Village of Hilton
Circulation, Accessibility, & Parking Study
Enhancing An American Village

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Final Report
August 2008

Fireman's carnival parade held in July

Village of Hilton Circulation, Accessibility, & Parking Study

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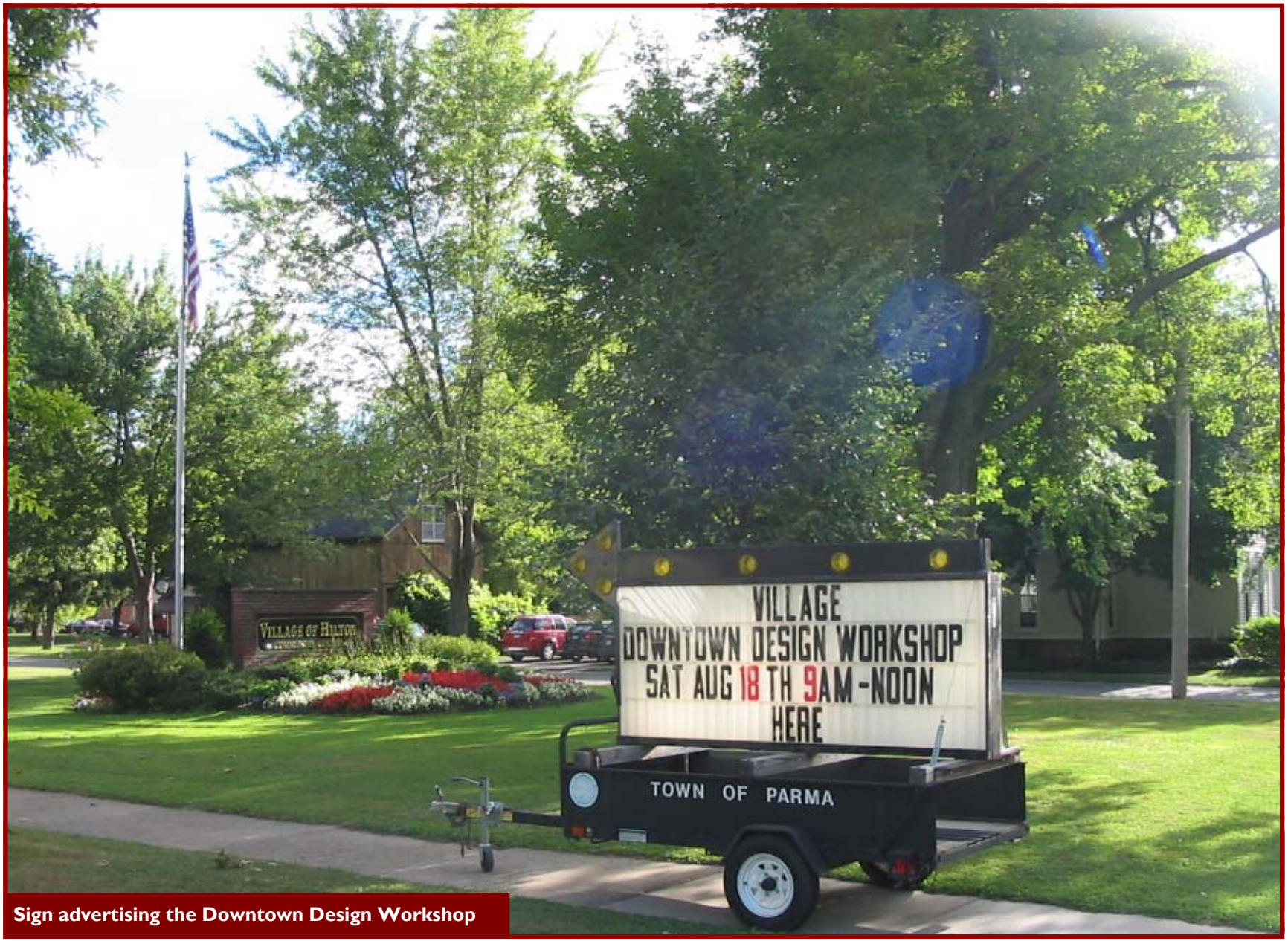

Sign advertising the Downtown Design Workshop

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Executive Summary

The *Village of Hilton's Main Street District Circulation, Accessibility & Parking Study* has been commissioned by the Genesee Transportation Council (GTC) under their Circulation, Accessibility, and Parking (CAP) Program. This program is designed to enhance the livability and economic vitality of villages, city neighborhoods, and hamlets throughout the Genesee-Finger Lakes Region.

STUDY PURPOSE/ OBJECTIVE: The purpose of the *Village of Hilton Circulation, Accessibility & Parking Study* is to develop feasible transportation planning and design concepts that will improve circulation, accessibility, and parking in Hilton's CBD for pedestrians, bicyclists, and motorists.

STUDY AREA: The primary study area encompasses the Village's Main Street, or central business district, including areas bordered by Lake Avenue to East Avenue and Railroad Avenue to Salmon Creek. The secondary study area includes the area south to Village II Drive and east to Canning Street.

COMMUNITY ENGAGEMENT PROCESS: A Public Downtown Design Workshop began with an overview of the planning process and the status of the study. Following the presentation, attendees were separated into two working groups. Both groups were asked to discuss various aspects of the existing transportation system including: vehicular circulation, non-motorized travel options, traffic calming needs, potential gateway enhancements, and parking and access improvements. Each group went on a walking tour of their respective areas where they made observations and critiqued the transportation system. Upon completion of the walk-about, the groups returned to the Community Center to brainstorm the issues and opportunities with the aid of maps and drawings. In order to verify and expand on the issues expressed by the Steering Committee and the attendees of the Downtown Design Workshop, a Community Transportation Survey was administered as part of this planning process. Lastly, a second Public Meeting was held to present the draft recommendations and to obtain community feedback.

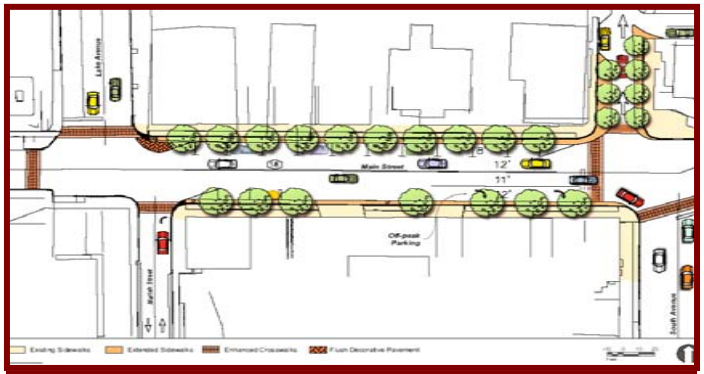
COMMUNITY OBJECTIVES: The community must decide which improvements meet their goals and objectives. To aid in this decision, "Community Objectives" were developed based on the results of the Community Transportation Survey and the goals formulated by the stakeholders to address the future transportation needs of the Village.

