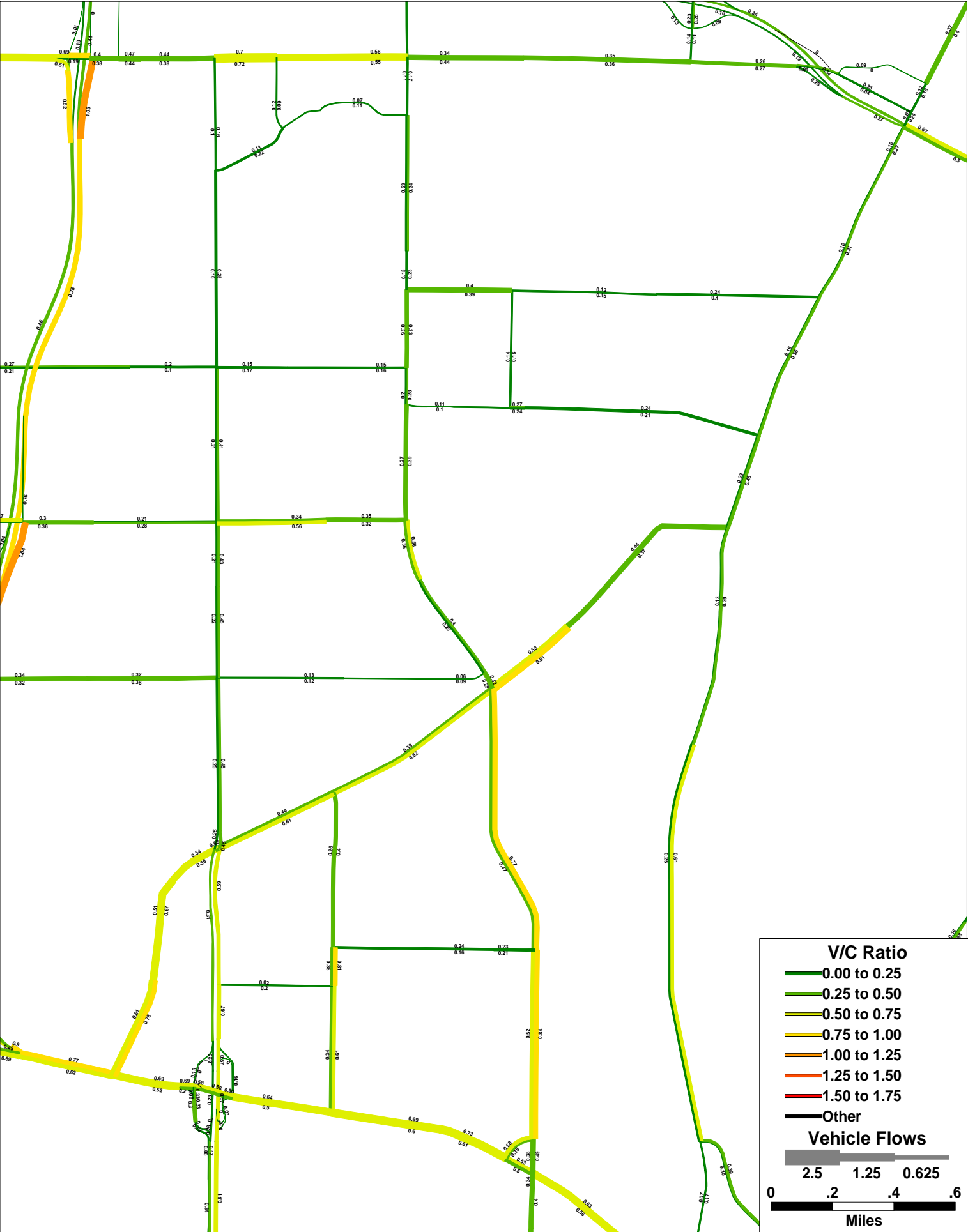




Dewey Avenue- 2031 w/ Lane Reduction- PM Peak Hour Volumes

GTC, February 2009





Pedestrian Level of Service Calculations

(East) Ridge-Eastman

	Please Select From the Drop Down	Points	Weight	Scores
Path Width	1.1 - 1.5 m	2	3	6
Surface Quality	Poor Quality	1	5	5
Obstruction (Per km)	1 to 4	3	3	9
Crossing Opportunities	Some, but not enough	2	4	8
Support Facilities	Few and well located	2	4	8
Connectivity	Reasonable	2	3	6
Path Environment	Acceptable, within 1 or 2 m of road	2	4	8
Potential for Conflict	Severe, over 25 per km	0	5	0
Pedestrian Volume	Less than 80 per day	4	1	4
Mix of Users	Under 20% non pedestrians	3	1	3
Personal Security	Good	3	3	9
TOTAL SCORE				66
PED LOS				D

(East) Eastman-Velox

	Please Select From the Drop Down	Points	Weight	Scores
Path Width	1.1 - 1.5 m	2	3	6
Surface Quality	Moderate Quality	2	5	10
Obstruction (Per km)	None	4	3	12
Crossing Opportunities	Some, but not enough	2	4	8
Support Facilities	Few and well located	2	4	8
Connectivity	Reasonable	2	3	6
Path Environment	Reasonable, within 2 or 3 m of road	3	4	12
Potential for Conflict	Severe, over 25 per km	0	5	0
Pedestrian Volume	Less than 80 per day	4	1	4
Mix of Users	Under 20% non pedestrians	3	1	3
Personal Security	Good	3	3	9
TOTAL SCORE				78
PED LOS				C

(East) Velox-Winchester

	Please Select From the Drop Down	Points	Weight	Scores
Path Width	1.1 - 1.5 m	2	3	6
Surface Quality	Acceptable Quality	3	5	15
Obstruction (Per km)	None	4	3	12
Crossing Opportunities	Some, but not enough	2	4	8
Support Facilities	Few and well located	2	4	8
Connectivity	Reasonable	2	3	6
Path Environment	Reasonable, within 2 or 3 m of road	3	4	12
Potential for Conflict	Severe, over 25 per km	0	5	0
Pedestrian Volume	Less than 80 per day	4	1	4
Mix of Users	Under 20% non pedestrians	3	1	3
Personal Security	Good	3	3	9
TOTAL SCORE				83
PED LOS				C

(East) Winchester-Bennington

	Please Select From the Drop Down	Points	Weight	Scores
Path Width	No Path	0	3	0
Surface Quality	Unsealed, Bumps	0	5	0
Obstruction (Per km)	1 to 4	3	3	9
Crossing Opportunities	Poorly located	1	4	4
Support Facilities	Few and far between	1	4	4
Connectivity	Reasonable	2	3	6
Path Environment	Pleasant, over 3 m from road	4	4	16
Potential for Conflict	Reasonable, 1 to 10 per km	3	5	15
Pedestrian Volume	Less than 80 per day	4	1	4
Mix of Users	Under 20% non pedestrians	3	1	3
Personal Security	Excellent	4	3	12
TOTAL SCORE				73
PED LOS				C

(East) Bennington-Barnard

	Please Select From the Drop Down	Points	Weight	Scores
Path Width	1.1 - 1.5 m	2	3	6
Surface Quality	Moderate Quality	2	5	10
Obstruction (Per km)	None	4	3	12
Crossing Opportunities	Some, but not enough	2	4	8
Support Facilities	Few and well located	2	4	8
Connectivity	Reasonable	2	3	6
Path Environment	Reasonable, within 2 or 3 m of road	3	4	12
Potential for Conflict	Severe, over 25 per km	0	5	0
Pedestrian Volume	Less than 80 per day	4	1	4
Mix of Users	Under 20% non pedestrians	3	1	3
Personal Security	Excellent	4	3	12
TOTAL SCORE				81
PED LOS				C

(East) Barnard-Shady Way

	Please Select From the Drop Down	Points	Weight	Scores
Path Width	1.1 - 1.5 m	2	3	6
Surface Quality	Moderate Quality	2	5	10
Obstruction (Per km)	None	4	3	12
Crossing Opportunities	Poorly located	1	4	4
Support Facilities	Few and well located	2	4	8
Connectivity	Reasonable	2	3	6
Path Environment	Acceptable, within 1 or 2 m of road	2	4	8
Potential for Conflict	Severe, over 25 per km	0	5	0
Pedestrian Volume	Less than 80 per day	4	1	4
Mix of Users	Under 20% non pedestrians	3	1	3
Personal Security	Excellent	4	3	12
TOTAL SCORE				73
PED LOS				C

(East) Shady Way-Maiden

	Please Select From the Drop Down	Points	Weight	Scores
Path Width	1.1 - 1.5 m	2	3	6
Surface Quality	Moderate Quality	2	5	10
Obstruction (Per km)	None	4	3	12
Crossing Opportunities	Adequate	3	4	12
Support Facilities	Adequate	3	4	12
Connectivity	Reasonable	2	3	6
Path Environment	Poor, less than 1 m of Road	1	4	4
Potential for Conflict	Severe, over 25 per km	0	5	0
Pedestrian Volume	Less than 80 per day	4	1	4
Mix of Users	Under 20% non pedestrians	3	1	3
Personal Security	Excellent	4	3	12
TOTAL SCORE				81
PED LOS				C

(East) Maiden-Clark

	Please Select From the Drop Down	Points	Weight	Scores
Path Width	1.1 - 1.5 m	2	3	6
Surface Quality	Acceptable Quality	3	5	15
Obstruction (Per km)	None	4	3	12
Crossing Opportunities	Some, but not enough	2	4	8
Support Facilities	Adequate	3	4	12
Connectivity	Reasonable	2	3	6
Path Environment	Acceptable, within 1 or 2 m of road	2	4	8
Potential for Conflict	Poor, 16 to 25 per km	1	5	5
Pedestrian Volume	Less than 80 per day	4	1	4
Mix of Users	Under 20% non pedestrians	3	1	3
Personal Security	Excellent	4	3	12
TOTAL SCORE				91
PED LOS				C

(East) Clark-Dorsey

	Please Select From the Drop Down	Points	Weight	Scores
Path Width	1.1 - 1.5 m	2	3	6
Surface Quality	Acceptable Quality	3	5	15
Obstruction (Per km)	None	4	3	12
Crossing Opportunities	Some, but not enough	2	4	8
Support Facilities	Adequate	3	4	12
Connectivity	Reasonable	2	3	6
Path Environment	Pleasant, over 3 m from road	4	4	16
Potential for Conflict	Reasonable, 1 to 10 per km	3	5	15
Pedestrian Volume	Less than 80 per day	4	1	4
Mix of Users	Under 20% non pedestrians	3	1	3
Personal Security	Excellent	4	3	12
TOTAL SCORE				109
PED LOS				B

(East) Dorsey-Ronald

	Please Select From the Drop Down	Points	Weight	Scores
Path Width	1.1 - 1.5 m	2	3	6
Surface Quality	Moderate Quality	2	5	10
Obstruction (Per km)	None	4	3	12
Crossing Opportunities	Poorly located	1	4	4
Support Facilities	Few and well located	2	4	8
Connectivity	Reasonable	2	3	6
Path Environment	Reasonable, within 2 or 3 m of road	3	4	12
Potential for Conflict	Reasonable, 1 to 10 per km	3	5	15
Pedestrian Volume	Less than 80 per day	4	1	4
Mix of Users	Under 20% non pedestrians	3	1	3
Personal Security	Excellent	4	3	12
TOTAL SCORE				92
PED LOS				C

(East) Ronald-Britton

	Please Select From the Drop Down	Points	Weight	Scores
Path Width	1.6 - 2.0 m	3	3	9
Surface Quality	Excellent Quality	4	5	20
Obstruction (Per km)	None	4	3	12
Crossing Opportunities	Adequate	3	4	12
Support Facilities	Adequate	3	4	12
Connectivity	Reasonable	2	3	6
Path Environment	Unpleasant, close to vehicles	0	4	0
Potential for Conflict	Reasonable, 1 to 10 per km	3	5	15
Pedestrian Volume	Less than 80 per day	4	1	4
Mix of Users	Under 20% non pedestrians	3	1	3
Personal Security	Excellent	4	3	12
TOTAL SCORE				105
PED LOS				B

(East) Britton-Dobson

	Please Select From the Drop Down	Points	Weight	Scores
Path Width	1.1 - 1.5 m	2	3	6
Surface Quality	Excellent Quality	4	5	20
Obstruction (Per km)	None	4	3	12
Crossing Opportunities	Adequate	3	4	12
Support Facilities	Adequate	3	4	12
Connectivity	Reasonable	2	3	6
Path Environment	Acceptable, within 1 or 2 m of road	2	4	8
Potential for Conflict	Moderate, 10 to 15 per km	2	5	10
Pedestrian Volume	Less than 80 per day	4	1	4
Mix of Users	Under 20% non pedestrians	3	1	3
Personal Security	Excellent	4	3	12
TOTAL SCORE				105
PED LOS				B

(East) Dobson-Lawson

	Please Select From the Drop Down	Points	Weight	Scores
Path Width	1.6 - 2.0 m	3	3	9
Surface Quality	Acceptable Quality	3	5	15
Obstruction (Per km)	None	4	3	12
Crossing Opportunities	Some, but not enough	2	4	8
Support Facilities	Adequate	3	4	12
Connectivity	Reasonable	2	3	6
Path Environment	Unpleasant, close to vehicles	0	4	0
Potential for Conflict	Severe, over 25 per km	0	5	0
Pedestrian Volume	Less than 80 per day	4	1	4
Mix of Users	Under 20% non pedestrians	3	1	3
Personal Security	Excellent	4	3	12
TOTAL SCORE				81
PED LOS				C

(East) Lawson-Rumson

	Please Select From the Drop Down	Points	Weight	Scores
Path Width	1.1 - 1.5 m	2	3	6
Surface Quality	Acceptable Quality	3	5	15
Obstruction (Per km)	None	4	3	12
Crossing Opportunities	Some, but not enough	2	4	8
Support Facilities	Few and well located	2	4	8
Connectivity	Reasonable	2	3	6
Path Environment	Acceptable, within 1 or 2 m of road	2	4	8
Potential for Conflict	Severe, over 25 per km	0	5	0
Pedestrian Volume	Less than 80 per day	4	1	4
Mix of Users	Under 20% non pedestrians	3	1	3
Personal Security	Excellent	4	3	12
TOTAL SCORE				82
PED LOS				C

(East) Rumson-Latta

	Please Select From the Drop Down	Points	Weight	Scores
Path Width	1.6 - 2.0 m	3	3	9
Surface Quality	Acceptable Quality	3	5	15
Obstruction (Per km)	None	4	3	12
Crossing Opportunities	Some, but not enough	2	4	8
Support Facilities	Few and well located	2	4	8
Connectivity	Reasonable	2	3	6
Path Environment	Unpleasant, close to vehicles	0	4	0
Potential for Conflict	Moderate, 10 to 15 per km	2	5	10
Pedestrian Volume	Less than 80 per day	4	1	4
Mix of Users	Under 20% non pedestrians	3	1	3
Personal Security	Excellent	4	3	12
TOTAL SCORE				87
PED LOS				C

NB Path Average
86

(West) Latta to Rumson

	Please Select From the Drop Down	Points	Weight	Scores
Path Width	1.6 - 2.0 m	3	3	9
Surface Quality	Acceptable Quality	3	5	15
Obstruction (Per km)	None	4	3	12
Crossing Opportunities	Some, but not enough	2	4	8
Support Facilities	Few and far between	1	4	4
Connectivity	Reasonable	2	3	6
Path Environment	Unpleasant, close to vehicles	0	4	0
Potential for Conflict	Severe, over 25 per km	0	5	0
Pedestrian Volume	Less than 80 per day	4	1	4
Mix of Users	Under 20% non pedestrians	3	1	3
Personal Security	Excellent	4	3	12
TOTAL SCORE			73	
PED LOS			C	

(West) Rumson-McGuire

	Please Select From the Drop Down	Points	Weight	Scores
Path Width	1.1 - 1.5 m	2	3	6
Surface Quality	Acceptable Quality	3	5	15
Obstruction (Per km)	None	4	3	12
Crossing Opportunities	Poorly located	1	4	4
Support Facilities	Nonexistent	0	4	0
Connectivity	Reasonable	2	3	6
Path Environment	Acceptable, within 1 or 2 m of road	2	4	8
Potential for Conflict	Severe, over 25 per km	0	5	0
Pedestrian Volume	Less than 80 per day	4	1	4
Mix of Users	Under 20% non pedestrians	3	1	3
Personal Security	Excellent	4	3	12
TOTAL SCORE			70	
PED LOS			C	

(West) McGuire-Denise

	Please Select From the Drop Down	Points	Weight	Scores
Path Width	1.6 - 2.0 m	3	3	9
Surface Quality	Acceptable Quality	3	5	15
Obstruction (Per km)	None	4	3	12
Crossing Opportunities	Some, but not enough	2	4	8
Support Facilities	Few and far between	1	4	4
Connectivity	Reasonable	2	3	6
Path Environment	Unpleasant, close to vehicles	0	4	0
Potential for Conflict	Severe, over 25 per km	0	5	0
Pedestrian Volume	Less than 80 per day	4	1	4
Mix of Users	Under 20% non pedestrians	3	1	3
Personal Security	Excellent	4	3	12
TOTAL SCORE			73	
PED LOS			C	

(West) Denise-Dobson

	Please Select From the Drop Down	Points	Weight	Scores
Path Width	1.6 - 2.0 m	3	3	9
Surface Quality	Moderate Quality	2	5	10
Obstruction (Per km)	None	4	3	12
Crossing Opportunities	Some, but not enough	2	4	8
Support Facilities	Few and far between	1	4	4
Connectivity	Reasonable	2	3	6
Path Environment	Unpleasant, close to vehicles	0	4	0
Potential for Conflict	Poor, 16 to 25 per km	1	5	5
Pedestrian Volume	Less than 80 per day	4	1	4
Mix of Users	Under 20% non pedestrians	3	1	3
Personal Security	Excellent	4	3	12
TOTAL SCORE			73	
PED LOS			C	

(West) Dobson-English

	Please Select From the Drop Down	Points	Weight	Scores
Path Width	1.6 - 2.0 m	3	3	9
Surface Quality	Moderate Quality	2	5	10
Obstruction (Per km)	None	4	3	12
Crossing Opportunities	Some, but not enough	2	4	8
Support Facilities	Few and far between	1	4	4
Connectivity	Reasonable	2	3	6
Path Environment	Unpleasant, close to vehicles	0	4	0
Potential for Conflict	Severe, over 25 per km	0	5	0
Pedestrian Volume	Less than 80 per day	4	1	4
Mix of Users	Under 20% non pedestrians	3	1	3
Personal Security	Excellent	4	3	12
TOTAL SCORE			68	
PED LOS			D	

(West) English-Leonard

	Please Select From the Drop Down	Points	Weight	Scores
Path Width	1.6 - 2.0 m	3	3	9
Surface Quality	Moderate Quality	2	5	10
Obstruction (Per km)	None	4	3	12
Crossing Opportunities	Some, but not enough	2	4	8
Support Facilities	Few and far between	1	4	4
Connectivity	Reasonable	2	3	6
Path Environment	Unpleasant, close to vehicles	0	4	0
Potential for Conflict	Severe, over 25 per km	0	5	0
Pedestrian Volume	Less than 80 per day	4	1	4
Mix of Users	Under 20% non pedestrians	3	1	3
Personal Security	Excellent	4	3	12
TOTAL SCORE			68	
PED LOS			D	

(West) Leonard-Mosley

	Please Select From the Drop Down	Points	Weight	Scores
Path Width	1.6 - 2.0 m	3	3	9
Surface Quality	Moderate Quality	2	5	10
Obstruction (Per km)	None	4	3	12
Crossing Opportunities	Some, but not enough	2	4	8
Support Facilities	Few and far between	1	4	4
Connectivity	Reasonable	2	3	6
Path Environment	Unpleasant, close to vehicles	0	4	0
Potential for Conflict	Severe, over 25 per km	0	5	0
Pedestrian Volume	Less than 80 per day	4	1	4
Mix of Users	Under 20% non pedestrians	3	1	3
Personal Security	Excellent	4	3	12
TOTAL SCORE			68	
PED LOS			D	

(West) Mosley-Hager

	Please Select From the Drop Down	Points	Weight	Scores
Path Width	1.1 - 1.5 m	2	3	6
Surface Quality	Acceptable Quality	3	5	15
Obstruction (Per km)	None	4	3	12
Crossing Opportunities	Poorly located	1	4	4
Support Facilities	Few and far between	1	4	4
Connectivity	Reasonable	2	3	6
Path Environment	Acceptable, within 1 or 2 m of road	2	4	8
Potential for Conflict	Severe, over 25 per km	0	5	0
Pedestrian Volume	Less than 80 per day	4	1	4
Mix of Users	Under 20% non pedestrians	3	1	3
Personal Security	Excellent	4	3	12
TOTAL SCORE			74	
PED LOS			C	

(West) Hager-Dorsey

	Please Select From the Drop Down	Points	Weight	Scores
Path Width	1.1 - 1.5 m	2	3	6
Surface Quality	Moderate Quality	2	5	10
Obstruction (Per km)	None	4	3	12
Crossing Opportunities	Some, but not enough	2	4	8
Support Facilities	Few and far between	1	4	4
Connectivity	Reasonable	2	3	6
Path Environment	Reasonable, within 2 or 3 m of road	3	4	12
Potential for Conflict	Severe, over 25 per km	0	5	0
Pedestrian Volume	Less than 80 per day	4	1	4
Mix of Users	Under 20% non pedestrians	3	1	3
Personal Security	Excellent	4	3	12
TOTAL SCORE			77	
PED LOS			C	

(West) Dorsey-Brookridge

	Please Select From the Drop Down	Points	Weight	Scores
Path Width	1.1 - 1.5 m	2	3	6
Surface Quality	Moderate Quality	2	5	10
Obstruction (Per km)	None	4	3	12
Crossing Opportunities	Some, but not enough	2	4	8
Support Facilities	Few and far between	1	4	4
Connectivity	Reasonable	2	3	6
Path Environment	Acceptable, within 1 or 2 m of road	2	4	8
Potential for Conflict	Poor, 16 to 25 per km	1	5	5
Pedestrian Volume	Less than 80 per day	4	1	4
Mix of Users	Under 20% non pedestrians	3	1	3
Personal Security	Excellent	4	3	12
TOTAL SCORE			78	
PED LOS			C	

(West) Brookridge-Briarcliff

	Please Select From the Drop Down	Points	Weight	Scores
Path Width	1.1 - 1.5 m	2	3	6
Surface Quality	Acceptable Quality	3	5	15
Obstruction (Per km)	None	4	3	12
Crossing Opportunities	Adequate	3	4	12
Support Facilities	Few and far between	1	4	4
Connectivity	Reasonable	2	3	6
Path Environment	Pleasant, over 3 m from road	4	4	16
Potential for Conflict	Severe, over 25 per km	0	5	0
Pedestrian Volume	Less than 80 per day	4	1	4
Mix of Users	Under 20% non pedestrians	3	1	3
Personal Security	Excellent	4	3	12
TOTAL SCORE			90	
PED LOS			C	

(West) Briarcliff-Maiden

	Please Select From the Drop Down	Points	Weight	Scores
Path Width	1.1 - 1.5 m	2	3	6
Surface Quality	Acceptable Quality	3	5	15
Obstruction (Per km)	None	4	3	12
Crossing Opportunities	Some, but not enough	2	4	8
Support Facilities	Adequate	3	4	12
Connectivity	Reasonable	2	3	6
Path Environment	Poor, less than 1 m of Road	1	4	4
Potential for Conflict	Poor, 16 to 25 per km	1	5	5
Pedestrian Volume	Less than 80 per day	4	1	4
Mix of Users	Under 20% non pedestrians	3	1	3
Personal Security	Excellent	4	3	12
TOTAL SCORE			87	
PED LOS			C	

(West) Maiden-Beaumont

	Please Select From the Drop Down	Points	Weight	Scores
Path Width	1.6 - 2.0 m	3	3	9
Surface Quality	Acceptable Quality	3	5	15
Obstruction (Per km)	None	4	3	12
Crossing Opportunities	Some, but not enough	2	4	8
Support Facilities	Adequate	3	4	12
Connectivity	Reasonable	2	3	6
Path Environment	Poor, less than 1 m of Road	1	4	4
Potential for Conflict	Poor, 16 to 25 per km	1	5	5
Pedestrian Volume	Less than 80 per day	4	1	4
Mix of Users	Under 20% non pedestrians	3	1	3
Personal Security	Excellent	4	3	12
TOTAL SCORE			90	
PED LOS			C	

(West) Beaumont-Dalston

	Please Select From the Drop Down	Points	Weight	Scores
Path Width	1.6 - 2.0 m	3	3	9
Surface Quality	Acceptable Quality	3	5	15
Obstruction (Per km)	None	4	3	12
Crossing Opportunities	Some, but not enough	2	4	8
Support Facilities	Few and well located	2	4	8
Connectivity	Reasonable	2	3	6
Path Environment	Unpleasant, close to vehicles	0	4	0
Potential for Conflict	Severe, over 25 per km	0	5	0
Pedestrian Volume	Less than 80 per day	4	1	4
Mix of Users	Under 20% non pedestrians	3	1	3
Personal Security	Excellent	4	3	12
TOTAL SCORE			77	
PED LOS			C	

(West) Dalston-Eastland

	Please Select From the Drop Down	Points	Weight	Scores
Path Width	1.1 - 1.5 m	2	3	6
Surface Quality	Acceptable Quality	3	5	15
Obstruction (Per km)	None	4	3	12
Crossing Opportunities	Some, but not enough	2	4	8
Support Facilities	Few and well located	2	4	8
Connectivity	Reasonable	2	3	6
Path Environment	Acceptable, within 1 or 2 m of road	2	4	8
Potential for Conflict	Severe, over 25 per km	0	5	0
Pedestrian Volume	Less than 80 per day	4	1	4
Mix of Users	Under 20% non pedestrians	3	1	3
Personal Security	Excellent	4	3	12
TOTAL SCORE			82	
PED LOS			C	

(West) Eastland-Bennington

	Please Select From the Drop Down	Points	Weight	Scores
Path Width	1.1 - 1.5 m	2	3	6
Surface Quality	Acceptable Quality	3	5	15
Obstruction (Per km)	None	4	3	12
Crossing Opportunities	Some, but not enough	2	4	8
Support Facilities	Few and well located	2	4	8
Connectivity	Reasonable	2	3	6
Path Environment	Acceptable, within 1 or 2 m of road	2	4	8
Potential for Conflict	Poor, 16 to 25 per km	1	5	5
Pedestrian Volume	Less than 80 per day	4	1	4
Mix of Users	Under 20% non pedestrians	3	1	3
Personal Security	Excellent	4	3	12
TOTAL SCORE			87	
PED LOS			C	

(West) Bennington-Lenriet

	Please Select From the Drop Down	Points	Weight	Scores
Path Width	1.1 - 1.5 m	2	3	6
Surface Quality	Acceptable Quality	3	5	15
Obstruction (Per km)	None	4	3	12
Crossing Opportunities	Some, but not enough	2	4	8
Support Facilities	Few and well located	2	4	8
Connectivity	Reasonable	2	3	6
Path Environment	Acceptable, within 1 or 2 m of road	2	4	8
Potential for Conflict	Severe, over 25 per km	0	5	0
Pedestrian Volume	Less than 80 per day	4	1	4
Mix of Users	Under 20% non pedestrians	3	1	3
Personal Security	Excellent	4	3	12
TOTAL SCORE			82	
PED LOS			C	

(West) Lenriet-Velox

	Please Select From the Drop Down	Points	Weight	Scores
Path Width	1.1 - 1.5 m	2	3	6
Surface Quality	Moderate Quality	2	5	10
Obstruction (Per km)	None	4	3	12
Crossing Opportunities	Some, but not enough	2	4	8
Support Facilities	Few and well located	2	4	8
Connectivity	Reasonable	2	3	6
Path Environment	Reasonable, within 2 or 3 m of road	3	4	12
Potential for Conflict	Severe, over 25 per km	0	5	0
Pedestrian Volume	Less than 80 per day	4	1	4
Mix of Users	Under 20% non pedestrians	3	1	3
Personal Security	Excellent	4	3	12
TOTAL SCORE			81	
PED LOS			C	

(West) Velox-Ridge

	Please Select From the Drop Down	Points	Weight	Scores
Path Width	1.1 - 1.5 m	2	3	6
Surface Quality	Acceptable Quality	3	5	15
Obstruction (Per km)	None	4	3	12
Crossing Opportunities	Poorly located	1	4	4
Support Facilities	Few and well located	2	4	8
Connectivity	Reasonable	2	3	6
Path Environment	Poor, less than 1 m of Road	1	4	4
Potential for Conflict	Severe, over 25 per km	0	5	0
Pedestrian Volume	Less than 80 per day	4	1	4
Mix of Users	Under 20% non pedestrians	3	1	3
Personal Security	Excellent	4	3	12
TOTAL SCORE			74	
PED LOS			C	

SB Path Average
77.47368421

LEVEL OF SERVICE: CRITERIA/DEFINITIONS

Level of Service Criteria

Highway Capacity Manual 2000

SIGNALIZED INTERSECTIONS

Level of Service is a qualitative measure describing operational conditions within a traffic stream, based on service measures such as speed and travel time, freedom to maneuver, traffic interruptions, comfort, and convenience. Level of Service for signalized intersections is defined in terms of delay specifically, average total delay per vehicle for a 15 minute analysis period. The ranges are as follows:

Level of Service	Control Delay per vehicle (seconds)
A	< 10
B	10 – 20
C	20 – 35
D	35 – 55
E	55 – 80
F	>80

UNSIGNALIZED INTERSECTIONS

Level of Service for unsignalized intersections is also defined in terms of delay. However, the delay criteria are different from a signalized intersection. The primary reason for this is driver expectation that a signalized intersection is designed to carry higher volumes than an unsignalized intersection. The total delay threshold for any given Level of Service is less for an unsignalized intersection than for a signalized intersection. The ranges are as follows:

Level of Service	Control Delay per vehicle (seconds)
A	< 10
B	10 – 15
C	15 – 25
D	25 – 35
E	35 - 50
F	>50

LEVEL OF SERVICE: CALCULATIONS

LOS CALCULATIONS: EXISTING CONDITIONS

Dewey Avenue Corridor Study
4: W Ridge & Dewey

Existing Conditions - AM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	78	1569	149	46	1071	88	87	148	37	434	355	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	10	10	10	10	11	11	10	11	11
Storage Length (ft)	160		0	280		0	150		0	80		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.987			0.989			0.970			0.995	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1652	4685	0	1652	4694	0	1652	3319	0	1652	3404	0
Flt Permitted	0.141			0.065			0.374			0.433		
Satd. Flow (perm)	245	4685	0	113	4694	0	650	3319	0	753	3404	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			13			25			3	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		497			667			1166			580	
Travel Time (s)		9.7			13.0			26.5			13.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	87	1743	166	51	1190	98	97	164	41	482	394	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	87	1909	0	51	1288	0	97	205	0	482	408	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.04	1.04	1.09	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	30	19		40	19		25	30		25	40	
Trailing Detector (ft)	-10	19		-10	19		-10	25		-10	35	
Detector 1 Position(ft)	-10	19		-10	19		-10	25		-10	35	
Detector 1 Size(ft)	40	0		50	0		35	5		35	5	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		
Detector Phase	5	2		1	6		7	4		3	8	
Switch Phase												
Minimum Initial (s)	4.0	29.0		4.0	29.0		4.0	12.0		4.0	12.0	
Minimum Split (s)	10.0	35.0		10.0	35.0		12.0	36.0		12.0	34.0	
Total Split (s)	12.0	52.0	0.0	12.0	52.0	0.0	20.0	36.0	0.0	20.0	36.0	0.0

7:30 am Baseline
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Synchro 7 - Report
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Dewey Avenue Corridor Study
4: W Ridge & Dewey

Existing Conditions - AM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	10.0%	43.3%	0.0%	10.0%	43.3%	0.0%	16.7%	30.0%	0.0%	16.7%	30.0%	0.0%
Maximum Green (s)	7.0	46.0		7.0	46.0		15.0	30.0		15.0	30.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0		3.5	4.0	
All-Red Time (s)	1.5	2.0		1.5	2.0		1.5	2.0		1.5	2.0	
Lost Time Adjust (s)	-2.0	-3.0	-1.0	-2.0	-3.0	-1.0	-2.0	-3.0	-1.0	-2.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	4.0		2.0	4.0	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		7.0			12.0			7.0			7.0	
Flash Dont Walk (s)		22.0			17.0			23.0			21.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effect Green (s)	73.6	65.7		70.8	62.6		31.0	19.1		38.7	24.1	
Actuated g/C Ratio	0.61	0.55		0.59	0.52		0.26	0.16		0.32	0.20	
v/c Ratio	0.33	0.74		0.30	0.52		0.36	0.37		1.30	0.59	
Control Delay	13.0	21.5		22.7	16.8		32.0	40.5		187.5	47.8	
Queue Delay	0.0	0.1		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	13.0	21.6		22.7	16.8		32.0	40.5		187.5	47.8	
LOS	B	C		C	B		C	D		F	D	
Approach Delay		21.2			17.0			37.8			123.5	
Approach LOS		C			B			D			F	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 71 (59%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.30

Intersection Signal Delay: 41.2

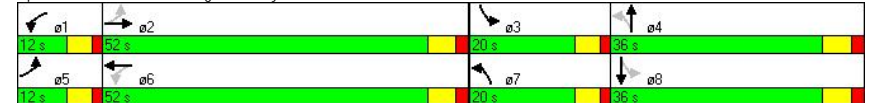
Intersection Capacity Utilization 84.3%

Analysis Period (min) 15

Intersection LOS: D

ICU Level of Service E

Splits and Phases: 4: W Ridge & Dewey



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Dewey Avenue Corridor Study
14: Eastman & Dewey

Existing Conditions - AM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	53	0	15	0	239	280	166	603	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	10	10	10	10	10	10	10	10	10
Storage Length (ft)	100		0	50		0	50		0	240		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt					0.850			0.919				
Flt Protected				0.950						0.950		
Satd. Flow (prot)	1739	1739	0	1652	1478	0	1739	3036	0	1652	3303	0
Flt Permitted				0.757						0.429		
Satd. Flow (perm)	1739	1739	0	1316	1478	0	1739	3036	0	746	3303	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					496			311				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		583			686			580			1020	
Travel Time (s)		13.3			15.6			13.2			23.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	59	0	17	0	266	311	184	670	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	59	17	0	0	577	0	184	670	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (mph)	15		9	15		9		15	9	15		9
Number of Detectors	1	1		2	2		1	1		1	1	
Detector Template												
Leading Detector (ft)	15	15		45	45		19	19		19	19	
Trailing Detector (ft)	0	0		-10	-10		19	19		19	19	
Detector 1 Position(ft)	0	0		-10	-10		19	19		19	19	
Detector 1 Size(ft)	15	15		6	6		0	0		0	0	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)				39	39							
Detector 2 Size(ft)				6	6							
Detector 2 Type				Cl+Ex	Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)				0.0	0.0							
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			2			1			1	
Permitted Phases	2			2			1			1		

7:30 am Baseline
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Dewey Avenue Corridor Study
14: Eastman & Dewey

Existing Conditions - AM
6/15/2010

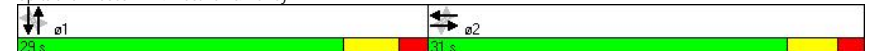
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	2	2		2	2		1	1		1	1	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		23.0	23.0		23.0	23.0	
Minimum Split (s)	31.0	31.0		31.0	31.0		29.0	29.0		29.0	29.0	
Total Split (s)	31.0	31.0	0.0	31.0	31.0	0.0	29.0	29.0	0.0	29.0	29.0	0.0
Total Split (%)	51.7%	51.7%	0.0%	51.7%	51.7%	0.0%	48.3%	48.3%	0.0%	48.3%	48.3%	0.0%
Maximum Green (s)	25.5	25.5		25.5	25.5		23.0	23.0		23.0	23.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.5	-2.5	-1.0	-2.5	-2.5	-1.0	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lag	Lag		Lag	Lag		Lead	Lead		Lead	Lead	
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		4.0	4.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	18.0	18.0		18.0	18.0		16.0	16.0		16.0	16.0	
Pedestrian Calls (#/hr)	1	1		1	1		0	0		0	0	
Act Effect Green (s)				14.4	14.4		45.9	45.9		45.9	45.9	
Actuated g/C Ratio				0.24	0.24		0.76	0.76		0.76	0.76	
v/c Ratio				0.19	0.02		0.24	0.32		0.32	0.27	
Control Delay				16.9	0.1		1.6	9.0		5.4	5.4	
Queue Delay				0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay				16.9	0.1		1.6	9.0		5.4	5.4	
LOS				B	A		A	A		A	A	
Approach Delay					13.2		1.6	6.2		6.2	6.2	
Approach LOS					B		A	A		A	A	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 33 (55%), Referenced to phase 1:NBSB, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.32
Intersection Signal Delay: 4.8
Intersection Capacity Utilization 53.3%
Analysis Period (min) 15

Intersection LOS: A
ICU Level of Service A

Splits and Phases: 14: Eastman & Dewey



7:30 am Baseline
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Dewey Avenue Corridor Study
15: Christian & Dewey

Existing Conditions - AM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	5	32	18	38	11	37	8	209	36	219	713	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	14	14	14	10	10	10	10	10	10
Storage Length (ft)	0		0	0		0	75		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	0.95
Frt		0.956			0.942			0.978			0.999	
Flt Protected		0.995			0.978		0.950			0.950		
Satd. Flow (prot)	0	1772	0	0	1831	0	1652	3231	0	1652	3300	0
Flt Permitted		0.975			0.870		0.339			0.584		
Satd. Flow (perm)	0	1736	0	0	1628	0	589	3231	0	1015	3300	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20			41			40			1	
Link Speed (mph)		30			30			30			35	
Link Distance (ft)		370			2670			1020			2230	
Travel Time (s)		8.4			60.7			23.2			43.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	6	36		20	42	12	41	9	232	40	243	792
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	62	0	0	95	0	9	272	0	243	796	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	0.92	0.92	0.92	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	10	10		10	10		19	19		50	19	
Trailing Detector (ft)	-10	-10		-10	-10		19	19		50	19	
Detector 1 Position(ft)	-10	-10		-10	-10		19	19		50	19	
Detector 1 Size(ft)	20	20		20	20		0	0		0	0	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			2			1			1	
Permitted Phases							1			1		
Detector Phase	2	2		2	2		1	1		1	1	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		13.0	13.0		13.0	13.0	
Minimum Split (s)	29.0	29.0		29.0	29.0		21.0	21.0		21.0	21.0	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	50.0	50.0	0.0	50.0	50.0	0.0

7:30 am Baseline
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Dewey Avenue Corridor Study
15: Christian & Dewey

Existing Conditions - AM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	37.5%	37.5%	0.0%	37.5%	37.5%	0.0%	62.5%	62.5%	0.0%	62.5%	62.5%	0.0%
Maximum Green (s)	24.0	24.0		24.0	24.0		44.5	44.5		44.5	44.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.5	2.5		2.5	2.5		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0	-2.5	-2.5	-1.0	-2.0	-2.5	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.5	3.0	3.0
Lead/Lag	Lag	Lag		Lag	Lag		Lead	Lead		Lead	Lead	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		3.0	3.0		3.0	3.0	
Recall Mode	Min	Min		Min	Min		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	14.0	14.0		14.0	14.0		8.0	8.0		8.0	8.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		11.0			11.0		63.0	63.0		62.5	63.0	
Actuated g/C Ratio		0.14			0.14		0.79	0.79		0.78	0.79	
v/c Ratio		0.24			0.37		0.02	0.11		0.31	0.31	
Control Delay		24.3			23.0		2.5	2.0		5.5	3.9	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		24.3			23.0		2.5	2.0		5.5	3.9	
LOS		C			C		A	A		A	A	
Approach Delay		24.3			23.0			2.0			4.3	
Approach LOS		C			C			A			A	

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 80
Offset: 0 (0%), Referenced to phase 1:NBSB, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.37
Intersection Signal Delay: 5.9
Intersection Capacity Utilization 52.3%
Analysis Period (min) 15

Intersection LOS: A
ICU Level of Service A

Splits and Phases: 15: Christian & Dewey



7:30 am Baseline
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Dewey Avenue Corridor Study
16: McCall & Dewey

Existing Conditions - AM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	23	6	98	1	2	1	13	227	3	6	689	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	13	9	9	9	10	10	10	10	10	10
Storage Length (ft)	0		0	0		0	75		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.896			0.966			0.998			0.995	
Flt Protected		0.991			0.988		0.950			0.950		
Satd. Flow (prot)	0	1709	0	0	1600	0	1652	3297	0	1652	3287	0
Flt Permitted		0.948			0.943		0.322			0.574		
Satd. Flow (perm)	0	1635	0	0	1527	0	560	3297	0	998	3287	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		111			2			3			7	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		415			370			2230			1450	
Travel Time (s)		9.4			8.4			43.4			28.2	
Peak Hour Factor	0.88	0.88	0.88	0.50	0.50	0.50	0.79	0.79	0.79	0.86	0.86	0.86
Adj. Flow (vph)	26	7	111	2	4	2	16	287	4	7	801	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	144	0	0	8	0	16	291	0	7	827	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	0.96	1.14	1.14	1.14	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	15	15		15	15		50	19		19	19	
Trailing Detector (ft)	-5	-5		-5	-5		50	19		19	19	
Detector 1 Position(ft)	-5	-5		-5	-5		50	19		19	19	
Detector 1 Size(ft)	20	20		20	20		0	0		0	0	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			2			1			1	
Permitted Phases							1			1		
Detector Phase	2	2		2	2		1	1		1	1	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	29.0	29.0		29.0	29.0		21.0	21.0		21.0	21.0	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	50.0	50.0	0.0	50.0	50.0	0.0

7:30 am Baseline
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Dewey Avenue Corridor Study
16: McCall & Dewey

Existing Conditions - AM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	37.5%	37.5%	0.0%	37.5%	37.5%	0.0%	62.5%	62.5%	0.0%	62.5%	62.5%	0.0%
Maximum Green (s)	24.0	24.0		24.0	24.0		44.5	44.5		44.5	44.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.5	2.5		2.5	2.5		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0	-2.0	-2.5	-1.0	-2.5	-2.5	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.5	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lag	Lag		Lag	Lag		Lead	Lead		Lead	Lead	
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0							
Flash Dont Walk (s)	14.0	14.0		14.0	14.0							
Pedestrian Calls (#/hr)	1	1		1	1							
Act Effect Green (s)		13.6			13.6		59.9	60.4		60.4	60.4	
Actuated g/C Ratio		0.17			0.17		0.75	0.76		0.76	0.76	
v/c Ratio		0.39			0.03		0.04	0.12		0.01	0.33	
Control Delay		11.5			21.2		4.1	3.1		4.3	4.3	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		11.5			21.2		4.1	3.1		4.3	4.3	
LOS		B			C		A	A		A	A	
Approach Delay		11.5			21.3			3.1			4.3	
Approach LOS		B			C			A			A	

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 80
Offset: 0 (0%), Referenced to phase 1:NBSB, Start of Green
Natural Cycle: 50
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.39
Intersection Signal Delay: 5.0
Intersection Capacity Utilization 35.7%
Analysis Period (min) 15

Intersection LOS: A
ICU Level of Service A

Splits and Phases: 16: McCall & Dewey



7:30 am Baseline
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Dewey Avenue Corridor Study
17: W Ridge & Woodside

Existing Conditions - AM
6/15/2010

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	98	1415	933	73	2	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	10	10	10	12	12
Storage Length (ft)	75			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25			25	25	25
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	1.00
Frt			0.989		0.884	
Flt Protected	0.950				0.993	
Satd. Flow (prot)	1770	4746	4694	0	1635	0
Flt Permitted	0.225				0.993	
Satd. Flow (perm)	419	4746	4694	0	1635	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			16		12	
Link Speed (mph)		35	35		30	
Link Distance (ft)		667	1165		282	
Travel Time (s)		13.0	22.7		6.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	109	1572	1037	81	2	12
Shared Lane Traffic (%)						
Lane Group Flow (vph)	109	1572	1118	0	14	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.09	1.09	1.09	1.00	1.00
Turning Speed (mph)	16			9	16	9
Number of Detectors	1	1	1		1	
Detector Template						
Leading Detector (ft)	50	19	19		15	
Trailing Detector (ft)	0	19	19		-5	
Detector 1 Position(ft)	0	19	19		-5	
Detector 1 Size(ft)	50	0	0		20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	
Turn Type	pm+pt					
Protected Phases	2	1 2	1		3	
Permitted Phases	1 2	1				
Detector Phase	2	1 2	1		3	
Switch Phase						
Minimum Initial (s)	4.0		30.0		6.0	
Minimum Split (s)	13.0		36.0		33.0	
Total Split (s)	20.0	87.0	67.0	0.0	33.0	0.0

7:30 am Baseline
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Dewey Avenue Corridor Study
17: W Ridge & Woodside

Existing Conditions - AM
6/15/2010

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Total Split (%)	16.7%	72.5%	55.8%	0.0%	27.5%	0.0%
Maximum Green (s)	14.0		61.0		27.0	
Yellow Time (s)	4.0		4.0		3.5	
All-Red Time (s)	2.0		2.0		2.5	
Lost Time Adjust (s)	-3.0	-3.0	-3.0	-1.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		2.0		4.0	
Recall Mode	None		C-Max		None	
Walk Time (s)			23.0		7.0	
Flash Dont Walk (s)			7.0		19.0	
Pedestrian Calls (#/hr)			0		0	
Act Effect Green (s)	108.3	113.1	92.3		10.3	
Actuated g/C Ratio	0.90	0.94	0.77		0.09	
v/c Ratio	0.19	0.35	0.31		0.09	
Control Delay	0.8	0.4	5.1		27.4	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	0.8	0.4	5.1		27.4	
LOS	A	A	A		C	
Approach Delay		0.4	5.1		27.4	
Approach LOS		A	A		C	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 80 (67%), Referenced to phase 1:EBWB, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.35

Intersection Signal Delay: 2.4

Intersection Capacity Utilization 45.4%

Analysis Period (min) 15

Intersection LOS: A
ICU Level of Service A

Splits and Phases: 17: W Ridge & Woodside



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Synchro 7 - Report
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Dewey Avenue Corridor Study
416: Banker & Bennington

Existing Conditions - AM
6/15/2010

Lane Group	EBL2	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR	SWR2
Lane Configurations												
Volume (vph)	2	1	1	3	221	53	11	676	10	94	1	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00
Frt		0.966			0.971			0.998		0.989		
Flt Protected		0.964						0.999		0.956		
Satd. Flow (prot)	0	1735	0	0	3437	0	0	3529	0	1761	0	0
Flt Permitted		0.964			0.950			0.950		0.956		
Satd. Flow (perm)	0	1735	0	0	3265	0	0	3356	0	1761	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			59			3		8		
Link Speed (mph)		30			35			35		30		
Link Distance (ft)		257			1450			325		339		
Travel Time (s)		5.8			28.2			6.3		7.7		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	2	1	1	3	246	59	12	751	11	104	1	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	4	0	0	308	0	0	774	0	113	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Right	Right
Median Width(ft)		12			4			0		12		
Link Offset(ft)		0			0			0		0		
Crosswalk Width(ft)		16			16			16		16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	15	9	15		9	15		9	15	9	9
Number of Detectors	1	1		1	1		1	1		1		
Detector Template												
Leading Detector (ft)	50	50		19	19		19	19		50		
Trailing Detector (ft)	0	0		19	19		19	19		0		
Detector 1 Position(ft)	0	0		19	19		19	19		0		
Detector 1 Size(ft)	50	50		0	0		0	0		50		
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex		
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0		
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0		
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0		
Turn Type	Perm			Perm			Perm					
Protected Phases		2			1			1				
Permitted Phases	2			1			1			2		
Detector Phase	2	2		1	1		1	1		2		
Switch Phase												
Minimum Initial (s)	4.0	4.0		16.0	16.0		16.0	16.0		4.0		
Minimum Split (s)	27.0	27.0		24.0	24.0		24.0	24.0		27.0		
Total Split (s)	27.0	27.0	0.0	33.0	33.0	0.0	33.0	33.0	0.0	27.0	0.0	0.0
Total Split (%)	45.0%	45.0%	0.0%	55.0%	55.0%	0.0%	55.0%	55.0%	0.0%	45.0%	0.0%	0.0%
Maximum Green (s)	21.0	21.0		27.5	27.5		27.5	27.5		21.0		
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5		
All-Red Time (s)	2.5	2.5		2.0	2.0		2.0	2.0		2.5		

7:30 am Baseline
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Dewey Avenue Corridor Study
416: Banker & Bennington

Existing Conditions - AM
6/15/2010

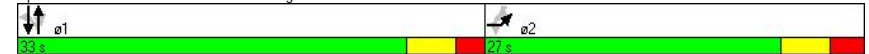
Lane Group	EBL2	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR	SWR2
Lost Time Adjust (s)	-3.0	-3.0	-1.0	-2.5	-2.5	-1.0	-2.5	-2.5	-1.0	-3.0	-1.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lag	Lag		Lead	Lead		Lead	Lead		Lag		
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0		
Recall Mode	None	None		C-Max	C-Max		C-Max	C-Max		None		
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0		
Flash Dont Walk (s)	12.0	12.0		10.0	10.0		10.0	10.0		12.0		
Pedestrian Calls (#/hr)	1	1		0	0		0	0		1		
Act Effect Green (s)		13.3			43.6			43.6		13.3		
Actuated g/C Ratio		0.22			0.73			0.73		0.22		
v/c Ratio		0.01			0.13			0.32		0.29		
Control Delay		13.5			3.6			2.4		18.2		
Queue Delay		0.0			0.0			0.1		0.0		
Total Delay		13.5			3.6			2.5		18.2		
LOS		B			A			A		B		
Approach Delay		13.5			3.6			2.5		18.2		
Approach LOS		B			A			A		B		

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 22 (37%), Referenced to phase 1:NBSB, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.32
Intersection Signal Delay: 4.3
Intersection Capacity Utilization 45.8%
Analysis Period (min) 15

Intersection LOS: A
ICU Level of Service A

Splits and Phases: 416: Banker & Bennington



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Dewey Avenue Corridor Study
457: Denise Road & Dewey Avenue

Existing Conditions - AM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	7	5	20	87	0	41	1	193	43	50	464	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	75		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.917			0.957			0.973			0.998	
Flt Protected		0.989			0.967		0.950			0.950		
Satd. Flow (prot)	0	1689	0	0	1724	0	1770	3444	0	1770	3532	0
Flt Permitted		0.935			0.774		0.457			0.590		
Satd. Flow (perm)	0	1597	0	0	1380	0	851	3444	0	1099	3532	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		22			46			48			3	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		500			500			510			501	
Travel Time (s)		11.4			11.4			9.9			9.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	8	6	22	97	0	46	1	214	48	56	516	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	36	0	0	143	0	1	262	0	56	523	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		4	4		6	6		2	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		15.0	15.0		15.0	15.0	
Minimum Split (s)	29.5	29.5		29.5	29.5		25.5	25.5		25.5	25.5	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	30.0	30.0	0.0	30.0	30.0	0.0
Total Split (%)	50.0%	50.0%	0.0%	50.0%	50.0%	0.0%	50.0%	50.0%	0.0%	50.0%	50.0%	0.0%

7:30 am Baseline
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Dewey Avenue Corridor Study
457: Denise Road & Dewey Avenue

Existing Conditions - AM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Maximum Green (s)	23.5	23.5		23.5	23.5		24.5	24.5		24.5	24.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		1.5	1.5		1.5	1.5	
Lost Time Adjust (s)	-3.5	-3.5	-1.0	-3.5	-3.5	-1.0	-2.5	-2.5	-1.0	-2.5	-2.5	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		4.0	4.0		4.0	4.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		10.0	10.0		10.0	10.0	
Flash Dont Walk (s)	16.0	16.0		16.0	16.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		12.6			12.6		44.5	44.5		44.5	44.5	
Actuated g/C Ratio		0.21			0.21		0.74	0.74		0.74	0.74	
v/c Ratio		0.10			0.44		0.00	0.10		0.07	0.20	
Control Delay		11.0			18.0		3.0	2.3		4.2	3.8	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		11.0			18.0		3.0	2.3		4.2	3.8	
LOS		B			B		A	A		A	A	
Approach Delay		11.0			18.0			2.3			3.8	
Approach LOS		B			B			A			A	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 30 (50%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.44

Intersection Signal Delay: 5.7

Intersection Capacity Utilization 49.5%

Analysis Period (min) 15

Intersection LOS: A

ICU Level of Service A

Splits and Phases: 457: Denise Road & Dewey Avenue



7:30 am Baseline
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Synchro 7 - Report
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Dewey Avenue Corridor Study
459: Clark Pk & Dewey Avenue

Existing Conditions - AM
6/15/2010

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø2
Lane Configurations							
Volume (vph)	0	0	315	0	0	796	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95	
Frt							
Flt Protected							
Satd. Flow (prot)	0	0	3539	0	0	3539	
Flt Permitted							
Satd. Flow (perm)	0	0	3539	0	0	3539	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)							
Link Speed (mph)	30		35			35	
Link Distance (ft)	362		1048			1991	
Travel Time (s)	8.2		20.4			38.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	
Adj. Flow (vph)	0	0	350	0	0	884	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	350	0	0	884	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Right	Left	Right	Left	Left	
Median Width(ft)	0		12			12	
Link Offset(ft)	0		0			0	
Crosswalk Width(ft)	16		16			16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15	9		9	15		
Number of Detectors			1			1	
Detector Template							
Leading Detector (ft)			50			50	
Trailing Detector (ft)			0			0	
Detector 1 Position(ft)			0			0	
Detector 1 Size(ft)			50			50	
Detector 1 Type			CI+Ex			CI+Ex	
Detector 1 Channel							
Detector 1 Extend (s)			0.0			0.0	
Detector 1 Queue (s)			0.0			0.0	
Detector 1 Delay (s)			0.0			0.0	
Turn Type							
Protected Phases			1			1	2
Permitted Phases							
Detector Phase			1			1	
Switch Phase							
Minimum Initial (s)			10.0			10.0	10.0
Minimum Split (s)			16.0			16.0	16.0
Total Split (s)	0.0	0.0	16.0	0.0	0.0	16.0	46.0
Total Split (%)	0.0%	0.0%	25.8%	0.0%	0.0%	25.8%	74%
Maximum Green (s)			10.0			10.0	40.0
Yellow Time (s)			4.0			4.0	4.0
All-Red Time (s)			2.0			2.0	2.0

7:30 am Baseline
%user_name%

Synchro 7 - Report
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Dewey Avenue Corridor Study
459: Clark Pk & Dewey Avenue

Existing Conditions - AM
6/15/2010

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø2
Lost Time Adjust (s)	-1.0	-1.0	-3.0	-1.0	-1.0	-3.0	
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	
Lead/Lag			Lead			Lead	Lag
Lead-Lag Optimize?							
Vehicle Extension (s)			4.0			4.0	8.0
Recall Mode			None			None	None
Act Effect Green (s)			16.0			16.0	
Actuated g/C Ratio			1.00			1.00	
v/c Ratio			0.10			0.25	
Control Delay			0.1			0.2	
Queue Delay			0.0			0.0	
Total Delay			0.1			0.2	
LOS			A			A	
Approach Delay			0.1			0.2	
Approach LOS			A			A	

Intersection Summary

Area Type: Other
Cycle Length: 62
Actuated Cycle Length: 16
Natural Cycle: 40
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 0.25
Intersection Signal Delay: 0.1
Intersection Capacity Utilization 25.3%
Analysis Period (min) 15

Intersection LOS: A
ICU Level of Service A

Splits and Phases: 459: Clark Pk & Dewey Avenue



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Synchro 7 - Report
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Dewey Avenue Corridor Study
461: Britton Road & Dewey Avenue

Existing Conditions - AM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	14	27	31	177	35	60	5	246	26	74	641	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	150		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.920			0.905			0.986			0.999	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1714	0	1770	1686	0	1770	3490	0	1770	3536	0
Flt Permitted	0.689			0.715			0.343			0.568		
Satd. Flow (perm)	1283	1714	0	1332	1686	0	639	3490	0	1058	3536	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		34			67			24			2	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		500			500			1974			650	
Travel Time (s)		11.4			11.4			38.5			12.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	16	30	34	197	39	67	6	273	29	82	712	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	16	64	0	197	106	0	6	302	0	82	718	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		4	4		6	6		2	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		15.0	15.0		15.0	15.0	
Minimum Split (s)	30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	30.0	30.0	0.0	30.0	30.0	0.0
Total Split (%)	50.0%	50.0%	0.0%	50.0%	50.0%	0.0%	50.0%	50.0%	0.0%	50.0%	50.0%	0.0%

7:30 am Baseline
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Synchro 7 - Report
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Dewey Avenue Corridor Study
461: Britton Road & Dewey Avenue

Existing Conditions - AM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Maximum Green (s)	24.0	24.0		24.0	24.0		24.0	24.0		24.0	24.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.5	2.5		2.5	2.5		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		9.0	9.0		9.0	9.0	
Flash Dont Walk (s)	17.0	17.0		17.0	17.0		12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	18.1	18.1		18.1	18.1		35.9	35.9		35.9	35.9	
Actuated g/C Ratio	0.30	0.30		0.30	0.30		0.60	0.60		0.60	0.60	
v/c Ratio	0.04	0.12		0.49	0.19		0.02	0.14		0.13	0.34	
Control Delay	12.4	7.9		20.3	7.0		7.2	6.0		3.8	4.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	12.4	7.9		20.3	7.0		7.2	6.0		3.8	4.0	
LOS	B	A		C	A		A	A		A	A	
Approach Delay		8.8			15.7			6.1			4.0	
Approach LOS		A			B			A			A	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.49

Intersection Signal Delay: 7.0

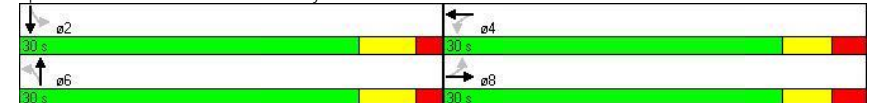
Intersection Capacity Utilization 56.9%

Analysis Period (min) 15

Intersection LOS: A

ICU Level of Service B

Splits and Phases: 461: Britton Road & Dewey Avenue















7:30 am Baseline
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Synchro 7 - Report
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Dewey Avenue Corridor Study
462: Dalston & Dewey Avenue

Existing Conditions - AM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	0	9	0	0	0	22	268	0	0	675	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.896						0.996			0.999	
Flt Protected		0.989						0.996				
Satd. Flow (prot)	0	1651	0	0	1863	0	0	3525	0	0	3536	0
Flt Permitted		0.920						0.882				
Satd. Flow (perm)	0	1535	0	0	1863	0	0	3122	0	0	3536	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10									2	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		347			289			2400			654	
Travel Time (s)		7.9			6.6			46.8			12.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	3	0	10	0	0	0	24	298	0	0	750	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	13	0	0	0	0	0	322	0	0	756	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			6			2	
Permitted Phases	4			8			6			2		
Detector Phase	4	4		8	8		6	6		2	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		20.0	20.0		20.0	20.0	
Minimum Split (s)	24.5	24.5		24.5	24.5		34.5	34.5		34.5	34.5	
Total Split (s)	27.0	27.0	0.0	27.0	27.0	0.0	73.0	73.0	0.0	73.0	73.0	0.0
Total Split (%)	27.0%	27.0%	0.0%	27.0%	27.0%	0.0%	73.0%	73.0%	0.0%	73.0%	73.0%	0.0%
Maximum Green (s)	21.5	21.5		21.5	21.5		67.5	67.5		67.5	67.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.5	1.5		1.5	1.5	

7:30 am Baseline
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Synchro 7 - Report
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Dewey Avenue Corridor Study
462: Dalston & Dewey Avenue

Existing Conditions - AM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lost Time Adjust (s)	-2.5	-2.5	-1.0	-1.0	-2.5	-1.0	-2.5	-2.5	-1.0	-1.0	-2.5	-1.0
Total Lost Time (s)	3.0	3.0	3.0	4.5	3.0	3.0	3.0	3.0	3.0	4.5	3.0	3.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		4.0	4.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		20.0	20.0		20.0	20.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0		9.0	9.0		9.0	9.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		9.5					96.6			96.6		
Actuated g/C Ratio		0.10					0.97			0.97		
v/c Ratio		0.08					0.11			0.22		
Control Delay		25.5					0.5			0.3		
Queue Delay		0.0					0.0			0.0		
Total Delay		25.5					0.5			0.3		
LOS		C					A			A		
Approach Delay		25.5					0.5			0.3		
Approach LOS		C					A			A		

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 75 (75%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.22
Intersection Signal Delay: 0.6
Intersection Capacity Utilization 35.9%
Analysis Period (min) 15
Intersection LOS: A
ICU Level of Service A

Splits and Phases: 462: Dalston & Dewey Avenue



7:30 am Baseline
%user_name%

Synchro 7 - Report
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Dewey Avenue Corridor Study
469: Dorsey & Dewey Avenue

Existing Conditions - AM
6/15/2010

	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group						
Lane Configurations						
Volume (vph)	74	182	68	221	660	207
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	200			0
Storage Lanes	1	1	1			0
Taper Length (ft)	25	25	25			25
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95
Frt		0.850			0.964	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1583	1770	3539	3412	0
Flt Permitted	0.950		0.275			
Satd. Flow (perm)	1770	1583	512	3539	3412	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		201			92	
Link Speed (mph)	35			35	35	
Link Distance (ft)	3243			1991	1974	
Travel Time (s)	63.2			38.8	38.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	82	202	76	246	733	230
Shared Lane Traffic (%)						
Lane Group Flow (vph)	82	202	76	246	963	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	1	1	
Detector Template						
Leading Detector (ft)	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Turn Type		Perm	Perm			
Protected Phases	4			6	2	
Permitted Phases		4	6			
Detector Phase	4	4	6	6	2	
Switch Phase						
Minimum Initial (s)	6.0	6.0	20.0	20.0	20.0	
Minimum Split (s)	28.5	28.5	28.5	28.5	28.5	
Total Split (s)	30.0	30.0	45.0	45.0	45.0	0.0
Total Split (%)	40.0%	40.0%	60.0%	60.0%	60.0%	0.0%

7:30 am Baseline
%user_name%

Synchro 7 - Report
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Dewey Avenue Corridor Study
469: Dorsey & Dewey Avenue

Existing Conditions - AM
6/15/2010

	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group						
Maximum Green (s)	25.0	25.0	40.0	40.0	40.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	-2.5	-2.5	-2.5	-2.5	-2.5	-1.0
Total Lost Time (s)	2.5	2.5	2.5	2.5	2.5	3.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	4.0	4.0	2.0	2.0	2.0	
Recall Mode	None	None	C-Max	C-Max	C-Max	
Walk Time (s)	7.0	7.0	10.0	10.0	10.0	
Flash Dont Walk (s)	16.0	16.0	13.0	13.0	13.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	
Act Effct Green (s)	12.3	12.3	57.7	57.7	57.7	
Actuated g/C Ratio	0.16	0.16	0.77	0.77	0.77	
v/c Ratio	0.28	0.47	0.19	0.09	0.36	
Control Delay	29.2	8.4	4.2	2.5	3.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	29.2	8.4	4.2	2.5	3.1	
LOS	C	A	A	A	A	
Approach Delay	14.4			2.9	3.1	
Approach LOS	B			A	A	

Intersection Summary

Area Type: Other

Cycle Length: 75

Actuated Cycle Length: 75

Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.47

Intersection Signal Delay: 5.1

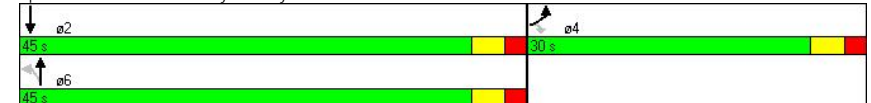
Intersection Capacity Utilization 56.5%

Analysis Period (min) 15

Intersection LOS: A

ICU Level of Service B

Splits and Phases: 469: Dorsey & Dewey Avenue



7:30 am Baseline
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Synchro 7 - Report
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Dewey Avenue Corridor Study
550: Ellington & Dewey

Existing Conditions - AM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	50	14	2	50	4	4	239	0	1	692	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.970			0.991							
Flt Protected		0.999			0.998			0.999				
Satd. Flow (prot)	0	1805	0	0	1842	0	0	3536	0	0	3539	0
Flt Permitted		0.996			0.991			0.948			0.955	
Satd. Flow (perm)	0	1800	0	0	1829	0	0	3355	0	0	3380	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			4						1	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		295			178			325			2220	
Travel Time (s)		6.7			4.0			6.3			43.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1	56	16	2	56	4	4	266	0	1	769	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	73	0	0	62	0	0	270	0	0	772	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		19	19		19	19	
Trailing Detector (ft)	0	0		0	0		19	19		19	19	
Detector 1 Position(ft)	0	0		0	0		19	19		19	19	
Detector 1 Size(ft)	50	50		50	50		0	0		0	0	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			2			1			1	
Permitted Phases	2			2			1			1		
Detector Phase	2	2		2	2		1	1		1	1	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		16.0	16.0		16.0	16.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		23.5	23.5		23.5	23.5	
Total Split (s)	26.0	26.0	0.0	26.0	26.0	0.0	34.0	34.0	0.0	34.0	34.0	0.0
Total Split (%)	43.3%	43.3%	0.0%	43.3%	43.3%	0.0%	56.7%	56.7%	0.0%	56.7%	56.7%	0.0%
Maximum Green (s)	20.5	20.5		20.5	20.5		28.5	28.5		28.5	28.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	

7:30 am Baseline
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Synchro 7 - Report
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Dewey Avenue Corridor Study
550: Ellington & Dewey

Existing Conditions - AM
6/15/2010

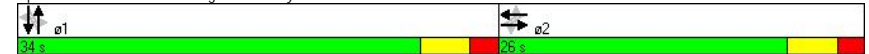
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lost Time Adjust (s)	-2.5	-2.5	-1.0	-2.5	-2.5	-1.0	-2.5	-2.5	-1.0	-2.5	-2.5	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lag	Lag		Lag	Lag		Lead	Lead		Lead	Lead	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		8.0	8.0		8.0	8.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	1	1		1	1		0	0		0	0	
Act Effect Green (s)		11.9			11.9			45.0			45.0	
Actuated g/C Ratio		0.20			0.20			0.75			0.75	
v/c Ratio		0.20			0.17			0.11			0.30	
Control Delay		16.0			18.0			2.1			4.4	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		16.0			18.0			2.1			4.4	
LOS		B			B			A			A	
Approach Delay		16.0			18.0			2.1			4.4	
Approach LOS		B			B			A			A	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 22 (37%), Referenced to phase 1:NBSB, Start of Green
Natural Cycle: 50
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.30
Intersection Signal Delay: 5.3
Intersection Capacity Utilization 31.6%
Analysis Period (min) 15

Intersection LOS: A
ICU Level of Service A

Splits and Phases: 550: Ellington & Dewey



7:30 am Baseline
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Synchro 7 - Report
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Dewey Avenue Corridor Study
579: Northgate Manor & Dewey Avenue

Existing Conditions - AM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	0	20	10	0	8	20	257	45	20	731	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		0	75		0	100		0
Storage Lanes	1		0	0		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.850			0.939			0.978			0.992	
Flt Protected	0.950				0.973		0.950			0.950		
Satd. Flow (prot)	1770	1583	0	0	1702	0	1770	3461	0	1770	3511	0
Flt Permitted	0.744				0.817		0.322			0.549		
Satd. Flow (perm)	1386	1583	0	0	1429	0	600	3461	0	1023	3511	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		82			9			40			11	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		500			500			840			510	
Travel Time (s)		11.4			11.4			16.4			9.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	11	0	22	11	0	9	22	286	50	22	812	44
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	22	0	0	20	0	22	336	0	22	856	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases		8			4			6			2	
Detector Phase		8			4			6			2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		15.0	15.0		15.0	15.0	
Minimum Split (s)	31.5	31.5		31.5	31.5		27.0	27.0		27.0	27.0	
Total Split (s)	32.0	32.0	0.0	32.0	32.0	0.0	28.0	28.0	0.0	28.0	28.0	0.0
Total Split (%)	53.3%	53.3%	0.0%	53.3%	53.3%	0.0%	46.7%	46.7%	0.0%	46.7%	46.7%	0.0%

7:30 am Baseline
%user_name%

Synchro 7 - Report
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Dewey Avenue Corridor Study
579: Northgate Manor & Dewey Avenue

Existing Conditions - AM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Maximum Green (s)	25.5	25.5		25.5	25.5		22.0	22.0		22.0	22.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-3.5	-3.5	-1.0	-3.5	-3.5	-1.0	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		8.0	8.0		8.0	8.0	
Flash Dont Walk (s)	18.0	18.0		18.0	18.0		13.0	13.0		13.0	13.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	10.7	10.7		10.6	10.6		53.0	53.0		53.0	53.0	
Actuated g/C Ratio	0.18	0.18		0.18	0.18		0.88	0.88		0.88	0.88	
v/c Ratio	0.04	0.06		0.08	0.08		0.04	0.11		0.02	0.28	
Control Delay	20.5	0.3		16.1	16.1		2.1	1.3		1.9	1.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	20.5	0.3		16.1	16.1		2.1	1.3		1.9	1.7	
LOS	C	A		B	B		A	A		A	A	
Approach Delay		7.1		16.1	16.1		1.4	1.4		1.7	1.7	
Approach LOS		A		B	B		A	A		A	A	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 30 (50%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.28

Intersection Signal Delay: 2.0

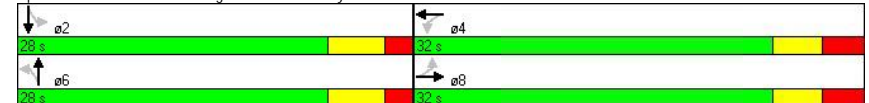
Intersection Capacity Utilization 35.9%

Analysis Period (min) 15

Intersection LOS: A

ICU Level of Service A

Splits and Phases: 579: Northgate Manor & Dewey Avenue



7:30 am Baseline
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Synchro 7 - Report
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Dewey Avenue Corridor Study
657: W Ridge & Eastman

Existing Conditions - AM
6/15/2010

Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	50	250	1500	800	10	10	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	15	15
Storage Length (ft)		262			0	0	0
Storage Lanes		1			0	1	0
Taper Length (ft)		25			25	25	25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	1.00
Frt				0.998		0.877	
Flt Protected		0.950				0.996	
Satd. Flow (prot)	0	1770	5085	5075	0	1790	0
Flt Permitted		0.950				0.996	
Satd. Flow (perm)	0	1770	5085	5075	0	1790	0
Right Turn on Red					Yes		No
Satd. Flow (RTOR)				2			
Link Speed (mph)			35	35		30	
Link Distance (ft)			1255	497		583	
Travel Time (s)			24.4	9.7		13.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	56	278	1667	889	11	11	111
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	334	1667	900	0	122	0
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Left	Right	Left	Right
Median Width(ft)			12	12		20	
Link Offset(ft)			0	0		0	
Crosswalk Width(ft)			16	16		16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	0.88	0.88
Turning Speed (mph)	9	15			9	15	9
Number of Detectors	1	1	1	1		1	
Detector Template							
Leading Detector (ft)	50	50	50	50		50	
Trailing Detector (ft)	0	0	0	0		0	
Detector 1 Position(ft)	0	0	0	0		0	
Detector 1 Size(ft)	50	50	50	50		50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0		0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0		0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0		0.0	
Turn Type	Prot	Prot					
Protected Phases	3	3	13	1		2	
Permitted Phases							
Detector Phase	3	3	13	1		2	
Switch Phase							
Minimum Initial (s)	6.0	6.0		24.0		6.0	
Minimum Split (s)	12.0	12.0		30.0		37.0	
Total Split (s)	30.0	30.0	83.0	53.0	0.0	37.0	0.0

7:30 am Baseline
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Synchro 7 - Report
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Dewey Avenue Corridor Study
657: W Ridge & Eastman

Existing Conditions - AM
6/15/2010

Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Total Split (%)	25.0%	25.0%	69.2%	44.2%	0.0%	30.8%	0.0%
Maximum Green (s)	24.0	24.0		47.0		31.0	
Yellow Time (s)	4.0	4.0		4.0		3.5	
All-Red Time (s)	2.0	2.0		2.0		2.5	
Lost Time Adjust (s)	-3.0	-3.0	-3.0	-3.0	-1.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0		3.0	3.0	3.0
Lead/Lag				Lead		Lag	
Lead-Lag Optimize?							
Vehicle Extension (s)	4.0	4.0		2.0		3.0	
Recall Mode	None	None		C-Max		None	
Walk Time (s)				8.0		7.0	
Flash Dont Walk (s)				16.0		24.0	
Pedestrian Calls (#/hr)				0		0	
Act Effect Green (s)		40.7	97.5	53.8		16.5	
Actuated g/C Ratio		0.34	0.81	0.45		0.14	
v/c Ratio		0.56	0.40	0.40		0.49	
Control Delay		36.4	3.7	13.8		54.0	
Queue Delay		0.0	0.0	0.0		0.0	
Total Delay		36.4	3.7	13.8		54.0	
LOS		D	A	B		D	
Approach Delay			9.2	13.8		54.0	
Approach LOS			A	B		D	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 93 (78%), Referenced to phase 1:EBWB, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.56
Intersection Signal Delay: 12.4
Intersection Capacity Utilization 53.4%
Analysis Period (min) 15
Intersection LOS: B
ICU Level of Service A

Splits and Phases: 657: W Ridge & Eastman



7:30 am Baseline
%user_name%

Synchro 7 - Report
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Dewey Avenue Corridor Study
1001: English Road & Dewey Avenue

Existing Conditions - AM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	35	68	117	48	59	5	40	174	31	13	496	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		0	150		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.905			0.988			0.978			0.992	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1686	0	1770	1840	0	1770	3461	0	1770	3511	0
Flt Permitted	0.710			0.478			0.424			0.610		
Satd. Flow (perm)	1323	1686	0	890	1840	0	790	3461	0	1136	3511	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		130			6			34			12	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		3301			500			650			840	
Travel Time (s)		75.0			11.4			12.7			16.4	
Peak Hour Factor	0.96	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	36	76	130	53	66	6	44	193	34	14	551	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	36	206	0	53	72	0	44	227	0	14	581	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		4	4		6	6		2	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		15.0	15.0		15.0	15.0	
Minimum Split (s)	30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	30.0	30.0	0.0	30.0	30.0	0.0
Total Split (%)	50.0%	50.0%	0.0%	50.0%	50.0%	0.0%	50.0%	50.0%	0.0%	50.0%	50.0%	0.0%

7:30 am Baseline
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Synchro 7 - Report
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Dewey Avenue Corridor Study
1001: English Road & Dewey Avenue

Existing Conditions - AM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Maximum Green (s)	24.0	24.0		24.0	24.0		24.0	24.0		24.0	24.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.5	2.5		2.5	2.5		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		9.0	9.0		9.0	9.0	
Flash Dont Walk (s)	17.0	17.0		17.0	17.0		12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	12.9	12.9		12.9	12.9		41.1	41.1		41.1	41.1	
Actuated g/C Ratio	0.22	0.22		0.22	0.22		0.68	0.68		0.68	0.68	
v/c Ratio	0.13	0.44		0.28	0.18		0.08	0.10		0.02	0.24	
Control Delay	18.5	11.1		22.3	17.8		3.9	2.8		6.5	6.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	18.5	11.1		22.3	17.8		3.9	2.8		6.5	6.6	
LOS	B	B		C	B		A	A		A	A	
Approach Delay		12.2			19.7			3.0			6.6	
Approach LOS		B			B			A			A	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.44

Intersection Signal Delay: 8.2

Intersection Capacity Utilization 56.2%

Analysis Period (min) 15

Intersection LOS: A

ICU Level of Service B

Splits and Phases: 1001: English Road & Dewey Avenue



7:30 am Baseline
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Synchro 7 - Report
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Dewey Avenue Corridor Study
1021: Latta & Dewey Avenue

Existing Conditions - AM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	36	180	142	74	246	13	136	53	48	28	171	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	200		0	200		0	125		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.934			0.993			0.929			0.979	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1740	0	1770	1850	0	1770	3288	0	1770	3465	0
Flt Permitted	0.586			0.437			0.403			0.673		
Satd. Flow (perm)	1092	1740	0	814	1850	0	751	3288	0	1254	3465	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		47			4			59			15	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		3343			564			615			360	
Travel Time (s)		65.1			11.0			12.0			7.0	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.81	0.81	0.81	0.90	0.90	0.90
Adj. Flow (vph)	40	198	156	81	270	14	168	65	59	31	190	31
Shared Lane Traffic (%)												
Lane Group Flow (vph)	40	354	0	81	284	0	168	124	0	31	221	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm			pm+pt			pm+pt			pm+pt		
Protected Phases		2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		1	6		7	4		3	8	
Switch Phase												
Minimum Initial (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Minimum Split (s)	25.0	25.0		8.0	25.0		8.0	25.0		8.0	25.0	
Total Split (s)	53.0	53.0	0.0	10.0	63.0	0.0	19.0	37.0	0.0	10.0	28.0	0.0
Total Split (%)	48.2%	48.2%	0.0%	9.1%	57.3%	0.0%	17.3%	33.6%	0.0%	9.1%	25.5%	0.0%

7:30 am Baseline
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Synchro 7 - Report
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Dewey Avenue Corridor Study
1021: Latta & Dewey Avenue

Existing Conditions - AM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Maximum Green (s)	48.0	48.0		5.0	58.0		14.0	32.0		5.0	23.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		5.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		0.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lag	Lag		Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)	5.0	5.0			5.0			5.0			5.0	
Flash Dont Walk (s)	15.0	15.0			15.0			15.0			15.0	
Pedestrian Calls (#/hr)	0	0			0			0			0	
Act Effct Green (s)	61.8	61.8		72.0	72.0		32.0	26.0		20.9	13.9	
Actuated g/C Ratio	0.56	0.56		0.65	0.65		0.29	0.24		0.19	0.13	
v/c Ratio	0.07	0.35		0.13	0.23		0.47	0.15		0.11	0.49	
Control Delay	14.2	14.1		8.2	8.8		34.3	18.9		28.1	45.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	14.2	14.1		8.2	8.8		34.3	18.9		28.1	45.0	
LOS	B	B		A	A		C	B		C	D	
Approach Delay		14.1			8.7			27.8			42.9	
Approach LOS		B			A			C			D	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.49

Intersection Signal Delay: 21.2

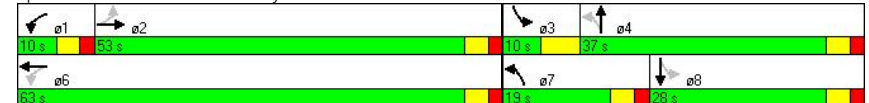
Intersection Capacity Utilization 48.7%

Analysis Period (min) 15

Intersection LOS: C

ICU Level of Service A

Splits and Phases: 1021: Latta & Dewey Avenue



7:30 am Baseline
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Synchro 7 - Report
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Dewey Avenue Corridor Study
4601: Maiden & Dewey Avenue

Existing Conditions - AM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	23	1	166	0	0	0	143	233	0	0	569	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		200	0		0	0		0	125		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850								0.990	
Flt Protected		0.954					0.950					
Satd. Flow (prot)	0	1777	1583	0	1863	0	1770	3539	0	1863	3504	0
Flt Permitted		0.734					0.208					
Satd. Flow (perm)	0	1367	1583	0	1863	0	387	3539	0	1863	3504	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			189								7	
Link Speed (mph)		35			30			35			35	
Link Distance (ft)		4626			213			192			1048	
Travel Time (s)		90.1			4.8			3.7			20.4	
Peak Hour Factor	0.88	0.88	0.88	0.50	0.50	0.50	0.73	0.73	0.73	0.80	0.80	0.80
Adj. Flow (vph)	26	1	189	0	0	0	196	319	0	0	711	52
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	27	189	0	0	0	196	319	0	0	763	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	custom	Perm			pm+pt			pm+pt			
Protected Phases		3	1		3		14	46		5	2	
Permitted Phases	3		3	3			46			2		
Detector Phase	3	3	1	3	3		14	46		5	2	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0					4.0	15.0	
Minimum Split (s)	9.5	9.5	9.0	9.5	9.5					9.0	28.0	
Total Split (s)	20.0	20.0	12.0	20.0	20.0	0.0	49.0	68.0	0.0	12.0	31.0	0.0
Total Split (%)	20.0%	20.0%	12.0%	20.0%	20.0%	0.0%	49.0%	68.0%	0.0%	12.0%	31.0%	0.0%

7:30 am Baseline
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Synchro 7 - Report
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Dewey Avenue Corridor Study
4601: Maiden & Dewey Avenue

Existing Conditions - AM
6/15/2010

Lane Group	ø4	ø6	ø8
Lane Configurations			
Volume (vph)			
Ideal Flow (vphpl)			
Storage Length (ft)			
Storage Lanes			
Taper Length (ft)			
Lane Util. Factor			
Frt			
Flt Protected			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Right Turn on Red			
Satd. Flow (RTOR)			
Link Speed (mph)			
Link Distance (ft)			
Travel Time (s)			
Peak Hour Factor			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Enter Blocked Intersection			
Lane Alignment			
Median Width(ft)			
Link Offset(ft)			
Crosswalk Width(ft)			
Two way Left Turn Lane			
Headway Factor			
Turning Speed (mph)			
Number of Detectors			
Detector Template			
Leading Detector (ft)			
Trailing Detector (ft)			
Detector 1 Position(ft)			
Detector 1 Size(ft)			
Detector 1 Type			
Detector 1 Channel			
Detector 1 Extend (s)			
Detector 1 Queue (s)			
Detector 1 Delay (s)			
Turn Type			
Protected Phases	4	6	8
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	4.0	15.0	4.0
Minimum Split (s)	37.0	28.0	37.0
Total Split (s)	37.0	31.0	57.0
Total Split (%)	37%	31%	57%

7:30 am Baseline
%user_name%

Synchro 7 - Report
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Dewey Avenue Corridor Study
4601: Maiden & Dewey Avenue

Existing Conditions - AM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Maximum Green (s)	14.5	14.5	7.0	14.5	14.5					7.0	25.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5					3.5	4.0	
All-Red Time (s)	2.0	2.0	1.5	2.0	2.0					1.5	2.0	
Lost Time Adjust (s)	-2.5	-2.5	-2.0	-2.5	-2.5	-1.0	-2.0	-3.0	-1.0	-2.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lead	Lead	Lead	Lead	Lead					Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0					2.0	4.0	
Recall Mode	None	None	None	None	None					None	C-Max	
Walk Time (s)											7.0	
Flash Dont Walk (s)											15.0	
Pedestrian Calls (#/hr)											0	
Act Effct Green (s)		8.9	16.5				85.4	76.1			39.1	
Actuated g/C Ratio		0.09	0.16				0.85	0.76			0.39	
v/c Ratio		0.22	0.45				0.21	0.12			0.56	
Control Delay		45.9	6.2				6.5	1.3			28.2	
Queue Delay		0.0	0.0				2.1	0.1			0.0	
Total Delay		45.9	6.2				8.6	1.4			28.2	
LOS		D	A				A	A			C	
Approach Delay		11.2						4.1			28.2	
Approach LOS		B						A			C	

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.76

Intersection Signal Delay: 17.5

Intersection LOS: B

Intersection Capacity Utilization 38.3%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 4601: Maiden & Dewey Avenue



Dewey Avenue Corridor Study
4601: Maiden & Dewey Avenue

Existing Conditions - AM
6/15/2010

Lane Group	ø4	ø6	ø8
Maximum Green (s)	31.0	25.0	51.0
Yellow Time (s)	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag	Lag	Lag	
Lead-Lag Optimize?			
Vehicle Extension (s)	3.0	4.0	3.0
Recall Mode	None	C-Max	None
Walk Time (s)	9.0	7.0	9.0
Flash Dont Walk (s)	22.0	15.0	22.0
Pedestrian Calls (#/hr)	0	0	0
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay			
Queue Delay			
Total Delay			
LOS			
Approach Delay			
Approach LOS			

Intersection Summary

Dewey Avenue Corridor Study
4602: Dewey Avenue & Stone

Existing Conditions - AM
6/15/2010

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	56	234	19	91	557	110	38	104	18	47	298	113
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	0		0	75		0	200		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.989			0.975			0.978			0.959	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3500	0	1770	3451	0	1770	1822	0	1770	1786	0
Flt Permitted	0.255			0.526			0.180			0.666		
Satd. Flow (perm)	475	3500	0	980	3451	0	335	1822	0	1241	1786	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			23			13			21	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		654			192			352			322	
Travel Time (s)		12.7			3.7			6.9			6.3	
Peak Hour Factor	0.94	0.94	0.94	0.91	0.91	0.91	0.85	0.85	0.85	0.90	0.90	0.90
Adj. Flow (vph)	60	249	20	100	612	121	45	122	21	52	331	126
Shared Lane Traffic (%)												
Lane Group Flow (vph)	60	269	0	100	733	0	45	143	0	52	457	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt			pm+pt			pm+pt			Perm		
Protected Phases	5	2		1	6		3	8			4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		4	4	
Switch Phase												
Minimum Initial (s)	4.0	15.0		4.0	15.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	9.0	28.0		9.0	28.0		9.5	37.0		37.0	37.0	
Total Split (s)	12.0	31.0	0.0	12.0	31.0	0.0	20.0	57.0	0.0	37.0	37.0	0.0
Total Split (%)	12.0%	31.0%	0.0%	12.0%	31.0%	0.0%	20.0%	57.0%	0.0%	37.0%	37.0%	0.0%

7:30 am Baseline
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Synchro 7 - Report
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Dewey Avenue Corridor Study
4602: Dewey Avenue & Stone

Existing Conditions - AM
6/15/2010

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Maximum Green (s)	7.0	25.0		7.0	25.0		14.5	51.0		31.0	31.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0		4.0	4.0	
All-Red Time (s)	1.5	2.0		1.5	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-3.0	-1.0	-2.0	-3.0	-1.0	-2.5	-3.0	-1.0	-3.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead			Lag	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	4.0		2.0	4.0		2.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		7.0			7.0			9.0			9.0	
Flash Dont Walk (s)		15.0			15.0			22.0			22.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	47.2	39.1		49.3	41.8		43.0	43.0		33.1	33.1	
Actuated g/C Ratio	0.47	0.39		0.49	0.42		0.43	0.43		0.33	0.33	
v/c Ratio	0.18	0.20		0.18	0.50		0.17	0.18		0.13	0.76	
Control Delay	17.3	22.6		7.0	8.4		14.3	14.2		21.8	36.3	
Queue Delay	0.0	0.0		0.2	0.2		0.0	0.0		0.0	0.0	
Total Delay	17.3	22.6		7.2	8.6		14.3	14.2		21.8	36.3	
LOS	B	C		A	A		B	B		C	D	
Approach Delay		21.6			8.4			14.2			34.8	
Approach LOS		C			A			B			C	

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.76

Intersection Signal Delay: 18.6

Intersection Capacity Utilization 61.5%

Analysis Period (min) 15

Intersection LOS: B

ICU Level of Service B

Splits and Phases: 4602: Dewey Avenue & Stone



7:30 am Baseline
%user_name%

Synchro 7 - Report
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Dewey Avenue Corridor Study
4: W Ridge & Dewey

Existing Conditions - PM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	85	887	153	34	1214	225	194	338	47	242	225	323
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	10	10	10	10	11	11	10	11	11
Storage Length (ft)	160		0	280		0	150		0	80		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.978			0.977			0.982			0.912	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1652	4642	0	1652	4637	0	1652	3360	0	1652	3120	0
Flt Permitted	0.069			0.181			0.160			0.283		
Satd. Flow (perm)	120	4642	0	315	4637	0	278	3360	0	492	3120	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		34			38			12			174	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		497			667			1166			580	
Travel Time (s)		9.7			13.0			26.5			13.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	94	986	170	38	1349	250	216	376	52	269	250	359
Shared Lane Traffic (%)												
Lane Group Flow (vph)	94	1156	0	38	1599	0	216	428	0	269	609	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.04	1.04	1.09	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	30	19		40	19		25	30		25	40	
Trailing Detector (ft)	-10	19		-10	19		-10	25		-10	35	
Detector 1 Position(ft)	-10	19		-10	19		-10	25		-10	35	
Detector 1 Size(ft)	40	0		50	0		35	5		35	5	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		
Detector Phase	5	2		1	6		7	4		3	8	
Switch Phase												
Minimum Initial (s)	4.0	29.0		4.0	29.0		4.0	12.0		4.0	12.0	
Minimum Split (s)	10.0	35.0		10.0	35.0		12.0	36.0		12.0	34.0	
Total Split (s)	12.0	52.0	0.0	12.0	52.0	0.0	20.0	36.0	0.0	20.0	36.0	0.0

5:00 pm Baseline
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Synchro 7 - Report
Page 1

Dewey Avenue Corridor Study
4: W Ridge & Dewey

Existing Conditions - PM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	10.0%	43.3%	0.0%	10.0%	43.3%	0.0%	16.7%	30.0%	0.0%	16.7%	30.0%	0.0%
Maximum Green (s)	7.0	46.0		7.0	46.0		15.0	30.0		15.0	30.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0		3.5	4.0	
All-Red Time (s)	1.5	2.0		1.5	2.0		1.5	2.0		1.5	2.0	
Lost Time Adjust (s)	-2.0	-3.0	-1.0	-2.0	-3.0	-1.0	-2.0	-3.0	-1.0	-2.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	4.0		2.0	4.0	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		7.0			12.0			7.0			7.0	
Flash Dont Walk (s)		22.0			17.0			23.0			21.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effect Green (s)	67.4	61.4		64.0	56.1		42.0	26.0		43.5	26.8	
Actuated g/C Ratio	0.56	0.51		0.53	0.47		0.35	0.22		0.36	0.22	
v/c Ratio	0.51	0.48		0.15	0.73		0.77	0.58		0.79	0.73	
Control Delay	32.6	14.4		8.7	20.0		46.3	43.4		42.7	30.1	
Queue Delay	0.0	0.1		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	32.6	14.4		8.7	20.0		46.3	43.4		42.7	30.1	
LOS	C	B		A	B		D	D		D	C	
Approach Delay		15.8			19.7			44.4			33.9	
Approach LOS		B			B			D			C	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 71 (59%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 25.0

Intersection Capacity Utilization 73.9%

Analysis Period (min) 15

Intersection LOS: C

ICU Level of Service D

Splits and Phases: 4: W Ridge & Dewey



5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Avenue Corridor Study
14: Eastman & Dewey

Existing Conditions - PM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	120	60	5	270	175	148	5	572	64	6	351	125
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	10	10	10	10	10	10	10	10	10
Storage Length (ft)	100		0	50		0	50		0	240		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.988			0.931			0.985			0.961	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1652	1718	0	1652	1619	0	1652	3254	0	1652	3174	0
Flt Permitted	0.401			0.709			0.421			0.326		
Satd. Flow (perm)	697	1718	0	1233	1619	0	732	3254	0	567	3174	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			95			25			106	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		583			686			580			1020	
Travel Time (s)		13.3			15.6			13.2			23.2	
Peak Hour Factor	0.90	0.90	0.90	0.95	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	133	67	6	284	194	164	6	636	71	7	390	139
Shared Lane Traffic (%)												
Lane Group Flow (vph)	133	73	0	284	358	0	6	707	0	7	529	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		2	2		1	1		1	1	
Detector Template												
Leading Detector (ft)	15	15		45	45		19	19		19	19	
Trailing Detector (ft)	0	0		-10	-10		19	19		19	19	
Detector 1 Position(ft)	0	0		-10	-10		19	19		19	19	
Detector 1 Size(ft)	15	15		6	6		0	0		0	0	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)				39	39							
Detector 2 Size(ft)				6	6							
Detector 2 Type				Cl+Ex	Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)				0.0	0.0							
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			2			1			1	
Permitted Phases	2			2			1			1		

5:00 pm Baseline
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Synchro 7 - Report
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Dewey Avenue Corridor Study
14: Eastman & Dewey