1. ***Increase safety especially for pedestrians and bicyclists***
2. ***Promote walking & bicycling***
3. ***Reduce speeds on roadways entering the Village***
4. ***Maintain current vehicular access and capacity levels***
5. ***Maintain parking supply and convenience***
6. ***Improve aesthetics and community character via transportation enhancements***

RECOMMENDATIONS:

MAIN STREET PREFERRED PLAN

A plan for Main Street must address issues for all users; it must also address opportunities to compliment and enhance the entire "street", not just the Travelway for motorists. A Preferred Plan for Main Street was developed based upon the Community Transportation Survey, input received at the Public Workshop, and guidance from the Steering Committee. The visualizations shown to the right of the Preferred Plan below depict how Hovey Street & Main Street could look in the Village of Hilton.



The Preferred Plan shown in the above rendering, includes flush decorative pavement, an extension of the existing sidewalks, new tree plantings, and enhanced crosswalks.

Proposed Main Street Sidewalks & Streetscape Enhancements Looking East from Lake Avenue

MAIN STREET SIDEWALKS

The built environment on any Main Street influences travel choice and conveys a feeling or sense of place, most importantly for pedestrian traffic. Sufficient space for pedestrians to walk, browse shop and relax contributes largely to whether or not a downtown Main Street is perceived as inviting to residents, shoppers, visitors and tourists. A vibrant and successful Main Street exhibits vitality with activity, predominantly pedestrian activity. Expanding the sidewalks to14 feet, from the existing 9.5 feet, provides greater room for pedestrian flow and it also creates opportunities to expand the relationship between the buildings and the street with space for outdoor seating and merchandise display. There is also sufficient room for streetscape amenities such as benches, trash receptacles, and bike racks.

RECOMMENDATIONS:

PEDESTRIAN SAFETY RECOMMENDATIONS

Pedestrian safety can be enhanced at the Main/Hovey/East/South intersection by modifying the traffic signal operation to provide a Leading Pedestrian Interval or LPI. In addition to the LPI at the Main/Hovey/East/South intersection, countdown pedestrian signals are recommended at this intersection. Countdown pedestrian signals (CPSs) can be used to supplement or replace traditional pedestrian signals with flashing numbers that count down the number of seconds remaining until the end of the pedestrian change interval. The combination of these two improvements will greatly enhance the safety of the pedestrian crossings at these two intersections.

Consider enhanced crosswalks at:

a. Main Street / South Avenue /East Avenue / Hovey Street intersection
b. Railroad Avenue / East Avenue intersection
c. Main Street / Lake Avenue
d. West Avenue in front of the Village Hall
e. South Avenue / Village II intersection (future roundabout)

SOUTH AVE PEDESTRIAN ENHANCEMENTS

Some longer term pedestrian enhancements are proposed along South Ave in the vicinity of the bridge:

a. Create visual connection between the two sides using flags or other vertical elements
b. Decorative bridge railing (e.g. art)
c. Interpretive signage
d. Plantings with multi-season interest
e. Long term – wider sidewalks

FUTURE MULTI-USE TRAIL & PEDESTRIAN BRIDGES

Initiate a feasibility study for a multi-use trail along Salmon Creek with strong consideration given to developing the segment between the two pedestrian bridges as Phase 1.

FUTURE SIDEWALKS

a. Connect the multi-use trail and pedestrian bridges as described above to the existing sidewalks on Mariah Street and Upton Avenue with new sidewalks.
b. Develop sidewalks along both sides of East Avenue near the High School.

RECOMMENDATIONS:

BICYCLE ENHANCEMENT RECOMMENDATIONS

Existing 5 Mile Bike Route:

Include bike lanes on East Avenue and Lake Avenue as described below to enhance the existing 5 Mile Bike Route. The addition of bike lanes to roadways helps define road space for both vehicle traffic and bicyclists.

Future Bike Lanes:

Narrow travel lanes to 10 feet and include 5 foot bike lanes on South Avenue, West Avenue, Lake Avenue with approval from governing agencies. For East Avenue an alternative treatment is a "signed shared roadway." It is noted that this results in discontinuous bike lanes through the Village due to the lack of bike lanes on the segment of Main Street between Lake and South Avenues. In this section a "signed shared roadway" is recommended.

OTHER STREETSCAPE ENHANCEMENT RECOMMENDATIONS

Street Trees:

a. Strategically place trees as to not obstruct storefront views and merchant signs.
b. Consider developing a tree management program (e.g. Tree City USA) to ensure that street trees remain a defining village element.
c. Include street trees on both sides of East Avenue from the Village line near Bennett Road to Main Street.

Street Furnishings:

a. Develop standards for streetscape furnishings that include the manufacturer, model, and color for benches, trash receptacles, ash urns, bike racks, and planters.
b. Install furnishings on Main Street, Hovey Street and other streets where a high level of pedestrian activity takes place.

VILLAGE PLANNING AND POLICY FOR A PEDESTRIAN & BICYCLE FRIENDLY COMMUNITY

a. Amend the current Village Comprehensive Plan, and other regulations and procedures to encourage and support greater pedestrian and bicycle activity and safety.
b. Form a Pedestrian Safety Advisory Board to serve as a forum for identifying pedestrian and bicycle safety needs. This function may also be assigned to an existing group such as the Planning Board.
c. Develop a Pedestrian Safety Action Plan consistent with the amended goals and objectives of the Comprehensive Plan and transportation goals contained in this Study.
d. Form public and private partnerships to help fund pedestrian and bicycle improvements such as bike racks.

RECOMMENDATIONS:

HOVEY SQUARE

One-way Entrance:

Conversion of Hovey Street to one-way northbound (enter only) operation is recommended in an effort to significantly improve safety and efficiency of the signalized intersection at Main and Hovey Streets. This change also provides an opportunity to create an exciting aesthetic treatment that instills a sense-of-arrival at the confluence of the major roadways in the village.

Hovey Street - One-way Entrance

Hovey Square Parking:

Two alternative parking layouts were developed for reconfiguration of the Hovey Square parking area. The primary difference between the alternatives is the presence or absence of a convenient north/south route through the parking area from Hovey Street. Alternative A allows vehicles to travel along a "spine" through the parking area and out to Railroad Ave to the north. Alternative B severs the "spine" using landscaped islands creating a circuitous route from Main Street to Railroad Avenue through the parking lot. Both alternatives will improve the overall operation and safety of the existing and future parking area.

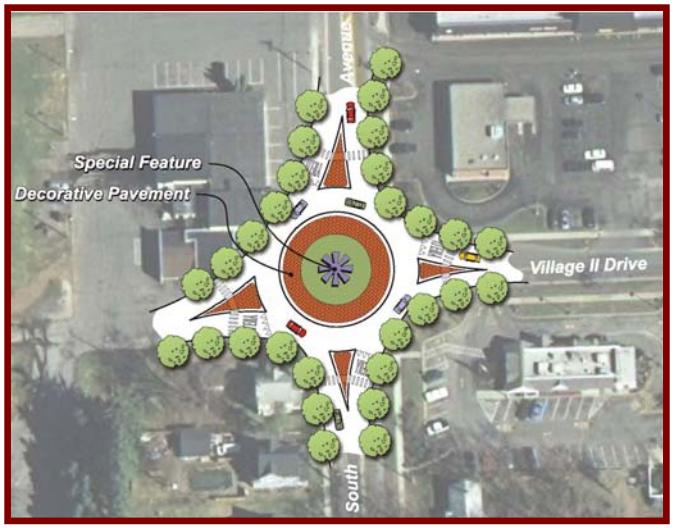
TRAFFIC CALMING ENHANCEMENTS

Traffic calming enhancements previously discussed include enhanced crosswalks and a roundabout at Village II Drive. Other applicable tools are: raised crosswalks, raised intersections, curb extensions at intersections, pavement narrowing, gateway treatments, streetscaping techniques, enhanced crosswalk with in-road sign, on street parking, and bike lanes.