Existing Conditions - PM
6/15/2010

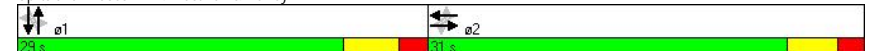
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	2	2		2	2		1	1		1	1	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		23.0	23.0		23.0	23.0	
Minimum Split (s)	31.0	31.0		31.0	31.0		29.0	29.0		29.0	29.0	
Total Split (s)	31.0	31.0	0.0	31.0	31.0	0.0	29.0	29.0	0.0	29.0	29.0	0.0
Total Split (%)	51.7%	51.7%	0.0%	51.7%	51.7%	0.0%	48.3%	48.3%	0.0%	48.3%	48.3%	0.0%
Maximum Green (s)	25.5	25.5		25.5	25.5		23.0	23.0		23.0	23.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.5	-2.5	-1.0	-2.5	-2.5	-1.0	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lag	Lag		Lag	Lag		Lead	Lead		Lead	Lead	
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		4.0	4.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	18.0	18.0		18.0	18.0		16.0	16.0		16.0	16.0	
Pedestrian Calls (#/hr)	1	1		1	1		0	0		0	0	
Act Effect Green (s)	23.1	23.1		23.1	23.1		30.9	30.9		30.9	30.9	
Actuated g/C Ratio	0.38	0.38		0.38	0.38		0.52	0.52		0.52	0.52	
v/c Ratio	0.49	0.11		0.60	0.52		0.02	0.42		0.02	0.31	
Control Delay	10.3	2.7		19.4	12.2		6.0	5.5		15.8	15.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	10.3	2.7		19.4	12.2		6.0	5.5		15.8	15.8	
LOS	B	A		B	B		A	A		B	B	
Approach Delay		7.6			15.4			5.5			15.8	
Approach LOS		A			B			A			B	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 28 (47%), Referenced to phase 1:NBSB, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.60
Intersection Signal Delay: 11.4
Intersection Capacity Utilization 54.1%
Analysis Period (min) 15

Intersection LOS: B
ICU Level of Service A

Splits and Phases: 14: Eastman & Dewey



5:00 pm Baseline
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Synchro 7 - Report
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Dewey Avenue Corridor Study
15: Christian & Dewey

Existing Conditions - PM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	17	20	7	22	35	203	12	661	41	66	331	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	14	14	14	10	10	10	10	10	10
Storage Length (ft)	0		0	0		0	75		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	0.95
Frt		0.978			0.894			0.991			0.996	
Flt Protected		0.981			0.996		0.950			0.950		
Satd. Flow (prot)	0	1787	0	0	1769	0	1652	3274	0	1652	3290	0
Flt Permitted		0.667			0.971		0.528	0.288		0.288		
Satd. Flow (perm)	0	1215	0	0	1725	0	918	3274	0	501	3290	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			226			11			6	
Link Speed (mph)		30			30			30			35	
Link Distance (ft)		370			2670			1020			2230	
Travel Time (s)		8.4			60.7			23.2			43.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	19	22	8	24	39	226	13	734	46	73	368	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	49	0	0	289	0	13	780	0	73	378	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	0.92	0.92	0.92	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	10	10		10	10		19	19		50	19	
Trailing Detector (ft)	-10	-10		-10	-10		19	19		50	19	
Detector 1 Position(ft)	-10	-10		-10	-10		19	19		50	19	
Detector 1 Size(ft)	20	20		20	20		0	0		0	0	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm			Perm			Perm			pm+pt		
Protected Phases		2			2			1			3	13
Permitted Phases											13	
Detector Phase	2	2		2	2		1	1		3	13	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		13.0	13.0		5.0		
Minimum Split (s)	29.0	29.0		29.0	29.0		21.0	21.0		10.0		
Total Split (s)	29.0	29.0	0.0	29.0	29.0	0.0	21.0	21.0	0.0	10.0	31.0	0.0

5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Avenue Corridor Study
15: Christian & Dewey

Existing Conditions - PM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	48.3%	48.3%	0.0%	48.3%	48.3%	0.0%	35.0%	35.0%	0.0%	16.7%	51.7%	0.0%
Maximum Green (s)	23.0	23.0		23.0	23.0		15.5	15.5		5.0		
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5		
All-Red Time (s)	2.5	2.5		2.5	2.5		2.0	2.0		1.5		
Lost Time Adjust (s)	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0	-2.5	-2.5	-1.0	-2.0	-2.5	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lag	Lag		Lag	Lag		Lead	Lead				
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		3.0	3.0		3.0		
Recall Mode	Min	Min		Min	Min		C-Max	C-Max		Min		
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0				
Flash Dont Walk (s)	14.0	14.0		14.0	14.0		8.0	8.0				
Pedestrian Calls (#/hr)	0	0		0	0		0	0				
Act Effect Green (s)		11.6			11.6		30.5	30.5		39.4	42.4	
Actuated g/C Ratio		0.19			0.19		0.51	0.51		0.66	0.71	
v/c Ratio		0.20			0.56		0.03	0.47		0.15	0.16	
Control Delay		18.4			10.1		6.6	8.4		1.5	1.4	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		18.4			10.1		6.6	8.4		1.5	1.4	
LOS		B			B		A	A		A	A	
Approach Delay		18.4			10.1			8.3			1.4	
Approach LOS		B			B			A			A	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 1:NBSB, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.56
Intersection Signal Delay: 7.0
Intersection Capacity Utilization 49.8%
Analysis Period (min) 15

Intersection LOS: A
ICU Level of Service A

Splits and Phases: 15: Christian & Dewey



5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Avenue Corridor Study
16: McCall & Dewey

Existing Conditions - PM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	56	8	58	5	8	16	85	693	7	6	401	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	13	9	9	9	10	10	10	10	10	10
Storage Length (ft)	0		0	0		0	75		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.936			0.924			0.999			0.984	
Flt Protected		0.977			0.992		0.950			0.950		
Satd. Flow (prot)	0	1760	0	0	1537	0	1652	3300	0	1652	3250	0
Flt Permitted		0.846			0.947		0.423			0.295		
Satd. Flow (perm)	0	1524	0	0	1467	0	735	3300	0	513	3250	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		78			18			2			22	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		415			370			2230			1450	
Travel Time (s)		9.4			8.4			43.4			28.2	
Peak Hour Factor	0.74	0.74	0.74	0.91	0.91	0.91	0.86	0.86	0.86	0.91	0.91	0.91
Adj. Flow (vph)	76	11	78	5	9	18	99	806	8	7	441	54
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	165	0	0	32	0	99	814	0	7	495	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	0.96	1.14	1.14	1.14	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	15	15		15	15		50	19		19	19	
Trailing Detector (ft)	-5	-5		-5	-5		50	19		19	19	
Detector 1 Position(ft)	-5	-5		-5	-5		50	19		19	19	
Detector 1 Size(ft)	20	20		20	20		0	0		0	0	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm			Perm			pm+pt			Perm		
Protected Phases		2			2		3	1 3			1	
Permitted Phases							1 3			1		
Detector Phase	2	2		2	2		3	1 3		1	1	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		4.0			4.0	4.0	
Minimum Split (s)	29.0	29.0		29.0	29.0		10.0			21.0	21.0	
Total Split (s)	29.0	29.0	0.0	29.0	29.0	0.0	10.0	31.0	0.0	21.0	21.0	0.0

5:00 pm Baseline
%user_name%

Synchro 7 - Report
Page 7

Dewey Avenue Corridor Study
16: McCall & Dewey

Existing Conditions - PM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	48.3%	48.3%	0.0%	48.3%	48.3%	0.0%	16.7%	51.7%	0.0%	35.0%	35.0%	0.0%
Maximum Green (s)	23.0	23.0		23.0	23.0		5.0	51.7%		15.5	15.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5			3.5	3.5	
All-Red Time (s)	2.5	2.5		2.5	2.5		1.5			2.0	2.0	
Lost Time Adjust (s)	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0	-2.0	-2.5	-1.0	-2.5	-2.5	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lag	Lag		Lag	Lag					Lead	Lead	
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		4.0	4.0		3.0			3.0	3.0	
Recall Mode	None	None		None	None		None			C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0							
Flash Dont Walk (s)	14.0	14.0		14.0	14.0							
Pedestrian Calls (#/hr)	1	1		1	1							
Act Effect Green (s)		14.5			14.5		39.0	42.6		27.7	27.7	
Actuated g/C Ratio		0.24			0.24		0.65	0.71		0.46	0.46	
v/c Ratio		0.39			0.09		0.15	0.35		0.03	0.33	
Control Delay		12.0			9.7		1.9	2.3		11.0	11.4	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		12.0			9.7		1.9	2.3		11.0	11.4	
LOS		B			A		A	A		B	B	
Approach Delay		12.0			9.7			2.3			11.3	
Approach LOS		B			A			A			B	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 55 (92%), Referenced to phase 1:NBSB, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.39
Intersection Signal Delay: 6.2
Intersection Capacity Utilization 46.5%
Analysis Period (min) 15

Intersection LOS: A
ICU Level of Service A

Splits and Phases: 16: McCall & Dewey



5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Avenue Corridor Study
17: W Ridge & Woodside

Existing Conditions - PM
6/15/2010

	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	6	1168	1393	7	84	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	10	10	10	12	12
Storage Length (ft)	75			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25			25	25	25
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	1.00
Frt			0.999		0.935	
Flt Protected	0.950				0.975	
Satd. Flow (prot)	1770	4746	4742	0	1698	0
Flt Permitted	0.125				0.975	
Satd. Flow (perm)	233	4746	4742	0	1698	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			1		37	
Link Speed (mph)		35	35		30	
Link Distance (ft)		667	1165		282	
Travel Time (s)		13.0	22.7		6.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	7	1298	1548	8	93	87
Shared Lane Traffic (%)						
Lane Group Flow (vph)	7	1298	1556	0	180	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.09	1.09	1.09	1.00	1.00
Turning Speed (mph)	16			9	16	9
Number of Detectors	1	1	1		1	
Detector Template						
Leading Detector (ft)	50	19	19		15	
Trailing Detector (ft)	0	19	19		-5	
Detector 1 Position(ft)	0	19	19		-5	
Detector 1 Size(ft)	50	0	0		20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	
Turn Type	pm+pt					
Protected Phases	2	1 2	1		3	
Permitted Phases	1 2	1				
Detector Phase	2	1 2	1		3	
Switch Phase						
Minimum Initial (s)	4.0		30.0		6.0	
Minimum Split (s)	13.0		36.0		33.0	
Total Split (s)	13.0	87.0	74.0	0.0	33.0	0.0

5:00 pm Baseline
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Synchro 7 - Report
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Dewey Avenue Corridor Study
17: W Ridge & Woodside

Existing Conditions - PM
6/15/2010

	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Total Split (%)	10.8%	72.5%	61.7%	0.0%	27.5%	0.0%
Maximum Green (s)	7.0		68.0		27.0	
Yellow Time (s)	4.0		4.0		3.5	
All-Red Time (s)	2.0		2.0		2.5	
Lost Time Adjust (s)	-3.0	-3.0	-3.0	-1.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		2.0		4.0	
Recall Mode	None		C-Max		None	
Walk Time (s)			23.0		7.0	
Flash Dont Walk (s)			7.0		19.0	
Pedestrian Calls (#/hr)			0		0	
Act Effect Green (s)	91.3	94.3	81.3		19.7	
Actuated g/C Ratio	0.76	0.79	0.68		0.16	
v/c Ratio	0.02	0.35	0.48		0.58	
Control Delay	3.5	3.7	10.4		43.4	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	3.5	3.7	10.4		43.4	
LOS	A	A	B		D	
Approach Delay		3.7	10.4		43.4	
Approach LOS		A	B		D	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 53 (44%), Referenced to phase 1:EBWB, Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.58
Intersection Signal Delay: 9.5
Intersection Capacity Utilization 43.2%
Analysis Period (min) 15

Intersection LOS: A
ICU Level of Service A

Splits and Phases: 17: W Ridge & Woodside



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Synchro 7 - Report
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Dewey Avenue Corridor Study
416: Banker & Bennington

Existing Conditions - PM
6/15/2010

Lane Group	EBL2	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR	SWR2
Lane Configurations												
Volume (vph)	4	50	7	1	732	167	16	344	3	63	50	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00
Frt		0.984			0.972			0.999		0.933		
Flt Protected		0.958						0.998		0.975		
Satd. Flow (prot)	0	1756	0	0	3440	0	0	3529	0	1694	0	0
Flt Permitted		0.958			0.955			0.906		0.975		
Satd. Flow (perm)	0	1756	0	0	3285	0	0	3203	0	1694	0	0
Right Turn on Red			Yes			Yes			Yes		Yes	
Satd. Flow (RTOR)		8			66			2		10		
Link Speed (mph)		30			35			35		30		
Link Distance (ft)		257			1450			325		339		
Travel Time (s)		5.8			28.2			6.3		7.7		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	4	56	8	1	813	186	18	382	3	70	56	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	68	0	0	1000	0	0	403	0	139	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Right	Right
Median Width(ft)		12			4			0		12		
Link Offset(ft)		0			0			0		0		
Crosswalk Width(ft)		16			16			16		16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	15	9	15		9	15		9	15	9	9
Number of Detectors	1	1		1	1		1	1		1		
Detector Template												
Leading Detector (ft)	50	50		19	19		19	19		50		
Trailing Detector (ft)	0	0		19	19		19	19		0		
Detector 1 Position(ft)	0	0		19	19		19	19		0		
Detector 1 Size(ft)	50	50		0	0		0	0		50		
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex		
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0		
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0		
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0		
Turn Type	Perm			Perm			Perm					
Protected Phases		2			1			1				
Permitted Phases	2			1			1			2		
Detector Phase	2	2		1	1		1	1		2		
Switch Phase												
Minimum Initial (s)	4.0	4.0		16.0	16.0		16.0	16.0		4.0		
Minimum Split (s)	27.0	27.0		24.0	24.0		24.0	24.0		27.0		
Total Split (s)	27.0	27.0	0.0	33.0	33.0	0.0	33.0	33.0	0.0	27.0	0.0	0.0
Total Split (%)	45.0%	45.0%	0.0%	55.0%	55.0%	0.0%	55.0%	55.0%	0.0%	45.0%	0.0%	0.0%
Maximum Green (s)	21.0	21.0		27.5	27.5		27.5	27.5		21.0		
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5		
All-Red Time (s)	2.5	2.5		2.0	2.0		2.0	2.0		2.5		

5:00 pm Baseline
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Synchro 7 - Report
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Dewey Avenue Corridor Study
416: Banker & Bennington

Existing Conditions - PM
6/15/2010

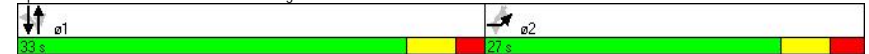
Lane Group	EBL2	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR	SWR2
Lost Time Adjust (s)	-3.0	-3.0	-1.0	-2.5	-2.5	-1.0	-2.5	-2.5	-1.0	-3.0	-1.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lag	Lag		Lead	Lead		Lead	Lead		Lag		
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0		
Recall Mode	None	None		C-Max	C-Max		C-Max	C-Max		None		
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0		
Flash Dont Walk (s)	12.0	12.0		10.0	10.0		10.0	10.0		12.0		
Pedestrian Calls (#/hr)	1	1		0	0		0	0		1		
Act Effect Green (s)		13.9			43.1			43.1		13.9		
Actuated g/C Ratio		0.23			0.72			0.72		0.23		
v/c Ratio		0.16			0.42			0.18		0.35		
Control Delay		15.6			4.2			2.4		18.8		
Queue Delay		0.0			0.0			0.0		0.0		
Total Delay		15.6			4.2			2.4		18.8		
LOS		B			A			A		B		
Approach Delay		15.6			4.2			2.4		18.8		
Approach LOS		B			A			A		B		

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 18 (30%), Referenced to phase 1:NBSB, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.42
Intersection Signal Delay: 5.5
Intersection Capacity Utilization 47.0%
Analysis Period (min) 15

Intersection LOS: A
ICU Level of Service A

Splits and Phases: 416: Banker & Bennington



5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Avenue Corridor Study
457: Denise Road & Dewey Avenue

Existing Conditions - PM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	13	6	23	186	19	82	18	747	181	75	548	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	75		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.925			0.961			0.971			0.998	
Flt Protected		0.985			0.969		0.950			0.950		
Satd. Flow (prot)	0	1697	0	0	1735	0	1770	3437	0	1770	3532	0
Flt Permitted		0.897			0.800		0.390			0.226		
Satd. Flow (perm)	0	1546	0	0	1432	0	726	3437	0	421	3532	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		26			27			64			3	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		500			500			510			501	
Travel Time (s)		11.4			11.4			9.9			9.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	14	7	26	207	21	91	20	830	201	83	609	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	47	0	0	319	0	20	1031	0	83	618	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		4	4		6	6		2	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		15.0	15.0		15.0	15.0	
Minimum Split (s)	29.5	29.5		29.5	29.5		25.5	25.5		25.5	25.5	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	50.0	50.0	0.0	50.0	50.0	0.0
Total Split (%)	37.5%	37.5%	0.0%	37.5%	37.5%	0.0%	62.5%	62.5%	0.0%	62.5%	62.5%	0.0%

5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Avenue Corridor Study
457: Denise Road & Dewey Avenue

Existing Conditions - PM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Maximum Green (s)	23.5	23.5		23.5	23.5		44.5	44.5		44.5	44.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		1.5	1.5		1.5	1.5	
Lost Time Adjust (s)	-3.5	-3.5	-1.0	-3.5	-3.5	-1.0	-2.5	-2.5	-1.0	-2.5	-2.5	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		4.0	4.0		4.0	4.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		10.0	10.0		10.0	10.0	
Flash Dont Walk (s)	16.0	16.0		16.0	16.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		23.1			23.1		50.9	50.9		50.9	50.9	
Actuated g/C Ratio		0.29			0.29		0.64	0.64		0.64	0.64	
v/c Ratio		0.10			0.74		0.04	0.47		0.31	0.27	
Control Delay		11.4			33.8		1.9	2.5		12.0	7.4	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		11.4			33.8		1.9	2.5		12.0	7.4	
LOS		B			C		A	A		B	A	
Approach Delay		11.4			33.8			2.5			7.9	
Approach LOS		B			C			A			A	

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 26 (33%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 9.2

Intersection Capacity Utilization 71.9%

Analysis Period (min) 15

Intersection LOS: A

ICU Level of Service C

Splits and Phases: 457: Denise Road & Dewey Avenue



5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Avenue Corridor Study
459: Clark Pk & Dewey Avenue

Existing Conditions - PM
6/15/2010

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø2
Lane Configurations							
Volume (vph)	0	0	1100	0	0	700	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95	
Frt							
Flt Protected							
Satd. Flow (prot)	0	0	3539	0	0	3539	
Flt Permitted							
Satd. Flow (perm)	0	0	3539	0	0	3539	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)							
Link Speed (mph)	30		35			35	
Link Distance (ft)	362		1048			1991	
Travel Time (s)	8.2		20.4			38.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	
Adj. Flow (vph)	0	0	1222	0	0	778	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	1222	0	0	778	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Right	Left	Right	Left	Left	
Median Width(ft)	0		12			12	
Link Offset(ft)	0		0			0	
Crosswalk Width(ft)	16		16			16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15	9		9	15		
Number of Detectors			1			1	
Detector Template							
Leading Detector (ft)			50			50	
Trailing Detector (ft)			0			0	
Detector 1 Position(ft)			0			0	
Detector 1 Size(ft)			50			50	
Detector 1 Type			CI+Ex			CI+Ex	
Detector 1 Channel							
Detector 1 Extend (s)			0.0			0.0	
Detector 1 Queue (s)			0.0			0.0	
Detector 1 Delay (s)			0.0			0.0	
Turn Type							
Protected Phases			1			1	2
Permitted Phases							
Detector Phase			1			1	
Switch Phase							
Minimum Initial (s)			10.0			10.0	10.0
Minimum Split (s)			16.0			16.0	16.0
Total Split (s)	0.0	0.0	16.0	0.0	0.0	16.0	46.0
Total Split (%)	0.0%	0.0%	25.8%	0.0%	0.0%	25.8%	74%
Maximum Green (s)			10.0			10.0	40.0
Yellow Time (s)			4.0			4.0	4.0
All-Red Time (s)			2.0			2.0	2.0

5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Avenue Corridor Study
459: Clark Pk & Dewey Avenue

Existing Conditions - PM
6/15/2010

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø2
Lost Time Adjust (s)	-1.0	-1.0	-3.0	-1.0	-1.0	-3.0	
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	
Lead/Lag			Lead			Lead	Lag
Lead-Lag Optimize?							
Vehicle Extension (s)			4.0			4.0	8.0
Recall Mode			None			None	None
Act Effect Green (s)			16.0			16.0	
Actuated g/C Ratio			1.00			1.00	
v/c Ratio			0.35			0.22	
Control Delay			0.3			0.1	
Queue Delay			0.0			0.0	
Total Delay			0.3			0.1	
LOS			A			A	
Approach Delay			0.3			0.1	
Approach LOS			A			A	

Intersection Summary

Area Type: Other

Cycle Length: 62

Actuated Cycle Length: 16

Natural Cycle: 40

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.35

Intersection Signal Delay: 0.2

Intersection Capacity Utilization 33.7%

Analysis Period (min) 15

Intersection LOS: A
ICU Level of Service A

Splits and Phases: 459: Clark Pk & Dewey Avenue



5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Avenue Corridor Study
461: Britton Road & Dewey Avenue

Existing Conditions - PM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	42	67	9	229	79	135	24	845	112	107	622	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	150		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.982			0.905			0.983			0.992	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1829	0	1770	1686	0	1770	3479	0	1770	3511	0
Flt Permitted	0.464			0.702			0.343			0.152		
Satd. Flow (perm)	864	1829	0	1308	1686	0	639	3479	0	283	3511	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			116			21		8		
Link Speed (mph)		30			30			35		35		
Link Distance (ft)		500			500			1974		650		
Travel Time (s)		11.4			11.4			38.5		12.7		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	47	74	10	254	88	150	27	939	124	119	691	37
Shared Lane Traffic (%)												
Lane Group Flow (vph)	47	84	0	254	238	0	27	1063	0	119	728	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm			Perm			pm+pt			pm+pt		
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		4	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		4.0	15.0		4.0	15.0	
Minimum Split (s)	30.0	30.0		30.0	30.0		9.0	27.0		9.0	27.0	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	16.0	34.0	0.0	16.0	34.0	0.0
Total Split (%)	37.5%	37.5%	0.0%	37.5%	37.5%	0.0%	20.0%	42.5%	0.0%	20.0%	42.5%	0.0%

5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Avenue Corridor Study
461: Britton Road & Dewey Avenue

Existing Conditions - PM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Maximum Green (s)	24.0	24.0		24.0	24.0		11.0	28.0		11.0	28.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	4.0		3.5	4.0	
All-Red Time (s)	2.5	2.5		2.5	2.5		1.5	2.0		1.5	2.0	
Lost Time Adjust (s)	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0	-2.0	-3.0	-1.0	-2.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		4.0	4.0		2.0	4.0		2.0	4.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0			9.0			9.0	
Flash Dont Walk (s)	17.0	17.0		17.0	17.0			12.0			12.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)	23.4	23.4		23.4	23.4		46.5	40.8		50.5	46.4	
Actuated g/C Ratio	0.29	0.29		0.29	0.29		0.58	0.51		0.63	0.58	
v/c Ratio	0.19	0.16		0.66	0.41		0.06	0.60		0.35	0.36	
Control Delay	21.5	18.1		33.3	13.0		6.2	18.0		14.6	6.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	21.5	18.1		33.3	13.0		6.2	18.0		14.6	6.7	
LOS	C	B		C	B		A	B		B	A	
Approach Delay		19.4			23.5			17.7			7.8	
Approach LOS		B			C			B			A	

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.66

Intersection Signal Delay: 15.6

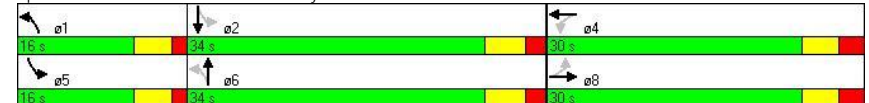
Intersection Capacity Utilization 63.9%

Analysis Period (min) 15

Intersection LOS: B

ICU Level of Service B

Splits and Phases: 461: Britton Road & Dewey Avenue



5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Avenue Corridor Study
462: Dalston & Dewey Avenue

Existing Conditions - PM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	0	24	0	0	0	25	730	0	0	482	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.904									0.998	
Flt Protected		0.986						0.998				
Satd. Flow (prot)	0	1660	0	0	1863	0	0	3532	0	0	3532	0
Flt Permitted		0.906						0.924				
Satd. Flow (perm)	0	1526	0	0	1863	0	0	3270	0	0	3532	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		27									2	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		347			289			2220			654	
Travel Time (s)		7.9			6.6			43.2			12.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	11	0	27	0	0	0	28	811	0	0	536	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	38	0	0	0	0	0	839	0	0	542	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			6			2	
Permitted Phases	4			8			6			2		
Detector Phase	4	4		8	8		6	6		2	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		20.0	20.0		20.0	20.0	
Minimum Split (s)	24.5	24.5		24.5	24.5		34.5	34.5		34.5	34.5	
Total Split (s)	45.0	45.0	0.0	45.0	45.0	0.0	65.0	65.0	0.0	65.0	65.0	0.0
Total Split (%)	40.9%	40.9%	0.0%	40.9%	40.9%	0.0%	59.1%	59.1%	0.0%	59.1%	59.1%	0.0%
Maximum Green (s)	39.5	39.5		39.5	39.5		59.5	59.5		59.5	59.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.5	1.5		1.5	1.5	

5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Avenue Corridor Study
462: Dalston & Dewey Avenue

Existing Conditions - PM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lost Time Adjust (s)	-2.5	-2.5	-1.0	-1.0	-2.5	-1.0	-2.5	-2.5	-1.0	-1.0	-2.5	-1.0
Total Lost Time (s)	3.0	3.0	3.0	4.5	3.0	3.0	3.0	3.0	3.0	4.5	3.0	3.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		4.0	4.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		20.0	20.0		20.0	20.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0		9.0	9.0		9.0	9.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		10.3					99.7			99.7		
Actuated g/C Ratio		0.09					0.91			0.91		
v/c Ratio		0.23					0.28			0.17		
Control Delay		25.3					1.5			0.3		
Queue Delay		0.0					0.0			0.0		
Total Delay		25.3					1.5			0.3		
LOS		C					A			A		
Approach Delay		25.3					1.5			0.3		
Approach LOS		C					A			A		

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 92 (84%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.28

Intersection Signal Delay: 1.7

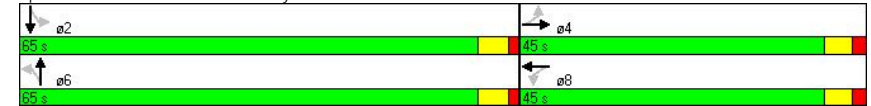
Intersection Capacity Utilization 50.0%

Analysis Period (min) 15

Intersection LOS: A

ICU Level of Service A

Splits and Phases: 462: Dalston & Dewey Avenue



5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Avenue Corridor Study
469: Dorsey & Dewey Avenue

Existing Conditions - PM
6/15/2010

	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	304	114	207	818	501	151
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	200			0
Storage Lanes	1	1	1			0
Taper Length (ft)	25	25	25			25
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95
Frt		0.850			0.965	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1583	1770	3539	3415	0
Flt Permitted	0.950		0.269			
Satd. Flow (perm)	1770	1583	501	3539	3415	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		127			59	
Link Speed (mph)	35			35	35	
Link Distance (ft)	3243			1991	1974	
Travel Time (s)	63.2			38.8	38.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	338	127	230	909	557	168
Shared Lane Traffic (%)						
Lane Group Flow (vph)	338	127	230	909	725	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	1	1	
Detector Template						
Leading Detector (ft)	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Turn Type	custom	pm+pt				
Protected Phases	4		1	6	2	
Permitted Phases		14	6			
Detector Phase	4	14	1	6	2	
Switch Phase						
Minimum Initial (s)	6.0		6.0	20.0	20.0	
Minimum Split (s)	28.5		11.0	28.5	28.5	
Total Split (s)	29.0	45.0	16.0	51.0	35.0	0.0
Total Split (%)	36.3%	56.3%	20.0%	63.8%	43.8%	0.0%

5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Avenue Corridor Study
469: Dorsey & Dewey Avenue

Existing Conditions - PM
6/15/2010

	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Maximum Green (s)	23.5		11.5	45.5	29.5	
Yellow Time (s)	3.5		3.5	3.5	3.5	
All-Red Time (s)	2.0		1.0	2.0	2.0	
Lost Time Adjust (s)	-2.5	-1.5	-1.5	-2.5	-2.5	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?					Yes	
Vehicle Extension (s)	4.0		2.0	2.0	2.0	
Recall Mode	None		None	C-Max	C-Max	
Walk Time (s)	7.0			10.0	10.0	
Flash Dont Walk (s)	16.0			13.0	13.0	
Pedestrian Calls (#/hr)	0			0	0	
Act Effct Green (s)	22.7	36.0	51.3	51.3	38.0	
Actuated g/C Ratio	0.28	0.45	0.64	0.64	0.48	
v/c Ratio	0.67	0.16	0.47	0.40	0.44	
Control Delay	32.2	2.5	10.0	8.1	14.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	32.2	2.5	10.0	8.1	14.8	
LOS	C	A	A	A	B	
Approach Delay	24.1			8.4	14.8	
Approach LOS	C			A	B	

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 42 (53%), Referenced to phase 2:SBT and 6:NBT, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.67

Intersection Signal Delay: 13.5

Intersection LOS: B

Intersection Capacity Utilization 57.0%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 469: Dorsey & Dewey Avenue



5:00 pm Baseline
%user_name%

Synchro 7 - Report
Page 22

Dewey Avenue Corridor Study
550: Ellington & Dewey

Existing Conditions - PM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	5	50	11	2	50	1	13	868	6	2	436	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.978			0.998			0.999			0.998	
Flt Protected		0.996			0.998			0.999				
Satd. Flow (prot)	0	1814	0	0	1855	0	0	3532	0	0	3532	0
Flt Permitted		0.976			0.991			0.948			0.953	
Satd. Flow (perm)	0	1778	0	0	1842	0	0	3352	0	0	3366	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			1			2			3	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		295			178			325			2220	
Travel Time (s)		6.7			4.0			6.3			43.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	6	56	12	2	56	1	14	964	7	2	484	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	74	0	0	59	0	0	985	0	0	493	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		19	19		19	19	
Trailing Detector (ft)	0	0		0	0		19	19		19	19	
Detector 1 Position(ft)	0	0		0	0		19	19		19	19	
Detector 1 Size(ft)	50	50		50	50		0	0		0	0	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			2			1			1	
Permitted Phases	2			2			1			1		
Detector Phase	2	2		2	2		1	1		1	1	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		16.0	16.0		16.0	16.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		23.5	23.5		23.5	23.5	
Total Split (s)	26.0	26.0	0.0	26.0	26.0	0.0	34.0	34.0	0.0	34.0	34.0	0.0
Total Split (%)	43.3%	43.3%	0.0%	43.3%	43.3%	0.0%	56.7%	56.7%	0.0%	56.7%	56.7%	0.0%
Maximum Green (s)	20.5	20.5		20.5	20.5		28.5	28.5		28.5	28.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	

5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Avenue Corridor Study
550: Ellington & Dewey

Existing Conditions - PM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lost Time Adjust (s)	-2.5	-2.5	-1.0	-2.5	-2.5	-1.0	-2.5	-2.5	-1.0	-2.5	-2.5	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lag	Lag		Lag	Lag		Lead	Lead		Lead	Lead	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		8.0	8.0		8.0	8.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	1	1		1	1		0	0		0	0	
Act Effect Green (s)		12.0			12.0			44.9			44.9	
Actuated g/C Ratio		0.20			0.20			0.75			0.75	
v/c Ratio		0.20			0.16			0.39			0.20	
Control Delay		16.9			18.5			1.8			4.0	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		16.9			18.5			1.8			4.0	
LOS		B			B			A			A	
Approach Delay		16.9			18.5			1.8			4.0	
Approach LOS		B			B			A			A	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 18 (30%), Referenced to phase 1:NBSB, Start of Green

Natural Cycle: 50

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.39

Intersection Signal Delay: 3.8

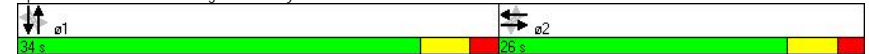
Intersection Capacity Utilization 45.4%

Analysis Period (min) 15

Intersection LOS: A

ICU Level of Service A

Splits and Phases: 550: Ellington & Dewey



5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Avenue Corridor Study
579: Northgate Manor & Dewey Avenue

Existing Conditions - PM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	3	36	68	4	56	61	895	21	66	612	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		0	75		0	100		0
Storage Lanes	1		0	0		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.860			0.941			0.997			0.993	
Flt Protected	0.950				0.974		0.950			0.950		
Satd. Flow (prot)	1770	1602	0	0	1707	0	1770	3529	0	1770	3514	0
Flt Permitted	0.630				0.815		0.365		0.254			
Satd. Flow (perm)	1174	1602	0	0	1429	0	680	3529	0	473	3514	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		40			55			5			10	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		500			500			840			510	
Travel Time (s)		11.4			11.4			16.4			9.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	27	3	40	76	4	62	68	994	23	73	680	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	27	43	0	0	142	0	68	1017	0	73	712	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		4	4		6	6		2	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		15.0	15.0		15.0	15.0	
Minimum Split (s)	31.5	31.5		31.5	31.5		27.0	27.0		27.0	27.0	
Total Split (s)	32.0	32.0	0.0	32.0	32.0	0.0	48.0	48.0	0.0	48.0	48.0	0.0
Total Split (%)	40.0%	40.0%	0.0%	40.0%	40.0%	0.0%	60.0%	60.0%	0.0%	60.0%	60.0%	0.0%

5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Avenue Corridor Study
579: Northgate Manor & Dewey Avenue

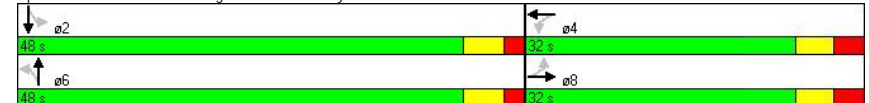
Existing Conditions - PM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Maximum Green (s)	25.5	25.5		25.5	25.5		42.0	42.0		42.0	42.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-3.5	-3.5	-1.0	-3.5	-3.5	-1.0	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		8.0	8.0		8.0	8.0	
Flash Dont Walk (s)	18.0	18.0		18.0	18.0		13.0	13.0		13.0	13.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	14.9	14.9		14.9	14.9		59.1	59.1		59.1	59.1	
Actuated g/C Ratio	0.19	0.19		0.19	0.19		0.74	0.74		0.74	0.74	
v/c Ratio	0.12	0.13		0.46	0.46		0.14	0.39		0.21	0.27	
Control Delay	26.4	10.0		22.0	22.0		1.0	1.7		4.4	2.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	26.4	10.0		22.0	22.0		1.0	1.7		4.4	2.9	
LOS	C	B		C	C		A	A		A	A	
Approach Delay		16.3			22.0			1.6			3.0	
Approach LOS		B			C			A			A	

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 80
Offset: 26 (33%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.46
Intersection Signal Delay: 4.0
Intersection Capacity Utilization 62.0%
Analysis Period (min) 15
Intersection LOS: A
ICU Level of Service B

Splits and Phases: 579: Northgate Manor & Dewey Avenue



5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Avenue Corridor Study
657: W Ridge & Eastman

Existing Conditions - PM
6/15/2010

Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	80	172	1100	1450	50	50	333
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	15	15
Storage Length (ft)		262			0	0	0
Storage Lanes		1			0	1	0
Taper Length (ft)		25			25	25	25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	1.00
Frt				0.995		0.883	
Flt Protected		0.950				0.993	
Satd. Flow (prot)	0	1770	5085	5060	0	1797	0
Flt Permitted		0.950				0.993	
Satd. Flow (perm)	0	1770	5085	5060	0	1797	0
Right Turn on Red					Yes		No
Satd. Flow (RTOR)				6			
Link Speed (mph)			35	35		30	
Link Distance (ft)			1255	497		583	
Travel Time (s)			24.4	9.7		13.3	
Peak Hour Factor	0.95	0.95	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	84	181	1222	1611	56	56	370
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	265	1222	1667	0	426	0
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Left	Right	Left	Right
Median Width(ft)			12	12		20	
Link Offset(ft)			0	0		0	
Crosswalk Width(ft)			16	16		16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	0.88	0.88
Turning Speed (mph)	9	15			9	15	9
Number of Detectors	1	1	1	1		1	
Detector Template							
Leading Detector (ft)	50	50	50	50		50	
Trailing Detector (ft)	0	0	0	0		0	
Detector 1 Position(ft)	0	0	0	0		0	
Detector 1 Size(ft)	50	50	50	50		50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0		0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0		0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0		0.0	
Turn Type	Prot	Prot					
Protected Phases	3	3	13	1		2	
Permitted Phases							
Detector Phase	3	3	13	1		2	
Switch Phase							
Minimum Initial (s)	6.0	6.0		24.0		6.0	
Minimum Split (s)	12.0	12.0		30.0		37.0	
Total Split (s)	25.0	25.0	83.0	58.0	0.0	37.0	0.0

5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Avenue Corridor Study
657: W Ridge & Eastman

Existing Conditions - PM
6/15/2010

Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Total Split (%)	20.8%	20.8%	69.2%	48.3%	0.0%	30.8%	0.0%
Maximum Green (s)	19.0	19.0		52.0		31.0	
Yellow Time (s)	4.0	4.0		4.0		3.5	
All-Red Time (s)	2.0	2.0		2.0		2.5	
Lost Time Adjust (s)	-3.0	-3.0	-3.0	-3.0	-1.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0		3.0	3.0	3.0
Lead/Lag				Lead		Lag	
Lead-Lag Optimize?							
Vehicle Extension (s)	4.0	4.0		2.0		3.0	
Recall Mode	None	None		C-Max		None	
Walk Time (s)				8.0		7.0	
Flash Dont Walk (s)				16.0		24.0	
Pedestrian Calls (#/hr)				0		0	
Act Effect Green (s)		22.7	81.3	55.6		32.7	
Actuated g/C Ratio		0.19	0.68	0.46		0.27	
v/c Ratio		0.79	0.35	0.71		0.87	
Control Delay		64.7	8.7	17.1		58.1	
Queue Delay		0.0	0.0	0.5		0.0	
Total Delay		64.7	8.7	17.6		58.1	
LOS		E	A	B		E	
Approach Delay			18.7	17.6		58.1	
Approach LOS			B	B		E	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 74 (62%), Referenced to phase 1:EBWB, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 22.9

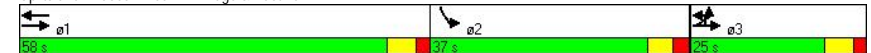
Intersection Capacity Utilization 76.4%

Analysis Period (min) 15

Intersection LOS: C

ICU Level of Service D

Splits and Phases: 657: W Ridge & Eastman



5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Avenue Corridor Study
1001: English Road & Dewey Avenue

Existing Conditions - PM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	42	67	9	229	79	135	24	845	112	107	622	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		0	150		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.982			0.905			0.983			0.992	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1829	0	1770	1686	0	1770	3479	0	1770	3511	0
Flt Permitted	0.464			0.702			0.343			0.152		
Satd. Flow (perm)	864	1829	0	1308	1686	0	639	3479	0	283	3511	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			116			21			8	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		3301			500			650			840	
Travel Time (s)		75.0			11.4			12.7			16.4	
Peak Hour Factor	0.96	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	44	74	10	254	88	150	27	939	124	119	691	37
Shared Lane Traffic (%)												
Lane Group Flow (vph)	44	84	0	254	238	0	27	1063	0	119	728	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm			Perm			pm+pt			pm+pt		
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		4	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		4.0	15.0		4.0	15.0	
Minimum Split (s)	30.0	30.0		30.0	30.0		9.0	27.0		9.0	27.0	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	16.0	34.0	0.0	16.0	34.0	0.0
Total Split (%)	37.5%	37.5%	0.0%	37.5%	37.5%	0.0%	20.0%	42.5%	0.0%	20.0%	42.5%	0.0%

5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Avenue Corridor Study
1001: English Road & Dewey Avenue

Existing Conditions - PM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Maximum Green (s)	24.0	24.0		24.0	24.0		11.0	28.0		11.0	28.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	4.0		3.5	4.0	
All-Red Time (s)	2.5	2.5		2.5	2.5		1.5	2.0		1.5	2.0	
Lost Time Adjust (s)	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0	-2.0	-3.0	-1.0	-2.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		4.0	4.0		2.0	4.0		2.0	4.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0			9.0			9.0	
Flash Dont Walk (s)	17.0	17.0		17.0	17.0			12.0			12.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)	23.4	23.4		23.4	23.4		46.5	40.8		50.5	46.4	
Actuated g/C Ratio	0.29	0.29		0.29	0.29		0.58	0.51		0.63	0.58	
v/c Ratio	0.17	0.16		0.66	0.41		0.06	0.60		0.35	0.36	
Control Delay	21.3	18.1		33.3	13.0		7.5	11.1		13.6	16.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	21.3	18.1		33.3	13.0		7.5	11.1		13.6	16.2	
LOS	C	B		C	B		A	B		B	B	
Approach Delay		19.2			23.5			11.0			15.9	
Approach LOS		B			C			B			B	

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.66

Intersection Signal Delay: 15.4

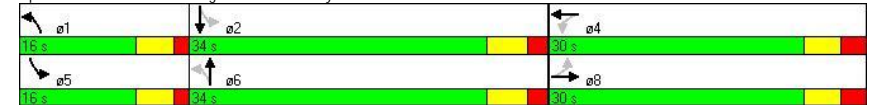
Intersection Capacity Utilization 63.9%

Analysis Period (min) 15

Intersection LOS: B

ICU Level of Service B

Splits and Phases: 1001: English Road & Dewey Avenue



5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Avenue Corridor Study
1021: Latta & Dewey Avenue

Existing Conditions - PM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	94	307	122	125	236	19	207	202	162	37	160	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	200		0	200		0	125		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.957			0.989			0.933			0.952	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1783	0	1770	1842	0	1770	3302	0	1770	3369	0
Flt Permitted	0.597			0.336			0.303			0.521		
Satd. Flow (perm)	1112	1783	0	626	1842	0	564	3302	0	970	3369	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20			5			174			90	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		3343			564			615			360	
Travel Time (s)		65.1			11.0			12.0			7.0	
Peak Hour Factor	0.88	0.88	0.88	0.97	0.97	0.97	0.93	0.93	0.93	0.84	0.84	0.84
Adj. Flow (vph)	107	349	139	129	243	20	223	217	174	44	190	90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	107	488	0	129	263	0	223	391	0	44	280	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm			pm+pt			pm+pt			Perm		
Protected Phases		2		1	6		7	4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		1	6		7	4		8	8	
Switch Phase												
Minimum Initial (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Minimum Split (s)	25.0	25.0		8.0	25.0		8.0	25.0		25.0	25.0	
Total Split (s)	30.0	30.0	0.0	15.0	45.0	0.0	14.0	55.0	0.0	41.0	41.0	0.0
Total Split (%)	30.0%	30.0%	0.0%	15.0%	45.0%	0.0%	14.0%	55.0%	0.0%	41.0%	41.0%	0.0%

5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Avenue Corridor Study
1021: Latta & Dewey Avenue

Existing Conditions - PM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Maximum Green (s)	25.0	25.0		10.0	40.0		9.0	50.0		36.0	36.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lag	Lag		Lead			Lead			Lag	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)	5.0	5.0			5.0		5.0			5.0	5.0	
Flash Dont Walk (s)	15.0	15.0			15.0		15.0			15.0	15.0	
Pedestrian Calls (#/hr)	0	0		0			0			0	0	
Act Effct Green (s)	53.4	53.4		66.8	66.8		27.2	27.2		13.2	13.2	
Actuated g/C Ratio	0.53	0.53		0.67	0.67		0.27	0.27		0.13	0.13	
v/c Ratio	0.18	0.51		0.24	0.21		0.78	0.38		0.34	0.54	
Control Delay	14.5	17.6		7.6	7.3		49.9	16.6		45.9	30.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	14.5	17.6		7.6	7.3		49.9	16.6		45.9	30.6	
LOS	B	B		A	A		D	B		D	C	
Approach Delay		17.0			7.4			28.7			32.7	
Approach LOS		B			A			C			C	

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 21.4

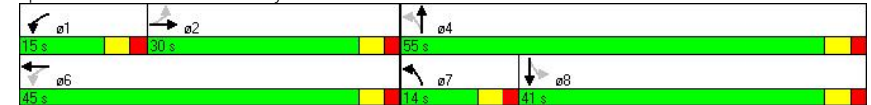
Intersection Capacity Utilization 62.2%

Analysis Period (min) 15

Intersection LOS: C

ICU Level of Service B

Splits and Phases: 1021: Latta & Dewey Avenue



5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Avenue Corridor Study
4601: Maiden & Dewey Avenue

Existing Conditions - PM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	91	0	246	0	0	0	244	565	0	0	455	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		200	0		0	0		0	125		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850								0.985	
Flt Protected		0.950					0.950					
Satd. Flow (prot)	0	1770	1583	0	1863	0	1770	3539	0	1863	3486	0
Flt Permitted		0.757					0.264					
Satd. Flow (perm)	0	1410	1583	0	1863	0	492	3539	0	1863	3486	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			289									
Link Speed (mph)		35			30			35			35	
Link Distance (ft)		4626			213			192			1048	
Travel Time (s)		90.1			4.8			3.7			20.4	
Peak Hour Factor	0.85	0.85	0.85	0.90	0.90	0.90	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	107	0	289	0	0	0	260	601	0	0	484	52
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	107	289	0	0	0	260	601	0	0	536	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	custom	Perm			pm+pt			pm+pt			
Protected Phases		3	1		3		14	46		5	2	
Permitted Phases	3		3	3			46			2		
Detector Phase	3	3	1	3	3		14	46		5	2	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0					4.0	15.0	
Minimum Split (s)	9.5	9.5	9.0	9.5	9.5					9.0	28.0	
Total Split (s)	25.0	25.0	12.0	25.0	25.0	0.0	51.0	73.0	0.0	12.0	34.0	0.0
Total Split (%)	22.7%	22.7%	10.9%	22.7%	22.7%	0.0%	46.4%	66.4%	0.0%	10.9%	30.9%	0.0%

5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Avenue Corridor Study
4601: Maiden & Dewey Avenue

Existing Conditions - PM
6/15/2010

Lane Group	ø4	ø6	ø8
Lane Configurations			
Volume (vph)			
Ideal Flow (vphpl)			
Storage Length (ft)			
Storage Lanes			
Taper Length (ft)			
Lane Util. Factor			
Frt			
Flt Protected			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Right Turn on Red			
Satd. Flow (RTOR)			
Link Speed (mph)			
Link Distance (ft)			
Travel Time (s)			
Peak Hour Factor			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Enter Blocked Intersection			
Lane Alignment			
Median Width(ft)			
Link Offset(ft)			
Crosswalk Width(ft)			
Two way Left Turn Lane			
Headway Factor			
Turning Speed (mph)			
Number of Detectors			
Detector Template			
Leading Detector (ft)			
Trailing Detector (ft)			
Detector 1 Position(ft)			
Detector 1 Size(ft)			
Detector 1 Type			
Detector 1 Channel			
Detector 1 Extend (s)			
Detector 1 Queue (s)			
Detector 1 Delay (s)			
Turn Type			
Protected Phases	4	6	8
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	4.0	15.0	4.0
Minimum Split (s)	37.0	28.0	37.0
Total Split (s)	39.0	34.0	64.0
Total Split (%)	35%	31%	58%

5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Avenue Corridor Study
4601: Maiden & Dewey Avenue

Existing Conditions - PM
6/15/2010

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Maximum Green (s)	19.5	19.5	7.0	19.5	19.5					7.0	28.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5					3.5	4.0	
All-Red Time (s)	2.0	2.0	1.5	2.0	2.0					1.5	2.0	
Lost Time Adjust (s)	-2.5	-2.5	-2.0	-2.5	-2.5	-1.0	-2.0	-3.0	-1.0	-2.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lead	Lead	Lead	Lead	Lead					Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0					2.0	4.0	
Recall Mode	None	None	None	None	None					None	C-Max	
Walk Time (s)											7.0	
Flash Dont Walk (s)											15.0	
Pedestrian Calls (#/hr)											0	
Act Effct Green (s)		15.2	31.5				87.6	76.9			32.6	
Actuated g/C Ratio		0.14	0.29				0.80	0.70			0.30	
v/c Ratio		0.55	0.44				0.26	0.24			0.51	
Control Delay		53.9	4.1				12.1	2.1			34.1	
Queue Delay		0.0	0.1				5.0	0.3			0.1	
Total Delay		53.9	4.2				17.1	2.4			34.1	
LOS		D	A				B	A			C	
Approach Delay		17.6						6.8			34.1	
Approach LOS		B						A			C	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.75

Intersection Signal Delay: 17.4

Intersection LOS: B

Intersection Capacity Utilization 42.7%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 4601: Maiden & Dewey Avenue



Dewey Avenue Corridor Study
4601: Maiden & Dewey Avenue

Existing Conditions - PM
6/15/2010

Lane Group	ø4	ø6	ø8
Maximum Green (s)	33.0	28.0	58.0
Yellow Time (s)	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag	Lag	Lag	
Lead-Lag Optimize?			
Vehicle Extension (s)	3.0	4.0	3.0
Recall Mode	None	C-Max	None
Walk Time (s)	9.0	7.0	9.0
Flash Dont Walk (s)	22.0	15.0	22.0
Pedestrian Calls (#/hr)	0	0	0
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay			
Queue Delay			
Total Delay			
LOS			
Approach Delay			
Approach LOS			

Intersection Summary

Dewey Avenue Corridor Study
4602: Dewey Avenue & Stone

Existing Conditions - PM
6/15/2010

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	72	589	68	211	436	99	125	346	46	62	221	147
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	0		0	75		0	200		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.984			0.972			0.982			0.940	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3483	0	1770	3440	0	1770	1829	0	1770	1751	0
Flt Permitted	0.359			0.151			0.184			0.505		
Satd. Flow (perm)	669	3483	0	281	3440	0	343	1829	0	941	1751	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11			25			10			32	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		654			192			352			322	
Travel Time (s)		12.7			3.7			6.9			6.3	
Peak Hour Factor	0.91	0.91	0.91	0.84	0.84	0.84	0.88	0.88	0.88	0.87	0.87	0.87
Adj. Flow (vph)	79	647	75	251	519	118	142	393	52	71	254	169
Shared Lane Traffic (%)												
Lane Group Flow (vph)	79	722	0	251	637	0	142	445	0	71	423	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt			pm+pt			pm+pt			Perm		
Protected Phases	5	2		1	6		3	8			4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		4	4	
Switch Phase												
Minimum Initial (s)	4.0	15.0		4.0	15.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	9.0	28.0		9.0	28.0		9.5	37.0		37.0	37.0	
Total Split (s)	12.0	34.0	0.0	12.0	34.0	0.0	25.0	64.0	0.0	39.0	39.0	0.0
Total Split (%)	10.9%	30.9%	0.0%	10.9%	30.9%	0.0%	22.7%	58.2%	0.0%	35.5%	35.5%	0.0%

5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Avenue Corridor Study
4602: Dewey Avenue & Stone

Existing Conditions - PM
6/15/2010

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Maximum Green (s)	7.0	28.0		7.0	28.0		19.5	58.0		33.0	33.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0		4.0	4.0	
All-Red Time (s)	1.5	2.0		1.5	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-3.0	-1.0	-2.0	-3.0	-1.0	-2.5	-3.0	-1.0	-3.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead			Lag	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	4.0		2.0	4.0		2.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		7.0			7.0			9.0		9.0	9.0	
Flash Dont Walk (s)		15.0			15.0			22.0		22.0	22.0	
Pedestrian Calls (#/hr)		0			0			0		0	0	
Act Effct Green (s)	41.1	32.6		50.7	42.4		52.1	52.1		33.9	33.9	
Actuated g/C Ratio	0.37	0.30		0.46	0.39		0.47	0.47		0.31	0.31	
v/c Ratio	0.24	0.69		0.72	0.47		0.39	0.51		0.24	0.75	
Control Delay	19.9	37.1		50.1	14.3		18.1	20.8		29.2	40.2	
Queue Delay	0.0	0.0		8.9	0.3		0.2	0.0		0.0	0.1	
Total Delay	19.9	37.1		59.0	14.7		18.3	20.8		29.2	40.3	
LOS	B	D		E	B		B	C		C	D	
Approach Delay		35.4			27.2			20.2			38.7	
Approach LOS		D			C			C			D	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.75

Intersection Signal Delay: 30.1

Intersection Capacity Utilization 71.0%

Analysis Period (min) 15

Intersection LOS: C

ICU Level of Service C

Splits and Phases: 4602: Dewey Avenue & Stone



5:00 pm Baseline
%user_name%

Synchro 7 - Report
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LOS CALCULATIONS: FUTURE 20 YEAR CONDITIONS

Dewey Ave. Corridor Study
4: W Ridge & Dewey

Future Volumes AM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	78	1569	149	46	1071	88	87	148	37	434	355	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	10	10	10	10	11	11	10	11	11
Storage Length (ft)	160		0	280		0	150		0	80		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1652	4685	0	1652	4694	0	1652	3319	0	1652	3404	0
Flt Permitted	0.111			0.067			0.321			0.420		
Satd. Flow (perm)	193	4685	0	116	4694	0	558	3319	0	730	3404	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			13			25			3	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		497			667			1166			580	
Travel Time (s)		9.7			13.0			26.5			13.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	95	2100	0	56	1417	0	106	226	0	530	450	0
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		
Detector Phase	5	2		1	6		7	4		3	8	
Switch Phase												
Minimum Initial (s)	4.0	29.0		4.0	29.0		4.0	12.0		4.0	12.0	
Minimum Split (s)	10.0	35.0		10.0	35.0		12.0	36.0		12.0	34.0	
Total Split (s)	12.0	52.0	0.0	12.0	52.0	0.0	20.0	36.0	0.0	20.0	36.0	0.0
Total Split (%)	10.0%	43.3%	0.0%	10.0%	43.3%	0.0%	16.7%	30.0%	0.0%	16.7%	30.0%	0.0%
Maximum Green (s)	7.0	46.0		7.0	46.0		15.0	30.0		15.0	30.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0		3.5	4.0	
All-Red Time (s)	1.5	2.0		1.5	2.0		1.5	2.0		1.5	2.0	
Lost Time Adjust (s)	-2.0	-3.0	-1.0	-2.0	-3.0	-1.0	-2.0	-3.0	-1.0	-2.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	4.0		2.0	4.0	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		7.0			12.0			7.0			7.0	
Flash Dont Walk (s)		22.0			17.0			23.0			21.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effect Green (s)	72.3	64.1		69.3	60.9		32.9	20.5		40.0	25.1	
Actuated g/C Ratio	0.60	0.53		0.58	0.51		0.27	0.17		0.33	0.21	
v/c Ratio	0.41	0.84		0.32	0.59		0.40	0.39		1.42	0.63	
Control Delay	18.1	25.7		25.1	19.1		31.6	40.0		233.7	47.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	18.1	25.7		25.1	19.1		31.6	40.0		233.7	47.0	
LOS	B	C		C	B		C	D		F	D	
Approach Delay		25.4			19.3			37.3			148.0	
Approach LOS		C			B			D			F	

7:30 am Baseline
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Synchro 7 - Report
Page 1

Dewey Ave. Corridor Study
4: W Ridge & Dewey

Future Volumes AM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	23	489		15	265		59	73		-560	153	
Queue Length 95th (ft)	52	#735		52	386		91	103		#600	212	
Internal Link Dist (ft)		417			587			1086			500	
Turn Bay Length (ft)	160			280			150			80		
Base Capacity (vph)	239	2508		187	2388		329	931		374	938	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.40	0.84		0.30	0.59		0.32	0.24		1.42	0.48	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 71 (59%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.42

Intersection Signal Delay: 48.5

Intersection LOS: D

Intersection Capacity Utilization 90.1%

ICU Level of Service E

Analysis Period (min) 15

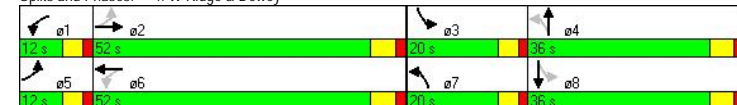
- Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 4: W Ridge & Dewey



7:30 am Baseline
%user_name%

Synchro 7 - Report
Page 2

Dewey Ave. Corridor Study
14: Eastman & Dewey

Future Volumes AM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	53	0	15	0	239	280	166	603	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	10	10	10	10	10	10	10	10	10
Storage Length (ft)	100		0	50		0	50		0	240		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1739	1739	0	1652	1478	0	1739	3036	0	1652	3303	0
Flt Permitted				0.757						0.401		
Satd. Flow (perm)	1739	1739	0	1316	1478	0	1739	3036	0	697	3303	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					458			342				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		583			686			580			1020	
Travel Time (s)		13.3			15.6			13.2			23.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	65	18	0	0	634	0	203	737	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			2			1			1	
Permitted Phases							1			1		
Detector Phase	2	2		2	2		1	1		1	1	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		23.0	23.0		23.0	23.0	
Minimum Split (s)	31.0	31.0		31.0	31.0		29.0	29.0		29.0	29.0	
Total Split (s)	31.0	31.0	0.0	31.0	31.0	0.0	29.0	29.0	0.0	29.0	29.0	0.0
Total Split (%)	51.7%	51.7%	0.0%	51.7%	51.7%	0.0%	48.3%	48.3%	0.0%	48.3%	48.3%	0.0%
Maximum Green (s)	25.5	25.5		25.5	25.5		23.0	23.0		23.0	23.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.5	-2.5	-1.0	-2.5	-2.5	-1.0	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lag	Lag		Lag	Lag		Lead	Lead		Lead	Lead	
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		4.0	4.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	18.0	18.0		18.0	18.0		16.0	16.0		16.0	16.0	
Pedestrian Calls (#/hr)	1	1		1	1		0	0		0	0	
Act Effect Green (s)				14.6	14.6			45.8		45.8	45.8	
Actuated g/C Ratio				0.24	0.24			0.76		0.76	0.76	
v/c Ratio				0.20	0.03			0.26		0.38	0.29	
Control Delay				17.1	0.1			1.7		11.3	5.6	
Queue Delay				0.0	0.0			0.0		0.0	0.0	
Total Delay				17.1	0.1			1.7		11.3	5.6	
LOS				B	A			A		B	A	
Approach Delay					13.4			1.7			6.9	
Approach LOS					B			A			A	

7:30 am Baseline
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Dewey Ave. Corridor Study
14: Eastman & Dewey

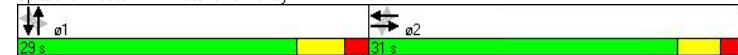
Future Volumes AM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)				20	0			10			24	41
Queue Length 95th (ft)				31	0			40		#150	138	
Internal Link Dist (ft)		503			606			500			940	
Turn Bay Length (ft)				50						240		
Base Capacity (vph)				614	934			2398		532	2521	
Starvation Cap Reductn				0	0			0		0	0	
Spillback Cap Reductn				0	0			0		0	0	
Storage Cap Reductn				0	0			0		0	0	
Reduced v/c Ratio				0.11	0.02			0.26		0.38	0.29	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 33 (55%), Referenced to phase 1:NBSB, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.38
Intersection Signal Delay: 5.2
Intersection Capacity Utilization 53.3%
Analysis Period (min) 15
Intersection LOS: A
ICU Level of Service A
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 14: Eastman & Dewey



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Dewey Ave. Corridor Study
15: Christian & Dewey

Future Volumes AM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	5	32	18	38	11	37	8	209	36	219	713	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	14	14	14	10	10	10	10	10	10
Storage Length (ft)	0		0	0		0	75		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	0	1774	0	0	1831	0	1652	3231	0	1652	3300	0
Flt Permitted		0.977			0.860		0.309			0.569		
Satd. Flow (perm)	0	1740	0	0	1610	0	537	3231	0	989	3300	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		22			45			42			1	
Link Speed (mph)		30			30			30			35	
Link Distance (ft)		370			2670			1020			2230	
Travel Time (s)		8.4			60.7			23.2			43.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	67	0	0	104	0	10	299	0	268	876	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			2			1			1	
Permitted Phases	2						1			1		
Detector Phase	2	2		2	2		1	1		1	1	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		13.0	13.0		13.0	13.0	
Minimum Split (s)	29.0	29.0		29.0	29.0		21.0	21.0		21.0	21.0	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	50.0	50.0	0.0	50.0	50.0	0.0
Total Split (%)	37.5%	37.5%	0.0%	37.5%	37.5%	0.0%	62.5%	62.5%	0.0%	62.5%	62.5%	0.0%
Maximum Green (s)	24.0	24.0		24.0	24.0		44.5	44.5		44.5	44.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.5	2.5		2.5	2.5		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0	-2.5	-2.5	-1.0	-2.0	-2.5	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.5	3.0	3.0
Lead/Lag	Lag	Lag		Lag	Lag		Lead	Lead		Lead	Lead	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		3.0	3.0		3.0	3.0	
Recall Mode	Min	Min		Min	Min		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	14.0	14.0		14.0	14.0		8.0	8.0		8.0	8.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		11.4			11.4		62.6	62.6		62.1	62.6	
Actuated g/C Ratio		0.14			0.14		0.78	0.78		0.78	0.78	
v/c Ratio		0.25			0.39		0.02	0.12		0.35	0.34	
Control Delay		23.8			22.8		2.7	2.1		6.3	4.4	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		23.8			22.8		2.7	2.1		6.3	4.4	
LOS		C			C		A	A		A	A	
Approach Delay		23.8			22.8			2.1			4.8	
Approach LOS		C			C			A			A	

7:30 am Baseline
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Dewey Ave. Corridor Study
15: Christian & Dewey

Future Volumes AM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		20			27		1	11		28	45	
Queue Length 95th (ft)		52			68		5	25		134	161	
Internal Link Dist (ft)		290			2590			940			2150	
Turn Bay Length (ft)							75			75		
Base Capacity (vph)		602			573		420	2537		768	2582	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.11			0.18		0.02	0.12		0.35	0.34	

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 80
Offset: 0 (0%), Referenced to phase 1:NBSB, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.39
Intersection Signal Delay: 6.3
Intersection Capacity Utilization 54.8%
Analysis Period (min) 15

Intersection LOS: A
ICU Level of Service A

Splits and Phases: 15: Christian & Dewey



7:30 am Baseline
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Synchro 7 - Report
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Dewey Ave. Corridor Study
16: McCall & Dewey

Future Volumes AM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	23	6	98	1	2	1	13	227	3	6	689	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	13	9	9	9	10	10	10	10	10	10
Storage Length (ft)	0		0	0		0	75		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	0	1709	0	0	1600	0	1652	3297	0	1652	3287	0
Flt Permitted		0.947			0.948		0.292			0.558		
Satd. Flow (perm)	0	1633	0	0	1535	0	508	3297	0	970	3287	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		122			2			3			7	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		415			370			2230			1450	
Travel Time (s)		9.4			8.4			43.4			28.2	
Peak Hour Factor	0.88	0.88	0.88	0.50	0.50	0.50	0.79	0.79	0.79	0.86	0.86	0.86
Growth Factor	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	159	0	0	8	0	18	320	0	8	909	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			2			1			1	
Permitted Phases	2			2			1			1		
Detector Phase	2	2		2	2		1	1		1	1	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	29.0	29.0		29.0	29.0		21.0	21.0		21.0	21.0	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	50.0	50.0	0.0	50.0	50.0	0.0
Total Split (%)	37.5%	37.5%	0.0%	37.5%	37.5%	0.0%	62.5%	62.5%	0.0%	62.5%	62.5%	0.0%
Maximum Green (s)	24.0	24.0		24.0	24.0		44.5	44.5		44.5	44.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.5	2.5		2.5	2.5		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0	-2.0	-2.5	-1.0	-2.5	-2.5	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.5	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lag	Lag		Lag	Lag		Lead	Lead		Lead	Lead	
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0							
Flash Dont Walk (s)	14.0	14.0		14.0	14.0							
Pedestrian Calls (#/hr)	1	1		1	1							
Act Effect Green (s)		13.9			13.9		59.6	60.1		60.1	60.1	
Actuated g/C Ratio		0.17			0.17		0.74	0.75		0.75	0.75	
v/c Ratio		0.41			0.03		0.05	0.13		0.01	0.37	
Control Delay		11.5			21.0		4.3	3.2		4.3	4.6	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		11.5			21.0		4.3	3.2		4.3	4.6	
LOS		B			C		A	A		A	A	
Approach Delay		11.5			21.0			3.3			4.6	
Approach LOS		B			C			A			A	

7:30 am Baseline
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Synchro 7 - Report
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Dewey Ave. Corridor Study
16: McCall & Dewey

Future Volumes AM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		16			3		2	14		1	54	
Queue Length 95th (ft)		53			6		8	35		6	137	
Internal Link Dist (ft)		335			290			2150			1370	
Turn Bay Length (ft)							75			75		
Base Capacity (vph)		632			519		378	2476		728	2469	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.25			0.02		0.05	0.13		0.01	0.37	

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 80
Offset: 0 (0%), Referenced to phase 1:NBSB, Start of Green
Natural Cycle: 50
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.41
Intersection Signal Delay: 5.2
Intersection Capacity Utilization 38.6%
Analysis Period (min) 15
Intersection LOS: A
ICU Level of Service A

Splits and Phases: 16: McCall & Dewey



7:30 am Baseline
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Dewey Ave. Corridor Study
17: W Ridge & Woodside

Future Volumes AM
5/18/2009

	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group						
Lane Configurations		↑↑↑			↑	
Volume (vph)	98	1415	933	73	2	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	10	10	10	12	12
Storage Length (ft)	75			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25			25	25	25
Satd. Flow (prot)	1770	4746	4694	0	1633	0
Flt Permitted	0.197				0.993	
Satd. Flow (perm)	367	4746	4694	0	1633	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			16		13	
Link Speed (mph)		35	35		30	
Link Distance (ft)		667	1165		282	
Travel Time (s)		13.0	22.7		6.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	110%	110%	110%	110%	110%	110%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	120	1729	1229	0	15	0
Turn Type	pm+pt					
Protected Phases	2	1 2	1		3	
Permitted Phases	1 2	1				
Detector Phase	2	1 2	1		3	
Switch Phase						
Minimum Initial (s)	4.0		30.0		6.0	
Minimum Split (s)	13.0		36.0		33.0	
Total Split (s)	20.0	87.0	67.0	0.0	33.0	0.0
Total Split (%)	16.7%	72.5%	55.8%	0.0%	27.5%	0.0%
Maximum Green (s)	14.0		61.0		27.0	
Yellow Time (s)	4.0		4.0		3.5	
All-Red Time (s)	2.0		2.0		2.5	
Lost Time Adjust (s)	-3.0	-3.0	-3.0	-1.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		2.0		4.0	
Recall Mode	None		C-Max		None	
Walk Time (s)			23.0		7.0	
Flash Dont Walk (s)			7.0		19.0	
Pedestrian Calls (#/hr)			0		0	
Act Effect Green (s)	108.3	113.1	91.5		10.4	
Actuated g/C Ratio	0.90	0.94	0.76		0.09	
v/c Ratio	0.23	0.39	0.34		0.10	
Control Delay	0.7	0.4	5.5		26.5	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	0.7	0.4	5.5		26.5	
LOS	A	A	A		C	
Approach Delay		0.4	5.5		26.5	
Approach LOS		A	A		C	

7:30 am Baseline
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Dewey Ave. Corridor Study
17: W Ridge & Woodside

Future Volumes AM
5/18/2009

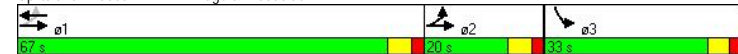
	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group						
Queue Length 50th (ft)	1	0	70		1	
Queue Length 95th (ft)	m5	m26	157		23	
Internal Link Dist (ft)		587	1085		202	
Turn Bay Length (ft)	75					
Base Capacity (vph)	531	4459	3584		418	
Starvation Cap Reductn	0	435	0		0	
Spillback Cap Reductn	0	0	0		0	
Storage Cap Reductn	0	0	0		0	
Reduced v/c Ratio	0.23	0.43	0.34		0.04	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 80 (67%), Referenced to phase 1:EBWB, Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.39
Intersection Signal Delay: 2.5
Intersection Capacity Utilization 46.0%
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Intersection LOS: A
ICU Level of Service A

Splits and Phases: 17: W Ridge & Woodside



7:30 am Baseline
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Dewey Ave. Corridor Study
416: Banker & Bennington

Future Volumes AM
5/18/2009

Lane Group	EBL2	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR	SWR2
Lane Configurations												
Volume (vph)	2	1	1	3	221	53	11	676	10	94	1	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1735	0	0	3433	0	0	3529	0	1761	0	0
Flt Permitted		0.964			0.948			0.949		0.956		
Satd. Flow (perm)	0	1735	0	0	3258	0	0	3352	0	1761	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			65			3		8		
Link Speed (mph)		30			35			35		30		
Link Distance (ft)		257			1450			325		339		
Travel Time (s)		5.8			28.2			6.3		7.7		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	4	0	0	339	0	0	851	0	125	0	0
Turn Type	Perm			Perm			Perm					
Protected Phases		2			1			1				
Permitted Phases	2			1			1			2		
Detector Phase	2	2		1	1		1	1		2		
Switch Phase												
Minimum Initial (s)	4.0	4.0		16.0	16.0		16.0	16.0		4.0		
Minimum Split (s)	27.0	27.0		24.0	24.0		24.0	24.0		27.0		
Total Split (s)	27.0	27.0	0.0	33.0	33.0	0.0	33.0	33.0	0.0	27.0	0.0	0.0
Total Split (%)	45.0%	45.0%	0.0%	55.0%	55.0%	0.0%	55.0%	55.0%	0.0%	45.0%	0.0%	0.0%
Maximum Green (s)	21.0	21.0		27.5	27.5		27.5	27.5		21.0		
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5		
All-Red Time (s)	2.5	2.5		2.0	2.0		2.0	2.0		2.5		
Lost Time Adjust (s)	-3.0	-3.0	-1.0	-2.5	-2.5	-1.0	-2.5	-2.5	-1.0	-3.0	-1.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lag	Lag		Lead	Lead		Lead	Lead		Lag		
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0		
Recall Mode	None	None		C-Max	C-Max		C-Max	C-Max		None		
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0		
Flash Dont Walk (s)	12.0	12.0		10.0	10.0		10.0	10.0		12.0		
Pedestrian Calls (#/hr)	1	1		0	0		0	0		1		
Act Effect Green (s)		13.5			43.4			43.4		13.5		
Actuated g/C Ratio		0.22			0.72			0.72		0.22		
v/c Ratio		0.01			0.14			0.35		0.31		
Control Delay		13.5			3.7			2.5		18.6		
Queue Delay		0.0			0.0			0.0		0.0		
Total Delay		13.5			3.7			2.5		18.6		
LOS		B			A			A		B		
Approach Delay		13.5			3.7			2.5		18.6		
Approach LOS		B			A			A		B		
Queue Length 50th (ft)		1			13			25		36		
Queue Length 95th (ft)		6			42			32		59		
Internal Link Dist (ft)		177			1370			245		259		
Turn Bay Length (ft)												

7:30 am Baseline
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Synchro 7 - Report
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Dewey Ave. Corridor Study
416: Banker & Bennington

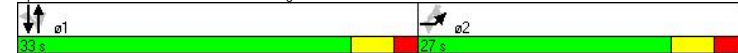
Future Volumes AM
5/18/2009

Lane Group	EBL2	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR	SWR2
Base Capacity (vph)		695			2376			2427		709		
Starvation Cap Reductn		0			0			287		0		
Spillback Cap Reductn		0			0			0		0		
Storage Cap Reductn		0			0			0		0		
Reduced v/c Ratio		0.01			0.14			0.40		0.18		

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 22 (37%), Referenced to phase 1:NBSB, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.35
Intersection Signal Delay: 4.4
Intersection Capacity Utilization 49.1%
Analysis Period (min) 15
Intersection LOS: A
ICU Level of Service A

Splits and Phases: 416: Banker & Bennington



7:30 am Baseline
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Synchro 7 - Report
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Dewey Ave. Corridor Study
457: Denise Road & Dewey Avenue

Future Volumes AM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	7	5	20	87	0	41	1	193	43	50	464	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0	175	0	0	65	0	0	125	0	0
Storage Lanes	0	0	0	1	0	0	1	0	0	1	0	0
Taper Length (ft)	25	25	25	25	25	25	25	25	25	25	25	25
Satd. Flow (prot)	0	1689	0	1770	1583	0	1770	3440	0	1770	3532	0
Flt Permitted	0.932		0.732		0.430		0.575					
Satd. Flow (perm)	0	1592	0	1364	1583	0	801	3440	0	1071	3532	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		24			557			53			3	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		500			500			712			501	
Travel Time (s)		11.4			11.4			13.9			9.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	39	0	106	50	0	1	289	0	61	574	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		4	4		6	6		2	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		15.0	15.0		15.0	15.0	
Minimum Split (s)	29.5	29.5		29.5	29.5		25.5	25.5		25.5	25.5	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	30.0	30.0	0.0	30.0	30.0	0.0
Total Split (%)	50.0%	50.0%	0.0%	50.0%	50.0%	0.0%	50.0%	50.0%	0.0%	50.0%	50.0%	0.0%
Maximum Green (s)	23.5	23.5		23.5	23.5		24.5	24.5		24.5	24.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		1.5	1.5		1.5	1.5	
Lost Time Adjust (s)	-3.5	-3.5	-1.0	-3.5	-3.5	-1.0	-2.5	-2.5	-1.0	-2.5	-2.5	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		4.0	4.0		4.0	4.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		10.0	10.0		10.0	10.0	
Flash Dont Walk (s)	16.0	16.0		16.0	16.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	12.9	12.9		12.9	12.9		44.2	44.2		44.2	44.2	
Actuated g/C Ratio	0.22	0.22		0.22	0.22		0.74	0.74		0.74	0.74	
v/c Ratio	0.11	0.36		0.36	0.06		0.00	0.11		0.08	0.22	
Control Delay	10.9	22.8		0.2	3.0		2.3	4.3		3.9		
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	10.9	22.8		0.2	3.0		2.3	4.3		3.9		
LOS	B	C		A	A		A	A		A	A	
Approach Delay	10.9			15.5			2.3			4.0		
Approach LOS	B			B			A			A		
Queue Length 50th (ft)	4			33	0		0	7		6	31	

7:30 am Baseline
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Synchro 7 - Report
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Dewey Ave. Corridor Study
457: Denise Road & Dewey Avenue

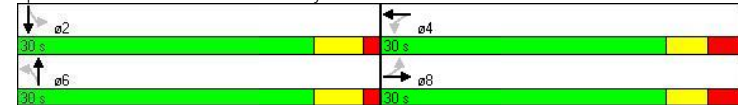
Future Volumes AM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	22			65	0		m1	16		20	63	
Internal Link Dist (ft)	420				420			632			421	
Turn Bay Length (ft)				175			65			125		
Base Capacity (vph)	730			614	1019		591	2550		790	2605	
Starvation Cap Reductn	0		0	0		0	0		0	0		0
Spillback Cap Reductn	0		0	0		0	0		0	0		0
Storage Cap Reductn	0		0	0		0	0		0	0		0
Reduced v/c Ratio	0.05		0.17	0.05		0.00	0.11		0.08	0.22		

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 30 (50%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.36
Intersection Signal Delay: 5.4
Intersection Capacity Utilization 48.8%
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 457: Denise Road & Dewey Avenue



7:30 am Baseline
%user_name%

Synchro 7 - Report
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Dewey Ave. Corridor Study
459: Clark Pk & Dewey Avenue

Future Volumes AM
5/18/2009

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø2
Lane Configurations							
Volume (vph)	0	0	315	0	0	796	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Satd. Flow (prot)	0	0	3539	0	0	3539	
Flt Permitted							
Satd. Flow (perm)	0	0	3539	0	0	3539	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)							
Link Speed (mph)	30		35			35	
Link Distance (ft)	362		1048			1991	
Travel Time (s)	8.2		20.4			38.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	
Growth Factor	110%	110%	110%	110%	110%	110%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	385	0	0	973	
Turn Type							
Protected Phases			1			1	2
Permitted Phases							
Detector Phase			1			1	
Switch Phase							
Minimum Initial (s)			10.0			10.0	10.0
Minimum Split (s)			16.0			16.0	16.0
Total Split (s)	0.0	0.0	16.0	0.0	0.0	16.0	46.0
Total Split (%)	0.0%	0.0%	25.8%	0.0%	0.0%	25.8%	74%
Maximum Green (s)			10.0			10.0	40.0
Yellow Time (s)			4.0			4.0	4.0
All-Red Time (s)			2.0			2.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-3.0	-1.0	-1.0	-3.0	
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	
Lead/Lag			Lead			Lead	Lag
Lead-Lag Optimize?							
Vehicle Extension (s)			4.0			4.0	8.0
Recall Mode			None			None	None
Act Effect Green (s)			16.0			16.0	
Actuated g/C Ratio			1.00			1.00	
v/c Ratio			0.11			0.27	
Control Delay			0.1			0.2	
Queue Delay			0.0			0.0	
Total Delay			0.1			0.2	
LOS			A			A	
Approach Delay			0.1			0.2	
Approach LOS			A			A	
Queue Length 50th (ft)			0			0	
Queue Length 95th (ft)			0			0	
Internal Link Dist (ft)	282		968			1911	
Turn Bay Length (ft)							
Base Capacity (vph)			3539			3539	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			0			0	

7:30 am Baseline
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Synchro 7 - Report
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Dewey Ave. Corridor Study
459: Clark Pk & Dewey Avenue

Future Volumes AM
5/18/2009

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø2
Storage Cap Reductn			0			0	
Reduced v/c Ratio			0.11			0.27	
Intersection Summary							
Area Type:	Other						
Cycle Length:	62						
Actuated Cycle Length:	16						
Natural Cycle:	40						
Control Type:	Semi Act-Uncoord						
Maximum v/c Ratio:	0.27						
Intersection Signal Delay:	0.2						
Intersection Capacity Utilization	27.5%						
Analysis Period (min)	15						
			Intersection LOS: A				
			ICU Level of Service A				

Splits and Phases: 459: Clark Pk & Dewey Avenue



7:30 am Baseline
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Synchro 7 - Report
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Dewey Ave. Corridor Study
461: Britton Road & Dewey Avenue

Future Volumes AM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	14	27	31	177	35	60	5	246	26	74	641	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	150		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	1714	0	1770	1688	0	1770	3490	0	1770	3536	0
Flt Permitted	0.682			0.711			0.308			0.551		
Satd. Flow (perm)	1270	1714	0	1324	1688	0	574	3490	0	1026	3536	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		38			73			24			2	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		500			500			1974			650	
Travel Time (s)		11.4			11.4			38.5			12.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	17	71	0	216	116	0	6	333	0	90	789	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		4	4		6	6		2	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		15.0	15.0		15.0	15.0	
Minimum Split (s)	30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	30.0	30.0	0.0	30.0	30.0	0.0
Total Split (%)	50.0%	50.0%	0.0%	50.0%	50.0%	0.0%	50.0%	50.0%	0.0%	50.0%	50.0%	0.0%
Maximum Green (s)	24.0	24.0		24.0	24.0		24.0	24.0		24.0	24.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.5	2.5		2.5	2.5		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		9.0	9.0		9.0	9.0	
Flash Dont Walk (s)	17.0	17.0		17.0	17.0		12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)	19.0	19.0		19.0	19.0		35.0	35.0		35.0	35.0	
Actuated g/C Ratio	0.32	0.32		0.32	0.32		0.58	0.58		0.58	0.58	
v/c Ratio	0.04	0.12		0.52	0.20		0.02	0.16		0.15	0.38	
Control Delay	11.8	7.4		20.3	6.6		7.8	6.6		4.9	5.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	11.8	7.4		20.3	6.6		7.8	6.6		4.9	5.0	
LOS	B	A		C	A		A	A		A	A	
Approach Delay		8.3			15.5			6.6			5.0	
Approach LOS		A			B			A			A	
Queue Length 50th (ft)	4	8		63	11		1	23		11	53	

7:30 am Baseline
%user_name%

Synchro 7 - Report
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Dewey Ave. Corridor Study
461: Britton Road & Dewey Avenue

Future Volumes AM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	13	26		98	34		6	53		23	66	
Internal Link Dist (ft)		420			420			1894			570	
Turn Bay Length (ft)	100			100			150			150		
Base Capacity (vph)	572	792		596	800		335	2048		599	2066	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.03	0.09		0.36	0.14		0.02	0.16		0.15	0.38	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBT; Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.52
Intersection Signal Delay: 7.6
Intersection Capacity Utilization 59.6%
Analysis Period (min) 15
Intersection LOS: A
ICU Level of Service B

Splits and Phases: 461: Britton Road & Dewey Avenue



7:30 am Baseline
%user_name%

Synchro 7 - Report
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Dewey Ave. Corridor Study
462: Dalston & Dewey Avenue

Future Volumes AM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	0	9	0	0	0	22	268	0	0	675	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1657	0	0	1863	0	0	3525	0	0	3536	0
Flt Permitted		0.909						0.869				
Satd. Flow (perm)	0	1526	0	0	1863	0	0	3076	0	0	3536	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11									2	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		347			289			2400			654	
Travel Time (s)		7.9			6.6			46.8			12.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	15	0	0	0	0	0	355	0	0	831	0
Turn Type	Perm			Perm			Perm		Perm			
Protected Phases		4			8			6			2	
Permitted Phases	4			8			6		2			
Detector Phase	4	4		8	8		6	6		2	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		20.0	20.0		20.0	20.0	
Minimum Split (s)	24.5	24.5		24.5	24.5		34.5	34.5		34.5	34.5	
Total Split (s)	27.0	27.0	0.0	27.0	27.0	0.0	73.0	73.0	0.0	73.0	73.0	0.0
Total Split (%)	27.0%	27.0%	0.0%	27.0%	27.0%	0.0%	73.0%	73.0%	0.0%	73.0%	73.0%	0.0%
Maximum Green (s)	21.5	21.5		21.5	21.5		67.5	67.5		67.5	67.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.5	1.5		1.5	1.5	
Lost Time Adjust (s)	-2.5	-2.5	-1.0	-1.0	-2.5	-1.0	-2.5	-2.5	-1.0	-1.0	-2.5	-1.0
Total Lost Time (s)	3.0	3.0	3.0	4.5	3.0	3.0	3.0	3.0	3.0	4.5	3.0	3.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		4.0	4.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		20.0	20.0		20.0	20.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0		9.0	9.0		9.0	9.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		9.6						93.4			93.4	
Actuated g/C Ratio		0.10						0.93			0.93	
v/c Ratio		0.10						0.12			0.25	
Control Delay		25.6						0.9			0.4	
Queue Delay		0.0						0.0			0.0	
Total Delay		25.6						0.9			0.4	
LOS		C						A			A	
Approach Delay		25.6						0.9			0.4	
Approach LOS		C						A			A	
Queue Length 50th (ft)		2						0			0	
Queue Length 95th (ft)		22						23			9	
Internal Link Dist (ft)		267			209			2320			574	
Turn Bay Length (ft)												

7:30 am Baseline
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Synchro 7 - Report
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Dewey Ave. Corridor Study
462: Dalston & Dewey Avenue

Future Volumes AM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		375						2873			3303	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.04						0.12			0.25	

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 75 (75%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.25

Intersection Signal Delay: 0.9

Intersection LOS: A

Intersection Capacity Utilization 38.3%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 462: Dalston & Dewey Avenue



7:30 am Baseline
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Synchro 7 - Report
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Dewey Ave. Corridor Study
469: Dorsey & Dewey Avenue

Future Volumes AM
5/18/2009

	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group						
Lane Configurations						
Volume (vph)	74	182	68	221	660	207
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	200			0
Storage Lanes	1	1	1			0
Taper Length (ft)	25	25	25			25
Satd. Flow (prot)	1770	1583	1770	3539	3412	0
Flt Permitted	0.950		0.244			
Satd. Flow (perm)	1770	1583	455	3539	3412	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		168			92	
Link Speed (mph)	35			35	35	
Link Distance (ft)	3243			1991	1974	
Travel Time (s)	63.2			38.8	38.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	110%	110%	110%	110%	110%	110%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	90	222	83	270	1060	0
Turn Type		Perm	Perm			
Protected Phases	4			6	2	
Permitted Phases		4	6			
Detector Phase	4	4	6	6	2	
Switch Phase						
Minimum Initial (s)	6.0	6.0	20.0	20.0	20.0	
Minimum Split (s)	28.5	28.5	28.5	28.5	28.5	
Total Split (s)	30.0	30.0	45.0	45.0	45.0	0.0
Total Split (%)	40.0%	40.0%	60.0%	60.0%	60.0%	0.0%
Maximum Green (s)	25.0	25.0	40.0	40.0	40.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	-2.5	-2.5	-2.5	-2.5	-2.5	-1.0
Total Lost Time (s)	2.5	2.5	2.5	2.5	2.5	3.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	4.0	4.0	2.0	2.0	2.0	
Recall Mode	None	None	C-Max	C-Max	C-Max	
Walk Time (s)	7.0	7.0	10.0	10.0	10.0	
Flash Dont Walk (s)	16.0	16.0	13.0	13.0	13.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	
Act Effct Green (s)	13.0	13.0	57.0	57.0	57.0	
Actuated g/C Ratio	0.17	0.17	0.76	0.76	0.76	
v/c Ratio	0.29	0.54	0.24	0.10	0.41	
Control Delay	28.4	13.1	5.4	2.8	3.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	28.4	13.1	5.4	2.8	3.7	
LOS	C	B	A	A	A	
Approach Delay	17.5			3.4	3.7	
Approach LOS	B			A	A	
Queue Length 50th (ft)	37	22	8	12	57	

7:30 am Baseline
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Synchro 7 - Report
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Dewey Ave. Corridor Study
469: Dorsey & Dewey Avenue

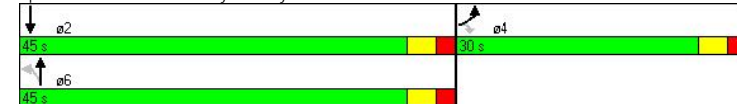
Future Volumes AM
5/18/2009

	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group						
Queue Length 95th (ft)	70	75	31	28	115	
Internal Link Dist (ft)	3163			1911	1894	
Turn Bay Length (ft)	200		200			
Base Capacity (vph)	649	687	346	2691	2616	
Starvation Cap Reductn	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.14	0.32	0.24	0.10	0.41	

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.54
Intersection Signal Delay: 6.1
Intersection Capacity Utilization 59.0%
Analysis Period (min) 15
Intersection LOS: A
ICU Level of Service B

Splits and Phases: 469: Dorsey & Dewey Avenue



7:30 am Baseline
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Synchro 7 - Report
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Dewey Ave. Corridor Study
550: Ellington & Dewey

Future Volumes AM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	50	14	2	50	4	4	239	0	1	692	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1807	0	0	1842	0	0	3536	0	0	3539	0
Flt Permitted		0.997			0.992			0.945			0.955	
Satd. Flow (perm)	0	1803	0	0	1829	0	0	3345	0	0	3380	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		17			5						1	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		295			178			325			2238	
Travel Time (s)		6.7			4.0			6.3			43.6	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	79	0	0	68	0	0	297	0	0	849	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			2			1			1	
Permitted Phases	2			2			1			1		
Detector Phase	2	2		2	2		1	1		1	1	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		16.0	16.0		16.0	16.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		23.5	23.5		23.5	23.5	
Total Split (s)	26.0	26.0	0.0	26.0	26.0	0.0	34.0	34.0	0.0	34.0	34.0	0.0
Total Split (%)	43.3%	43.3%	0.0%	43.3%	43.3%	0.0%	56.7%	56.7%	0.0%	56.7%	56.7%	0.0%
Maximum Green (s)	20.5	20.5		20.5	20.5		28.5	28.5		28.5	28.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.5	-2.5	-1.0	-2.5	-2.5	-1.0	-2.5	-2.5	-1.0	-2.5	-2.5	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lag	Lag		Lag	Lag		Lead	Lead		Lead	Lead	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		8.0	8.0		8.0	8.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	1	1		1	1		0	0		0	0	
Act Effect Green (s)		12.0			12.0			44.9			44.9	
Actuated g/C Ratio		0.20			0.20			0.75			0.75	
v/c Ratio		0.21			0.18			0.12			0.34	
Control Delay		16.1			18.0			2.1			4.6	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		16.1			18.0			2.1			4.6	
LOS		B			B			A			A	
Approach Delay		16.1			18.0			2.1			4.6	
Approach LOS		B			B			A			A	
Queue Length 50th (ft)		20			20			7			41	
Queue Length 95th (ft)		39			37			16			127	
Internal Link Dist (ft)		215			98			245			2158	
Turn Bay Length (ft)												

7:30 am Baseline
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Synchro 7 - Report
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Dewey Ave. Corridor Study
550: Ellington & Dewey

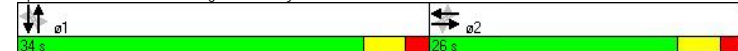
Future Volumes AM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		702			704			2503				2530
Starvation Cap Reductn		0			0			0				0
Spillback Cap Reductn		0			0			0				0
Storage Cap Reductn		0			0			0				0
Reduced v/c Ratio		0.11			0.10			0.12				0.34

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 22 (37%), Referenced to phase 1:NBSB, Start of Green
Natural Cycle: 50
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.34
Intersection Signal Delay: 5.5
Intersection Capacity Utilization 33.5%
Analysis Period (min) 15
Intersection LOS: A
ICU Level of Service A

Splits and Phases: 550: Ellington & Dewey



7:30 am Baseline
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Synchro 7 - Report
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Dewey Ave. Corridor Study
579: Wendy's Driveway & Dewey Ave

Future Volumes AM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	0	20	10	0	8	20	257	45	20	731	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	200		90	180		0	240		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	1583	0	1770	1583	0	1770	3461	0	1770	3511	0
Flt Permitted	0.751			0.742			0.292			0.532		
Satd. Flow (perm)	1399	1583	0	1382	1583	0	544	3461	0	991	3511	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		62			412			41			11	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		500			500			638			712	
Travel Time (s)		11.4			11.4			12.4			13.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	12	24	0	12	10	0	24	369	0	24	942	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		4	4		6	6		2	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		15.0	15.0		15.0	15.0	
Minimum Split (s)	31.5	31.5		31.5	31.5		27.0	27.0		27.0	27.0	
Total Split (s)	32.0	32.0	0.0	32.0	32.0	0.0	28.0	28.0	0.0	28.0	28.0	0.0
Total Split (%)	53.3%	53.3%	0.0%	53.3%	53.3%	0.0%	46.7%	46.7%	0.0%	46.7%	46.7%	0.0%
Maximum Green (s)	25.5	25.5		25.5	25.5		22.0	22.0		22.0	22.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-3.5	-3.5	-1.0	-3.5	-3.5	-1.0	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		8.0	8.0		8.0	8.0	
Flash Dont Walk (s)	18.0	18.0		18.0	18.0		13.0	13.0		13.0	13.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)	10.6	10.6		10.6	10.6		53.0	53.0		53.0	53.0	
Actuated g/C Ratio	0.18	0.18		0.18	0.18		0.88	0.88		0.88	0.88	
v/c Ratio	0.05	0.07		0.05	0.02		0.05	0.12		0.03	0.30	
Control Delay	20.5	1.9		20.6	0.0		2.5	1.5		1.9	1.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	20.5	1.9		20.6	0.0		2.5	1.5		1.9	1.7	
LOS	C	A		C	A		A	A		A	A	
Approach Delay		8.1			11.3			1.6			1.8	
Approach LOS		A			B			A			A	
Queue Length 50th (ft)	4	0		4	0		0	0		0	0	

7:30 am Baseline
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Synchro 7 - Report
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Dewey Ave. Corridor Study
579: Wendy's Driveway & Dewey Ave