PROPOSED ROUNDABOUT AT VILLAGE II DRIVE

In addition to the improvements proposed for Main Street, a new modern roundabout is proposed at the Intersection of South Avenue with Village II Drive to control right of way as well enhance safety and provide traffic calming benefits. Benefits of a roundabout compared to traditional intersections and traffic signals are fewer conflict points, lower speeds, easier decision making, less delay, higher capacity thresholds, more efficient in off-peak hours, less cars waiting/idling, reduced fuel consumption, less air pollution, creates a gateway that provides a sense of place, and can be used to celebrate local culture & heritage. The concept plan on the opposite page depicts a conceptual layout for a roundabout at South Ave/Village II Drive.

RECOMMENDATIONS:



Village II Drive Conceptual Roundabout Layout

PRESERVING CAPACITY ON MAJOR THOROUGHFARES

The widening of village arterial routes for the purpose of accommodating left-turn site development traffic should be discouraged. If a traffic impact study performed in accordance with NYSDOT study requirements determines that a left-turn lane is justified along Routes 18 and 259, and East Avenue, the intensity of land development should be limited to a level such that a left-turn lane is not warranted. Under such conditions, further development shall be limited until alternative means of access for future development beyond the warrant threshold can be attained.

IMPLEMENTATION & FUNDING:

IMPLEMENTATION & FUNDING

Recommendations for implementation of the proposed improvements are subdivided into three categories: immediate to near term(0-5 years), medium term (5-10 years), and long term (10-20 years). Many of the Immediate to Near Term recommendations can be implemented as part of ongoing maintenance and other programs while others in this phase of implementation are either relatively low cost modifications or funding for these types or improvements may be available. Medium Term recommendations require more planning and funding to implement and can likely be accomplished in the 5 to 10 year timeframe. The Long Term recommendations are generally more expensive and are likely to require significant planning to implement. It is noted that the longer timeframes may more closely align with typical NYSDOT timeframes used for programming funding. Specific improvements may be made sooner as funding becomes available. The Village of Hilton may also consider implementing a Capital Improvement Program to providing their own funding for various projects and improvements.

I. Introduction

Today's community transportation issues involve much more than moving vehicles and preserving safety and efficiency of travel. Public safety, economic development, the environment and quality of life are also very important in understanding transportation problems and solutions. Well designed and integrated land use, transportation and circulation systems, particularly in village downtown environments help preserve a sense of community, foster economic development goals, and preserve both public and private investment.

"Main Streets record human endeavors over time: the progression of architectural styles, types of businesses, social changes and the evolution of street design."

Over the past five years, the Village of Hilton has completed a vision for its downtown as well as a future land use map amendment to its Master Plan. The vision plan for the central business district (CBD) includes the addition of up to 70,000 square feet of new commercial space. In addition, there has been much interest in re-developing property within the CBD as well as expanding its limits in order to accommodate new commercial operations. This study will evaluate the parking, accessibility and traffic circulation needs in the downtown study area, and recommend transportation and urban design improvements for all modes of travel.

A. Community Background & Study Area Description

The Village of Hilton is located in the Town of Parma in northwestern Monroe County. Settlement of the Village of Hilton began in the late 1700's primarily as a farming community and the location, approximately three miles south of Lake Ontario, provides favorable soil and weather conditions for fruit farming. As the community grew, the Village was home to a railroad station and businesses that supported the agricultural economy. In March of 1965 over 60% of the CBD was destroyed by fire. Rebuilding resulted in a mixture of old and new architecture throughout the Village's downtown. Hilton hosts two significant special events on a yearly basis: the annual Fireman's Carnival in July and the Hilton Apple Fest in October.

Hilton's Main Street (NYS Route 259) is similar to other Village Main Streets in Upstate New York in that it serves the dual purpose as a primary travel route as well as the heart of an active Central Business District. Route 259 is a state travel route linking the communities of Hilton, Spencerport, and North Chili, with the Lake Ontario State Parkway located to the north and Interstate 490 located to the south. As a result of the dual role, conflicts have arisen between typical Main Street activities (i.e. pedestrian activity, accessing local business, and utilizing the library) and motorists traveling through the CBD to reach destinations beyond the CBD (i.e. the four school campuses and neighborhoods in the Village as well as points beyond the Village limits). Local traffic volumes through downtown have steadily increased as the population in the rural areas to the west of Rochester have continued to grow over the past four decades. It should also be noted that the location of the library and schools in relation to the CBD have resulted in high volumes of young pedestrians and bicyclists traveling through the CBD on a regular basis.

Master planning efforts for the Village have resulted in a clear vision and objectives for the CBD. A review of the Village Center Development Plan contained in the 1977 Village of Hilton Master Plan, as well as the 2000 Vision Plan for the CBD provides the following objectives for the downtown area;

- Encourage business expansion to occur through acquisition, clearance, or rezoning in a logical manner and in accordance with the Vision Plan;
- Encourage slightly higher residential densities in appropriate neighborhoods adjacent to the central business district in order to provide a good population base near the village center to support the expanded business base and maintain the vitality of the area after business hours;
- Ensure the traditional business area along Main Street should remain the focal point for village activities;
- Provide for safe, easy access to and through the village center via vehicular, pedestrian and bicycle traffic;
- Encourage a pedestrian-oriented environment by providing for such elements as links between major activities, interesting urban spaces, street furniture, landscaping and other human-scale features;
- Assure adequate off-street parking; and
- Create an aesthetically pleasing environment by maintaining a clean appearance, adequate control of advertising and general signage while promoting a consistent style of architecture, paying close attention to materials, patterns and colors.

These objectives seek to enhance the Village's economic status and improve the quality of life for its residents. The community recognizes that the success of the downtown area as well as the commercial activity along South Avenue is dependent upon their ability to remain a convenient destination for motorists, bicycles and pedestrians.

COMMUNITY TRANSPORTATION GOAL

Based upon the information gathered through this planning process, it is the goal of the Village of Hilton to have a transportation system that meets the needs of residents, businesses, and the traveling public. To accomplish this, the Village and its partners will focus public and private efforts to;

- Ensure the safety of pedestrian, bicycle, and motor vehicle traffic;
- Provide an environment that entices residents to walk and bike to services; and promotes health and wellness.
- Implement traffic calming techniques to maintain travel speeds at or below the posted limit.
- Maintain the existing levels of access to local businesses and circulation within and through the Village.
- Ensure future parking supplies keep pace with commercial growth within the central business district.
- Develop a transportation system that contributes to the overall aesthetics and character of the community.

These elements form the basis of Hilton's transportation strategy that will guide decision-making over the next decade. In order to achieve this strategy, the Village recognizes that it will have to work closely with GTC, NYSDOT, MCDOT, and the Town of Parma.