Future Volumes AM
5/18/2009

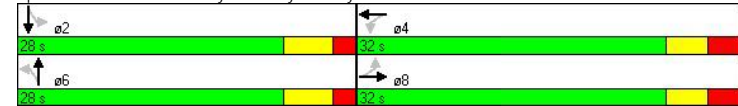
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	15	4		15	0		8	29		6	61	
Internal Link Dist (ft)		420			420			558			632	
Turn Bay Length (ft)	50			200			180			240		
Base Capacity (vph)	676	797		668	978		481	3064		876	3105	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.02	0.03		0.02	0.01		0.05	0.12		0.03	0.30	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 30 (50%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.30
Intersection Signal Delay: 2.0
Intersection Capacity Utilization 37.6%
Analysis Period (min) 15

Intersection LOS: A
ICU Level of Service A

Splits and Phases: 579: Wendy's Driveway & Dewey Ave



7:30 am Baseline
%user_name%

Synchro 7 - Report
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Dewey Ave. Corridor Study
657: W Ridge & Eastman

Future Volumes AM
5/18/2009

Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	50	250	1500	800	10	10	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	15	15
Storage Length (ft)		262			0	0	0
Storage Lanes		1			0	1	0
Taper Length (ft)		25			25	25	25
Satd. Flow (prot)	0	1770	5085	5075	0	1790	0
Flt Permitted		0.950				0.996	
Satd. Flow (perm)	0	1770	5085	5075	0	1790	0
Right Turn on Red					Yes		No
Satd. Flow (RTOR)				2			
Link Speed (mph)			35	35		30	
Link Distance (ft)			1255	497		583	
Travel Time (s)			24.4	9.7		13.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	110%	110%	110%	110%	110%	110%	110%
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	367	1833	990	0	134	0
Turn Type	Prot	Prot					
Protected Phases	3	3	1 3	1		2	
Permitted Phases							
Detector Phase	3	3	1 3	1		2	
Switch Phase							
Minimum Initial (s)	6.0	6.0		24.0		6.0	
Minimum Split (s)	12.0	12.0		30.0		37.0	
Total Split (s)	30.0	30.0	83.0	53.0	0.0	37.0	0.0
Total Split (%)	25.0%	25.0%	69.2%	44.2%	0.0%	30.8%	0.0%
Maximum Green (s)	24.0	24.0		47.0		31.0	
Yellow Time (s)	4.0	4.0		4.0		3.5	
All-Red Time (s)	2.0	2.0		2.0		2.5	
Lost Time Adjust (s)	-3.0	-3.0	-3.0	-3.0	-1.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag				Lead		Lag	
Lead-Lag Optimize?							
Vehicle Extension (s)	4.0	4.0		2.0		3.0	
Recall Mode	None	None		C-Max		None	
Walk Time (s)				8.0		7.0	
Flash Dont Walk (s)				16.0		24.0	
Pedestrian Calls (#/hr)				0		0	
Act Effect Green (s)		42.2	96.7	51.5		17.3	
Actuated g/C Ratio		0.35	0.81	0.43		0.14	
v/c Ratio		0.59	0.45	0.45		0.52	
Control Delay		37.0	4.2	13.9		54.0	
Queue Delay		0.0	0.1	0.0		0.0	
Total Delay		37.0	4.3	13.9		54.0	
LOS		D	A	B		D	
Approach Delay			9.8	13.9		54.0	
Approach LOS			A	B		D	

7:30 am Baseline
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Synchro 7 - Report
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Dewey Ave. Corridor Study
657: W Ridge & Eastman

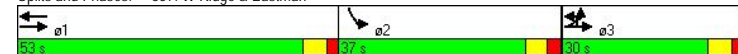
Future Volumes AM
5/18/2009

Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 50th (ft)		226	126	226		97	
Queue Length 95th (ft)		352	190	154		154	
Internal Link Dist (ft)			1175	417		503	
Turn Bay Length (ft)		262					
Base Capacity (vph)		622	4098	2180		507	
Starvation Cap Reductn		0	0	0		0	
Spillback Cap Reductn		0	703	0		0	
Storage Cap Reductn		0	0	0		0	
Reduced v/c Ratio		0.59	0.54	0.45		0.26	

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 93 (78%), Referenced to phase 1:EBWB, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.59
 Intersection Signal Delay: 12.8
 Intersection Capacity Utilization 55.7%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service B

Splits and Phases: 657: W Ridge & Eastman



7:30 am Baseline
%user_name%

Synchro 7 - Report
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Dewey Ave. Corridor Study
1001: English Road & Dewey Avenue

Future Volumes AM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	35	68	117	48	59	5	40	174	31	13	496	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		0	150		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	1686	0	1770	1840	0	1770	3458	0	1770	3511	0
Flt Permitted	0.706			0.449			0.394			0.596		
Satd. Flow (perm)	1315	1686	0	836	1840	0	734	3458	0	1110	3511	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		143			6			38			12	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		3301			500			650			638	
Travel Time (s)		75.0			11.4			12.7			12.4	
Peak Hour Factor	0.96	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	40	226	0	59	78	0	49	251	0	16	639	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		4	4		6	6		2	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		15.0	15.0		15.0	15.0	
Minimum Split (s)	30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	30.0	30.0	0.0	30.0	30.0	0.0
Total Split (%)	50.0%	50.0%	0.0%	50.0%	50.0%	0.0%	50.0%	50.0%	0.0%	50.0%	50.0%	0.0%
Maximum Green (s)	24.0	24.0		24.0	24.0		24.0	24.0		24.0	24.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.5	2.5		2.5	2.5		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		9.0	9.0		9.0	9.0	
Flash Dont Walk (s)	17.0	17.0		17.0	17.0		12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)	13.5	13.5		13.5	13.5		40.5	40.5		40.5	40.5	
Actuated g/C Ratio	0.22	0.22		0.22	0.22		0.68	0.68		0.68	0.68	
v/c Ratio	0.14	0.46		0.32	0.19		0.10	0.11		0.02	0.27	
Control Delay	18.0	10.7		22.7	17.3		4.2	3.0		7.0	7.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	18.0	10.7		22.7	17.3		4.2	3.0		7.0	7.1	
LOS	B	B		C	B		A	A		A	A	
Approach Delay		11.8			19.6			3.2			7.1	
Approach LOS		B			B			A			A	
Queue Length 50th (ft)	12	25		18	21		4	8		1	23	

7:30 am Baseline
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Synchro 7 - Report
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Dewey Ave. Corridor Study
1001: English Road & Dewey Avenue

Future Volumes AM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	29	66		42	45		16	23		m9	137	
Internal Link Dist (ft)		3221			420			570			558	
Turn Bay Length (ft)	100						150				150	
Base Capacity (vph)	592	837		376	831		496	2349		750	2376	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.07	0.27		0.16	0.09		0.10	0.11		0.02	0.27	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL; Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.46
Intersection Signal Delay: 8.4
Intersection Capacity Utilization 58.7%
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1001: English Road & Dewey Avenue



7:30 am Baseline
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Synchro 7 - Report
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Dewey Ave. Corridor Study
1021: Latta & Dewey Avenue

Future Volumes AM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	36	180	142	74	246	13	136	53	48	28	171	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	200		0	200		0	125		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	1740	0	1770	1848	0	1770	3288	0	1770	3465	0
Flt Permitted	0.570			0.404			0.382			0.665		
Satd. Flow (perm)	1062	1740	0	753	1848	0	712	3288	0	1239	3465	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		47			4			65			15	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		3343			564			615			360	
Travel Time (s)		65.1			11.0			12.0			7.0	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.81	0.81	0.81	0.90	0.90	0.90
Growth Factor	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	44	390	0	89	313	0	185	137	0	34	243	0
Turn Type	Perm			pm+pt			pm+pt			pm+pt		
Protected Phases		2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		1	6		7	4		3	8	
Switch Phase												
Minimum Initial (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Minimum Split (s)	25.0	25.0		8.0	25.0		8.0	25.0		8.0	25.0	
Total Split (s)	53.0	53.0	0.0	10.0	63.0	0.0	19.0	37.0	0.0	10.0	28.0	0.0
Total Split (%)	48.2%	48.2%	0.0%	9.1%	57.3%	0.0%	17.3%	33.6%	0.0%	9.1%	25.5%	0.0%
Maximum Green (s)	48.0	48.0		5.0	58.0		14.0	32.0		5.0	23.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		5.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		0.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lag	Lag		Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)	5.0	5.0			5.0			5.0			5.0	
Flash Dont Walk (s)	15.0	15.0			15.0			15.0			15.0	
Pedestrian Calls (#/hr)	0	0			0			0			0	
Act Effect Green (s)	60.6	60.6		71.1	71.1		32.9	26.9		21.6	14.6	
Actuated g/C Ratio	0.55	0.55		0.65	0.65		0.30	0.24		0.20	0.13	
v/c Ratio	0.08	0.40		0.15	0.26		0.51	0.16		0.12	0.51	
Control Delay	14.9	15.4		8.7	9.4		34.8	18.4		27.7	45.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	14.9	15.4		8.7	9.4		34.8	18.4		27.7	45.1	
LOS	B	B		A	A		C	B		C	D	
Approach Delay		15.4			9.2			27.8			43.0	
Approach LOS		B			A			C			D	
Queue Length 50th (ft)	15	139		22	87		101	21		17	80	

7:30 am Baseline
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Synchro 7 - Report
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Dewey Ave. Corridor Study
1021: Latta & Dewey Avenue

Future Volumes AM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	38	239		45	143		138	39		39	116	
Internal Link Dist (ft)		3263			484			535			280	
Turn Bay Length (ft)	200			200			200			125		
Base Capacity (vph)	585	980		576	1196		367	1061		277	799	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.08	0.40		0.15	0.26		0.50	0.13		0.12	0.30	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.51

Intersection Signal Delay: 21.8

Intersection LOS: C

Intersection Capacity Utilization 52.3%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1021: Latta & Dewey Avenue



7:30 am Baseline
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Synchro 7 - Report
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Dewey Ave. Corridor Study
4601: Maiden & Dewey Avenue

Future Volumes AM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	23	1	166	0	0	0	143	233	0	0	569	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		200	0		0	0		0	125		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	0	1777	1583	0	1863	0	1770	3539	0	1863	3504	0
Flt Permitted		0.733					0.153					
Satd. Flow (perm)	0	1365	1583	0	1863	0	285	3539	0	1863	3504	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			208								8	
Link Speed (mph)		35			30			35			35	
Link Distance (ft)		4626			213			192			1048	
Travel Time (s)		90.1			4.8			3.7			20.4	
Peak Hour Factor	0.88	0.88	0.88	0.50	0.50	0.50	0.73	0.73	0.73	0.80	0.80	0.80
Growth Factor	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	30	208	0	0	0	215	351	0	0	840	0
Turn Type	Perm		custom	Perm			pm+pt			pm+pt		
Protected Phases		3	1		3		14	46		5	2	
Permitted Phases	3		3	3			46			2		
Detector Phase	3	3	1	3	3		14	46		5	2	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0					4.0	15.0	
Minimum Split (s)	9.5	9.5	9.0	9.5	9.5					9.0	28.0	
Total Split (s)	20.0	20.0	12.0	20.0	20.0	0.0	49.0	68.0	0.0	12.0	31.0	0.0
Total Split (%)	20.0%	20.0%	12.0%	20.0%	20.0%	0.0%	49.0%	68.0%	0.0%	12.0%	31.0%	0.0%
Maximum Green (s)	14.5	14.5	7.0	14.5	14.5					7.0	25.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5					3.5	4.0	
All-Red Time (s)	2.0	2.0	1.5	2.0	2.0					1.5	2.0	
Lost Time Adjust (s)	-2.5	-2.5	-2.0	-2.5	-2.5	-1.0	-2.0	-3.0	-1.0	-2.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lead/Lag	Lead	Lead	Lead	Lead	Lead					Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0					2.0	4.0	
Recall Mode	None	None	None	None	None					None	C-Max	
Walk Time (s)											7.0	
Flash Dont Walk (s)											15.0	
Pedestrian Calls (#/hr)											0	
Act Effct Green (s)		9.1	16.5				85.0	75.9			36.5	
Actuated g/C Ratio		0.09	0.16				0.85	0.76			0.36	
v/c Ratio		0.24	0.48				0.23	0.13			0.65	
Control Delay		46.3	6.4				10.1	1.3			31.8	
Queue Delay		0.0	0.0				5.0	0.2			0.1	
Total Delay		46.3	6.4				15.1	1.4			31.9	
LOS		D	A				B	A			C	
Approach Delay		11.4						6.6			31.9	
Approach LOS		B						A			C	
Queue Length 50th (ft)		18	0				34	11			248	

7:30 am Baseline
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Synchro 7 - Report
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Dewey Ave. Corridor Study
4601: Maiden & Dewey Avenue

Future Volumes AM
5/18/2009

Lane Group	ø4	ø6	ø8
Lane Configurations			
Volume (vph)			
Ideal Flow (vphpl)			
Storage Length (ft)			
Storage Lanes			
Taper Length (ft)			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Right Turn on Red			
Satd. Flow (RTOR)			
Link Speed (mph)			
Link Distance (ft)			
Travel Time (s)			
Peak Hour Factor			
Growth Factor			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Turn Type			
Protected Phases	4	6	8
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	4.0	15.0	4.0
Minimum Split (s)	37.0	28.0	37.0
Total Split (s)	37.0	31.0	57.0
Total Split (%)	37%	31%	57%
Maximum Green (s)	31.0	25.0	51.0
Yellow Time (s)	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag	Lag	Lag	
Lead-Lag Optimize?			
Vehicle Extension (s)	3.0	4.0	3.0
Recall Mode	None	C-Max	None
Walk Time (s)	9.0	7.0	9.0
Flash Dont Walk (s)	22.0	15.0	22.0
Pedestrian Calls (#/hr)	0	0	0
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay			
Queue Delay			
Total Delay			
LOS			
Approach Delay			
Approach LOS			
Queue Length 50th (ft)			

7:30 am Baseline
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Synchro 7 - Report
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Dewey Ave. Corridor Study
4601: Maiden & Dewey Avenue

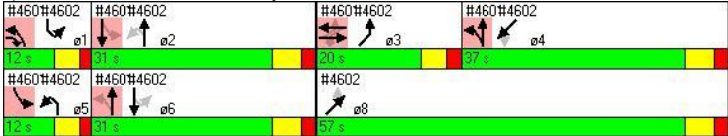
Future Volumes AM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)		45	29				63	12			290	
Internal Link Dist (ft)		4546			133			112			968	
Turn Bay Length (ft)			200									
Base Capacity (vph)		232	441				945	2690			1285	
Starvation Cap Reductn		0	0				656	1477			0	
Spillback Cap Reductn		0	2				0	0			32	
Storage Cap Reductn		0	0				0	0			0	
Reduced v/c Ratio		0.13	0.47				0.74	0.29			0.67	

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.77
Intersection Signal Delay: 20.2
Intersection Capacity Utilization 40.8%
Analysis Period (min) 15
Intersection LOS: C
ICU Level of Service A

Splits and Phases: 4601: Maiden & Dewey Avenue



Dewey Ave. Corridor Study
4601: Maiden & Dewey Avenue

Future Volumes AM
5/18/2009

Lane Group	ø4	ø6	ø8
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary

Dewey Ave. Corridor Study
4602: Dewey Avenue & Stone

Future Volumes AM
5/18/2009

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	56	234	19	91	557	110	38	104	18	47	298	113
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	0		0	75		0	200		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	3500	0	1770	3451	0	1770	1822	0	1770	1786	0
Flt Permitted	0.198			0.496			0.166			0.657		
Satd. Flow (perm)	369	3500	0	924	3451	0	309	1822	0	1224	1786	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			23			13			21	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		654			192			352			322	
Travel Time (s)		12.7			3.7			6.9			6.3	
Peak Hour Factor	0.94	0.94	0.94	0.91	0.91	0.91	0.85	0.85	0.85	0.90	0.90	0.90
Growth Factor	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	66	296	0	110	806	0	49	158	0	57	502	0
Turn Type	pm+pt			pm+pt			pm+pt			Perm		
Protected Phases	5	2		1	6		3	8			4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		4	4	
Switch Phase												
Minimum Initial (s)	4.0	15.0		4.0	15.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	9.0	28.0		9.0	28.0		9.5	37.0		37.0	37.0	
Total Split (s)	12.0	31.0	0.0	12.0	31.0	0.0	20.0	57.0	0.0	37.0	37.0	0.0
Total Split (%)	12.0%	31.0%	0.0%	12.0%	31.0%	0.0%	20.0%	57.0%	0.0%	37.0%	37.0%	0.0%
Maximum Green (s)	7.0	25.0		7.0	25.0		14.5	51.0		31.0	31.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0		4.0	4.0	
All-Red Time (s)	1.5	2.0		1.5	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-3.0	-1.0	-2.0	-3.0	-1.0	-2.5	-3.0	-1.0	-3.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead			Lag	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	4.0		2.0	4.0		2.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		7.0			7.0			9.0		9.0	9.0	
Flash Dont Walk (s)		15.0			15.0			22.0		22.0	22.0	
Pedestrian Calls (#/hr)		0			0			0		0	0	
Act Effect Green (s)	44.7	36.5		46.4	39.0		45.7	45.7		35.6	35.6	
Actuated g/C Ratio	0.45	0.36		0.46	0.39		0.46	0.46		0.36	0.36	
v/c Ratio	0.24	0.23		0.22	0.59		0.18	0.19		0.13	0.77	
Control Delay	18.8	23.9		8.2	10.6		13.5	13.4		20.8	35.7	
Queue Delay	0.0	0.0		0.2	0.3		0.0	0.0		0.0	0.0	
Total Delay	18.8	23.9		8.4	11.0		13.5	13.4		20.8	35.7	
LOS	B	C		A	B		B	B		C	D	
Approach Delay		23.0			10.6			13.4			34.2	
Approach LOS		C			B			B			C	
Queue Length 50th (ft)	24	71		11	44		16	49		24	262	

7:30 am Baseline
%user_name%

Synchro 7 - Report
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Dewey Ave. Corridor Study
4602: Dewey Avenue & Stone

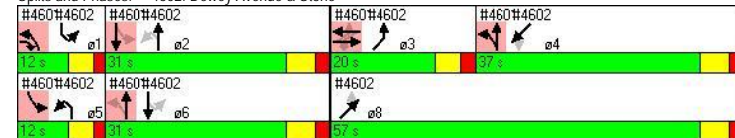
Future Volumes AM
5/18/2009

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Queue Length 95th (ft)	53	113		m26	94		30	72		50	375	
Internal Link Dist (ft)		574			112			272			242	
Turn Bay Length (ft)	200						75			200		
Base Capacity (vph)	294	1283		507	1361		390	990		454	676	
Starvation Cap Reductn	0	0		107	151		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	2	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.22	0.23		0.28	0.67		0.13	0.16		0.13	0.74	

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBT; Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.77
Intersection Signal Delay: 19.6
Intersection Capacity Utilization 65.7%
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4602: Dewey Avenue & Stone



7:30 am Baseline
%user_name%

Synchro 7 - Report
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Dewey Ave. Corridor Study
4: W Ridge & Dewey

Future Volumes PM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	104	1082	187	41	1481	275	237	412	57	295	275	394
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	10	10	10	10	11	11	10	11	11
Storage Length (ft)	160		0	280		0	150		0	80		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1652	4642	0	1652	4632	0	1652	3360	0	1652	3120	0
Flt Permitted	0.077			0.100			0.135			0.257		
Satd. Flow (perm)	134	4642	0	174	4632	0	235	3360	0	447	3120	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		34			38			12			151	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		497			667			1166			580	
Travel Time (s)		9.7			13.0			26.5			13.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	116	1410	0	46	1952	0	263	521	0	328	744	0
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		
Detector Phase	5	2		1	6		7	4		3	8	
Switch Phase												
Minimum Initial (s)	4.0	29.0		4.0	29.0		4.0	12.0		4.0	12.0	
Minimum Split (s)	10.0	35.0		10.0	35.0		12.0	36.0		12.0	34.0	
Total Split (s)	12.0	52.0	0.0	12.0	52.0	0.0	20.0	36.0	0.0	20.0	36.0	0.0
Total Split (%)	10.0%	43.3%	0.0%	10.0%	43.3%	0.0%	16.7%	30.0%	0.0%	16.7%	30.0%	0.0%
Maximum Green (s)	7.0	46.0		7.0	46.0		15.0	30.0		15.0	30.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0		3.5	4.0	
All-Red Time (s)	1.5	2.0		1.5	2.0		1.5	2.0		1.5	2.0	
Lost Time Adjust (s)	-2.0	-3.0	-1.0	-2.0	-3.0	-1.0	-2.0	-3.0	-1.0	-2.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	4.0		2.0	4.0	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		7.0			12.0			7.0			7.0	
Flash Dont Walk (s)		22.0			17.0			23.0			21.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	61.6	54.2		59.4	51.3		47.7	30.7		47.7	30.7	
Actuated g/C Ratio	0.51	0.45		0.50	0.43		0.40	0.26		0.40	0.26	
v/c Ratio	0.63	0.67		0.25	0.98		0.89	0.60		0.94	0.87dr	
Control Delay	37.4	22.2		13.4	41.7		62.2	41.2		61.8	35.6	
Queue Delay	0.0	0.1		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	37.4	22.3		13.4	41.7		62.2	41.2		61.8	35.6	
LOS	D	C		B	D		E	D		E	D	
Approach Delay		23.5			41.1			48.2			43.7	
Approach LOS		C			D			D			D	
Queue Length 50th (ft)	24	326		9	-581		147	178		166	200	

5:00 pm Baseline
%user_name%

Synchro 7 - Report
Page 1

Dewey Ave. Corridor Study
4: W Ridge & Dewey

Future Volumes PM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	m#107	389		m18	#679		#301	235		#324	256	
Internal Link Dist (ft)		417			587			1086			500	
Turn Bay Length (ft)	160			280			150			80		
Base Capacity (vph)	185	2115		198	2002		294	933		348	967	
Starvation Cap Reductn	0	105		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.63	0.70		0.23	0.98		0.89	0.56		0.94	0.77	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 71 (59%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.98

Intersection Signal Delay: 37.6

Intersection LOS: D

Intersection Capacity Utilization 87.3%

ICU Level of Service E

Analysis Period (min) 15

- Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

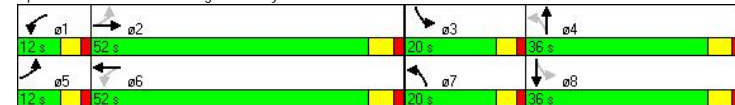
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 4: W Ridge & Dewey



5:00 pm Baseline
%user_name%

Synchro 7 - Report
Page 2

Dewey Ave. Corridor Study
14: Eastman & Dewey

Future Volumes PM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	146	73	6	329	214	181	6	698	78	7	428	153
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	10	10	10	10	10	10	10	10	10
Storage Length (ft)	100		0	50		0	50		0	240		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1652	1718	0	1652	1619	0	1652	3254	0	1652	3174	0
Flt Permitted	0.340			0.700			0.347			0.244		
Satd. Flow (perm)	591	1718	0	1217	1619	0	603	3254	0	424	3174	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			95			25			106	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		583			686			580			1020	
Travel Time (s)		13.3			15.6			13.2			23.2	
Peak Hour Factor	0.90	0.90	0.90	0.95	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	162	88	0	346	439	0	7	863	0	8	646	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			2			1			1	
Permitted Phases	2			2			1			1		
Detector Phase	2	2		2	2		1	1		1	1	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		23.0	23.0		23.0	23.0	
Minimum Split (s)	31.0	31.0		31.0	31.0		29.0	29.0		29.0	29.0	
Total Split (s)	31.0	31.0	0.0	31.0	31.0	0.0	29.0	29.0	0.0	29.0	29.0	0.0
Total Split (%)	51.7%	51.7%	0.0%	51.7%	51.7%	0.0%	48.3%	48.3%	0.0%	48.3%	48.3%	0.0%
Maximum Green (s)	25.5	25.5		25.5	25.5		23.0	23.0		23.0	23.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.5	-2.5	-1.0	-2.5	-2.5	-1.0	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lag	Lag		Lag	Lag		Lead	Lead		Lead	Lead	
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		4.0	4.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	18.0	18.0		18.0	18.0		16.0	16.0		16.0	16.0	
Pedestrian Calls (#/hr)	1	1		1	1		0	0		0	0	
Act Effct Green (s)	25.0	25.0		25.0	25.0		29.0	29.0		29.0	29.0	
Actuated g/C Ratio	0.42	0.42		0.42	0.42		0.48	0.48		0.48	0.48	
v/c Ratio	0.66	0.12		0.68	0.60		0.02	0.55		0.04	0.41	
Control Delay	21.7	2.7		21.2	13.6		8.2	8.1		15.7	17.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	21.7	2.7		21.2	13.6		8.2	8.1		15.7	17.8	
LOS	C	A		C	B		A	A		B	B	
Approach Delay		15.0			16.9			8.1			17.8	
Approach LOS		B			B			A			B	
Queue Length 50th (ft)	27	9		88	80		1	54		2	106	

5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Ave. Corridor Study
14: Eastman & Dewey

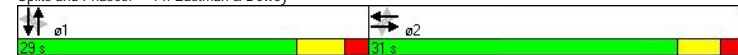
Future Volumes PM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	m71	m11		167	154		m2	m94		m13	152	
Internal Link Dist (ft)		503			606			500			940	
Turn Bay Length (ft)	100			50			50			240		
Base Capacity (vph)	276	805		568	806		291	1583		205	1587	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.59	0.11		0.61	0.54		0.02	0.55		0.04	0.41	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 28 (47%), Referenced to phase 1:NBSB, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.68
Intersection Signal Delay: 14.0
Intersection Capacity Utilization 62.2%
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 14: Eastman & Dewey



5:00 pm Baseline
%user_name%

Synchro 7 - Report
Page 4

Dewey Ave. Corridor Study
15: Christian & Dewey

Future Volumes PM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	21	24	9	27	43	248	15	807	50	81	404	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	14	14	14	10	10	10	10	10	10
Storage Length (ft)	0		0	0		0	75		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	0	1787	0	0	1771	0	1652	3274	0	1652	3290	0
Flt Permitted		0.598			0.969		0.483			0.205		
Satd. Flow (perm)	0	1089	0	0	1723	0	840	3274	0	356	3290	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			276			11			6	
Link Speed (mph)		30			30			30			35	
Link Distance (ft)		370			2670			1020			2230	
Travel Time (s)		8.4			60.7			23.2			43.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	60	0	0	354	0	17	953	0	90	461	0
Turn Type	Perm			Perm		Perm		pm+pt		3	13	
Protected Phases		2			2			1				
Permitted Phases	2			2			1			13		
Detector Phase	2	2		2	2		1	1		3	13	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		13.0	13.0		5.0		
Minimum Split (s)	29.0	29.0		29.0	29.0		21.0	21.0		10.0		
Total Split (s)	29.0	29.0	0.0	29.0	29.0	0.0	21.0	21.0	0.0	10.0	31.0	0.0
Total Split (%)	48.3%	48.3%	0.0%	48.3%	48.3%	0.0%	35.0%	35.0%	0.0%	16.7%	51.7%	0.0%
Maximum Green (s)	23.0	23.0		23.0	23.0		15.5	15.5		5.0		
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5		
All-Red Time (s)	2.5	2.5		2.5	2.5		2.0	2.0		1.5		
Lost Time Adjust (s)	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0	-2.5	-2.5	-1.0	-2.0	-2.5	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lag	Lag		Lag	Lag		Lead	Lead				
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		3.0	3.0		3.0		
Recall Mode	Min	Min		Min	Min		C-Max	C-Max		Min		
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0				
Flash Dont Walk (s)	14.0	14.0		14.0	14.0		8.0	8.0				
Pedestrian Calls (#/hr)	0	0		0	0		0	0				
Act Effct Green (s)		12.3			12.3		28.8	28.8		38.7	41.7	
Actuated g/C Ratio		0.20			0.20		0.48	0.48		0.64	0.70	
v/c Ratio		0.26			0.62		0.04	0.60		0.20	0.20	
Control Delay		18.7			10.2		7.8	11.9		1.9	1.5	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		18.7			10.2		7.8	11.9		1.9	1.5	
LOS		B			B		A	B		A	A	
Approach Delay		18.7			10.2			11.8			1.6	
Approach LOS		B			B			B			A	
Queue Length 50th (ft)		16			24			73		1	1	

5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Ave. Corridor Study
15: Christian & Dewey

Future Volumes PM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)		37			76		m5	#289		m2		4
Internal Link Dist (ft)		290			2590			940				2150
Turn Bay Length (ft)							75			75		
Base Capacity (vph)		478			903		404	1579		442		2287
Starvation Cap Reductn		0			0		0	0		0		0
Spillback Cap Reductn		0			0		0	0		0		0
Storage Cap Reductn		0			0		0	0		0		0
Reduced v/c Ratio		0.13			0.39		0.04	0.60		0.20		0.20

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 0 (0%), Referenced to phase 1:NBSB, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.62

Intersection Signal Delay: 8.8

Intersection LOS: A

Intersection Capacity Utilization 58.0%

ICU Level of Service B

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 15: Christian & Dewey



5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Ave. Corridor Study
16: McCall & Dewey

Future Volumes PM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	68	10	71	6	10	20	104	846	9	7	489	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	13	9	9	9	10	10	10	10	10	10
Storage Length (ft)	0		0	0		0	75		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	0	1762	0	0	1538	0	1652	3297	0	1652	3250	0
Flt Permitted		0.844			0.939		0.330			0.204		
Satd. Flow (perm)	0	1521	0	0	1458	0	574	3297	0	355	3250	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		96			22			2			23	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		415			370			2230			1450	
Travel Time (s)		9.4			8.4			43.4			28.2	
Peak Hour Factor	0.74	0.74	0.74	0.91	0.91	0.91	0.86	0.86	0.86	0.91	0.91	0.91
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	202	0	0	40	0	121	994	0	8	603	0
Turn Type	Perm			Perm		pm+pt			Perm			
Protected Phases		2			2		3	13			1	
Permitted Phases	2			2			13			1		
Detector Phase	2	2		2	2		3	13		1	1	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		4.0			4.0	4.0	
Minimum Split (s)	29.0	29.0		29.0	29.0		10.0			21.0	21.0	
Total Split (s)	29.0	29.0	0.0	29.0	29.0	0.0	10.0	31.0	0.0	21.0	21.0	0.0
Total Split (%)	48.3%	48.3%	0.0%	48.3%	48.3%	0.0%	16.7%	51.7%	0.0%	35.0%	35.0%	0.0%
Maximum Green (s)	23.0	23.0		23.0	23.0		5.0			15.5	15.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5			3.5	3.5	
All-Red Time (s)	2.5	2.5		2.5	2.5		1.5			2.0	2.0	
Lost Time Adjust (s)	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0	-2.0	-2.5	-1.0	-2.5	-2.5	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lag	Lag		Lag	Lag				Lead	Lead		
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		4.0	4.0		3.0			3.0	3.0	
Recall Mode	None	None		None	None		None		C-Max	C-Max		
Walk Time (s)	7.0	7.0		7.0	7.0							
Flash Dont Walk (s)	14.0	14.0		14.0	14.0							
Pedestrian Calls (#/hr)	1	1		1	1							
Act Effct Green (s)		15.0			15.0		36.0	39.0		22.8	22.8	
Actuated g/C Ratio		0.25			0.25		0.60	0.65		0.38	0.38	
v/c Ratio		0.45			0.10		0.21	0.46		0.06	0.48	
Control Delay		12.3			9.4		2.2	2.5		12.6	14.6	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		12.3			9.4		2.2	2.5		12.6	14.6	
LOS		B			A		A	A		B	B	
Approach Delay		12.3			9.4			2.5			14.5	
Approach LOS		B			A			A			B	
Queue Length 50th (ft)		32			5		2	11		2	92	

5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Ave. Corridor Study
16: McCall & Dewey

Future Volumes PM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)		45			19		6	19		m6	148	
Internal Link Dist (ft)		335			290			2150			1370	
Turn Bay Length (ft)							75			75		
Base Capacity (vph)		714			644		582	2143		135	1247	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio	0.28				0.06		0.21	0.46		0.06	0.48	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 55 (92%), Referenced to phase 1:NBSB, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.48
Intersection Signal Delay: 7.4
Intersection Capacity Utilization 52.3%
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Intersection LOS: A
ICU Level of Service A

Splits and Phases: 16: McCall & Dewey



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Synchro 7 - Report
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Dewey Ave. Corridor Study
17: W Ridge & Woodside

Future Volumes PM
5/18/2009

	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group						
Lane Configurations		↑↑↑			↑	
Volume (vph)	6	1168	1393	7	84	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	10	10	10	12	12
Storage Length (ft)	75			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25			25	25	25
Satd. Flow (prot)	1770	4746	4742	0	1698	0
Flt Permitted	0.125				0.975	
Satd. Flow (perm)	233	4746	4742	0	1698	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			1		37	
Link Speed (mph)		35	35		30	
Link Distance (ft)		667	1165		282	
Travel Time (s)		13.0	22.7		6.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)						
Lane Group Flow (vph)	7	1298	1556	0	180	0
Turn Type	pm+pt					
Protected Phases	2	1 2	1		3	
Permitted Phases	1 2	1				
Detector Phase	2	1 2	1		3	
Switch Phase						
Minimum Initial (s)	4.0		30.0		6.0	
Minimum Split (s)	13.0		36.0		33.0	
Total Split (s)	13.0	87.0	74.0	0.0	33.0	0.0
Total Split (%)	10.8%	72.5%	61.7%	0.0%	27.5%	0.0%
Maximum Green (s)	7.0		68.0		27.0	
Yellow Time (s)	4.0		4.0		3.5	
All-Red Time (s)	2.0		2.0		2.5	
Lost Time Adjust (s)	-3.0	-3.0	-3.0	-1.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		2.0		4.0	
Recall Mode	None		C-Max		None	
Walk Time (s)			23.0		7.0	
Flash Dont Walk (s)			7.0		19.0	
Pedestrian Calls (#/hr)			0		0	
Act Effect Green (s)	91.3	94.3	81.3		19.7	
Actuated g/C Ratio	0.76	0.79	0.68		0.16	
v/c Ratio	0.02	0.35	0.48		0.58	
Control Delay	3.3	3.4	10.4		43.4	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	3.3	3.4	10.4		43.4	
LOS	A	A	B		D	
Approach Delay		3.4	10.4		43.4	
Approach LOS		A	B		D	
Queue Length 50th (ft)	1	67	192		103	

5:00 pm Baseline
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Synchro 7 - Report
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Dewey Ave. Corridor Study
17: W Ridge & Woodside

Future Volumes PM
5/18/2009

	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group						
Queue Length 95th (ft)	m1	m81	269		168	
Internal Link Dist (ft)		587	1085		202	
Turn Bay Length (ft)	75					
Base Capacity (vph)	305	3729	3212		452	
Starvation Cap Reductn	0	0	0		0	
Spillback Cap Reductn	0	0	0		0	
Storage Cap Reductn	0	0	0		0	
Reduced v/c Ratio	0.02	0.35	0.48		0.40	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 53 (44%), Referenced to phase 1:EBWB, Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.58
Intersection Signal Delay: 9.4
Intersection Capacity Utilization 43.2%
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 17: W Ridge & Woodside



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Synchro 7 - Report
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Dewey Ave. Corridor Study
416: Banker & Bennington

Future Volumes PM
5/18/2009

Lane Group	EBL2	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR	SWR2
Lane Configurations												
Volume (vph)	5	61	9	1	893	204	20	420	4	77	61	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1756	0	0	3440	0	0	3529	0	1694	0	0
Flt Permitted		0.958			0.955			0.888		0.975		
Satd. Flow (perm)	0	1756	0	0	3285	0	0	3140	0	1694	0	0
Right Turn on Red			Yes			Yes			Yes		Yes	
Satd. Flow (RTOR)		10			66			2		11		
Link Speed (mph)		30			35			35		30		
Link Distance (ft)		257			1450			325		339		
Travel Time (s)		5.8			28.2			6.3		7.7		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	84	0	0	1220	0	0	493	0	171	0	0
Turn Type	Perm			Perm			Perm					
Protected Phases		2			1			1				
Permitted Phases	2			1			1			2		
Detector Phase	2	2		1	1		1	1		2		
Switch Phase												
Minimum Initial (s)	4.0	4.0		16.0	16.0		16.0	16.0		4.0		
Minimum Split (s)	27.0	27.0		24.0	24.0		24.0	24.0		27.0		
Total Split (s)	27.0	27.0	0.0	33.0	33.0	0.0	33.0	33.0	0.0	27.0	0.0	0.0
Total Split (%)	45.0%	45.0%	0.0%	55.0%	55.0%	0.0%	55.0%	55.0%	0.0%	45.0%	0.0%	0.0%
Maximum Green (s)	21.0	21.0		27.5	27.5		27.5	27.5		21.0		
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5		
All-Red Time (s)	2.5	2.5		2.0	2.0		2.0	2.0		2.5		
Lost Time Adjust (s)	-3.0	-3.0	-1.0	-2.5	-2.5	-1.0	-2.5	-2.5	-1.0	-3.0	-1.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lag	Lag		Lead	Lead		Lead	Lead		Lag		
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0		
Recall Mode	None	None		C-Max	C-Max		C-Max	C-Max		None		
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0		
Flash Dont Walk (s)	12.0	12.0		10.0	10.0		10.0	10.0		12.0		
Pedestrian Calls (#/hr)	1	1		0	0		0	0		1		
Act Effct Green (s)	14.7				42.4			42.4		14.7		
Actuated g/C Ratio		0.24			0.71			0.71		0.24		
v/c Ratio		0.19			0.52			0.22		0.40		
Control Delay		15.5			5.4			2.5		19.4		
Queue Delay		0.0			0.0			0.0		0.0		
Total Delay		15.5			5.4			2.5		19.4		
LOS		B			A			A		B		
Approach Delay		15.5			5.4			2.5		19.4		
Approach LOS		B			A			A		B		
Queue Length 50th (ft)		21			160			14		49		
Queue Length 95th (ft)		42			82			21		79		
Internal Link Dist (ft)		177			1370			245		259		
Turn Bay Length (ft)												
Base Capacity (vph)		708			2342			2221		684		

5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Ave. Corridor Study
416: Banker & Bennington

Future Volumes PM
5/18/2009

Lane Group	EBL2	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR	SWR2
Starvation Cap Reductn		0			0			0		0		
Spillback Cap Reductn		0			0			0		0		
Storage Cap Reductn		0			0			0		0		
Reduced v/c Ratio		0.12			0.52			0.22		0.25		

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 18 (30%), Referenced to phase 1:NBSB, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.52

Intersection Signal Delay: 6.3

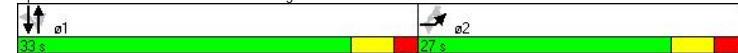
Intersection Capacity Utilization 55.0%

Analysis Period (min) 15

Intersection LOS: A

ICU Level of Service B

Splits and Phases: 416: Banker & Bennington



5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Ave. Corridor Study
457: Denise Road & Dewey Avenue

Future Volumes PM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	7	29	264	23	100	29	989	255	92	711	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0	175	0	0	65	0	125	0	0	0
Storage Lanes	0	0	0	1	0	0	1	0	1	0	0	0
Taper Length (ft)	25	25	25	25	25	25	25	25	25	25	25	25
Satd. Flow (prot)	0	1699	0	1770	1635	0	1770	3429	0	1770	3532	0
Flt Permitted	0	0.906	0	0.763	0	0.309	0	0.131	0	0.131	0	0
Satd. Flow (perm)	0	1563	0	1421	1635	0	576	3429	0	244	3532	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		32			91			70			3	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		500			500			706			501	
Travel Time (s)		11.4			11.4			13.8			9.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	58	0	293	137	0	32	1382	0	102	801	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		4	4		6	6		2	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		15.0	15.0		15.0	15.0	
Minimum Split (s)	29.5	29.5		29.5	29.5		25.5	25.5		25.5	25.5	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	50.0	50.0	0.0	50.0	50.0	0.0
Total Split (%)	37.5%	37.5%	0.0%	37.5%	37.5%	0.0%	62.5%	62.5%	0.0%	62.5%	62.5%	0.0%
Maximum Green (s)	23.5	23.5		23.5	23.5		44.5	44.5		44.5	44.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		1.5	1.5		1.5	1.5	
Lost Time Adjust (s)	-3.5	-3.5	-1.0	-3.5	-3.5	-1.0	-2.5	-2.5	-1.0	-2.5	-2.5	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		4.0	4.0		4.0	4.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		10.0	10.0		10.0	10.0	
Flash Dont Walk (s)	16.0	16.0		16.0	16.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)	23.1	23.1		23.1	23.1		50.9	50.9		50.9	50.9	
Actuated g/C Ratio	0.29	0.29		0.29	0.29		0.64	0.64		0.64	0.64	
v/c Ratio	0.12	0.12		0.71	0.26		0.09	0.63		0.66	0.36	
Control Delay	11.2	11.2		35.3	9.2		3.6	4.0		36.8	8.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	11.2	11.2		35.3	9.2		3.6	4.0		36.8	8.0	
LOS	B	B		D	A		A	A		D	A	
Approach Delay	11.2	11.2			27.0			4.0			11.2	
Approach LOS	B	B			C			A			B	
Queue Length 50th (ft)	9	9		128	16		3	58		29	91	
Queue Length 95th (ft)	33	33		204	53		m7	87		#127	137	

5:00 pm Baseline
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Synchro 7 - Report
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Dewey Ave. Corridor Study
457: Denise Road & Dewey Avenue

Future Volumes PM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		420			420			626				421
Turn Bay Length (ft)				175			65				125	
Base Capacity (vph)		549		480	612		367	2209		155	2250	
Starvation Cap Reductn		0		0	0		0	0		0	0	
Spillback Cap Reductn		0		0	0		0	0		0	0	
Storage Cap Reductn		0		0	0		0	0		0	0	
Reduced v/c Ratio		0.11		0.61	0.22		0.09	0.63		0.66	0.36	

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 26 (33%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 10.0

Intersection LOS: A

Intersection Capacity Utilization 79.3%

ICU Level of Service D

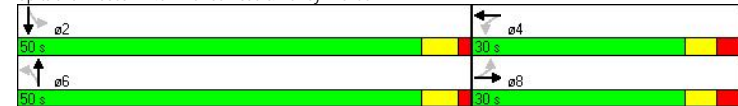
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 457: Denise Road & Dewey Avenue



5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Ave. Corridor Study
459: Clark Pk & Dewey Avenue

Future Volumes PM
5/18/2009

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø2
Lane Configurations							
Volume (vph)	0	0	1342	0	0	854	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Satd. Flow (prot)	0	0	3539	0	0	3539	
Flt Permitted							
Satd. Flow (perm)	0	0	3539	0	0	3539	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)							
Link Speed (mph)	30		35			35	
Link Distance (ft)	362		1048			1991	
Travel Time (s)	8.2		20.4			38.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	1491	0	0	949	
Turn Type							
Protected Phases			1			1	2
Permitted Phases							
Detector Phase			1			1	
Switch Phase							
Minimum Initial (s)			10.0			10.0	10.0
Minimum Split (s)			16.0			16.0	16.0
Total Split (s)	0.0	0.0	16.0	0.0	0.0	16.0	46.0
Total Split (%)	0.0%	0.0%	25.8%	0.0%	0.0%	25.8%	74%
Maximum Green (s)			10.0			10.0	40.0
Yellow Time (s)			4.0			4.0	4.0
All-Red Time (s)			2.0			2.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-3.0	-1.0	-1.0	-3.0	
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	
Lead/Lag			Lead			Lead	Lag
Lead-Lag Optimize?							
Vehicle Extension (s)			4.0			4.0	8.0
Recall Mode			None			None	None
Act Effect Green (s)			16.0			16.0	
Actuated g/C Ratio			1.00			1.00	
v/c Ratio			0.42			0.27	
Control Delay			0.4			0.2	
Queue Delay			0.0			0.0	
Total Delay			0.4			0.2	
LOS			A			A	
Approach Delay			0.4			0.2	
Approach LOS			A			A	
Queue Length 50th (ft)			0			0	
Queue Length 95th (ft)			0			0	
Internal Link Dist (ft)	282		968			1911	
Turn Bay Length (ft)							
Base Capacity (vph)			3539			3539	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			0			0	
Storage Cap Reductn			0			0	

5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Ave. Corridor Study
459: Clark Pk & Dewey Avenue

Future Volumes PM
5/18/2009

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø2
Reduced v/c Ratio			0.42			0.27	

Intersection Summary

Area Type: Other
 Cycle Length: 62
 Actuated Cycle Length: 16
 Natural Cycle: 40
 Control Type: Semi Act-Uncoord
 Maximum v/c Ratio: 0.42
 Intersection Signal Delay: 0.3
 Intersection Capacity Utilization 40.4%
 Analysis Period (min) 15
 Intersection LOS: A
 ICU Level of Service A

Splits and Phases: 459: Clark Pk & Dewey Avenue



5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Ave. Corridor Study
461: Britton Road & Dewey Avenue

Future Volumes PM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	60	82	11	279	96	141	29	1056	137	113	811	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	150		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	1831	0	1770	1697	0	1770	3479	0	1770	3507	0
Flt Permitted	0.443			0.681			0.232			0.100		
Satd. Flow (perm)	825	1831	0	1269	1697	0	432	3479	0	186	3507	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			100			20			9	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		500			500			1974			650	
Travel Time (s)		11.4			11.4			38.5			12.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	67	103	0	310	264	0	32	1325	0	126	957	0
Turn Type	Perm			Perm			pm+pt			pm+pt		
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		4	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		4.0	15.0		4.0	15.0	
Minimum Split (s)	30.0	30.0		30.0	30.0		9.0	27.0		9.0	27.0	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	16.0	34.0	0.0	16.0	34.0	0.0
Total Split (%)	37.5%	37.5%	0.0%	37.5%	37.5%	0.0%	20.0%	42.5%	0.0%	20.0%	42.5%	0.0%
Maximum Green (s)	24.0	24.0		24.0	24.0		11.0	28.0		11.0	28.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	4.0		3.5	4.0	
All-Red Time (s)	2.5	2.5		2.5	2.5		1.5	2.0		1.5	2.0	
Lost Time Adjust (s)	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0	-2.0	-3.0	-1.0	-2.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		4.0	4.0		2.0	4.0		2.0	4.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0			9.0			9.0	
Flash Dont Walk (s)	17.0	17.0		17.0	17.0			12.0			12.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effect Green (s)	25.1	25.1		25.1	25.1		44.7	38.9		48.8	44.6	
Actuated g/C Ratio	0.31	0.31		0.31	0.31		0.56	0.49		0.61	0.56	
v/c Ratio	0.26	0.18		0.78	0.44		0.09	0.78		0.43	0.49	
Control Delay	22.6	18.2		39.7	15.2		6.1	22.5		20.8	8.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	22.6	18.2		39.7	15.2		6.1	22.5		20.8	8.1	
LOS	C	B		D	B		A	C		C	A	
Approach Delay		19.9			28.4			22.1			9.6	
Approach LOS		B			C			C			A	
Queue Length 50th (ft)	24	32		134	59		5	107		21	83	
Queue Length 95th (ft)	56	67		#253	122		m8	#380		m80	131	