STUDY AREA

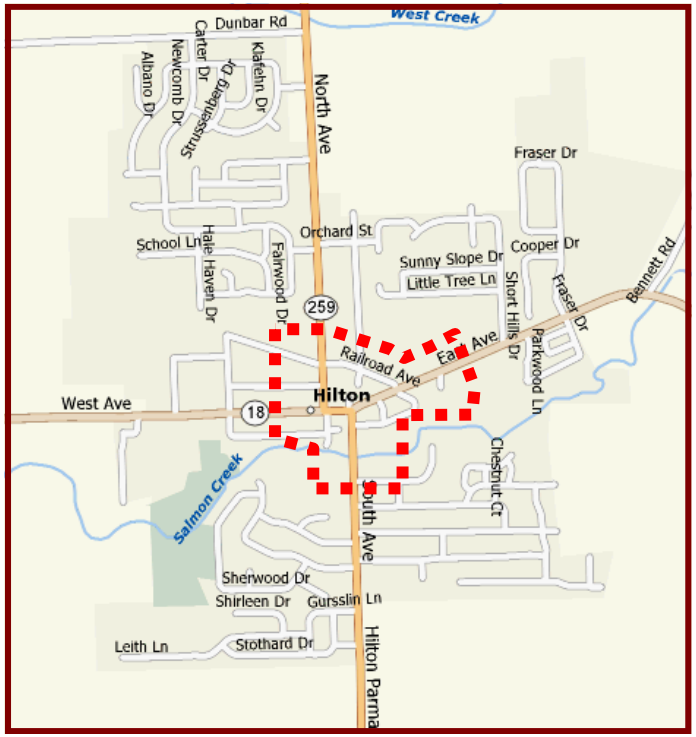
The primary study area encompasses the Village's Main Street, or central business district, including areas bordered by Lake Avenue to East Avenue and Railroad Avenue to Salmon Creek. The secondary study area includes the area south to Village II Drive and east to Canning Street. The primary and secondary study areas are depicted on the aerial to the right.

B. Study Purpose and Process

The purpose of the *Village of Hilton Circulation, Accessibility & Parking Study* is to develop feasible transportation planning and design concepts that will improve circulation, accessibility, and parking in Hilton's CBD for pedestrians, bicyclists, and motorists. This study will aid officials in advancing the Village of Hilton's Vision Plan by addressing transportation challenges and identifying physical as well as regulatory opportunities for traffic calming concepts, gateway treatments, enhanced parking and access management, and improved pedestrian, bicycle, and vehicular circulation.

At the beginning of the study, a Steering Committee was formed to establish priorities, provide continuity and oversight, and progress the Community's Vision Plan with respect to transportation and community design. The committee has guided the study process, facilitated a Downtown Design Workshop, and acted as liaisons to the broader Community. Members of the committee include village officials, a representative from the Hilton-Parma Chamber of Commerce, the Village Highway Superintendent, and the school district Director of Transportation. Other members include representatives from the New York State Department of Transportation (NYSDOT), Monroe County Department of Transportation (MCDOT) and the Genesee Transportation Council (GTC). GTC is the regional Metropolitan Planning Organization that is overseeing and administering the *Village of Hilton's Circulation, Accessibility, and Parking Study*. They are responsible for the disbursement of federal aid monies for transportation-related projects, programs, and initiatives within the region.

Figure 1: Study Area



Participants in the Downtown Design Workshop

TRANSPORTATION INVENTORY & LAND USE ANALYSIS

The foundation of this study is defined by documenting the existing transportation features, multi-modal traffic volumes, operating conditions, parking inventory, and land use patterns. To support the analysis and decision-making necessary to advance this study, an inventory of existing and planned conditions was conducted, and existing policies and regulations were reviewed. Land use maps illustrating existing building locations (Figure-Ground diagrams), residential and commercial zones, civic areas and parkland, parking, and schools have been developed. Subsequent sections of this report discuss the inventory and analysis in detail.

UNDERSTANDING THE PUBLIC REALM

This study evaluated the public realm with respect to safety, function, and context-appropriate or context-sensitive solutions for the study area that will improve the look and feel of this innately human-scale environment. The public realm is defined as the physical space spanning the roadway from building face to building face. The public realm is comprised of a Travelway and the roadside or Pedestrian Realm, as illustrated in Figures 2 and 3.

Aesthetic and operational improvements to both the Pedestrian Realm and the Travelway will augment the Village of Hilton's sense of place by increasing it's value as a destination and contributing to a community's quality of life. Improving the public realm serves to invite local residents as well as visitors to explore downtown Hilton on foot. The presence of pedestrians in a CBD contribute to its economic vitality and overall vibrancy while sending a visual cue to motorists that Main Street is an activity center, thus encouraging slower speeds and increased safety.

Figure 2: The Public Realm

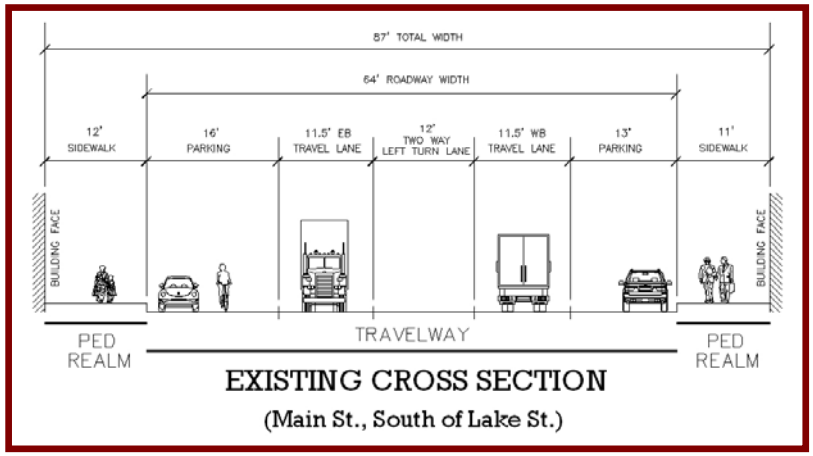
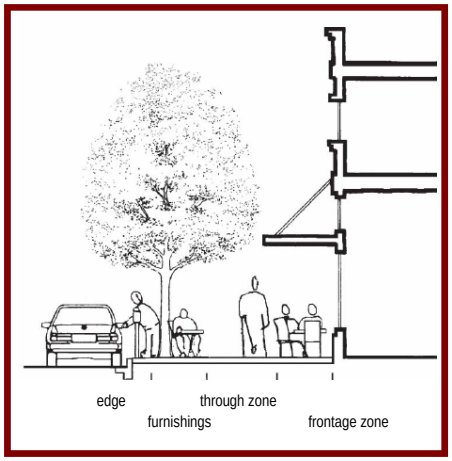


Figure 3: The Pedestrian Realm



II. Village of Hilton - Inventory and Analysis

This section provides an overview of existing conditions in the primary and secondary study areas.

A. Land Use Patterns

As previously stated and shown in Figure 1, the primary focus of this study is the Central Business District (CBD) of the Village of Hilton. In addition, the major thoroughfares that accommodate traffic coming in and traveling out of the Village will also be evaluated. These thoroughfares include East, West, South, and Lake Avenues.

Residential - As shown in the Existing Land Use Map on the opposite page, the existing Village neighborhoods are generally located in the northeast, northwest, southeast, and southwest quadrants of the Village. These neighborhoods are predominately single family homes with a small number of these homes having been converted to multi-family dwellings. In addition, townhouses have been built along Cedar Terrace and as part of the Unionville Station Senior Living Project.

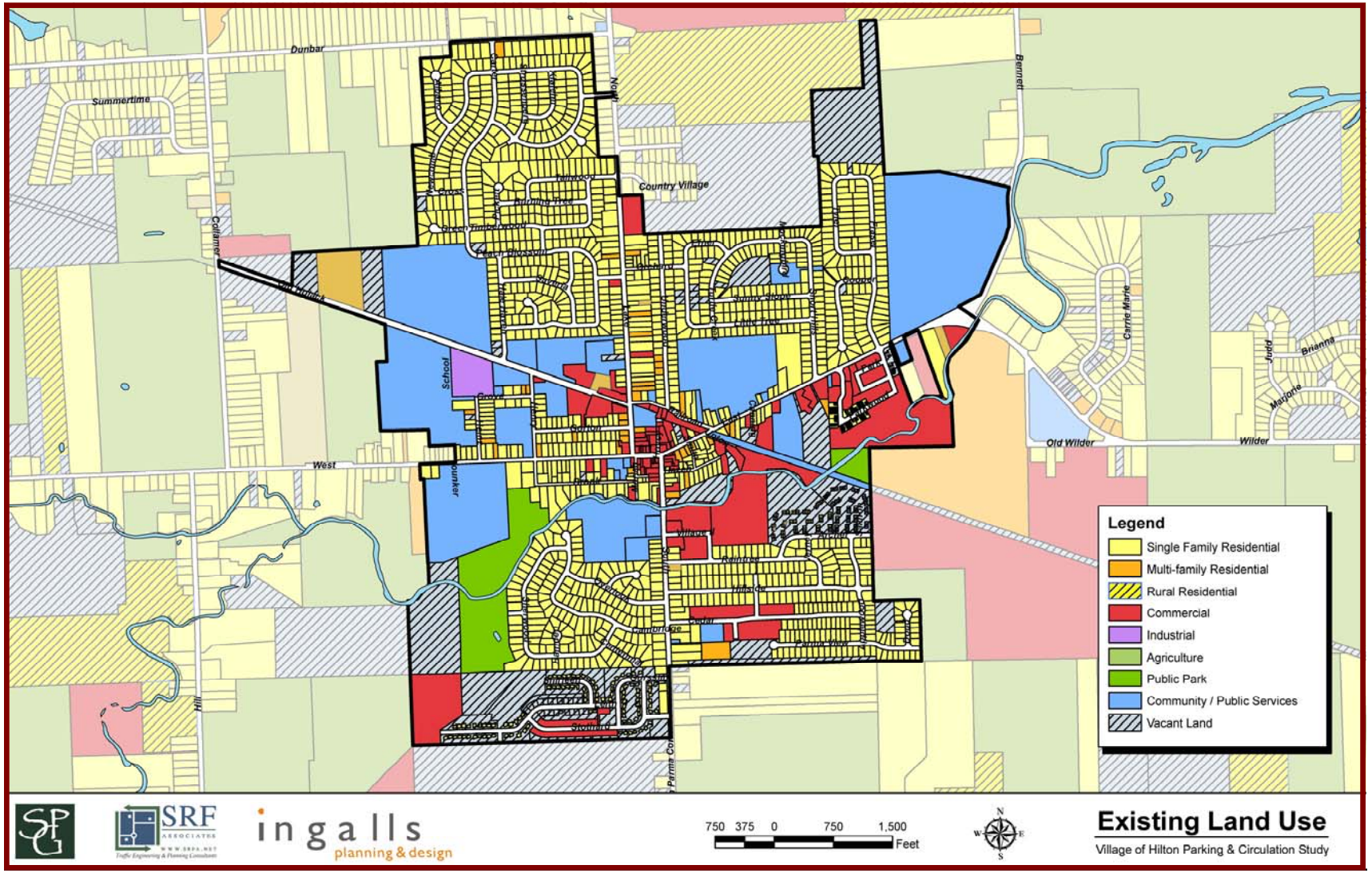
Commercial - A majority of commercial activity within Hilton is located within the Central Business District (CBD) along South Avenue, beginning at Village II Drive and along Main Street. There are two other commercial nodes located at the intersection of Lake Avenue and Old Hojack Lane and at the end of Canning Street. The land uses in the CBD consist primarily of retail and service uses along with associated parking areas distributed behind the buildings fronting Main Street. Main Street in the Village is a short stretch of roadway located in the center of the CBD between the South Avenue/East Avenue intersection and the West Avenue/Lake Avenue intersection. Main Street is characterized by one- and two-story buildings on both sides of the street, the majority of which are arranged with zero setbacks from the sidewalk. One notable exception to this is the motor vehicle service station located on the south side of Main Street in the middle of the block. The building on this site is a one-story service station set back from the sidewalk with an asphalt lot and two large curb cuts onto Main Street.

Community & Public - The Community and Public Uses within the Village are shown in blue on the Existing Land Use Map. There are four public school campuses within Hilton. These include;

1) Hilton High School located along East Avenue at the eastern village boundary;
2) Quest School located along the south side of West Avenue at the western village boundary;
3) Village Elementary School located along the south side of Old Hojack Lane at the western village boundary; and
4) Merton Williams Middle School located on the north side of Old Hojack Lane opposite the Village Elementary Campus.

There is also a private elementary school that is operated by the Lutheran Church located along East Avenue opposite Canning Street. Other public uses and community uses include churches, the library, the Post Office, the Community Center, and various public parks.

Figure 4: Existing Land Use



Natural Features - The most prominent natural feature in the Village is Salmon Creek, which flows west-east and is located to the south of the CBD, parallel to West Avenue and East Avenue within the Village limits. There is a bridge over the creek along South Avenue to the south of the CBD and immediately to the north of the commercial development at Village II Drive. The banks of Salmon Creek are accessible through several public park sites within the Village, including Hilton Village Park at the west end of the Village, Salmon Creek Park at the east end of the Village, and the fire station/public park at "Fireman's Field" to the south of the CBD along South Avenue.

Major Thoroughfares - The South Avenue thoroughfare into the Village is dominated by single-family residential development from the Village's southern boundary at Atchinson/Gursslin Lane northward to the shopping plaza at Village II Drive. Village II Drive leads to a multifamily residential development located to the east of the shopping plaza. North of the shopping plaza, South Avenue continues over the Salmon Creek bridge, which provides the transition into the Main Street area.