5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Ave. Corridor Study
461: Britton Road & Dewey Avenue

Future Volumes PM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		420			420			1894				570
Turn Bay Length (ft)	100			100			150				150	
Base Capacity (vph)	278	624		428	639		480	1702		371	1961	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.24	0.17		0.72	0.41		0.07	0.78		0.34	0.49	

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 18.9

Intersection LOS: B

Intersection Capacity Utilization 73.6%

ICU Level of Service D

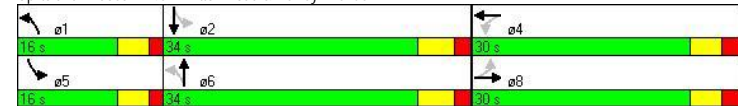
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 461: Britton Road & Dewey Avenue



5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Ave. Corridor Study
462: Dalston & Dewey Avenue

Future Volumes PM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	0	29	0	0	0	31	891	0	0	588	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1660	0	0	1863	0	0	3532	0	0	3532	0
Flt Permitted		0.914						0.913				
Satd. Flow (perm)	0	1539	0	0	1863	0	0	3231	0	0	3532	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		32									2	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		347			289			2220			654	
Travel Time (s)		7.9			6.6			43.2			12.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	45	0	0	0	0	0	1024	0	0	660	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			6			2	
Permitted Phases	4			8			6			2		
Detector Phase	4	4		8	8		6	6		2	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		20.0	20.0		20.0	20.0	
Minimum Split (s)	24.5	24.5		24.5	24.5		34.5	34.5		34.5	34.5	
Total Split (s)	45.0	45.0		45.0	45.0		65.0	65.0		65.0	65.0	
Total Split (%)	40.9%	40.9%	0.0%	40.9%	40.9%	0.0%	59.1%	59.1%	0.0%	59.1%	59.1%	0.0%
Maximum Green (s)	39.5	39.5		39.5	39.5		59.5	59.5		59.5	59.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.5	1.5		1.5	1.5	
Lost Time Adjust (s)	-2.5	-2.5	-1.0	-1.0	-2.5	-1.0	-2.5	-2.5	-1.0	-1.0	-2.5	-1.0
Total Lost Time (s)	3.0	3.0	3.0	4.5	3.0	3.0	3.0	3.0	3.0	4.5	3.0	3.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		4.0	4.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		20.0	20.0		20.0	20.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0		9.0	9.0		9.0	9.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		10.4						96.6			96.6	
Actuated g/C Ratio		0.09						0.88			0.88	
v/c Ratio		0.26						0.36			0.21	
Control Delay		24.7						2.1			0.4	
Queue Delay		0.0						0.0			0.0	
Total Delay		24.7						2.1			0.4	
LOS		C						A			A	
Approach Delay		24.7						2.1			0.4	
Approach LOS		C						A			A	
Queue Length 50th (ft)		9						54			5	
Queue Length 95th (ft)		43						91			7	
Internal Link Dist (ft)		267			209			2140			574	
Turn Bay Length (ft)												
Base Capacity (vph)		607						2836			3101	

5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Ave. Corridor Study
462: Dalston & Dewey Avenue

Future Volumes PM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.07						0.36			0.21	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 92 (84%), Referenced to phase 2:SBTL and 6:NBT, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.36

Intersection Signal Delay: 2.0

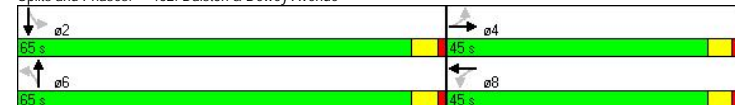
Intersection Capacity Utilization 57.2%

Analysis Period (min) 15

Intersection LOS: A

ICU Level of Service B

Splits and Phases: 462: Dalston & Dewey Avenue



5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Ave. Corridor Study
469: Dorsey & Dewey Avenue

Future Volumes PM
5/18/2009

	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group						
Lane Configurations						
Volume (vph)	371	139	253	998	611	184
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	200			0
Storage Lanes	1	1	1			0
Taper Length (ft)	25	25	25			25
Satd. Flow (prot)	1770	1583	1770	3539	3415	0
Flt Permitted	0.950		0.188			
Satd. Flow (perm)	1770	1583	350	3539	3415	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		116			59	
Link Speed (mph)	35			35	35	
Link Distance (ft)	3243			1991	1974	
Travel Time (s)	63.2			38.8	38.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)						
Lane Group Flow (vph)	412	154	281	1109	883	0
Turn Type		custom	pm+pt			
Protected Phases	4		1	6	2	
Permitted Phases		1 4	6			
Detector Phase	4	1 4	1	6	2	
Switch Phase						
Minimum Initial (s)	6.0		6.0	20.0	20.0	
Minimum Split (s)	28.5		11.0	28.5	28.5	
Total Split (s)	29.0	45.0	16.0	51.0	35.0	0.0
Total Split (%)	36.3%	56.3%	20.0%	63.8%	43.8%	0.0%
Maximum Green (s)	23.5		11.5	45.5	29.5	
Yellow Time (s)	3.5		3.5	3.5	3.5	
All-Red Time (s)	2.0		1.0	2.0	2.0	
Lost Time Adjust (s)	-2.5	-1.5	-1.5	-2.5	-2.5	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?					Yes	
Vehicle Extension (s)	4.0		2.0	2.0	2.0	
Recall Mode	None		None	C-Max	C-Max	
Walk Time (s)	7.0			10.0	10.0	
Flash Dont Walk (s)	16.0			13.0	13.0	
Pedestrian Calls (#/hr)	0			0	0	
Act Effect Green (s)	24.3	38.5	49.7	49.7	35.5	
Actuated g/C Ratio	0.30	0.48	0.62	0.62	0.44	
v/c Ratio	0.77	0.19	0.67	0.50	0.57	
Control Delay	35.7	3.9	17.2	9.7	16.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	35.7	3.9	17.2	9.7	16.0	
LOS	D	A	B	A	B	
Approach Delay	27.0			11.2	16.0	
Approach LOS	C			B	B	
Queue Length 50th (ft)	179	9	60	153	120	
Queue Length 95th (ft)	282	36	121	202	191	

5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Ave. Corridor Study
469: Dorsey & Dewey Avenue

Future Volumes PM
5/18/2009

	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group						
Internal Link Dist (ft)	3163			1911	1894	
Turn Bay Length (ft)	200		200			
Base Capacity (vph)	575	851	449	2200	1546	
Starvation Cap Reductn	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.72	0.18	0.63	0.50	0.57	

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 42 (53%), Referenced to phase 2:SBT and 6:NBT, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.77

Intersection Signal Delay: 15.9

Intersection LOS: B

Intersection Capacity Utilization 67.3%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 469: Dorsey & Dewey Avenue



5:00 pm Baseline
%user_name%

Synchro 7 - Report
Page 22

Dewey Ave. Corridor Study
550: Ellington & Dewey

Future Volumes PM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	6	61	13	2	61	1	16	1059	7	2	532	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1816	0	0	1857	0	0	3532	0	0	3532	0
Flt Permitted		0.976			0.992			0.944			0.952	
Satd. Flow (perm)	0	1780	0	0	1844	0	0	3338	0	0	3363	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			1			2			3	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		295			178			325			2220	
Travel Time (s)		6.7			4.0			6.3			43.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	89	0	0	71	0	0	1203	0	0	601	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			2			1			1	
Permitted Phases	2			2			1			1		
Detector Phase	2	2		2	2		1	1		1	1	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		16.0	16.0		16.0	16.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		23.5	23.5		23.5	23.5	
Total Split (s)	26.0	26.0		26.0	26.0		34.0	34.0		34.0	34.0	
Total Split (%)	43.3%	43.3%	0.0%	43.3%	43.3%	0.0%	56.7%	56.7%	0.0%	56.7%	56.7%	0.0%
Maximum Green (s)	20.5	20.5		20.5	20.5		28.5	28.5		28.5	28.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.5	-2.5	-1.0	-2.5	-2.5	-1.0	-2.5	-2.5	-1.0	-2.5	-2.5	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lag	Lag		Lag	Lag		Lead	Lead		Lead	Lead	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		8.0	8.0		8.0	8.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	1	1		1	1		0	0		0	0	
Act Effct Green (s)	12.2			12.2			44.7			44.7		
Actuated g/C Ratio	0.20			0.20			0.74			0.74		
v/c Ratio	0.24			0.19			0.48			0.24		
Control Delay	17.2			18.8			2.0			4.2		
Queue Delay	0.0			0.0			0.0			0.0		
Total Delay	17.2			18.8			2.0			4.2		
LOS	B			B			A			A		
Approach Delay	17.2			18.8			2.0			4.2		
Approach LOS	B			B			A			A		
Queue Length 50th (ft)	24			22			24			27		
Queue Length 95th (ft)	44			39			42			85		
Internal Link Dist (ft)	215			98			245			2140		
Turn Bay Length (ft)												
Base Capacity (vph)	691			707			2486			2505		

5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Ave. Corridor Study
550: Ellington & Dewey

Future Volumes PM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0			0			157			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.13			0.10			0.52			0.24	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 18 (30%), Referenced to phase 1:NBSB, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.48

Intersection Signal Delay: 4.0

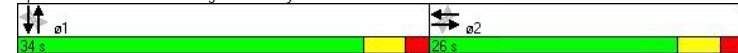
Intersection Capacity Utilization 54.2%

Analysis Period (min) 15

Intersection LOS: A

ICU Level of Service A

Splits and Phases: 550: Ellington & Dewey



5:00 pm Baseline
%user_name%

Synchro 7 - Report
Page 24

Dewey Ave. Corridor Study
579: Wendy's Driveway & Dewey Ave

Future Volumes PM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	29	5	42	273	5	155	49	893	100	233	590	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	200		90	180		0	240		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	1615	0	1770	1593	0	1770	3486	0	1770	3536	0
Flt Permitted	0.570			0.722			0.362			0.194		
Satd. Flow (perm)	1062	1615	0	1345	1593	0	674	3486	0	361	3536	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		47			106			24			2	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		500			500			644			706	
Travel Time (s)		11.4			11.4			12.5			13.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	32	53	0	303	178	0	54	1103	0	259	662	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		4	4		6	6		2	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		15.0	15.0		15.0	15.0	
Minimum Split (s)	31.5	31.5		31.5	31.5		27.0	27.0		27.0	27.0	
Total Split (s)	32.0	32.0	0.0	32.0	32.0	0.0	48.0	48.0	0.0	48.0	48.0	0.0
Total Split (%)	40.0%	40.0%	0.0%	40.0%	40.0%	0.0%	60.0%	60.0%	0.0%	60.0%	60.0%	0.0%
Maximum Green (s)	25.5	25.5		25.5	25.5		42.0	42.0		42.0	42.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-3.5	-3.5	-1.0	-3.5	-3.5	-1.0	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		8.0	8.0		8.0	8.0	
Flash Dont Walk (s)	18.0	18.0		18.0	18.0		13.0	13.0		13.0	13.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)	25.6	25.6		25.6	25.6		48.4	48.4		48.4	48.4	
Actuated g/C Ratio	0.32	0.32		0.32	0.32		0.60	0.60		0.60	0.60	
v/c Ratio	0.09	0.10		0.70	0.31		0.13	0.52		1.19	0.31	
Control Delay	18.2	6.9		32.9	9.7		5.1	9.5		139.7	6.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	18.2	6.9		32.9	9.7		5.1	9.5		139.7	6.6	
LOS	B	A		C	A		A	A		F	A	
Approach Delay		11.2			24.3			9.3			44.0	
Approach LOS		B			C			A			D	
Queue Length 50th (ft)	11	2		127	24		10	194		-166	74	
Queue Length 95th (ft)	29	24		209	66		m14	321		#315	84	

5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Ave. Corridor Study
579: Wendy's Driveway & Dewey Ave

Future Volumes PM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		420			420			564			626	
Turn Bay Length (ft)	50			200			180			240		
Base Capacity (vph)	385	615		488	645		408	2118		218	2140	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.08	0.09		0.62	0.28		0.13	0.52		1.19	0.31	

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 26 (33%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.19

Intersection Signal Delay: 24.2

Intersection LOS: C

Intersection Capacity Utilization 74.2%

ICU Level of Service D

Analysis Period (min) 15

- Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 579: Wendy's Driveway & Dewey Ave



5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Ave. Corridor Study
657: W Ridge & Eastman

Future Volumes PM
5/18/2009

Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	80	172	1100	1450	50	50	333
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	15	15
Storage Length (ft)		262			0	0	0
Storage Lanes		1			0	1	0
Taper Length (ft)		25			25	25	25
Satd. Flow (prot)	0	1770	5085	5060	0	1797	0
Flt Permitted		0.950				0.993	
Satd. Flow (perm)	0	1770	5085	5060	0	1797	0
Right Turn on Red					Yes		No
Satd. Flow (RTOR)				6			
Link Speed (mph)			35	35		30	
Link Distance (ft)			1255	497		583	
Travel Time (s)			24.4	9.7		13.3	
Peak Hour Factor	0.95	0.95	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	265	1222	1667	0	426	0
Turn Type	Prot	Prot					
Protected Phases	3	3	13	1		2	
Permitted Phases							
Detector Phase	3	3	13	1		2	
Switch Phase							
Minimum Initial (s)	6.0	6.0		24.0		6.0	
Minimum Split (s)	12.0	12.0		30.0		37.0	
Total Split (s)	25.0	25.0	83.0	58.0	0.0	37.0	0.0
Total Split (%)	20.8%	20.8%	69.2%	48.3%	0.0%	30.8%	0.0%
Maximum Green (s)	19.0	19.0		52.0		31.0	
Yellow Time (s)	4.0	4.0		4.0		3.5	
All-Red Time (s)	2.0	2.0		2.0		2.5	
Lost Time Adjust (s)	-3.0	-3.0	-3.0	-3.0	-1.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag				Lead		Lag	
Lead-Lag Optimize?							
Vehicle Extension (s)	4.0	4.0		2.0		3.0	
Recall Mode	None	None		C-Max		None	
Walk Time (s)				8.0		7.0	
Flash Dont Walk (s)				16.0		24.0	
Pedestrian Calls (#/hr)				0		0	
Act Efect Green (s)		22.7	81.3	55.6		32.7	
Actuated g/C Ratio		0.19	0.68	0.46		0.27	
v/c Ratio		0.79	0.35	0.71		0.87	
Control Delay		64.7	8.7	14.1		57.2	
Queue Delay		0.0	0.0	0.9		0.0	
Total Delay		64.7	8.7	15.0		57.2	
LOS		E	A	B		E	
Approach Delay			18.7	15.0		57.2	
Approach LOS			B	B		E	
Queue Length 50th (ft)		199	139	152		309	

5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Ave. Corridor Study
657: W Ridge & Eastman

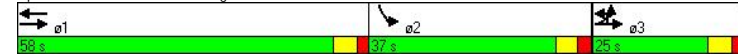
Future Volumes PM
5/18/2009

Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 95th (ft)		#337	164	m161		#470	
Internal Link Dist (ft)			1175	417		503	
Turn Bay Length (ft)		262					
Base Capacity (vph)		335	3446	2349		509	
Starvation Cap Reductn		0	0	383		0	
Spillback Cap Reductn		0	58	0		0	
Storage Cap Reductn		0	0	0		0	
Reduced v/c Ratio		0.79	0.36	0.85		0.84	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 74 (62%), Referenced to phase 1:EBWB, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.87
Intersection Signal Delay: 21.6
Intersection Capacity Utilization 76.4%
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 657: W Ridge & Eastman



5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Ave. Corridor Study
1001: English Road & Dewey Avenue

Future Volumes PM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	90	91	11	252	102	147	29	1056	136	119	811	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		0	150		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	1833	0	1770	1697	0	1770	3479	0	1770	3493	0
Flt Permitted	0.419			0.664			0.230			0.101		
Satd. Flow (perm)	780	1833	0	1237	1697	0	428	3479	0	188	3493	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			98			20			15	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		3301			500			650			644	
Travel Time (s)		75.0			11.4			12.7			12.5	
Peak Hour Factor	0.96	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	94	113	0	280	276	0	32	1324	0	132	989	0
Turn Type	Perm			Perm			pm+pt			pm+pt		
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		4	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		4.0	15.0		4.0	15.0	
Minimum Split (s)	30.0	30.0		30.0	30.0		9.0	27.0		9.0	27.0	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	16.0	34.0	0.0	16.0	34.0	0.0
Total Split (%)	37.5%	37.5%	0.0%	37.5%	37.5%	0.0%	20.0%	42.5%	0.0%	20.0%	42.5%	0.0%
Maximum Green (s)	24.0	24.0		24.0	24.0		11.0	28.0		11.0	28.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	4.0		3.5	4.0	
All-Red Time (s)	2.5	2.5		2.5	2.5		1.5	2.0		1.5	2.0	
Lost Time Adjust (s)	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0	-2.0	-3.0	-1.0	-2.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		4.0	4.0		2.0	4.0		2.0	4.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0			9.0			9.0	
Flash Dont Walk (s)	17.0	17.0		17.0	17.0			12.0			12.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)	24.4	24.4		24.4	24.4		44.6	37.5		49.5	45.3	
Actuated g/C Ratio	0.30	0.30		0.30	0.30		0.56	0.47		0.62	0.57	
v/c Ratio	0.39	0.20		0.74	0.47		0.09	0.81		0.44	0.50	
Control Delay	26.5	19.0		37.5	16.4		9.7	18.2		15.2	16.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	26.5	19.0		37.5	16.4		9.7	18.2		15.2	16.3	
LOS	C	B		D	B		A	B		B	B	
Approach Delay		22.4			27.0			18.0			16.2	
Approach LOS		C			C			B			B	
Queue Length 50th (ft)	35	36		118	65		6	138		39	172	
Queue Length 95th (ft)	77	73		#208	131		m12	#442		m74	258	

5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Ave. Corridor Study
1001: English Road & Dewey Avenue

Future Volumes PM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		3221			420			570				564
Turn Bay Length (ft)	100						150				150	
Base Capacity (vph)	263	624		417	638		482	1640		374	1984	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.36	0.18		0.67	0.43		0.07	0.81		0.35	0.50	

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.81

Intersection Signal Delay: 19.2

Intersection LOS: B

Intersection Capacity Utilization 72.9%

ICU Level of Service C

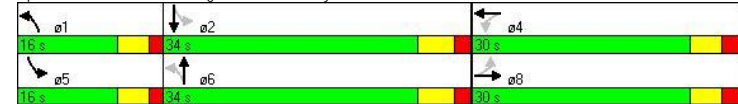
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1001: English Road & Dewey Avenue



5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Ave. Corridor Study
1021: Latta & Dewey Avenue

Future Volumes PM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	115	375	149	153	288	23	253	246	198	45	195	93
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	200		0	200		0	125		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	1783	0	1770	1842	0	1770	3302	0	1770	3366	0
Flt Permitted	0.566			0.239			0.260			0.479		
Satd. Flow (perm)	1054	1783	0	445	1842	0	484	3302	0	892	3366	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20			5			213			92	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		3343			564			615			360	
Travel Time (s)		65.1			11.0			12.0			7.0	
Peak Hour Factor	0.88	0.88	0.88	0.97	0.97	0.97	0.93	0.93	0.93	0.84	0.84	0.84
Shared Lane Traffic (%)												
Lane Group Flow (vph)	131	595	0	158	321	0	272	478	0	54	343	0
Turn Type	Perm			pm+pt			pm+pt			Perm		
Protected Phases		2		1	6		7	4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		1	6		7	4		8	8	
Switch Phase												
Minimum Initial (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Minimum Split (s)	25.0	25.0		8.0	25.0		8.0	25.0		25.0	25.0	
Total Split (s)	30.0	30.0	0.0	15.0	45.0	0.0	14.0	55.0	0.0	41.0	41.0	0.0
Total Split (%)	30.0%	30.0%	0.0%	15.0%	45.0%	0.0%	14.0%	55.0%	0.0%	41.0%	41.0%	0.0%
Maximum Green (s)	25.0	25.0		10.0	40.0		9.0	50.0		36.0	36.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lag	Lag		Lead			Lead			Lag	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)	5.0	5.0			5.0			5.0			5.0	
Flash Dont Walk (s)	15.0	15.0			15.0			15.0			15.0	
Pedestrian Calls (#/hr)	0	0			0			0			0	
Act Effect Green (s)	50.4	50.4		64.9	64.9		29.1	29.1		15.1	15.1	
Actuated g/C Ratio	0.50	0.50		0.65	0.65		0.29	0.29		0.15	0.15	
v/c Ratio	0.25	0.65		0.36	0.27		0.96	0.43		0.40	0.58	
Control Delay	17.5	23.6		9.8	8.6		77.0	16.1		46.2	32.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	17.5	23.6		9.8	8.6		77.0	16.1		46.2	32.3	
LOS	B	C		A	A		E	B		D	C	
Approach Delay		22.5			9.0			38.2			34.2	
Approach LOS		C			A			D			C	
Queue Length 50th (ft)	45	256		35	77		145	68		32	78	
Queue Length 95th (ft)	98	443		70	138		#242	105		63	106	

5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Ave. Corridor Study
1021: Latta & Dewey Avenue

Future Volumes PM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		3263			484			535				280
Turn Bay Length (ft)	200			200			200				125	
Base Capacity (vph)	532	909		458	1196		283	1819		339	1336	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.25	0.65		0.34	0.27		0.96	0.26		0.16	0.26	

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.96

Intersection Signal Delay: 26.7

Intersection LOS: C

Intersection Capacity Utilization 73.0%

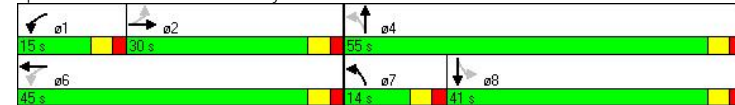
ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1021: Latta & Dewey Avenue



5:00 pm Baseline
%user_name%

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Dewey Ave. Corridor Study
4601: Maiden & Dewey Avenue

Future Volumes PM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	111	0	300	0	0	0	298	689	0	0	555	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		200	0		0	0		0	125		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	0	1770	1583	0	1863	0	1770	3539	0	1863	3486	0
Flt Permitted		0.757					0.175					
Satd. Flow (perm)	0	1410	1583	0	1863	0	326	3539	0	1863	3486	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			353								10	
Link Speed (mph)		35			30			35			35	
Link Distance (ft)		4626			213			192			1048	
Travel Time (s)		90.1			4.8			3.7			20.4	
Peak Hour Factor	0.85	0.85	0.85	0.90	0.90	0.90	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	131	353	0	0	0	317	733	0	0	654	0
Turn Type	Perm		custom	Perm			pm+pt			pm+pt		
Protected Phases		3	1		3		14	46		5	2	
Permitted Phases	3		3	3			46			2		
Detector Phase	3	3	1	3	3		14	46		5	2	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0					4.0	15.0	
Minimum Split (s)	9.5	9.5	9.0	9.5	9.5					9.0	28.0	
Total Split (s)	25.0	25.0	12.0	25.0	25.0	0.0	51.0	73.0	0.0	12.0	34.0	0.0
Total Split (%)	22.7%	22.7%	10.9%	22.7%	22.7%	0.0%	46.4%	66.4%	0.0%	10.9%	30.9%	0.0%
Maximum Green (s)	19.5	19.5	7.0	19.5	19.5					7.0	28.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5					3.5	4.0	
All-Red Time (s)	2.0	2.0	1.5	2.0	2.0					1.5	2.0	
Lost Time Adjust (s)	-2.5	-2.5	-2.0	-2.5	-2.5	-1.0	-2.0	-3.0	-1.0	-2.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lead	Lead	Lead	Lead	Lead					Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0					2.0	4.0	
Recall Mode	None	None	None	None	None					None	C-Max	
Walk Time (s)											7.0	
Flash Dont Walk (s)											15.0	
Pedestrian Calls (#/hr)											0	
Act Effct Green (s)		16.7	29.5				85.5	72.7			31.0	
Actuated g/C Ratio		0.15	0.27				0.78	0.66			0.28	
v/c Ratio		0.61	0.52				0.33	0.31			0.66	
Control Delay		55.1	4.5				20.8	3.0			38.1	
Queue Delay		0.0	0.2				14.8	0.6			0.6	
Total Delay		55.1	4.7				35.6	3.6			38.7	
LOS		E	A				D	A			D	
Approach Delay		18.4						13.3			38.7	
Approach LOS		B						B			D	
Queue Length 50th (ft)		87	0				125	32			211	
Queue Length 95th (ft)		135	26				m168	m62			275	

5:00 pm Baseline
%user_name%

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Dewey Ave. Corridor Study
4601: Maiden & Dewey Avenue

Future Volumes PM
5/18/2009

Lane Group	ø4	ø6	ø8
Lane Configurations			
Volume (vph)			
Ideal Flow (vphpl)			
Storage Length (ft)			
Storage Lanes			
Taper Length (ft)			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Right Turn on Red			
Satd. Flow (RTOR)			
Link Speed (mph)			
Link Distance (ft)			
Travel Time (s)			
Peak Hour Factor			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Turn Type			
Protected Phases	4	6	8
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	4.0	15.0	4.0
Minimum Split (s)	37.0	28.0	37.0
Total Split (s)	39.0	34.0	64.0
Total Split (%)	35%	31%	58%
Maximum Green (s)	33.0	28.0	58.0
Yellow Time (s)	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag	Lag	Lag	
Lead-Lag Optimize?			
Vehicle Extension (s)	3.0	4.0	3.0
Recall Mode	None	C-Max	None
Walk Time (s)	9.0	7.0	9.0
Flash Dont Walk (s)	22.0	15.0	22.0
Pedestrian Calls (#/hr)	0	0	0
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay			
Queue Delay			
Total Delay			
LOS			
Approach Delay			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			

5:00 pm Baseline
%user_name%

Synchro 7 - Report
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Dewey Ave. Corridor Study
4601: Maiden & Dewey Avenue

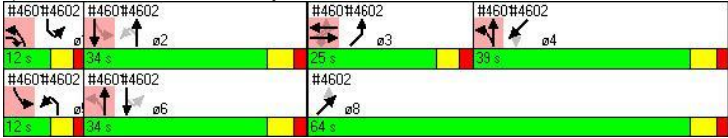
Future Volumes PM
5/18/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		4546			133			112			968	
Turn Bay Length (ft)			200									
Base Capacity (vph)		282	684				953	2360			990	
Starvation Cap Reductn		0	0				614	1168			0	
Spillback Cap Reductn		0	46				0	0			99	
Storage Cap Reductn		0	0				0	0			0	
Reduced v/c Ratio		0.46	0.55				0.94	0.61			0.73	

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.13
Intersection Signal Delay: 22.0
Intersection Capacity Utilization 49.9%
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4601: Maiden & Dewey Avenue



Dewey Ave. Corridor Study
4601: Maiden & Dewey Avenue

Future Volumes PM
5/18/2009

Lane Group	ø4	ø6	ø8
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary

Dewey Ave. Corridor Study
4602: Dewey Avenue & Stone

Future Volumes PM
5/18/2009

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	88	719	83	257	532	121	153	422	56	76	270	179
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	0		0	75		0	200		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	3486	0	1770	3440	0	1770	1829	0	1770	1751	0
Flt Permitted	0.181			0.121			0.129			0.459		
Satd. Flow (perm)	337	3486	0	225	3440	0	240	1829	0	855	1751	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11			25			10			32	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		654			192			352			322	
Travel Time (s)		12.7			3.7			6.9			6.3	
Peak Hour Factor	0.91	0.91	0.91	0.84	0.84	0.84	0.88	0.88	0.88	0.87	0.87	0.87
Shared Lane Traffic (%)												
Lane Group Flow (vph)	97	881	0	306	777	0	174	544	0	87	516	0
Turn Type	pm+pt			pm+pt			pm+pt			Perm		
Protected Phases	5	2		1	6		3	8			4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		4	4	
Switch Phase												
Minimum Initial (s)	4.0	15.0		4.0	15.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	9.0	28.0		9.0	28.0		9.5	37.0		37.0	37.0	
Total Split (s)	12.0	34.0	0.0	12.0	34.0	0.0	25.0	64.0	0.0	39.0	39.0	0.0
Total Split (%)	10.9%	30.9%	0.0%	10.9%	30.9%	0.0%	22.7%	58.2%	0.0%	35.5%	35.5%	0.0%
Maximum Green (s)	7.0	28.0		7.0	28.0		19.5	58.0		33.0	33.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0		4.0	4.0	
All-Red Time (s)	1.5	2.0		1.5	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-3.0	-1.0	-2.0	-3.0	-1.0	-2.5	-3.0	-1.0	-3.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead			Lag	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	4.0		2.0	4.0		2.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		7.0						9.0			9.0	
Flash Dont Walk (s)		15.0			15.0			22.0			22.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effect Green (s)	39.6	31.0		45.0	35.2		57.2	57.2		37.5	37.5	
Actuated g/C Ratio	0.36	0.28		0.41	0.32		0.52	0.52		0.34	0.34	
v/c Ratio	0.41	0.89		1.12	0.69		0.49	0.57		0.30	0.83	
Control Delay	24.5	47.7		131.4	19.0		19.0	19.8		29.9	44.7	
Queue Delay	0.0	2.7		17.4	1.5		1.4	0.0		0.0	1.2	
Total Delay	24.5	50.4		148.8	20.5		20.4	19.8		29.9	45.9	
LOS	C	D		F	C		C	B		C	D	
Approach Delay		47.8			56.8			19.9			43.6	
Approach LOS		D			E			B			D	
Queue Length 50th (ft)	44	310		~258	105		58	227		42	298	
Queue Length 95th (ft)	81	#423		#384	144		99	311		87	#482	

5:00 pm Baseline
%user_name%

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Dewey Ave. Corridor Study
4602: Dewey Avenue & Stone

Future Volumes PM
5/18/2009

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Internal Link Dist (ft)		574			112			272				242
Turn Bay Length (ft)	200						75			200		
Base Capacity (vph)	240	990		272	1118		431	1019		297	629	
Starvation Cap Reductn	0	0		10	173		0	0		0	0	
Spillback Cap Reductn	0	48		0	0		121	0		0	26	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.40	0.94		1.17	0.82		0.56	0.53		0.29	0.86	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.13

Intersection Signal Delay: 44.0

Intersection LOS: D

Intersection Capacity Utilization 83.7%

ICU Level of Service E

Analysis Period (min) 15

- Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 4602: Dewey Avenue & Stone



5:00 pm Baseline
%user_name%

Synchro 7 - Report
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**LOS CALCULATIONS:
FUTURE CONDITIONS
WITH ROAD DIET**

Dewey Avenue
4: W Ridge & Dewey

Future AM Build - 3 lane
10/23/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	78	1569	149	46	1071	88	87	148	37	434	355	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	10	10	10	10	11	11	10	11	11
Storage Length (ft)	160		0	280		0	150		0	80		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		497			667			1166			580	
Travel Time (s)		9.7			13.0			26.5			13.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	95	2100	0	56	1417	0	106	226	0	530	450	0
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		
Detector Phase	5	2		1	6		7	4		3	8	
Switch Phase												
Minimum Initial (s)	4.0	29.0		4.0	29.0		4.0	12.0		4.0	12.0	
Minimum Split (s)	10.0	35.0		10.0	35.0		12.0	36.0		12.0	34.0	
Total Split (s)	12.0	52.0	0.0	12.0	52.0	0.0	20.0	36.0	0.0	20.0	36.0	0.0
Total Split (%)	10.0%	43.3%	0.0%	10.0%	43.3%	0.0%	16.7%	30.0%	0.0%	16.7%	30.0%	0.0%
Maximum Green (s)	7.0	46.0		7.0	46.0		15.0	30.0		15.0	30.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0		3.5	4.0	
All-Red Time (s)	1.5	2.0		1.5	2.0		1.5	2.0		1.5	2.0	
Lost Time Adjust (s)	-2.0	-3.0	-1.0	-2.0	-3.0	-1.0	-2.0	-3.0	-1.0	-2.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	4.0		2.0	4.0	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		7.0			12.0			7.0			7.0	
Flash Dont Walk (s)		22.0			17.0			23.0			21.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effect Green (s)	72.4	64.1		69.2	60.7		32.9	20.5		40.0	25.1	
Actuated g/C Ratio	0.60	0.53		0.58	0.51		0.27	0.17		0.33	0.21	
v/c Ratio	0.40	0.84		0.32	0.59		0.40	0.39		1.42	0.63	
Control Delay	17.7	25.7		25.1	19.2		31.6	40.0		234.0	46.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	17.7	25.7		25.1	19.2		31.6	40.0		234.0	46.0	
LOS	B	C		C	B		C	D		F	D	
Approach Delay		25.4			19.5			37.3			147.6	
Approach LOS		C			B			D			F	
Queue Length 50th (ft)	23	489		15	265		59	73		-553	145	
Queue Length 95th (ft)	51	#735		52	390		91	103		#599	212	
Internal Link Dist (ft)		417			587			1086			500	
Turn Bay Length (ft)	160			280			150			80		

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Dewey Avenue
4: W Ridge & Dewey

Future AM Build - 3 lane
10/23/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	240	2508		187	2382		329	931		374	938	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.40	0.84		0.30	0.59		0.32	0.24		1.42	0.48	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 71 (59%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.42

Intersection Signal Delay: 48.5

Intersection LOS: D

Intersection Capacity Utilization 90.1%

ICU Level of Service E

Analysis Period (min) 15

- Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.













Splits and Phases: 4: W Ridge & Dewey



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Dewey Avenue
7: Banker & Bennington

Future AM Build - 3 lane
10/23/2009

Lane Group	EBL2	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR	SWR2
Lane Configurations												
Volume (vph)	2	1	1	3	221	53	11	676	10	94	1	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	0	50		150	50		0	0	0	
Storage Lanes		1	0	1		1	1		0	1	0	
Taper Length (ft)		25	25	25		25	25		25	25	25	
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			35			35		30		
Link Distance (ft)		272			1358			328		315		
Travel Time (s)		6.2			26.5			6.4		7.2		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	4	0	4	270	65	13	838	0	125	0	0
Turn Type	Perm			Perm		Perm	Perm					
Protected Phases		4			2			6				
Permitted Phases	4			2		2	6			8		
Detector Phase	4	4		2	2	2	6	6		8		
Switch Phase												
Minimum Initial (s)	3.0	3.0		3.0	3.0	3.0	3.0			3.0		
Minimum Split (s)	28.0	28.0		28.0	28.0	28.0	28.0			28.0		
Total Split (s)	28.0	28.0	0.0	32.0	32.0	32.0	32.0	0.0		28.0	0.0	0.0
Total Split (%)	46.7%	46.7%	0.0%	53.3%	53.3%	53.3%	53.3%	0.0%		46.7%	0.0%	0.0%
Maximum Green (s)	22.0	22.0		26.0	26.0	26.0	26.0			22.0		
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5			3.5		
All-Red Time (s)	2.5	2.5		2.5	2.5	2.5	2.5			2.5		
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	4.0	6.0	6.0	6.0	6.0	4.0	6.0	4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0			3.0		
Recall Mode	None	None		C-Max	C-Max	C-Max	C-Max			None		
Walk Time (s)	7.0	7.0		7.0	7.0	7.0	7.0			7.0		
Flash Dont Walk (s)	12.0	12.0		12.0	12.0	12.0	12.0			12.0		
Pedestrian Calls (#/hr)	0	0		0	0	0	0			0		
Act Effct Green (s)		9.2		42.3	42.3	42.3	42.3			9.2		
Actuated g/C Ratio		0.15		0.70	0.70	0.70	0.70			0.15		
v/c Ratio		0.02		0.01	0.21	0.06	0.02			0.43		
Control Delay		18.2		9.5	7.7	4.7	7.9			14.3		
Queue Delay		0.0		0.0	0.0	0.0	4.4			0.0		
Total Delay		18.2		9.5	7.7	4.7	7.9			18.7		
LOS		B		A	A	A	A			B		C
Approach Delay		18.3			7.2		18.6			25.7		
Approach LOS		B			A		B			C		
Queue Length 50th (ft)		1		0	30	0	2			188		39
Queue Length 95th (ft)		7		m0	128	18	m5			451		76
Internal Link Dist (ft)		192			1278		248			235		
Turn Bay Length (ft)				50		150	50					
Base Capacity (vph)		637		329	1315	1136	780	1312		680		

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Dewey Avenue
7: Banker & Bennington

Future AM Build - 3 lane
10/23/2009

Lane Group	EBL2	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR	SWR2
Starvation Cap Reductn		0		0	0	0	0	389		0		
Spillback Cap Reductn		0		0	0	0	0	0		0		
Storage Cap Reductn		0		0	0	0	0	0		0		
Reduced v/c Ratio		0.01		0.01	0.21	0.06	0.02	0.91		0.18		

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL; Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.64

Intersection Signal Delay: 16.3

Intersection LOS: B

Intersection Capacity Utilization 64.4%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Banker & Bennington



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Dewey Avenue
14: Eastman & Dewey

Future AM Build - 3 lane
10/23/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	53	0	15	0	239	280	166	603	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	10	10	10	10	10	10	10	10	10
Storage Length (ft)	100		0	50		0	50		0	240		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		583			686			580			1020	
Travel Time (s)		13.3			15.6			13.2			23.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	65	18	0	0	634	0	203	737	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			2			1			1	
Permitted Phases	2			2			1			1		
Detector Phase	2	2		2	2		1	1		1	1	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		23.0	23.0		23.0	23.0	
Minimum Split (s)	31.0	31.0		31.0	31.0		29.0	29.0		29.0	29.0	
Total Split (s)	31.0	31.0	0.0	31.0	31.0	0.0	29.0	29.0	0.0	29.0	29.0	0.0
Total Split (%)	51.7%	51.7%	0.0%	51.7%	51.7%	0.0%	48.3%	48.3%	0.0%	48.3%	48.3%	0.0%
Maximum Green (s)	25.5	25.5		25.5	25.5		23.0	23.0		23.0	23.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.5	-2.5	-1.0	-2.5	-2.5	-1.0	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lag	Lag		Lag	Lag		Lead	Lead		Lead	Lead	
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		4.0	4.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	18.0	18.0		18.0	18.0		16.0	16.0		16.0	16.0	
Pedestrian Calls (#/hr)	1	1		1	1		0	0		0	0	
Act Effect Green (s)				14.6	14.6			45.8		45.8	45.8	
Actuated g/C Ratio				0.24	0.24			0.76		0.76	0.76	
v/c Ratio				0.20	0.03			0.26		0.38	0.29	
Control Delay				17.1	0.1			1.8		11.9	5.9	
Queue Delay				0.0	0.0			0.0		0.0	0.0	
Total Delay				17.1	0.1			1.8		11.9	5.9	
LOS				B	A			A		B	A	
Approach Delay					13.4			1.8			7.2	
Approach LOS					B			A			A	
Queue Length 50th (ft)				20	0			10		36	67	
Queue Length 95th (ft)				31	0			40		#155	184	
Internal Link Dist (ft)		503			606			500			940	
Turn Bay Length (ft)				50						240		

Dewey Avenue
14: Eastman & Dewey

Future AM Build - 3 lane
10/23/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)				614	934			2398		532	2521	
Starvation Cap Reductn				0	0			0		0	0	
Spillback Cap Reductn				0	0			0		0	0	
Storage Cap Reductn				0	0			0		0	0	
Reduced v/c Ratio				0.11	0.02			0.26		0.38	0.29	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 33 (55%), Referenced to phase 1:NBSB, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.38

Intersection Signal Delay: 5.4

Intersection LOS: A

Intersection Capacity Utilization 53.3%

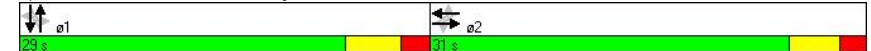
ICU Level of Service A

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 14: Eastman & Dewey



Dewey Avenue
15: Christian & Dewey

Future AM Build - 3 lane
10/23/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	5	32	18	38	11	37	8	209	36	219	713	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	14	14	14	10	10	10	10	10	10
Storage Length (ft)	0		0	0		0	75		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			35	
Link Distance (ft)		370			2670			1020			560	
Travel Time (s)		8.4			60.7			23.2			10.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	67	0	0	104	0	10	299	0	268	876	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			2			1			1	
Permitted Phases	2			2			1			1		
Detector Phase	2	2		2	2		1	1		1	1	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		13.0	13.0		13.0	13.0	
Minimum Split (s)	29.0	29.0		29.0	29.0		21.0	21.0		21.0	21.0	
Total Split (s)	29.0	29.0	0.0	29.0	29.0	0.0	31.0	31.0	0.0	31.0	31.0	0.0
Total Split (%)	48.3%	48.3%	0.0%	48.3%	48.3%	0.0%	51.7%	51.7%	0.0%	51.7%	51.7%	0.0%
Maximum Green (s)	23.0	23.0		23.0	23.0		25.5	25.5		25.5	25.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.5	2.5		2.5	2.5		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0	-2.5	-2.5	-1.0	-2.0	-2.5	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.5	3.0	3.0
Lead/Lag	Lag	Lag		Lag	Lag		Lead	Lead		Lead	Lead	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		3.0	3.0		3.0	3.0	
Recall Mode	Min	Min		Min	Min		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	14.0	14.0		14.0	14.0		8.0	8.0		8.0	8.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		10.6			10.6		43.4	43.4		42.9	43.4	
Actuated g/C Ratio		0.18			0.18		0.72	0.72		0.72	0.72	
v/c Ratio		0.21			0.32		0.03	0.13		0.38	0.37	
Control Delay		16.6			15.9		1.7	1.4		3.3	2.3	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		16.6			15.9		1.7	1.4		3.3	2.3	
LOS		B			B		A	A		A	A	
Approach Delay		16.6			15.9			1.4			2.5	
Approach LOS		B			B			A			A	
Queue Length 50th (ft)		14			19		0	4		15	25	
Queue Length 95th (ft)		40			52		1	6		m9	13	
Internal Link Dist (ft)		290			2590			940			480	
Turn Bay Length (ft)							75			75		

Dewey Avenue
15: Christian & Dewey

Future AM Build - 3 lane
10/23/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		760			734		383	2349		707	2387	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.09			0.14		0.03	0.13		0.38	0.37	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 0 (0%), Referenced to phase 1:NBSB, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.38

Intersection Signal Delay: 3.7

Intersection LOS: A

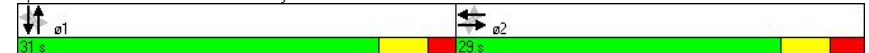
Intersection Capacity Utilization 54.8%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 15: Christian & Dewey



Dewey Avenue
16: McCall & Dewey

Future AM Build - 3 lane
10/23/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	23	6	98	1	2	1	13	227	3	6	689	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	13	9	9	9	10	10	10	10	10	10
Storage Length (ft)	0		0	0		0	75		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		415			370			1670			1358	
Travel Time (s)		9.4			8.4			32.5			26.5	
Peak Hour Factor	0.88	0.88	0.88	0.50	0.50	0.50	0.79	0.79	0.79	0.86	0.86	0.86
Growth Factor	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	159	0	0	8	0	18	320	0	8	909	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			2			1			1	
Permitted Phases	2			2			1			1		
Detector Phase	2	2		2	2		1	1		1	1	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0		21.0	21.0		21.0	21.0		21.0	21.0	
Total Split (s)	21.0	21.0	0.0	21.0	21.0	0.0	39.0	39.0	0.0	39.0	39.0	0.0
Total Split (%)	35.0%	35.0%	0.0%	35.0%	35.0%	0.0%	65.0%	65.0%	0.0%	65.0%	65.0%	0.0%
Maximum Green (s)	15.0	15.0		15.0	15.0		33.5	33.5		33.5	33.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.5	2.5		2.5	2.5		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0	-2.0	-2.5	-1.0	-2.5	-2.5	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.5	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lag	Lag		Lag	Lag		Lead	Lead		Lead	Lead	
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	5.0	5.0		5.0	5.0							
Flash Dont Walk (s)	10.0	10.0		10.0	10.0							
Pedestrian Calls (#/hr)	1	1		1	1							
Act Effect Green (s)		12.3			12.3		44.5	44.9		44.9	44.9	
Actuated g/C Ratio		0.20			0.20		0.74	0.75		0.75	0.75	
v/c Ratio		0.37			0.03		0.06	0.25		0.01	0.70	
Control Delay		8.9			15.2		6.7	5.9		4.7	10.3	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		8.9			15.2		6.7	5.9		4.7	10.3	
LOS		A			B		A	A		A	B	
Approach Delay		8.9			15.3			6.0			10.3	
Approach LOS		A			B			A			B	
Queue Length 50th (ft)		11			2		3	63		1	129	
Queue Length 95th (ft)		44			5		11	101		m3	#447	
Internal Link Dist (ft)		335			290			1590			1278	
Turn Bay Length (ft)							75			75		

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Dewey Avenue
16: McCall & Dewey

Future AM Build - 3 lane
10/23/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		574			460		281	1298		725	1295	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.28			0.02		0.06	0.25		0.01	0.70	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 0 (0%), Referenced to phase 1:NBSB, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.70

Intersection Signal Delay: 9.1

Intersection LOS: A

Intersection Capacity Utilization 58.2%

ICU Level of Service B

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 16: McCall & Dewey



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Dewey Avenue
17: W Ridge & Woodside

Future AM Build - 3 lane
10/23/2009

	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group						
Lane Configurations		↑↑↑			↑	
Volume (vph)	98	1415	933	73	2	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	10	10	10	12	12
Storage Length (ft)	75			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25			25	25	25
Right Turn on Red				Yes		Yes
Link Speed (mph)		35	35		30	
Link Distance (ft)		667	1165		282	
Travel Time (s)		13.0	22.7		6.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	110%	110%	110%	110%	110%	110%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	120	1729	1229	0	15	0
Turn Type	pm+pt					
Protected Phases	2	1 2	1		3	
Permitted Phases	1 2	1				
Detector Phase	2	1 2	1		3	
Switch Phase						
Minimum Initial (s)	4.0		30.0		6.0	
Minimum Split (s)	13.0		36.0		33.0	
Total Split (s)	20.0	87.0	67.0	0.0	33.0	0.0
Total Split (%)	16.7%	72.5%	55.8%	0.0%	27.5%	0.0%
Maximum Green (s)	14.0		61.0		27.0	
Yellow Time (s)	4.0		4.0		3.5	
All-Red Time (s)	2.0		2.0		2.5	
Lost Time Adjust (s)	-3.0	-3.0	-3.0	-1.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		2.0		4.0	
Recall Mode	None		C-Max		None	
Walk Time (s)			23.0		7.0	
Flash Dont Walk (s)			7.0		19.0	
Pedestrian Calls (#/hr)			0		0	
Act Effect Green (s)	108.3	113.1	91.6		10.3	
Actuated g/C Ratio	0.90	0.94	0.76		0.09	
v/c Ratio	0.23	0.39	0.34		0.10	
Control Delay	0.7	0.4	5.5		26.5	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	0.7	0.4	5.5		26.5	
LOS	A	A	A		C	
Approach Delay		0.4	5.5		26.5	
Approach LOS		A	A		C	
Queue Length 50th (ft)	1	0	70		1	
Queue Length 95th (ft)	m5	m25	157		23	
Internal Link Dist (ft)		587	1085		202	
Turn Bay Length (ft)	75					

Dewey Avenue
17: W Ridge & Woodside

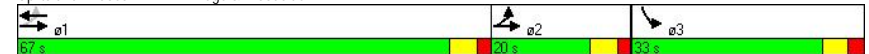
Future AM Build - 3 lane
10/23/2009

	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group						
Base Capacity (vph)	531	4460	3586		418	
Starvation Cap Reductn	0	435	0		0	
Spillback Cap Reductn	0	0	0		0	
Storage Cap Reductn	0	0	0		0	
Reduced v/c Ratio	0.23	0.43	0.34		0.04	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 80 (67%), Referenced to phase 1:EBWB, Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.39
Intersection Signal Delay: 2.5
Intersection Capacity Utilization 46.0%
Analysis Period (min) 15
Intersection LOS: A
ICU Level of Service A
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 17: W Ridge & Woodside



Dewey Avenue
457: Denise Road & Dewey Avenue

Future AM Build - 3 lane
10/23/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	7	5	20	87	0	41	1	193	43	50	464	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0	175	0	0	65	0	0	125	0	0
Storage Lanes	0	0	0	1	0	0	1	0	0	1	0	0
Taper Length (ft)	25	25	25	25	25	25	25	25	25	25	25	25
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		500			500			712			501	
Travel Time (s)		11.4			11.4			13.9			9.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	39	0	106	50	0	1	289	0	61	574	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		4	4		6	6		2	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		15.0	15.0		15.0	15.0	
Minimum Split (s)	29.5	29.5		29.5	29.5		25.5	25.5		25.5	25.5	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	30.0	30.0	0.0	30.0	30.0	0.0
Total Split (%)	50.0%	50.0%	0.0%	50.0%	50.0%	0.0%	50.0%	50.0%	0.0%	50.0%	50.0%	0.0%
Maximum Green (s)	23.5	23.5		23.5	23.5		24.5	24.5		24.5	24.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		1.5	1.5		1.5	1.5	
Lost Time Adjust (s)	-3.5	-3.5	-1.0	-3.5	-3.5	-1.0	-2.5	-2.5	-1.0	-2.5	-2.5	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		4.0	4.0		4.0	4.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		10.0	10.0		10.0	10.0	
Flash Dont Walk (s)	16.0	16.0		16.0	16.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		12.9		12.9	12.9		44.2	44.2		44.2	44.2	
Actuated g/C Ratio		0.22		0.22	0.22		0.74	0.74		0.74	0.74	
v/c Ratio		0.11		0.36	0.06		0.00	0.11		0.08	0.22	
Control Delay		10.9		22.8	0.2		3.0	2.3		4.3	3.9	
Queue Delay		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay		10.9		22.8	0.2		3.0	2.3		4.3	3.9	
LOS		B		C	A		A	A		A	A	
Approach Delay		10.9			15.5			2.3			4.0	
Approach LOS		B			B			A			A	
Queue Length 50th (ft)		4		33	0		0	7		6	31	
Queue Length 95th (ft)		22		65	0		m1	16		20	63	
Internal Link Dist (ft)		420			420			632			421	
Turn Bay Length (ft)				175			65			125		
Base Capacity (vph)		730		614	1019		591	2550		790	2605	

Dewey Avenue
457: Denise Road & Dewey Avenue

Future AM Build - 3 lane
10/23/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0		0	0		0	0		0	0	
Spillback Cap Reductn		0		0	0		0	0		0	0	
Storage Cap Reductn		0		0	0		0	0		0	0	
Reduced v/c Ratio		0.05		0.17	0.05		0.00	0.11		0.08	0.22	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 30 (50%), Referenced to phase 2:SBTL and 6:NBT, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.36

Intersection Signal Delay: 5.4

Intersection LOS: A

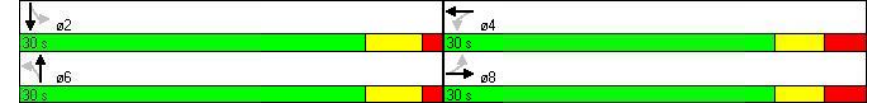
Intersection Capacity Utilization 48.8%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 457: Denise Road & Dewey Avenue



Dewey Avenue
459: Clark Pk & Dewey Avenue

Future AM Build - 3 lane
10/23/2009

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø2
Lane Configurations							
Volume (vph)	0	0	315	0	0	796	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Right Turn on Red		Yes		Yes			
Link Speed (mph)	30		35			35	
Link Distance (ft)	362		362			1991	
Travel Time (s)	8.2		7.1			38.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	
Growth Factor	110%	110%	110%	110%	110%	110%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	385	0	0	973	
Turn Type							
Protected Phases			1			1	2
Permitted Phases							
Detector Phase			1			1	
Switch Phase							
Minimum Initial (s)			10.0			10.0	10.0
Minimum Split (s)			16.0			16.0	16.0
Total Split (s)	0.0	0.0	16.0	0.0	0.0	16.0	46.0
Total Split (%)	0.0%	0.0%	25.8%	0.0%	0.0%	25.8%	74%
Maximum Green (s)			10.0			10.0	40.0
Yellow Time (s)			4.0			4.0	4.0
All-Red Time (s)			2.0			2.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-3.0	-1.0	-1.0	-3.0	
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	
Lead/Lag			Lead			Lead	Lag
Lead-Lag Optimize?							
Vehicle Extension (s)			4.0			4.0	8.0
Recall Mode			None			None	None
Act Effect Green (s)			16.0			16.0	
Actuated g/C Ratio			1.00			1.00	
v/c Ratio			0.21			0.52	
Control Delay			0.3			1.1	
Queue Delay			0.0			0.0	
Total Delay			0.3			1.1	
LOS			A			A	
Approach Delay			0.3			1.1	
Approach LOS			A			A	
Queue Length 50th (ft)			0			0	
Queue Length 95th (ft)			0			0	
Internal Link Dist (ft)	282		282			1911	
Turn Bay Length (ft)							
Base Capacity (vph)			1863			1863	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			0			0	
Storage Cap Reductn			0			0	
Reduced v/c Ratio			0.21			0.52	
Intersection Summary							

Dewey Avenue
459: Clark Pk & Dewey Avenue

Future AM Build - 3 lane
10/23/2009

Area Type: Other
Cycle Length: 62
Actuated Cycle Length: 16
Natural Cycle: 60
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 0.52
Intersection Signal Delay: 0.8
Intersection Capacity Utilization 49.4%
Analysis Period (min) 15

Intersection LOS: A
ICU Level of Service A

Splits and Phases: 459: Clark Pk & Dewey Avenue



Dewey Avenue
461: Britton Road & Dewey Avenue

Future AM Build - 3 lane
10/23/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	14	27	31	177	35	60	5	246	26	74	641	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	150		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		500			500			599			650	
Travel Time (s)		11.4			11.4			11.7			12.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	17	71	0	216	116	0	6	333	0	90	789	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		4	4		6	6		2	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		15.0	15.0		15.0	15.0	
Minimum Split (s)	30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	30.0	30.0	0.0	30.0	30.0	0.0
Total Split (%)	50.0%	50.0%	0.0%	50.0%	50.0%	0.0%	50.0%	50.0%	0.0%	50.0%	50.0%	0.0%
Maximum Green (s)	24.0	24.0		24.0	24.0		24.0	24.0		24.0	24.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.5	2.5		2.5	2.5		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		9.0	9.0		9.0	9.0	
Flash Dont Walk (s)	17.0	17.0		17.0	17.0		12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)	19.0	19.0		19.0	19.0		35.0	35.0		35.0	35.0	
Actuated g/C Ratio	0.32	0.32		0.32	0.32		0.58	0.58		0.58	0.58	
v/c Ratio	0.04	0.12		0.52	0.20		0.02	0.16		0.15	0.38	
Control Delay	11.8	7.4		20.3	6.6		7.8	6.6		4.9	5.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	11.8	7.4		20.3	6.6		7.8	6.6		4.9	5.0	
LOS	B	A		C	A		A	A		A	A	
Approach Delay		8.3			15.5			6.6			5.0	
Approach LOS		A			B			A			A	
Queue Length 50th (ft)	4	8		63	11		1	23		11	53	
Queue Length 95th (ft)	13	26		98	34		6	53		23	67	
Internal Link Dist (ft)		420			420			519			570	
Turn Bay Length (ft)	100			100			150			150		
Base Capacity (vph)	572	792		596	800		335	2048		599	2066	

Dewey Avenue
461: Britton Road & Dewey Avenue

Future AM Build - 3 lane
10/23/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.03	0.09		0.36	0.15		0.02	0.16		0.15	0.38	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBT, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.52

Intersection Signal Delay: 7.6

Intersection Capacity Utilization 59.6%

Analysis Period (min) 15

Intersection LOS: A

ICU Level of Service B

Splits and Phases: 461: Britton Road & Dewey Avenue



Dewey Avenue
462: Dalston & Dewey Avenue

Future AM Build - 3 lane
10/23/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	0	9	0	0	0	22	268	0	0	675	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0	0	0	0	50	0	0	50	0	0
Storage Lanes	0	0	0	0	0	0	1	0	0	1	0	0
Taper Length (ft)	25	25	25	25	25	25	25	25	25	25	25	25
Right Turn on Red		Yes			Yes			Yes			Yes	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		347			289			473			654	
Travel Time (s)		7.9			6.6			9.2			12.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	15	0	0	0	0	27	328	0	0	831	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			6			2	
Permitted Phases	4			8			6			2		
Detector Phase	4	4		8	8		6	6		2	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		20.0	20.0		20.0	20.0	
Minimum Split (s)	24.5	24.5		24.5	24.5		34.5	34.5		34.5	34.5	
Total Split (s)	27.0	27.0	0.0	27.0	27.0	0.0	73.0	73.0	0.0	73.0	73.0	0.0
Total Split (%)	27.0%	27.0%	0.0%	27.0%	27.0%	0.0%	73.0%	73.0%	0.0%	73.0%	73.0%	0.0%
Maximum Green (s)	21.5	21.5		21.5	21.5		67.5	67.5		67.5	67.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.5	1.5		1.5	1.5	
Lost Time Adjust (s)	-2.5	-2.5	-1.0	-1.0	-2.5	-1.0	-2.5	-2.5	-1.0	-1.0	-2.5	-1.0
Total Lost Time (s)	3.0	3.0	3.0	4.5	3.0	3.0	3.0	3.0	3.0	4.5	3.0	3.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		4.0	4.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		20.0	20.0		20.0	20.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0		9.0	9.0		9.0	9.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		9.6					93.4	93.4			93.4	
Actuated g/C Ratio		0.10					0.93	0.93			0.93	
v/c Ratio		0.10					0.05	0.10			0.25	
Control Delay		25.6					1.2	0.9			0.4	
Queue Delay		0.0					0.0	0.0			0.0	
Total Delay		25.6					1.2	0.9			0.4	
LOS		C					A	A			A	
Approach Delay		25.6						0.9			0.4	
Approach LOS		C						A			A	
Queue Length 50th (ft)		2					0	0			0	
Queue Length 95th (ft)		22					6	21			9	
Internal Link Dist (ft)		267			209			393			574	
Turn Bay Length (ft)							50					
Base Capacity (vph)		375					585	3306			3303	

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Dewey Avenue
462: Dalston & Dewey Avenue

Future AM Build - 3 lane
10/23/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0					0	0			0	
Spillback Cap Reductn		0					0	0			0	
Storage Cap Reductn		0					0	0			0	
Reduced v/c Ratio		0.04					0.05	0.10			0.25	

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 75 (75%), Referenced to phase 2:SBTL and 6:NBT, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.25

Intersection Signal Delay: 0.8

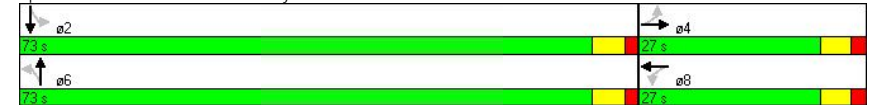
Intersection Capacity Utilization 32.4%

Analysis Period (min) 15

Intersection LOS: A

ICU Level of Service A

Splits and Phases: 462: Dalston & Dewey Avenue



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Dewey Avenue
469: Dorsey & Dewey Avenue

Future AM Build - 3 lane
10/23/2009

	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group						
Lane Configurations						
Volume (vph)	74	182	68	221	660	207
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	200			0
Storage Lanes	1	1	1			0
Taper Length (ft)	25	25	25			25
Right Turn on Red		Yes				Yes
Link Speed (mph)	35			35	35	
Link Distance (ft)	3243			1991	1375	
Travel Time (s)	63.2			38.8	26.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	110%	110%	110%	110%	110%	110%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	90	222	83	270	1060	0
Turn Type		Perm	Perm			
Protected Phases	4			6	2	
Permitted Phases		4	6			
Detector Phase	4	4	6	6	2	
Switch Phase						
Minimum Initial (s)	6.0	6.0	20.0	20.0	20.0	
Minimum Split (s)	21.0	21.0	28.5	28.5	28.5	
Total Split (s)	28.0	28.0	52.0	52.0	52.0	0.0
Total Split (%)	35.0%	35.0%	65.0%	65.0%	65.0%	0.0%
Maximum Green (s)	23.0	23.0	47.0	47.0	47.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	-2.5	-2.5	-2.5	-2.5	-2.5	-1.0
Total Lost Time (s)	2.5	2.5	2.5	2.5	2.5	3.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	4.0	4.0	2.0	2.0	2.0	
Recall Mode	None	None	C-Max	C-Max	C-Max	
Walk Time (s)	5.0	5.0	10.0	10.0	10.0	
Flash Dont Walk (s)	10.0	10.0	13.0	13.0	13.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	
Act Effect Green (s)	13.3	13.3	61.7	61.7	61.7	
Actuated g/C Ratio	0.17	0.17	0.77	0.77	0.77	
v/c Ratio	0.31	0.52	0.33	0.19	0.76	
Control Delay	30.9	10.6	7.9	3.2	10.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	30.9	10.6	7.9	3.2	10.5	
LOS	C	B	A	A	B	
Approach Delay	16.5			4.3	10.5	
Approach LOS	B			A	B	
Queue Length 50th (ft)	40	10	9	26	202	
Queue Length 95th (ft)	75	64	41	63	512	
Internal Link Dist (ft)	3163			1911	1295	
Turn Bay Length (ft)	200		200			
Base Capacity (vph)	564	639	251	1437	1399	

Dewey Avenue
469: Dorsey & Dewey Avenue

Future AM Build - 3 lane
10/23/2009

	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group						
Starvation Cap Reductn	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.16	0.35	0.33	0.19	0.76	

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.76

Intersection Signal Delay: 10.3

Intersection Capacity Utilization 73.8%

Analysis Period (min) 15

Intersection LOS: B

ICU Level of Service D

Splits and Phases: 469: Dorsey & Dewey Avenue



Dewey Avenue
550: Ellington & Dewey

Future AM Build - 3 lane
10/23/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	50	14	2	50	4	4	239	0	1	692	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	50		0	50		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		295			178			328			1747	
Travel Time (s)		6.7			4.0			6.4			34.0	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	79	0	0	68	0	5	292	0	1	848	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			2			1			1	
Permitted Phases	2			2			1			1		
Detector Phase	2	2		2	2		1	1		1	1	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		16.0	16.0		16.0	16.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		23.5	23.5		23.5	23.5	
Total Split (s)	26.0	26.0	0.0	26.0	26.0	0.0	34.0	34.0	0.0	34.0	34.0	0.0
Total Split (%)	43.3%	43.3%	0.0%	43.3%	43.3%	0.0%	56.7%	56.7%	0.0%	56.7%	56.7%	0.0%
Maximum Green (s)	20.5	20.5		20.5	20.5		28.5	28.5		28.5	28.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.5	-2.5	-1.0	-2.5	-2.5	-1.0	-2.5	-2.5	-1.0	-2.5	-2.5	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lag	Lag		Lag	Lag		Lead	Lead		Lead	Lead	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		8.0	8.0		8.0	8.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	1	1		1	1		0	0		0	0	
Act Effect Green (s)		12.0			12.0		44.9	44.9		44.9	44.9	
Actuated g/C Ratio		0.20			0.20		0.75	0.75		0.75	0.75	
v/c Ratio		0.21			0.18		0.01	0.21		0.00	0.61	
Control Delay		16.1			18.0		12.2	11.3		5.0	9.5	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.4	
Total Delay		16.2			18.0		12.2	11.3		5.0	9.9	
LOS		B			B		B	B		A	A	
Approach Delay		16.2			18.0			11.3			9.9	
Approach LOS		B			B			B			A	
Queue Length 50th (ft)		20			20		1	71		0	107	
Queue Length 95th (ft)		39			37		m10	180		2	#461	
Internal Link Dist (ft)		215			98			248			1667	
Turn Bay Length (ft)							50			50		
Base Capacity (vph)		702			704		351	1395		806	1395	

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Dewey Avenue
550: Ellington & Dewey

Future AM Build - 3 lane
10/23/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		60			0		0	0		0	171	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.12			0.10		0.01	0.21		0.00	0.69	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 22 (37%), Referenced to phase 1:NBSB, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.61

Intersection Signal Delay: 11.0

Intersection LOS: B

Intersection Capacity Utilization 51.9%

ICU Level of Service A

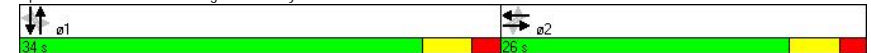
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 550: Ellington & Dewey



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Dewey Avenue
579: Wendy's Driveway & Dewey Ave

Future AM Build - 3 lane
10/23/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	0	20	10	0	8	20	257	45	20	731	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	200		90	180		0	240		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		500			500			638			712	
Travel Time (s)		11.4			11.4			12.4			13.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	12	24	0	12	10	0	24	369	0	24	942	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		4	4		6	6		2	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		15.0	15.0		15.0	15.0	
Minimum Split (s)	31.5	31.5		31.5	31.5		27.0	27.0		27.0	27.0	
Total Split (s)	32.0	32.0		32.0	32.0		28.0	28.0		28.0	28.0	
Total Split (%)	53.3%	53.3%	0.0%	53.3%	53.3%	0.0%	46.7%	46.7%	0.0%	46.7%	46.7%	0.0%
Maximum Green (s)	25.5	25.5		25.5	25.5		22.0	22.0		22.0	22.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-3.5	-3.5	-1.0	-3.5	-3.5	-1.0	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		8.0	8.0		8.0	8.0	
Flash Dont Walk (s)	18.0	18.0		18.0	18.0		13.0	13.0		13.0	13.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	10.6	10.6		10.6	10.6		53.0	53.0		53.0	53.0	
Actuated g/C Ratio	0.18	0.18		0.18	0.18		0.88	0.88		0.88	0.88	
v/c Ratio	0.05	0.07		0.05	0.02		0.05	0.12		0.03	0.30	
Control Delay	20.5	1.9		20.6	0.0		2.5	1.5		1.9	1.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	20.5	1.9		20.6	0.0		2.5	1.5		1.9	1.7	
LOS	C	A		C	A		A	A		A	A	
Approach Delay		8.1			11.3			1.6			1.8	
Approach LOS		A			B			A			A	
Queue Length 50th (ft)	4	0		4	0		0	0		0	0	
Queue Length 95th (ft)	15	4		15	0		8	29		6	61	
Internal Link Dist (ft)		420			420			558			632	
Turn Bay Length (ft)	50			200			180			240		
Base Capacity (vph)	676	797		668	978		481	3064		876	3105	

Dewey Avenue
579: Wendy's Driveway & Dewey Ave

Future AM Build - 3 lane
10/23/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.02	0.03		0.02	0.01		0.05	0.12		0.03	0.30	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 30 (50%), Referenced to phase 2:SBTL and 6:NBT, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.30

Intersection Signal Delay: 2.0

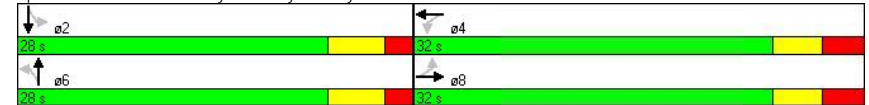
Intersection Capacity Utilization 37.6%

Analysis Period (min) 15

Intersection LOS: A

ICU Level of Service A

Splits and Phases: 579: Wendy's Driveway & Dewey Ave



Dewey Avenue
657: W Ridge & Eastman

Future AM Build - 3 lane
10/23/2009

Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	50	250	1500	800	10	10	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	15	15
Storage Length (ft)		262			0	0	0
Storage Lanes		1			0	1	0
Taper Length (ft)		25			25	25	25
Right Turn on Red					Yes		No
Link Speed (mph)			35	35		30	
Link Distance (ft)			1255	497		583	
Travel Time (s)			24.4	9.7		13.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	110%	110%	110%	110%	110%	110%	110%
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	367	1833	990	0	134	0
Turn Type	Prot	Prot					
Protected Phases	3	3	1 3	1		2	
Permitted Phases							
Detector Phase	3	3	1 3	1		2	
Switch Phase							
Minimum Initial (s)	6.0	6.0		24.0		6.0	
Minimum Split (s)	12.0	12.0		30.0		37.0	
Total Split (s)	30.0	30.0	83.0	53.0	0.0	37.0	0.0
Total Split (%)	25.0%	25.0%	69.2%	44.2%	0.0%	30.8%	0.0%
Maximum Green (s)	24.0	24.0		47.0		31.0	
Yellow Time (s)	4.0	4.0		4.0		3.5	
All-Red Time (s)	2.0	2.0		2.0		2.5	
Lost Time Adjust (s)	-3.0	-3.0	-3.0	-3.0	-1.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag				Lead		Lag	
Lead-Lag Optimize?							
Vehicle Extension (s)	4.0	4.0		2.0		3.0	
Recall Mode	None	None		C-Max		None	
Walk Time (s)				8.0		7.0	
Flash Dont Walk (s)				16.0		24.0	
Pedestrian Calls (#/hr)				0		0	
Act Effect Green (s)		42.2	96.7	51.5		17.3	
Actuated g/C Ratio		0.35	0.81	0.43		0.14	
v/c Ratio		0.59	0.45	0.45		0.52	
Control Delay		37.0	4.2	13.8		54.0	
Queue Delay		0.0	0.1	0.0		0.0	
Total Delay		37.0	4.3	13.8		54.0	
LOS		D	A	B		D	
Approach Delay			9.8	13.8		54.0	
Approach LOS			A	B		D	
Queue Length 50th (ft)		226	126	226		97	
Queue Length 95th (ft)		352	190	142		154	
Internal Link Dist (ft)			1175	417		503	
Turn Bay Length (ft)		262					

Dewey Avenue
657: W Ridge & Eastman

Future AM Build - 3 lane
10/23/2009

Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Base Capacity (vph)		622	4098	2180		507	
Starvation Cap Reductn		0	0	0		0	
Spillback Cap Reductn		0	703	0		0	
Storage Cap Reductn		0	0	0		0	
Reduced v/c Ratio		0.59	0.54	0.45		0.26	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 93 (78%), Referenced to phase 1:EBWB, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.59

Intersection Signal Delay: 12.7

Intersection LOS: B

Intersection Capacity Utilization 55.7%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 657: W Ridge & Eastman



Dewey Avenue
1001: English Road & Dewey Avenue

Future AM Build - 3 lane
10/23/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	35	68	117	48	59	5	40	174	31	13	496	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		0	150		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		3301			500			650			638	
Travel Time (s)		75.0			11.4			12.7			12.4	
Peak Hour Factor	0.96	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	40	226	0	59	78	0	49	251	0	16	639	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		4	4		6	6		2	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		15.0	15.0		15.0	15.0	
Minimum Split (s)	30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	30.0	30.0	0.0	30.0	30.0	0.0
Total Split (%)	50.0%	50.0%	0.0%	50.0%	50.0%	0.0%	50.0%	50.0%	0.0%	50.0%	50.0%	0.0%
Maximum Green (s)	24.0	24.0		24.0	24.0		24.0	24.0		24.0	24.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.5	2.5		2.5	2.5		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		9.0	9.0		9.0	9.0	
Flash Dont Walk (s)	17.0	17.0		17.0	17.0		12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	13.2	13.2		13.2	13.2		40.8	40.8		40.8	40.8	
Actuated g/C Ratio	0.22	0.22		0.22	0.22		0.68	0.68		0.68	0.68	
v/c Ratio	0.14	0.47		0.32	0.19		0.10	0.11		0.02	0.27	
Control Delay	18.3	11.0		23.4	17.6		4.1	2.9		6.7	6.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	18.3	11.0		23.4	17.6		4.1	2.9		6.7	6.9	
LOS	B	B		C	B		A	A		A	A	
Approach Delay		12.1			20.1			3.1			6.9	
Approach LOS		B			C			A			A	
Queue Length 50th (ft)	12	25		18	22		4	8		1	22	
Queue Length 95th (ft)	30	67		42	45		16	23		m8	136	
Internal Link Dist (ft)		3221			420			570			558	
Turn Bay Length (ft)	100						150			150		
Base Capacity (vph)	592	837		371	831		501	2364		755	2391	

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Dewey Avenue
1001: English Road & Dewey Avenue

Future AM Build - 3 lane
10/23/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.07	0.27		0.16	0.09		0.10	0.11		0.02	0.27	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBT, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.47

Intersection Signal Delay: 8.4

Intersection Capacity Utilization 58.7%

Intersection LOS: A

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1001: English Road & Dewey Avenue



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Dewey Avenue
1021: Latta & Dewey Avenue

Future AM Build - 3 lane
10/23/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	36	180	142	74	246	13	136	53	48	28	171	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	200		0	200		0	125		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		3343			564			615			360	
Travel Time (s)		65.1			11.0			12.0			7.0	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.81	0.81	0.81	0.90	0.90	0.90
Growth Factor	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	44	390	0	89	313	0	185	137	0	34	243	0
Turn Type	Perm			pm+pt			pm+pt			pm+pt		
Protected Phases		2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		1	6		7	4		3	8	
Switch Phase												
Minimum Initial (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Minimum Split (s)	25.0	25.0		8.0	25.0		8.0	25.0		8.0	25.0	
Total Split (s)	53.0	53.0		10.0	63.0		19.0	37.0		10.0	28.0	
Total Split (%)	48.2%	48.2%	0.0%	9.1%	57.3%	0.0%	17.3%	33.6%	0.0%	9.1%	25.5%	0.0%
Maximum Green (s)	48.0	48.0		5.0	58.0		14.0	32.0		5.0	23.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lag	Lag		Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)	5.0	5.0			5.0			5.0			5.0	
Flash Dont Walk (s)	15.0	15.0			15.0			15.0			15.0	
Pedestrian Calls (#/hr)	0	0			0			0			0	
Act Effect Green (s)	60.6	60.6		71.1	71.1		32.9	26.9		21.6	14.6	
Actuated g/C Ratio	0.55	0.55		0.65	0.65		0.30	0.24		0.20	0.13	
v/c Ratio	0.08	0.40		0.15	0.26		0.51	0.16		0.12	0.51	
Control Delay	15.0	15.4		8.7	9.4		34.8	18.4		27.7	45.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	15.0	15.4		8.7	9.4		34.8	18.4		27.7	45.1	
LOS	B	B		A	A		C	B		C	D	
Approach Delay		15.4			9.2			27.8			43.0	
Approach LOS		B			A			C			D	
Queue Length 50th (ft)	15	139		22	87		101	21		17	80	
Queue Length 95th (ft)	38	239		45	143		138	39		39	116	
Internal Link Dist (ft)		3263			484			535			280	
Turn Bay Length (ft)	200			200			200			125		
Base Capacity (vph)	585	980		576	1196		367	1061		277	799	

Dewey Avenue
1021: Latta & Dewey Avenue

Future AM Build - 3 lane
10/23/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.08	0.40		0.15	0.26		0.50	0.13		0.12	0.30	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.51

Intersection Signal Delay: 21.8

Intersection Capacity Utilization 52.3%

Analysis Period (min) 15

Intersection LOS: C













ICU Level of Service A

Splits and Phases: 1021: Latta & Dewey Avenue



Dewey Avenue
4601: Maiden & Dewey Avenue




Future AM Build - 3 lane
10/23/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	23	1	166	0	0	0	143	233	0	0	569	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		200	0		0	0		0	125		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			30			35			35	
Link Distance (ft)		4626			213			192			686	
Travel Time (s)		90.1			4.8			3.7			13.4	
Peak Hour Factor	0.88	0.88	0.88	0.50	0.50	0.50	0.73	0.73	0.73	0.80	0.80	0.80
Growth Factor	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	30	208	0	0	0	215	351	0	0	840	0
Turn Type	Perm		custom	Perm			pm+pt			pm+pt		
Protected Phases		3	1		3		14	46		5	2	
Permitted Phases	3		3	3			46			2		
Detector Phase	3	3	1	3	3		14	46		5	2	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0					4.0	15.0	
Minimum Split (s)	9.5	9.5	9.0	9.5	9.5					9.0	28.0	
Total Split (s)	20.0	20.0	12.0	20.0	20.0		0.0	49.0	68.0	0.0	12.0	31.0
Total Split (%)	20.0%	20.0%	12.0%	20.0%	20.0%	0.0%	49.0%	68.0%	0.0%	12.0%	31.0%	0.0%
Maximum Green (s)	14.5	14.5	7.0	14.5	14.5					7.0	25.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5					3.5	4.0	
All-Red Time (s)	2.0	2.0	1.5	2.0	2.0					1.5	2.0	
Lost Time Adjust (s)	-2.5	-2.5	-2.0	-2.5	-2.5	-1.0	-2.0	-3.0	-1.0	-2.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lead	Lead	Lead	Lead	Lead					Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0					2.0	4.0	
Recall Mode	None	None	None	None	None					None	C-Max	
Walk Time (s)											7.0	
Flash Dont Walk (s)											15.0	
Pedestrian Calls (#/hr)											0	
Act Effct Green (s)		9.1	16.5				85.0	75.9			36.5	
Actuated g/C Ratio		0.09	0.16				0.85	0.76			0.36	
v/c Ratio		0.24	0.48				0.23	0.13			0.65	
Control Delay		46.3	6.4				10.1	1.3			31.8	
Queue Delay		0.0	0.0				5.0	0.2			0.1	
Total Delay		46.3	6.4				15.1	1.4			31.9	
LOS		D	A				B	A			C	
Approach Delay		11.4						6.6			31.9	
Approach LOS		B						A			C	
Queue Length 50th (ft)		18	0				34	11			248	
Queue Length 95th (ft)		45	29				63	12			290	
Internal Link Dist (ft)		4546			133			112			606	
Turn Bay Length (ft)			200									
Base Capacity (vph)		232	441				945	2690			1285	

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Dewey Avenue
4601: Maiden & Dewey Avenue

Future AM Build - 3 lane
10/23/2009

Lane Group	ø4	ø6	ø8
Lane Configurations			
Volume (vph)			
Ideal Flow (vphpl)			
Storage Length (ft)			
Storage Lanes			
Taper Length (ft)			
Right Turn on Red			
Link Speed (mph)			
Link Distance (ft)			
Travel Time (s)			
Peak Hour Factor			
Growth Factor			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Turn Type			
Protected Phases	4	6	8
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	4.0	15.0	4.0
Minimum Split (s)	37.0	28.0	37.0
Total Split (s)	37.0	31.0	57.0
Total Split (%)	37%	31%	57%
Maximum Green (s)	31.0	25.0	51.0
Yellow Time (s)	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag	Lag	Lag	
Lead-Lag Optimize?			
Vehicle Extension (s)	3.0	4.0	3.0
Recall Mode	None	C-Max	None
Walk Time (s)	9.0	7.0	9.0
Flash Dont Walk (s)	22.0	15.0	22.0
Pedestrian Calls (#/hr)	0	0	0
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay			
Queue Delay			
Total Delay			
LOS			
Approach Delay			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			

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Dewey Avenue
4601: Maiden & Dewey Avenue

Future AM Build - 3 lane
10/23/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0				656	1477			0	
Spillback Cap Reductn		0	2				0	0			32	
Storage Cap Reductn		0	0				0	0			0	
Reduced v/c Ratio		0.13	0.47				0.74	0.29			0.67	

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.77

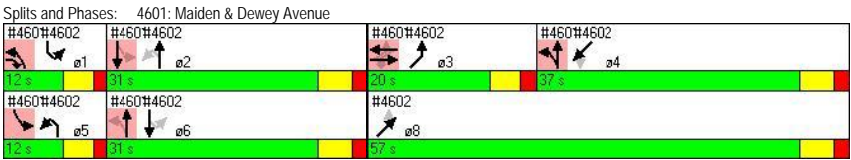
Intersection Signal Delay: 20.2

Intersection Capacity Utilization 40.8%

Analysis Period (min) 15

Intersection LOS: C

ICU Level of Service A



Dewey Avenue
4601: Maiden & Dewey Avenue

Future AM Build - 3 lane
10/23/2009

Lane Group	ø4	ø6	ø8
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary

Dewey Avenue
4602: Dewey Avenue & Stone

Future AM Build - 3 lane
10/23/2009

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	56	234	19	91	557	110	38	104	18	47	298	113
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	0		0	75		0	200		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			35				35
Link Distance (ft)		654			192			352				322
Travel Time (s)		12.7			3.7			6.9				6.3
Peak Hour Factor	0.94	0.94	0.94	0.91	0.91	0.91	0.85	0.85	0.85	0.90	0.90	0.90
Growth Factor	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	66	296	0	110	806	0	49	158	0	57	502	0
Turn Type	pm+pt			pm+pt			pm+pt			Perm		
Protected Phases	5	2		1	6		3	8			4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		4	4	
Switch Phase												
Minimum Initial (s)	4.0	15.0		4.0	15.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	9.0	28.0		9.0	28.0		9.5	37.0		37.0	37.0	
Total Split (s)	12.0	31.0	0.0	12.0	31.0	0.0	20.0	57.0	0.0	37.0	37.0	0.0
Total Split (%)	12.0%	31.0%	0.0%	12.0%	31.0%	0.0%	20.0%	57.0%	0.0%	37.0%	37.0%	0.0%
Maximum Green (s)	7.0	25.0		7.0	25.0		14.5	51.0		31.0	31.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0		4.0	4.0	
All-Red Time (s)	1.5	2.0		1.5	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-3.0	-1.0	-2.0	-3.0	-1.0	-2.5	-3.0	-1.0	-3.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead			Lag	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	4.0		2.0	4.0		2.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		7.0			7.0			9.0			9.0	
Flash Dont Walk (s)		15.0			15.0			22.0			22.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effect Green (s)	44.7	36.5		46.4	39.0		45.7	45.7		35.6	35.6	
Actuated g/C Ratio	0.45	0.36		0.46	0.39		0.46	0.46		0.36	0.36	
v/c Ratio	0.24	0.23		0.22	0.59		0.18	0.19		0.13	0.77	
Control Delay	18.8	23.9		8.2	10.6		13.5	13.4		20.8	35.7	
Queue Delay	0.0	0.0		0.2	0.3		0.0	0.0		0.0	0.0	
Total Delay	18.8	23.9		8.4	11.0		13.5	13.4		20.8	35.7	
LOS	B	C		A	B		B	B		C	D	
Approach Delay		23.0			10.6			13.4			34.2	
Approach LOS		C			B			B			C	
Queue Length 50th (ft)	24	71		11	44		16	49		24	262	
Queue Length 95th (ft)	53	113		m26	94		30	72		50	375	
Internal Link Dist (ft)		574			112			272			242	
Turn Bay Length (ft)	200						75			200		
Base Capacity (vph)	294	1283		507	1361		390	990		454	676	

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Dewey Avenue
4602: Dewey Avenue & Stone

Future AM Build - 3 lane
10/23/2009

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Starvation Cap Reductn	0	0		107	151		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	2	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.22	0.23		0.28	0.67		0.13	0.16		0.13	0.74	

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL; Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.77

Intersection Signal Delay: 19.6

Intersection LOS: B

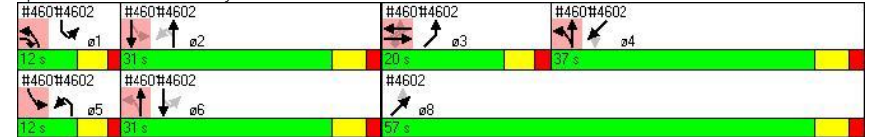
Intersection Capacity Utilization 65.7%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.













Splits and Phases: 4602: Dewey Avenue & Stone



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Dewey Avenue
10/23/2009

Future Build PM - 3 lane section
4: W Ridge & Dewey

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	104	1082	187	41	1481	275	237	412	57	295	275	394
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	10	10	10	10	11	11	10	11	11
Storage Length (ft)	160		0	280		0	150		0	80		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		497			667			1166			580	
Travel Time (s)		9.7			13.0			26.5			13.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	116	1410	0	46	1952	0	263	521	0	328	744	0
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		
Detector Phase	5	2		1	6		7	4		3	8	
Switch Phase												
Minimum Initial (s)	4.0	29.0		4.0	29.0		4.0	12.0		4.0	12.0	
Minimum Split (s)	10.0	35.0		10.0	35.0		12.0	36.0		12.0	34.0	
Total Split (s)	12.0	52.0	0.0	12.0	52.0	0.0	20.0	36.0	0.0	20.0	36.0	0.0
Total Split (%)	10.0%	43.3%	0.0%	10.0%	43.3%	0.0%	16.7%	30.0%	0.0%	16.7%	30.0%	0.0%
Maximum Green (s)	7.0	46.0		7.0	46.0		15.0	30.0		15.0	30.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0		3.5	4.0	
All-Red Time (s)	1.5	2.0		1.5	2.0		1.5	2.0		1.5	2.0	
Lost Time Adjust (s)	-2.0	-3.0	-1.0	-2.0	-3.0	-1.0	-2.0	-3.0	-1.0	-2.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	4.0		2.0	4.0	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		7.0			12.0			7.0			7.0	
Flash Dont Walk (s)		22.0			17.0			23.0			21.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	61.6	54.2		59.4	51.3		47.7	30.7		47.7	30.7	
Actuated g/C Ratio	0.51	0.45		0.50	0.43		0.40	0.26		0.40	0.26	
v/c Ratio	0.63	0.67		0.25	0.98		0.89	0.60		0.94	0.87dr	
Control Delay	37.4	22.2		13.4	41.7		62.2	41.2		61.9	35.3	
Queue Delay	0.0	0.1		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	37.4	22.3		13.4	41.7		62.2	41.2		61.9	35.3	
LOS	D	C		B	D		E	D		E	D	
Approach Delay		23.5			41.1			48.2			43.5	
Approach LOS		C			D			D			D	
Queue Length 50th (ft)	24	326		9	-581		147	178		166	198	
Queue Length 95th (ft)	m#107	389		m18	#679		#301	235		#324	254	
Internal Link Dist (ft)		417			587			1086			500	
Turn Bay Length (ft)	160			280			150			80		
Base Capacity (vph)	185	2115		198	2002		294	933		348	967	

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Future Build PM - 3 lane section
4: W Ridge & Dewey

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	105		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.63	0.70		0.23	0.98		0.89	0.56		0.94	0.77	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 71 (59%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.98

Intersection Signal Delay: 37.6

Intersection LOS: D

Intersection Capacity Utilization 87.3%

ICU Level of Service E

Analysis Period (min) 15

- Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 4: W Ridge & Dewey



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Future Build PM - 3 lane section
8: Banker & Bennington

Lane Group	EBL2	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR	SWR2
Lane Configurations												
Volume (vph)	5	61	9	1	893	204	20	420	4	77	61	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	0	50		150	75		0	0	0	
Storage Lanes		1	0	1		1	1		0	1	0	
Taper Length (ft)		25	25	25		25	25		25	25	25	
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			35			35		30		
Link Distance (ft)		279			1363			322		357		
Travel Time (s)		6.3			26.6			6.3		8.1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	81	0	1	971	222	22	461	0	166	0	0
Turn Type	Perm			Perm		Perm	Perm					
Protected Phases		4			2			6				
Permitted Phases	4			2		2	6			8		
Detector Phase	4	4		2	2	2	6	6		8		
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0		
Minimum Split (s)	25.0	25.0		25.0	25.0	25.0	25.0	25.0		25.0		
Total Split (s)	25.0	25.0	0.0	57.0	57.0	57.0	57.0	57.0	0.0	25.0	0.0	0.0
Total Split (%)	30.5%	30.5%	0.0%	69.5%	69.5%	69.5%	69.5%	69.5%	0.0%	30.5%	0.0%	0.0%
Maximum Green (s)	19.0	19.0		51.0	51.0	51.0	51.0	51.0		19.0		
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5		
All-Red Time (s)	2.5	2.5		2.5	2.5	2.5	2.5	2.5		2.5		
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	4.0	6.0	6.0	6.0	6.0	6.0	4.0	6.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0		
Recall Mode	None	None		C-Max	C-Max	C-Max	C-Max	C-Max		None		
Walk Time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0		
Flash Dont Walk (s)	12.0	12.0		12.0	12.0	12.0	12.0	12.0		12.0		
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0		0		
Act Effct Green (s)	12.8			57.2	57.2	57.2	57.2	57.2		12.8		
Actuated g/C Ratio	0.16			0.70	0.70	0.70	0.70	0.70		0.16		
v/c Ratio	0.29			0.00	0.75	0.19	0.09	0.36		0.60		
Control Delay	28.9			5.0	13.7	1.8	6.2	6.5		39.6		
Queue Delay	0.0			0.0	0.0	0.0	0.0	1.5		0.0		
Total Delay	28.9			5.0	13.7	1.8	6.2	8.0		39.6		
LOS	C			A	B	A	A	A		D		
Approach Delay	28.9				11.5			7.9		39.6		
Approach LOS	C				B			A		D		
Queue Length 50th (ft)	33			0	265	5	3	80		77		
Queue Length 95th (ft)	68			2	533	29	14	156		129		
Internal Link Dist (ft)	199				1283			242		277		
Turn Bay Length (ft)				50		150	75					
Base Capacity (vph)	413			619	1300	1160	241	1298		407		
Starvation Cap Reductn	0			0	0	0	0	625		0		

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Future Build PM - 3 lane section
8: Banker & Bennington

												
Lane Group	EBL2	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR	SWR2
Spillback Cap Reductn		0		0	0	0	0	0		0		
Storage Cap Reductn		0		0	0	0	0	0		0		
Reduced v/c Ratio		0.20		0.00	0.75	0.19	0.09	0.68		0.41		
Intersection Summary												
Area Type:	Other											
Cycle Length: 82												
Actuated Cycle Length: 82												
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green												
Natural Cycle: 70												
Control Type: Actuated-Coordinated												
Maximum v/c Ratio: 0.75												
Intersection Signal Delay: 13.7	Intersection LOS: B											
Intersection Capacity Utilization 75.1%	ICU Level of Service D											
Analysis Period (min) 15												

Splits and Phases: 8: Banker & Bennington



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Future Build PM - 3 lane section
14: Eastman & Dewey

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	146	73	6	329	214	181	6	698	78	7	428	153
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	10	10	10	10	10	10	10	10	10
Storage Length (ft)	100		0	50		0	50		0	240		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		583			686			580			1020	
Travel Time (s)		13.3			15.6			13.2			23.2	
Peak Hour Factor	0.90	0.90	0.90	0.95	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	162	88	0	346	439	0	7	863	0	8	646	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			2			1			1	
Permitted Phases	2			2			1			1		
Detector Phase	2	2		2	2		1	1		1	1	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		23.0	23.0		23.0	23.0	
Minimum Split (s)	31.0	31.0		31.0	31.0		29.0	29.0		29.0	29.0	
Total Split (s)	31.0	31.0	0.0	31.0	31.0	0.0	29.0	29.0	0.0	29.0	29.0	0.0
Total Split (%)	51.7%	51.7%	0.0%	51.7%	51.7%	0.0%	48.3%	48.3%	0.0%	48.3%	48.3%	0.0%
Maximum Green (s)	25.5	25.5		25.5	25.5		23.0	23.0		23.0	23.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.5	-2.5	-1.0	-2.5	-2.5	-1.0	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lag	Lag		Lag	Lag		Lead	Lead		Lead	Lead	
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		4.0	4.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	18.0	18.0		18.0	18.0		16.0	16.0		16.0	16.0	
Pedestrian Calls (#/hr)	1	1		1	1		0	0		0	0	
Act Effect Green (s)	25.0	25.0		25.0	25.0		29.0	29.0		29.0	29.0	
Actuated g/C Ratio	0.42	0.42		0.42	0.42		0.48	0.48		0.48	0.48	
v/c Ratio	0.66	0.12		0.68	0.60		0.02	0.55		0.04	0.41	
Control Delay	21.7	2.7		21.2	13.6		8.2	8.1		7.9	10.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	21.7	2.7		21.2	13.6		8.2	8.1		7.9	10.2	
LOS	C	A		C	B		A	A		A	B	
Approach Delay		15.0			16.9			8.1			10.2	
Approach LOS		B			B			A			B	
Queue Length 50th (ft)	27	9		88	80		1	54		0	102	
Queue Length 95th (ft)	m71	m11		167	154		m2	m94		m5	150	
Internal Link Dist (ft)		503			606			500			940	
Turn Bay Length (ft)	100			50			50			240		
Base Capacity (vph)	276	805		568	806		291	1583		205	1587	