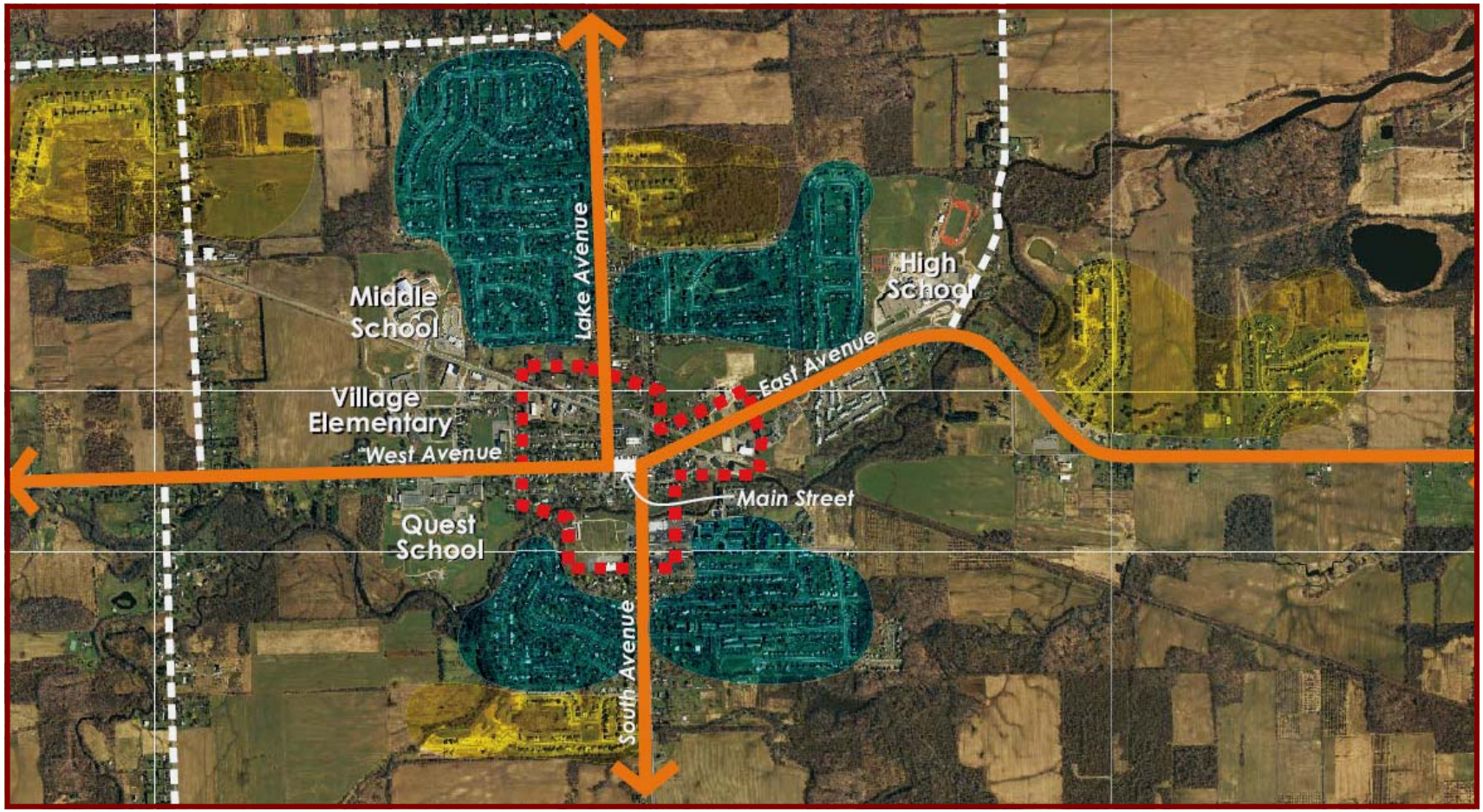
The East Avenue thoroughfare has a blend of land uses from the village boundary to the CBD. The north side of the street is dominated by single-family homes and the Lutheran Church. On the south side of East Avenue, a multifamily residential development is located at the intersection of East Avenue and Parkwood Lane; a commercial area that includes medical/veterinary offices and an assisted living/senior residence is located across from Short Hills Drive; and a complex in the commercial/industrial zone around Upton and Canning Streets includes several restaurants, a karate studio, and a fitness center.

The Lake Avenue thoroughfare enters the study area from the north and is dominated by single family residential development on both sides of the street until it approaches the CBD, where the land uses transition into the CBD with a mixture of commercial and residential development.

The West Avenue thoroughfare is dominated by single-family residential development on both sides of the roadway leading into the CBD, with the West Avenue School located at the western Village boundary across from Heinz Street, and Village Hall/Community Center located at the Henry Street intersection.

Recent Land Use Changes - Over the past two decades, residential growth has continued within Hilton to a point where the Village is virtually built out. As a result, the land required to build the Unionville Station Senior Living Development was annexed into the Village from the Town. A second phase of Unionville Station is being considered on the land immediately to the south of its current location. There are also active subdivision developments within the Town of Parma in close proximity to the Village. These include; 1) the All Seasons Subdivision along Collamer Road to the northwest of the Village; 2) Country Village Estates along Lake Avenue north of the Village; and 3) multiple subdivisions along Wilder Road to the East of the Village.

Figure 5: Emerging Land Use Patterns



As shown in Figure 5, the existing land use pattern of the Village has fully developed neighborhoods (shaded in blue) in each of the four quadrants, public school campuses in three of the four quadrants, and the primary commercial center at the nexus of the four quadrants (shown with the red-dashed outline). As a result, the Main Street area has evolved as the primary conduit for north/south and east/west travel into and through the Village while providing access to the central commercial activity center for the community. As new residential development continues within the Village and Town of Parma (shaded in yellow) on all four sides of the Village, the pressure on the primary travel routes (shown in orange) to handle increasing traffic volumes will continue to grow over time. As traffic volumes and congestion increase, travel into and through the Village will become more difficult.

B. Previous Planning and Zoning Efforts

Over the past 30 years, Hilton has been the focus of several thoughtful and thorough planning efforts, as described below.

VILLAGE OF HILTON MASTER PLAN, 1977

The Community Goals established in this plan addressed orderly growth and development, quality residential areas, revitalization of the Central Business District, improvement of the circulation system, and the provision of public facilities related to the potential for growth.

The 1977 Master Plan presents a dedicated chapter focusing on the "Village Center Development Plan" which states, "…the plan, first, recognizes the need for an expanded business area to serve the existing and projected population of the village and the surrounding area over the next twenty years. The traditional business area along Main Street should remain the focal point for village activities. Second, the village center plan seeks to increase the attractiveness and vitality of this area by assuring the development of a well-functioning, integrated business center."

The specific objectives formed in the Village Center Development Plan included:

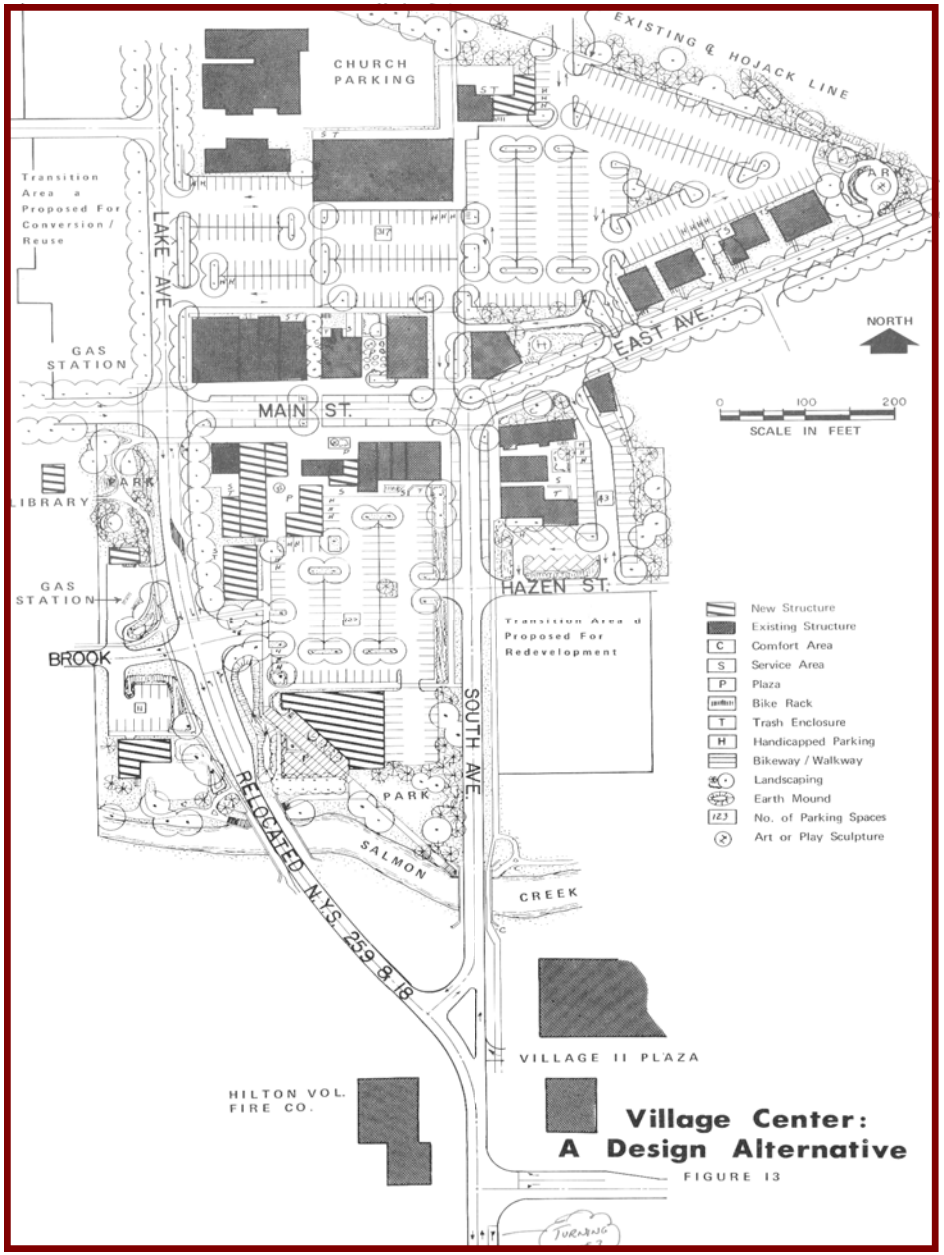
- Encourage business expansion to occur through acquisition, clearance, or rezoning in a logical manner;
- Eliminate or rehabilitate all substandard housing units and commercial structures;
- Encourage slightly higher residential densities in appropriate neighborhoods adjacent to the CBD in order to provide a good population base near the village center to support the expanded business base and maintain the vitality of the area after business hours;
- Integrate various functions or activities in the CBD in a pattern that promotes commercial competition and results in a full range of business services;
- Assure adequate off-street parking;
- Provide for safe, easy access to and through the village center via vehicular, pedestrian and bicycle traffic in a barrier-free environment;
- Encourage a pedestrian-oriented environment by providing for such elements as links between major activities, interesting urban spaces, street furniture, landscaping and other human-scale features;
- Create an aesthetically pleasing environment by maintaining a clean appearance, adequate control of advertising and general signage while promoting a consistent style of architecture, paying close attention to materials, patterns and colors.

The Village Center Development Plan included a concept diagram as well as a more detailed design plan (Figure 6) that illustrated the objectives listed above.

The transportation plan section presented policies for an, "economic and efficient circulation system," which addressed the encouragement of alternative transportation modes, including bicycle, pedestrian, and mass transit; maintenance and improvement of roads within the planning area to be consistent with public needs; and coordination of transportation decisions with county and regional transportation needs.

Many of the goals and objectives articulated in the 1977 Plan are likely to be relevant and applicable today.

Figure 6: 1977 Master Plan For the CBD



PARMA TOWN MASTER PLAN, 1970

This Master Plan was completed in 1970 and presents a fifteen-year vision for the Town of Parma. In the Transportation chapter of the Plan, the following objectives address connectivity between the Town and Village:

- East Avenue in Hilton and Wilder Road in Parma upgraded to arterial streets;
- North Avenue from Hilton to the Lake Ontario State Parkway upgraded to an arterial street;
- NYS Route 259 from Hilton to the Parma-Ogden Town Line Road upgraded to an arterial street; and
- West Avenue upgraded to an East-West collector.

While this CAP Study for the Village of Hilton does not directly address recommendations in the Town of Parma, it will be important to consider development and traffic patterns outside of the Village limits and ensure long-term connectivity between the Village and other regional nodes, including the City of Rochester and surrounding communities.

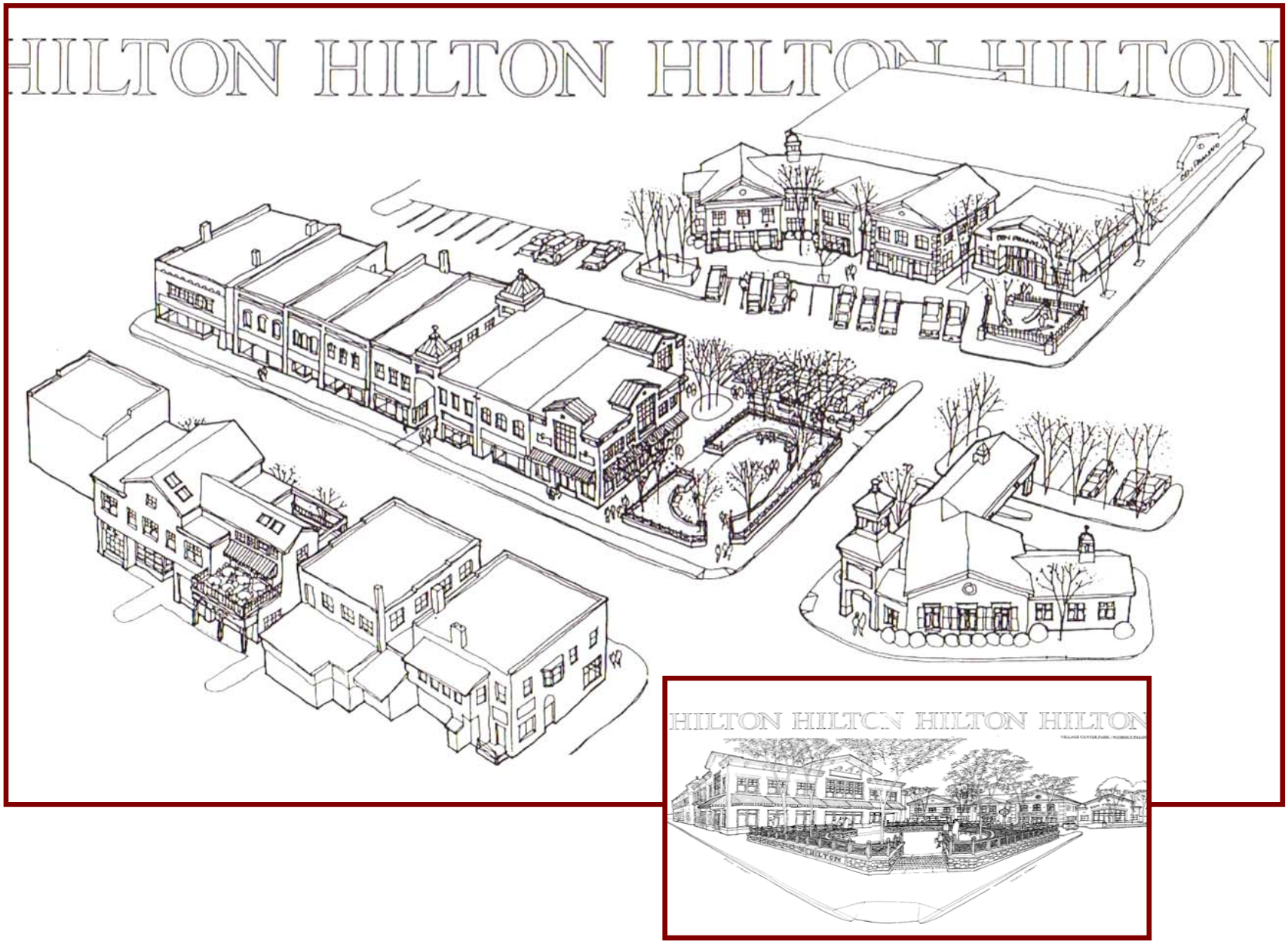
A VISION PLAN FOR THE CENTRAL BUSINESS DISTRICT OF THE VILLAGE OF HILTON, NY, 2000