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Future Build PM - 3 lane section
14: Eastman & Dewey

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.59	0.11		0.61	0.54		0.02	0.55		0.04	0.41	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 28 (47%), Referenced to phase 1:NBSB, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.68

Intersection Signal Delay: 12.0

Intersection LOS: B

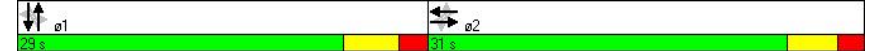
Intersection Capacity Utilization 62.2%

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 14: Eastman & Dewey



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Future Build PM - 3 lane section
15: Christian & Dewey

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	21	24	9	27	43	248	15	807	50	81	404	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	14	14	14	10	10	10	10	10	10
Storage Length (ft)	0		0	0		0	75		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			35	
Link Distance (ft)		370			2670			1020			610	
Travel Time (s)		8.4			60.7			23.2			11.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	60	0	0	354	0	17	953	0	90	461	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			2			1			1	
Permitted Phases	2			2			1			1		
Detector Phase	2	2		2	2		1	1		1	1	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		13.0	13.0		13.0	13.0	
Minimum Split (s)	29.0	29.0		29.0	29.0		21.0	21.0		21.0	21.0	
Total Split (s)	29.0	29.0	0.0	29.0	29.0	0.0	31.0	31.0	0.0	31.0	31.0	0.0
Total Split (%)	48.3%	48.3%	0.0%	48.3%	48.3%	0.0%	51.7%	51.7%	0.0%	51.7%	51.7%	0.0%
Maximum Green (s)	23.0	23.0		23.0	23.0		25.5	25.5		25.5	25.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.5	2.5		2.5	2.5		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0	-2.5	-2.5	-1.0	-2.0	-2.5	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.5	3.0	3.0
Lead/Lag	Lag	Lag		Lag	Lag		Lead	Lead		Lead	Lead	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		3.0	3.0		3.0	3.0	
Recall Mode	Min	Min		Min	Min		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	14.0	14.0		14.0	14.0		8.0	8.0		8.0	8.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		17.4			17.4		36.6	36.6		36.1	36.6	
Actuated g/C Ratio		0.29			0.29		0.61	0.61		0.60	0.61	
v/c Ratio		0.14			0.63		0.03	0.48		0.34	0.23	
Control Delay		12.4			18.2		4.5	5.7		14.0	7.1	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		12.4			18.2		4.5	5.7		14.0	7.1	
LOS		B			B		A	A		B	A	
Approach Delay		12.4			18.2			5.7			8.2	
Approach LOS		B			B			A			A	
Queue Length 50th (ft)		13			82		2	52		26	50	
Queue Length 95th (ft)		30			131		m3	168		m47	m95	
Internal Link Dist (ft)		290			2590			940			530	
Turn Bay Length (ft)							75			75		
Base Capacity (vph)		650			798		507	2000		261	2007	

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Future Build PM - 3 lane section
15: Christian & Dewey

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.09			0.44		0.03	0.48		0.34	0.23	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 0 (0%), Referenced to phase 1:NBSB, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 8.9

Intersection LOS: A

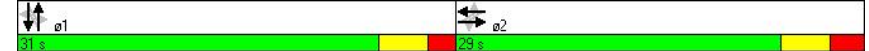
Intersection Capacity Utilization 64.3%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 15: Christian & Dewey



Dewey Avenue
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Future Build PM - 3 lane section
16: McCall & Dewey

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	68	10	71	6	10	20	104	846	9	7	489	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	75		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		415			370			1620			1363	
Travel Time (s)		9.4			8.4			31.6			26.6	
Peak Hour Factor	0.74	0.74	0.74	0.91	0.91	0.91	0.86	0.86	0.86	0.91	0.91	0.91
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	202	0	0	40	0	121	994	0	8	603	0
Turn Type	Perm			Perm			pm+pt			Perm		
Protected Phases		2			2		3	1 3			1	
Permitted Phases	2			2			1 3			1		
Detector Phase	2	2		2	2		3	1 3		1	1	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		4.0			4.0	4.0	
Minimum Split (s)	21.0	21.0		21.0	21.0		10.0			21.0	21.0	
Total Split (s)	21.0	21.0	0.0	21.0	21.0	0.0	10.0	39.0	0.0	29.0	29.0	0.0
Total Split (%)	35.0%	35.0%	0.0%	35.0%	35.0%	0.0%	16.7%	65.0%	0.0%	48.3%	48.3%	0.0%
Maximum Green (s)	15.0	15.0		15.0	15.0		5.0			23.5	23.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5			3.5	3.5	
All-Red Time (s)	2.5	2.5		2.5	2.5		1.5			2.0	2.0	
Lost Time Adjust (s)	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0	-2.0	-2.5	-1.0	-2.5	-2.5	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lag	Lag		Lag	Lag					Lead	Lead	
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		4.0	4.0		3.0			3.0	3.0	
Recall Mode	None	None		None	None		None			C-Max	C-Max	
Walk Time (s)	5.0	5.0		5.0	5.0							
Flash Dont Walk (s)	10.0	10.0		10.0	10.0							
Pedestrian Calls (#/hr)	1	1		1	1							
Act Effct Green (s)		14.3			14.3		36.7	39.7		26.0	26.0	
Actuated g/C Ratio		0.24			0.24		0.61	0.66		0.43	0.43	
v/c Ratio		0.49			0.10		0.26	0.81		0.06	0.75	
Control Delay		15.8			10.6		4.3	14.6		11.7	21.6	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		15.8			10.6		4.3	14.6		11.7	21.6	
LOS		B			B		A	B		B	C	
Approach Delay		15.8			10.6			13.5			21.5	
Approach LOS		B			B			B			C	
Queue Length 50th (ft)		37			5		6	332		2	171	
Queue Length 95th (ft)		60			23		11	432		9	#303	
Internal Link Dist (ft)		335			290			1540			1283	
Turn Bay Length (ft)							75			100		
Base Capacity (vph)		495			504		473	1231		124	802	
Starvation Cap Reductn		0			0		0	0		0	0	

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Dewey Avenue
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Future Build PM - 3 lane section
16: McCall & Dewey

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.41			0.08		0.26	0.81		0.06	0.75	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 55 (92%), Referenced to phase 1:NBSB, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.81

Intersection Signal Delay: 16.1

Intersection LOS: B

Intersection Capacity Utilization 73.7%

ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.







Splits and Phases: 16: McCall & Dewey



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Dewey Avenue
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Future Build PM - 3 lane section
17: W Ridge & Woodside

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	6	1168	1393	7	84	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	10	10	10	12	12
Storage Length (ft)	75			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25			25	25	25
Right Turn on Red				Yes		Yes
Link Speed (mph)		35	35		30	
Link Distance (ft)		667	1165		282	
Travel Time (s)		13.0	22.7		6.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)						
Lane Group Flow (vph)	7	1298	1556	0	180	0
Turn Type	pm+pt					
Protected Phases	2	1 2	1		3	
Permitted Phases	1 2	1				
Detector Phase	2	1 2	1		3	
Switch Phase						
Minimum Initial (s)	4.0		30.0		6.0	
Minimum Split (s)	13.0		36.0		33.0	
Total Split (s)	13.0	87.0	74.0	0.0	33.0	0.0
Total Split (%)	10.8%	72.5%	61.7%	0.0%	27.5%	0.0%
Maximum Green (s)	7.0		68.0		27.0	
Yellow Time (s)	4.0		4.0		3.5	
All-Red Time (s)	2.0		2.0		2.5	
Lost Time Adjust (s)	-3.0	-3.0	-3.0	-1.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		2.0		4.0	
Recall Mode	None		C-Max		None	
Walk Time (s)			23.0		7.0	
Flash Dont Walk (s)			7.0		19.0	
Pedestrian Calls (#/hr)			0		0	
Act Effct Green (s)	91.3	94.3	81.3		19.7	
Actuated g/C Ratio	0.76	0.79	0.68		0.16	
v/c Ratio	0.02	0.35	0.48		0.58	
Control Delay	3.3	3.4	10.4		43.4	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	3.3	3.4	10.4		43.4	
LOS	A	A	B		D	
Approach Delay		3.4	10.4		43.4	
Approach LOS		A	B		D	
Queue Length 50th (ft)	1	67	192		103	
Queue Length 95th (ft)	m1	m81	269		168	
Internal Link Dist (ft)		587	1085		202	
Turn Bay Length (ft)	75					
Base Capacity (vph)	305	3729	3212		452	

Dewey Avenue
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Future Build PM - 3 lane section
17: W Ridge & Woodside

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Starvation Cap Reductn	0	0	0		0	
Spillback Cap Reductn	0	0	0		0	
Storage Cap Reductn	0	0	0		0	
Reduced v/c Ratio	0.02	0.35	0.48		0.40	

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 53 (44%), Referenced to phase 1:EBWB, Start of Green
 Natural Cycle: 85
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.58
 Intersection Signal Delay: 9.4
 Intersection Capacity Utilization 43.2%
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 17: W Ridge & Woodside



Dewey Avenue
10/23/2009

Future Build PM - 3 lane section
457: Denise Road & Dewey Avenue

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	7	29	264	23	100	29	989	255	92	711	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0	175	0	0	65	0	0	125	0	0
Storage Lanes	0	0	0	1	0	0	1	0	0	1	0	0
Taper Length (ft)	25		25	25		25	25		25	25		25
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		500			500			706			501	
Travel Time (s)		11.4			11.4			13.8			9.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	58	0	293	137	0	32	1382	0	102	801	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		4	4		6	6		2	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		15.0	15.0		15.0	15.0	
Minimum Split (s)	29.5	29.5		29.5	29.5		25.5	25.5		25.5	25.5	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	50.0	50.0	0.0	50.0	50.0	0.0
Total Split (%)	37.5%	37.5%	0.0%	37.5%	37.5%	0.0%	62.5%	62.5%	0.0%	62.5%	62.5%	0.0%
Maximum Green (s)	23.5	23.5		23.5	23.5		44.5	44.5		44.5	44.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		1.5	1.5		1.5	1.5	
Lost Time Adjust (s)	-3.5	-3.5	-1.0	-3.5	-3.5	-1.0	-2.5	-2.5	-1.0	-2.5	-2.5	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		4.0	4.0		4.0	4.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		10.0	10.0		10.0	10.0	
Flash Dont Walk (s)	16.0	16.0		16.0	16.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	23.1	23.1		23.1	23.1		50.9	50.9		50.9	50.9	
Actuated g/C Ratio	0.29	0.29		0.29	0.29		0.64	0.64		0.64	0.64	
v/c Ratio	0.12	0.12		0.71	0.26		0.09	0.63		0.66	0.36	
Control Delay	11.2	35.3		9.2	9.2		3.6	4.0		36.8	8.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	11.2	35.3		9.2	9.2		3.6	4.0		36.8	8.0	
LOS	B			D	A		A	A		D	A	
Approach Delay	11.2				27.0			4.0			11.2	
Approach LOS	B				C			A			B	
Queue Length 50th (ft)	9			128	16		3	58		29	91	
Queue Length 95th (ft)	33			204	53		m7	87		#127	137	
Internal Link Dist (ft)	420				420			626			421	
Turn Bay Length (ft)				175			65			125		
Base Capacity (vph)		549		480	612		367	2210		155	2250	
Starvation Cap Reductn		0		0	0		0	0		0	0	

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Future Build PM - 3 lane section
457: Denise Road & Dewey Avenue

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0		0	0		0	0		0	0	
Storage Cap Reductn		0		0	0		0	0		0	0	
Reduced v/c Ratio		0.11		0.61	0.22		0.09	0.63		0.66	0.36	

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 26 (33%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 10.0

Intersection LOS: A

Intersection Capacity Utilization 79.3%

ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.








Splits and Phases: 457: Denise Road & Dewey Avenue



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Future Build PM - 3 lane section
459: Clark Pk & Dewey Avenue

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø2
Lane Configurations							
Volume (vph)	0	0	1342	0	0	854	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Right Turn on Red		Yes		Yes			
Link Speed (mph)	30		35			35	
Link Distance (ft)	362		276			1991	
Travel Time (s)	8.2		5.4			38.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	1491	0	0	949	
Turn Type							
Protected Phases			1			1	2
Permitted Phases							
Detector Phase			1			1	
Switch Phase							
Minimum Initial (s)			10.0			10.0	10.0
Minimum Split (s)			16.0			16.0	16.0
Total Split (s)	0.0	0.0	16.0	0.0	0.0	16.0	46.0
Total Split (%)	0.0%	0.0%	25.8%	0.0%	0.0%	25.8%	74%
Maximum Green (s)			10.0			10.0	40.0
Yellow Time (s)			4.0			4.0	4.0
All-Red Time (s)			2.0			2.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-3.0	-1.0	-1.0	-3.0	
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	
Lead/Lag			Lead			Lead	Lag
Lead-Lag Optimize?							
Vehicle Extension (s)			4.0			4.0	8.0
Recall Mode			None			None	None
Act Effect Green (s)			16.0			16.0	
Actuated g/C Ratio			1.00			1.00	
v/c Ratio			0.80			0.51	
Control Delay			4.5			1.0	
Queue Delay			0.0			0.0	
Total Delay			4.5			1.0	
LOS			A			A	
Approach Delay			4.5			1.0	
Approach LOS			A			A	
Queue Length 50th (ft)			0			0	
Queue Length 95th (ft)			#4			0	
Internal Link Dist (ft)	282		196			1911	
Turn Bay Length (ft)							
Base Capacity (vph)			1863			1863	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			0			0	
Storage Cap Reductn			0			0	
Reduced v/c Ratio			0.80			0.51	

Intersection Summary

Area Type: Other

Dewey Avenue
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Future Build PM - 3 lane section
459: Clark Pk & Dewey Avenue













Cycle Length: 62
Actuated Cycle Length: 16
Natural Cycle: 90
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 0.80
Intersection Signal Delay: 3.1
Intersection Capacity Utilization 74.0%
Analysis Period (min) 15
Intersection LOS: A
ICU Level of Service D
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 459: Clark Pk & Dewey Avenue



Dewey Avenue
10/23/2009

Future Build PM - 3 lane section
461: Britton Road & Dewey Avenue

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	60	82	11	279	96	141	29	1056	137	113	811	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	150		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		500			500			439			650	
Travel Time (s)		11.4			11.4			8.6			12.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	67	103	0	310	264	0	32	1325	0	126	957	0
Turn Type	Perm			Perm			pm+pt			pm+pt		
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		4	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		4.0	15.0		4.0	15.0	
Minimum Split (s)	30.0	30.0		30.0	30.0		9.0	27.0		9.0	27.0	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	16.0	34.0	0.0	16.0	34.0	0.0
Total Split (%)	37.5%	37.5%	0.0%	37.5%	37.5%	0.0%	20.0%	42.5%	0.0%	20.0%	42.5%	0.0%
Maximum Green (s)	24.0	24.0		24.0	24.0		11.0	28.0		11.0	28.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	4.0		3.5	4.0	
All-Red Time (s)	2.5	2.5		2.5	2.5		1.5	2.0		1.5	2.0	
Lost Time Adjust (s)	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0	-2.0	-3.0	-1.0	-2.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		4.0	4.0		2.0	4.0		2.0	4.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0			9.0			9.0	
Flash Dont Walk (s)	17.0	17.0		17.0	17.0			12.0			12.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)	25.1	25.1		25.1	25.1		44.7	38.9		48.8	44.6	
Actuated g/C Ratio	0.31	0.31		0.31	0.31		0.56	0.49		0.61	0.56	
v/c Ratio	0.26	0.18		0.78	0.44		0.09	0.78		0.43	0.49	
Control Delay	22.6	18.2		39.7	15.2		6.8	19.4		20.8	8.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	22.6	18.2		39.7	15.2		6.8	19.4		20.8	8.1	
LOS	C	B		D	B		A	B		C	A	
Approach Delay		19.9			28.4			19.1			9.6	
Approach LOS		B			C			B			A	
Queue Length 50th (ft)	24	32		134	59		5	168		21	83	
Queue Length 95th (ft)	56	67		#253	122		m7	m#258		m80	131	
Internal Link Dist (ft)		420			420			359			570	
Turn Bay Length (ft)	100			100			150			150		
Base Capacity (vph)	278	624		428	639		480	1702		371	1961	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	

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Future Build PM - 3 lane section
461: Britton Road & Dewey Avenue

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.24	0.17		0.72	0.41		0.07	0.78		0.34	0.49	

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 17.6

Intersection LOS: B

Intersection Capacity Utilization 73.6%

ICU Level of Service D

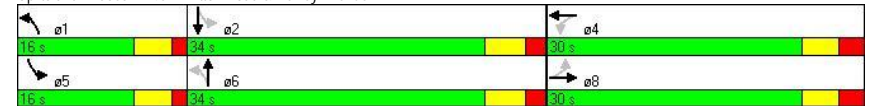
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 461: Britton Road & Dewey Avenue



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Future Build PM - 3 lane section
462: Dalston & Dewey Avenue

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	0	29	0	0	0	31	891	0	0	588	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0	0	0	0	100	0	100	0	100	0
Storage Lanes	0	0	0	0	0	0	1	0	1	0	1	0
Taper Length (ft)	25	25	25	25	25	25	25	25	25	25	25	25
Right Turn on Red		Yes			Yes			Yes			Yes	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		347			289			452			654	
Travel Time (s)		7.9			6.6			8.8			12.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	45	0	0	0	0	34	990	0	0	660	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			6			2	
Permitted Phases	4			8			6			2		
Detector Phase	4	4		8	8		6	6		2	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		20.0	20.0		20.0	20.0	
Minimum Split (s)	24.5	24.5		24.5	24.5		34.5	34.5		34.5	34.5	
Total Split (s)	45.0	45.0	0.0	45.0	45.0	0.0	65.0	65.0	0.0	65.0	65.0	0.0
Total Split (%)	40.9%	40.9%	0.0%	40.9%	40.9%	0.0%	59.1%	59.1%	0.0%	59.1%	59.1%	0.0%
Maximum Green (s)	39.5	39.5		39.5	39.5		59.5	59.5		59.5	59.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.5	1.5		1.5	1.5	
Lost Time Adjust (s)	-2.5	-2.5	-1.0	-1.0	-2.5	-1.0	-2.5	-2.5	-1.0	-1.0	-2.5	-1.0
Total Lost Time (s)	3.0	3.0	3.0	4.5	3.0	3.0	3.0	3.0	3.0	4.5	3.0	3.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		4.0	4.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		20.0	20.0		20.0	20.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0		9.0	9.0		9.0	9.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		10.4					96.6	96.6			96.6	
Actuated g/C Ratio		0.09					0.88	0.88			0.88	
v/c Ratio		0.26					0.05	0.32			0.21	
Control Delay		24.7					1.7	1.9			0.4	
Queue Delay		0.0					0.0	0.0			0.0	
Total Delay		24.7					1.7	1.9			0.4	
LOS		C					A	A			A	
Approach Delay		24.7						1.9			0.4	
Approach LOS		C						A			A	
Queue Length 50th (ft)		9					2	49			5	
Queue Length 95th (ft)		43					8	83			7	
Internal Link Dist (ft)		267			209			372			574	
Turn Bay Length (ft)							100					
Base Capacity (vph)		607					651	3107			3101	
Starvation Cap Reductn		0					0	0			0	

Dewey Avenue
10/23/2009

Future Build PM - 3 lane section
462: Dalston & Dewey Avenue

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0					0	0			0	
Storage Cap Reductn		0					0	0			0	
Reduced v/c Ratio		0.07					0.05	0.32			0.21	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 92 (84%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.32

Intersection Signal Delay: 1.9

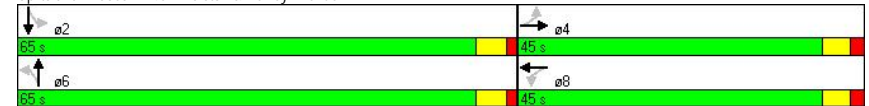
Intersection Capacity Utilization 37.4%

Analysis Period (min) 15

Intersection LOS: A

ICU Level of Service A

Splits and Phases: 462: Dalston & Dewey Avenue



Dewey Avenue
10/23/2009

Future Build PM - 3 lane section
469: Dorsey & Dewey Avenue

	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group						
Lane Configurations						
Volume (vph)	371	139	253	998	611	184
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	200			0
Storage Lanes	1	1	1			0
Taper Length (ft)	25	25	25			25
Right Turn on Red		Yes				Yes
Link Speed (mph)	35			35	35	
Link Distance (ft)	3243			1991	1535	
Travel Time (s)	63.2			38.8	29.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)						
Lane Group Flow (vph)	412	154	281	1109	883	0
Turn Type		custom	pm+pt			
Protected Phases	4		1	6	2	
Permitted Phases		1 4	6			
Detector Phase	4	1 4	1	6	2	
Switch Phase						
Minimum Initial (s)	6.0		6.0	20.0	20.0	
Minimum Split (s)	21.0		11.0	28.5	28.5	
Total Split (s)	22.0	35.0	13.0	58.0	45.0	0.0
Total Split (%)	27.5%	43.8%	16.3%	72.5%	56.3%	0.0%
Maximum Green (s)	16.5		8.5	52.5	39.5	
Yellow Time (s)	3.5		3.5	3.5	3.5	
All-Red Time (s)	2.0		1.0	2.0	2.0	
Lost Time Adjust (s)	-2.5	-1.5	-1.5	-2.5	-2.5	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?					Yes	
Vehicle Extension (s)	4.0		2.0	2.0	2.0	
Recall Mode	None		None	C-Max	C-Max	
Walk Time (s)	5.0			10.0	10.0	
Flash Dont Walk (s)	10.0			13.0	13.0	
Pedestrian Calls (#/hr)	0			0	0	
Act Effct Green (s)	19.0	32.0	55.0	55.0	42.0	
Actuated g/C Ratio	0.24	0.40	0.69	0.69	0.52	
v/c Ratio	0.98	0.21	0.89	0.87	0.92	
Control Delay	72.5	3.7	48.2	19.1	30.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	72.5	3.7	48.2	19.1	30.7	
LOS	E	A	D	B	C	
Approach Delay	53.7			25.0	30.7	
Approach LOS	D			C	C	
Queue Length 50th (ft)	205	0	85	362	402	
Queue Length 95th (ft)	#382	34	#225	#726	#648	
Internal Link Dist (ft)	3163			1911	1455	
Turn Bay Length (ft)			200			
Base Capacity (vph)	420	726	317	1281	961	
Starvation Cap Reductn	0	0	0	0	0	

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Future Build PM - 3 lane section
469: Dorsey & Dewey Avenue

	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group						
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.98	0.21	0.89	0.87	0.92	

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 42 (53%), Referenced to phase 2:SBT and 6:NBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.98

Intersection Signal Delay: 32.5

Intersection LOS: C

Intersection Capacity Utilization 87.9%

ICU Level of Service E

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 469: Dorsey & Dewey Avenue



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Dewey Avenue
10/23/2009

Future Build PM - 3 lane section
550: Ellington & Dewey

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	6	61	13	2	61	1	16	1059	7	2	532	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0	0	0	0	75	0	0	50	0	0
Storage Lanes	0	0	0	0	0	0	1	0	0	1	0	0
Taper Length (ft)	25	25	25	25	25	25	25	25	25	25	25	25
Right Turn on Red		Yes			Yes			Yes			Yes	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		295			178			322			1767	
Travel Time (s)		6.7			4.0			6.3			34.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	89	0	0	71	0	18	1185	0	2	599	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			2			1			1	
Permitted Phases	2			2			1			1		
Detector Phase	2	2		2	2		1	1		1	1	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		16.0	16.0		16.0	16.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		23.5	23.5		23.5	23.5	
Total Split (s)	26.0	26.0	0.0	26.0	26.0	0.0	34.0	34.0	0.0	34.0	34.0	0.0
Total Split (%)	43.3%	43.3%	0.0%	43.3%	43.3%	0.0%	56.7%	56.7%	0.0%	56.7%	56.7%	0.0%
Maximum Green (s)	20.5	20.5		20.5	20.5		28.5	28.5		28.5	28.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.5	-2.5	-1.0	-2.5	-2.5	-1.0	-2.5	-2.5	-1.0	-2.5	-2.5	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lag	Lag		Lag	Lag		Lead	Lead		Lead	Lead	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		8.0	8.0		8.0	8.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	1	1		1	1		0	0		0	0	
Act Effct Green (s)	12.2			12.2			44.7	44.7		44.7	44.7	
Actuated g/C Ratio	0.20			0.20			0.74	0.74		0.74	0.74	
v/c Ratio	0.24			0.19			0.03	0.85		0.02	0.43	
Control Delay	17.2			18.8			4.9	18.5		5.5	6.3	
Queue Delay	0.0			0.0			0.0	17.5		0.0	0.0	
Total Delay	17.2			18.8			4.9	36.0		5.5	6.3	
LOS	B			B			A	D		A	A	
Approach Delay	17.2			18.8				35.6			6.3	
Approach LOS	B			B				D			A	
Queue Length 50th (ft)	24			22			1	237		0	64	
Queue Length 95th (ft)	44			39			11	#758		3	219	
Internal Link Dist (ft)	215			98				242			1687	
Turn Bay Length (ft)							75			50		
Base Capacity (vph)	691			707			530	1386		129	1385	
Starvation Cap Reductn	0			0			0	224		0	0	

Dewey Avenue
10/23/2009

Future Build PM - 3 lane section
550: Ellington & Dewey

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.13			0.10		0.03	1.02		0.02	0.43	

Intersection Summary













Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 18 (30%), Referenced to phase 1:NBSB, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.85
Intersection Signal Delay: 25.2
Intersection Capacity Utilization 69.5%
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 550: Ellington & Dewey



Dewey Avenue
10/23/2009

Future Build PM - 3 lane section
579: Wendy's Driveway & Dewey Ave

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	29	5	42	273	5	155	49	893	100	233	590	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	200		90	180		0	240		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		500			500			644			706	
Travel Time (s)		11.4			11.4			12.5			13.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	32	53	0	303	178	0	54	1103	0	259	662	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		4	4		6	6		2	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		15.0	15.0		15.0	15.0	
Minimum Split (s)	31.5	31.5		31.5	31.5		27.0	27.0		27.0	27.0	
Total Split (s)	32.0	32.0	0.0	32.0	32.0	0.0	48.0	48.0	0.0	48.0	48.0	0.0
Total Split (%)	40.0%	40.0%	0.0%	40.0%	40.0%	0.0%	60.0%	60.0%	0.0%	60.0%	60.0%	0.0%
Maximum Green (s)	25.5	25.5		25.5	25.5		42.0	42.0		42.0	42.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-3.5	-3.5	-1.0	-3.5	-3.5	-1.0	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		8.0	8.0		8.0	8.0	
Flash Dont Walk (s)	18.0	18.0		18.0	18.0		13.0	13.0		13.0	13.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	25.6	25.6		25.6	25.6		48.4	48.4		48.4	48.4	
Actuated g/C Ratio	0.32	0.32		0.32	0.32		0.60	0.60		0.60	0.60	
v/c Ratio	0.09	0.10		0.70	0.31		0.13	0.52		1.19	0.31	
Control Delay	18.2	6.9		32.9	9.7		5.1	9.3		139.7	6.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	18.2	6.9		32.9	9.7		5.1	9.3		139.7	6.6	
LOS	B	A		C	A		A	A		F	A	
Approach Delay		11.2			24.3			9.1			44.0	
Approach LOS		B			C			A			D	
Queue Length 50th (ft)	11	2		127	24		10	194		-166	74	
Queue Length 95th (ft)	29	24		209	66		m14	321		#315	84	
Internal Link Dist (ft)		420			420			564			626	
Turn Bay Length (ft)	50			200			180			240		
Base Capacity (vph)	385	615		488	645		408	2118		218	2140	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	

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Dewey Avenue
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Future Build PM - 3 lane section
579: Wendy's Driveway & Dewey Ave

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.08	0.09		0.62	0.28		0.13	0.52		1.19	0.31	

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 80
Offset: 26 (33%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.19
Intersection Signal Delay: 24.1
Intersection Capacity Utilization 74.2%
Analysis Period (min) 15
Intersection LOS: C
ICU Level of Service D
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 579: Wendy's Driveway & Dewey Ave



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Future Build PM - 3 lane section
657: W Ridge & Eastman

Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	80	172	1100	1450	50	50	333
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	15	15
Storage Length (ft)		262			0	0	0
Storage Lanes		1			0	1	0
Taper Length (ft)		25			25	25	25
Right Turn on Red					Yes		No
Link Speed (mph)			35	35		30	
Link Distance (ft)			1255	497		583	
Travel Time (s)			24.4	9.7		13.3	
Peak Hour Factor	0.95	0.95	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	265	1222	1667	0	426	0
Turn Type	Prot	Prot					
Protected Phases	3	3	1 3	1		2	
Permitted Phases							
Detector Phase	3	3	1 3	1		2	
Switch Phase							
Minimum Initial (s)	6.0	6.0		24.0		6.0	
Minimum Split (s)	12.0	12.0		30.0		37.0	
Total Split (s)	25.0	25.0	83.0	58.0	0.0	37.0	0.0
Total Split (%)	20.8%	20.8%	69.2%	48.3%	0.0%	30.8%	0.0%
Maximum Green (s)	19.0	19.0		52.0		31.0	
Yellow Time (s)	4.0	4.0		4.0		3.5	
All-Red Time (s)	2.0	2.0		2.0		2.5	
Lost Time Adjust (s)	-3.0	-3.0	-3.0	-3.0	-1.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag				Lead		Lag	
Lead-Lag Optimize?							
Vehicle Extension (s)	4.0	4.0		2.0		3.0	
Recall Mode	None	None		C-Max		None	
Walk Time (s)				8.0		7.0	
Flash Dont Walk (s)				16.0		24.0	
Pedestrian Calls (#/hr)				0		0	
Act Effect Green (s)		22.7	81.3	55.6		32.7	
Actuated g/C Ratio		0.19	0.68	0.46		0.27	
v/c Ratio		0.79	0.35	0.71		0.87	
Control Delay		64.7	8.7	14.1		57.2	
Queue Delay		0.0	0.0	0.9		0.0	
Total Delay		64.7	8.7	15.0		57.2	
LOS		E	A	B		E	
Approach Delay			18.7	15.0		57.2	
Approach LOS			B	B		E	
Queue Length 50th (ft)		199	139	152		308	
Queue Length 95th (ft)		#337	164	m161		#470	
Internal Link Dist (ft)			1175	417		503	
Turn Bay Length (ft)		262					
Base Capacity (vph)		335	3446	2349		509	

Dewey Avenue
10/23/2009

Future Build PM - 3 lane section
657: W Ridge & Eastman

Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Starvation Cap Reductn		0	0	383		0	
Spillback Cap Reductn		0	58	0		0	
Storage Cap Reductn		0	0	0		0	
Reduced v/c Ratio		0.79	0.36	0.85		0.84	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 74 (62%), Referenced to phase 1:EBWB, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 21.6

Intersection LOS: C

Intersection Capacity Utilization 76.4%

ICU Level of Service D

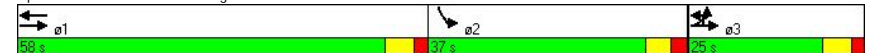
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.













m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 657: W Ridge & Eastman



Dewey Avenue
10/23/2009

Future Build PM - 3 lane section
1001: English Road & Dewey Avenue

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	90	91	11	252	102	147	29	1056	136	119	811	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		0	150		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		3301			500			650			644	
Travel Time (s)		75.0			11.4			12.7			12.5	
Peak Hour Factor	0.96	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	94	113	0	280	276	0	32	1324	0	132	989	0
Turn Type	Perm			Perm			pm+pt			pm+pt		
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		4	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		4.0	15.0		4.0	15.0	
Minimum Split (s)	30.0	30.0		30.0	30.0		9.0	27.0		9.0	27.0	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	16.0	34.0	0.0	16.0	34.0	0.0
Total Split (%)	37.5%	37.5%	0.0%	37.5%	37.5%	0.0%	20.0%	42.5%	0.0%	20.0%	42.5%	0.0%
Maximum Green (s)	24.0	24.0		24.0	24.0		11.0	28.0		11.0	28.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	4.0		3.5	4.0	
All-Red Time (s)	2.5	2.5		2.5	2.5		1.5	2.0		1.5	2.0	
Lost Time Adjust (s)	-3.0	-3.0	-1.0	-3.0	-3.0	-1.0	-2.0	-3.0	-1.0	-2.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		4.0	4.0		2.0	4.0		2.0	4.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0			9.0			9.0	
Flash Dont Walk (s)	17.0	17.0		17.0	17.0			12.0			12.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)	24.4	24.4		24.4	24.4		44.6	37.5		49.5	45.3	
Actuated g/C Ratio	0.30	0.30		0.30	0.30		0.56	0.47		0.62	0.57	
v/c Ratio	0.39	0.20		0.74	0.47		0.09	0.81		0.44	0.50	
Control Delay	26.5	19.0		37.5	16.4		9.7	18.3		15.2	16.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	26.5	19.0		37.5	16.4		9.7	18.3		15.2	16.3	
LOS	C	B		D	B		A	B		B	B	
Approach Delay		22.4			27.0			18.1			16.2	
Approach LOS		C			C			B			B	
Queue Length 50th (ft)	35	36		118	65		6	138		39	172	
Queue Length 95th (ft)	77	73		#208	131		m12	#442		m74	258	
Internal Link Dist (ft)		3221			420			570			564	
Turn Bay Length (ft)	100						150			150		
Base Capacity (vph)	263	624		417	638		482	1640		374	1984	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	

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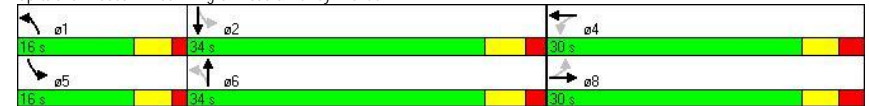
Future Build PM - 3 lane section
1001: English Road & Dewey Avenue

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.36	0.18		0.67	0.43		0.07	0.81		0.35	0.50	

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 80
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.81
Intersection Signal Delay: 19.2
Intersection Capacity Utilization 72.9%
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.













Splits and Phases: 1001: English Road & Dewey Avenue



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Dewey Avenue
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Future Build PM - 3 lane section
1021: Latta & Dewey Avenue

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	115	375	149	153	288	23	253	246	198	45	195	93
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	200		0	200		0	125		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		3343			564			615			360	
Travel Time (s)		65.1			11.0			12.0			7.0	
Peak Hour Factor	0.88	0.88	0.88	0.97	0.97	0.97	0.93	0.93	0.93	0.84	0.84	0.84
Shared Lane Traffic (%)												
Lane Group Flow (vph)	131	595	0	158	321	0	272	478	0	54	343	0
Turn Type	Perm			pm+pt			pm+pt		Perm			
Protected Phases		2		1	6		7	4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		1	6		7	4		8	8	
Switch Phase												
Minimum Initial (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Minimum Split (s)	25.0	25.0		8.0	25.0		8.0	25.0		25.0	25.0	
Total Split (s)	30.0	30.0	0.0	15.0	45.0	0.0	14.0	55.0	0.0	41.0	41.0	0.0
Total Split (%)	30.0%	30.0%	0.0%	15.0%	45.0%	0.0%	14.0%	55.0%	0.0%	41.0%	41.0%	0.0%
Maximum Green (s)	25.0	25.0		10.0	40.0		9.0	50.0		36.0	36.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lag	Lag		Lead			Lead		Lag	Lag		
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)	5.0	5.0			5.0			5.0		5.0	5.0	
Flash Dont Walk (s)	15.0	15.0			15.0			15.0		15.0	15.0	
Pedestrian Calls (#/hr)	0	0			0			0		0	0	
Act Effct Green (s)	50.4	50.4		64.9	64.9		29.1	29.1		15.1	15.1	
Actuated g/C Ratio	0.50	0.50		0.65	0.65		0.29	0.29		0.15	0.15	
v/c Ratio	0.25	0.65		0.36	0.27		0.96	0.43		0.40	0.58	
Control Delay	17.5	23.6		9.8	8.6		77.0	16.1		46.2	32.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	17.5	23.6		9.8	8.6		77.0	16.1		46.2	32.3	
LOS	B	C		A	A		E	B		D	C	
Approach Delay		22.5			9.0			38.2			34.2	
Approach LOS		C			A			D			C	
Queue Length 50th (ft)	45	256		35	77		145	68		32	78	
Queue Length 95th (ft)	98	443		70	138		#242	105		63	106	
Internal Link Dist (ft)		3263			484			535			280	
Turn Bay Length (ft)	200			200			200			125		
Base Capacity (vph)	532	909		458	1196		283	1819		339	1336	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	

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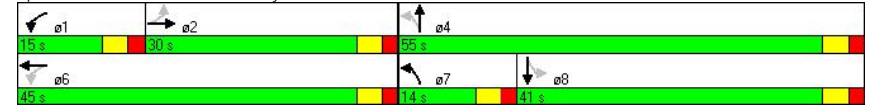
Future Build PM - 3 lane section
1021: Latta & Dewey Avenue

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.25	0.65		0.34	0.27		0.96	0.26		0.16	0.26	

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.96
Intersection Signal Delay: 26.7
Intersection Capacity Utilization 73.0%
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.













Splits and Phases: 1021: Latta & Dewey Avenue



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Dewey Avenue
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


Future Build PM - 3 lane section
4601: Maiden & Dewey Avenue

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	111	0	300	0	0	0	298	689	0	0	555	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		200	0		0	0		0	125		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			30			35			35	
Link Distance (ft)		4626			213			192			772	
Travel Time (s)		90.1			4.8			3.7			15.0	
Peak Hour Factor	0.85	0.85	0.85	0.90	0.90	0.90	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	131	353	0	0	0	317	733	0	0	654	0
Turn Type	Perm		custom	Perm			pm+pt			pm+pt		
Protected Phases		3	1		3		14	46		5	2	
Permitted Phases	3		3	3			46			2		
Detector Phase	3	3	1	3	3		14	46		5	2	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0					4.0	15.0	
Minimum Split (s)	9.5	9.5	9.0	9.5	9.5					9.0	28.0	
Total Split (s)	25.0	25.0	12.0	25.0	25.0	0.0	51.0	73.0	0.0	12.0	34.0	0.0
Total Split (%)	22.7%	22.7%	10.9%	22.7%	22.7%	0.0%	46.4%	66.4%	0.0%	10.9%	30.9%	0.0%
Maximum Green (s)	19.5	19.5	7.0	19.5	19.5					7.0	28.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5					3.5	4.0	
All-Red Time (s)	2.0	2.0	1.5	2.0	2.0					1.5	2.0	
Lost Time Adjust (s)	-2.5	-2.5	-2.0	-2.5	-2.5	-1.0	-2.0	-3.0	-1.0	-2.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lead	Lead	Lead	Lead	Lead					Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0					2.0	4.0	
Recall Mode	None	None	None	None	None					None	C-Max	
Walk Time (s)											7.0	
Flash Dont Walk (s)											15.0	
Pedestrian Calls (#/hr)											0	
Act Effct Green (s)		16.7	29.5				85.5	72.7			31.0	
Actuated g/C Ratio		0.15	0.27				0.78	0.66			0.28	
v/c Ratio		0.61	0.52				0.33	0.31			0.66	
Control Delay		55.1	4.5				20.8	3.0			38.1	
Queue Delay		0.0	0.2				14.8	0.6			0.6	
Total Delay		55.1	4.7				35.7	3.6			38.7	
LOS		E	A				D	A			D	
Approach Delay		18.4						13.3			38.7	
Approach LOS		B						B			D	
Queue Length 50th (ft)		87	0				125	32			211	
Queue Length 95th (ft)		135	26				m168	m61			275	
Internal Link Dist (ft)		4546			133			112			692	
Turn Bay Length (ft)			200									
Base Capacity (vph)		282	684				953	2360			990	
Starvation Cap Reductn		0	0				614	1168			0	

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Dewey Avenue
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Future Build PM - 3 lane section
4601: Maiden & Dewey Avenue

Lane Group	ø4	ø6	ø8
Lane Configurations			
Volume (vph)			
Ideal Flow (vphpl)			
Storage Length (ft)			
Storage Lanes			
Taper Length (ft)			
Right Turn on Red			
Link Speed (mph)			
Link Distance (ft)			
Travel Time (s)			
Peak Hour Factor			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Turn Type			
Protected Phases			
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	4.0	15.0	4.0
Minimum Split (s)	37.0	28.0	37.0
Total Split (s)	39.0	34.0	64.0
Total Split (%)	35%	31%	58%
Maximum Green (s)	33.0	28.0	58.0
Yellow Time (s)	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag	Lag	Lag	
Lead-Lag Optimize?			
Vehicle Extension (s)	3.0	4.0	3.0
Recall Mode	None	C-Max	None
Walk Time (s)	9.0	7.0	9.0
Flash Dont Walk (s)	22.0	15.0	22.0
Pedestrian Calls (#/hr)	0	0	0
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay			
Queue Delay			
Total Delay			
LOS			
Approach Delay			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			

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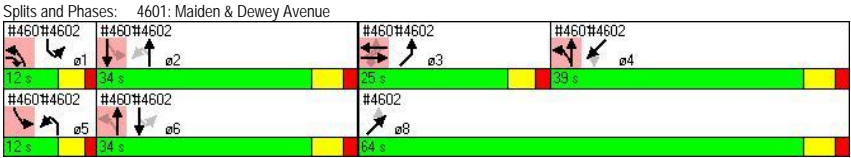
Dewey Avenue
10/23/2009

Future Build PM - 3 lane section
4601: Maiden & Dewey Avenue

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0	46				0	0			99	
Storage Cap Reductn		0	0				0	0			0	
Reduced v/c Ratio		0.46	0.55				0.94	0.61			0.73	

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.13
Intersection Signal Delay: 22.0
Intersection Capacity Utilization 49.9%
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.



Dewey Avenue
10/23/2009

Future Build PM - 3 lane section
4601: Maiden & Dewey Avenue

Lane Group	ø4	ø6	ø8
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary

Dewey Avenue
10/23/2009

Future Build PM - 3 lane section
4602: Dewey Avenue & Stone

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	88	719	83	257	532	121	153	422	56	76	270	179
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	0		0	75		0	200		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			35				35
Link Distance (ft)		654			192			352				322
Travel Time (s)		12.7			3.7			6.9				6.3
Peak Hour Factor	0.91	0.91	0.91	0.84	0.84	0.84	0.88	0.88	0.88	0.87	0.87	0.87
Shared Lane Traffic (%)												
Lane Group Flow (vph)	97	881	0	306	777	0	174	544	0	87	516	0
Turn Type	pm+pt			pm+pt			pm+pt			Perm		
Protected Phases	5	2		1	6		3	8			4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		4	4	
Switch Phase												
Minimum Initial (s)	4.0	15.0		4.0	15.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	9.0	28.0		9.0	28.0		9.5	37.0		37.0	37.0	
Total Split (s)	12.0	34.0	0.0	12.0	34.0	0.0	25.0	64.0	0.0	39.0	39.0	0.0
Total Split (%)	10.9%	30.9%	0.0%	10.9%	30.9%	0.0%	22.7%	58.2%	0.0%	35.5%	35.5%	0.0%
Maximum Green (s)	7.0	28.0		7.0	28.0		19.5	58.0		33.0	33.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0		4.0	4.0	
All-Red Time (s)	1.5	2.0		1.5	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-3.0	-1.0	-2.0	-3.0	-1.0	-2.5	-3.0	-1.0	-3.0	-3.0	-1.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead			Lag	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	4.0		2.0	4.0		2.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		7.0			7.0			9.0		9.0	9.0	
Flash Dont Walk (s)		15.0			15.0			22.0		22.0	22.0	
Pedestrian Calls (#/hr)		0			0			0		0	0	
Act Effct Green (s)	39.6	31.0		45.0	35.2		57.2	57.2		37.5	37.5	
Actuated g/C Ratio	0.36	0.28		0.41	0.32		0.52	0.52		0.34	0.34	
v/c Ratio	0.41	0.89		1.12	0.69		0.49	0.57		0.30	0.83	
Control Delay	24.7	47.9		131.4	19.0		19.0	19.8		29.9	44.7	
Queue Delay	0.0	2.7		17.4	1.5		1.4	0.0		0.0	1.2	
Total Delay	24.7	50.6		148.8	20.5		20.4	19.8		29.9	45.9	
LOS	C	D		F	C		C	B		C	D	
Approach Delay		48.0			56.8			19.9			43.6	
Approach LOS		D			E			B			D	
Queue Length 50th (ft)	44	310		-258	105		58	227		42	298	
Queue Length 95th (ft)	81	#423		#384	144		99	311		87	#482	
Internal Link Dist (ft)		574			112			272			242	
Turn Bay Length (ft)	200						75			200		
Base Capacity (vph)	240	990		272	1118		431	1019		297	629	
Starvation Cap Reductn	0	0		10	173		0	0		0	0	

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Dewey Avenue
10/23/2009

Future Build PM - 3 lane section
4602: Dewey Avenue & Stone

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Spillback Cap Reductn	0	48		0	0		121	0		0	26	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.40	0.94		1.17	0.82		0.56	0.53		0.29	0.86	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.13

Intersection Signal Delay: 44.1

Intersection LOS: D

Intersection Capacity Utilization 83.7%

ICU Level of Service E

Analysis Period (min) 15

- Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 4602: Dewey Avenue & Stone



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