The Village of Hilton worked with Barkstrom & Lacroix Architects in 1999 to produce this collection of essays and sketches that provided the Village with an "imaginative reconstruction of the Village center." This document includes several essays that provide the architect's impressions, thoughts, and ideas for Hilton, as well as a collection of "visual notes" that include sketches and photographs of Hilton's existing context and images of other villages with features that might be desirable for the creation of a successful and vibrant Village center.

This plan was not undertaken as a formal assessment of the Village, but rather represents a creative design study and process to envision the long-term potential for the Hilton Central Business District.

The sketches produced through this effort (Figure 7) are presented in both plan view and in perspective renderings that illustrate the Vision Plan's concepts and some of the architect's design considerations that could serve to enhance a "strong village presence" for Hilton. The results of this effort were used as the foundation for the development of the Village Center and Limited Commercial Zoning Districts in the Village Code.

Figure 7: Vision Plan Sketches



VILLAGE CENTER OVERLAY DISTRICT FORM BASED REGULATING CODE, 2003

In order to facilitate the implementation of ideas presented in the Vision Plan previously described the Village continued to work with Barkstrom & Lacroix to produce a strategy for integrating some of the elements proposed in the Vision Plan into the Village Zoning Code. This effort presents a framework for codifying the design elements developed in the Vision Plan and lays out these elements in a sample "form-based code" structure, and identifies the boundaries of the Central Business District as a "Village Center Overlay District."

This plan presents color plan-view renderings of a "Village Design Plan" (Figures 8), proposed use regulations for the Village Center Overlay District, and design standards that address building envelopes, architectural elements and other general "main street" design features.

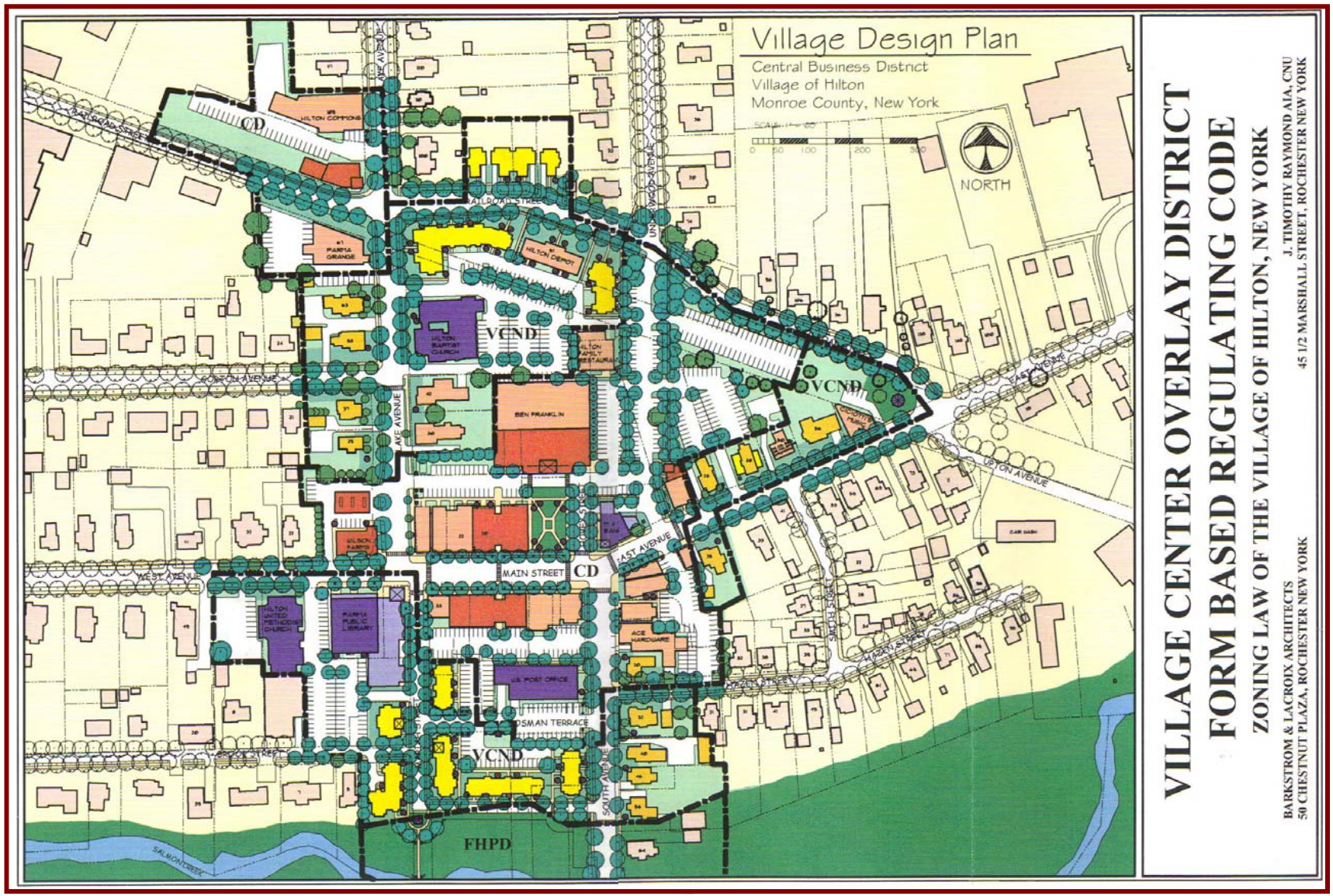
After this report was finalized, the Village incorporated several traditional village design elements into the Village code for the Limited Commercial and Central Business zoning districts. These specific design standards included the construction of buildings up to the front- and side-property lines with a zero setback, two- to three-story height requirement, a minimum 60% transparency for the street-level façade windows, and street-facing entrances.

LAND USE AMENDMENT, 2005

A future land use plan and map was prepared for the Village in 2005 which provides an evaluation of the Village's existing land uses as well as an overview of the issues and opportunities for each land use category. This overview identifies, "…the desired uses, scale and design for future development and rehabilitation efforts in the Village of Hilton." The Amendment provides future zoning recommendations that focus on the Commercial District and Village Center Neighborhood District, and call out "essential features, " some as first introduced by the Barkstrom & Lacroix plan, to be promoted in future zoning updates:

- Buildings placed to the edge of the sidewalk;
- Minimum building heights of two stories;
- A centrally located community green;
- Turn of the century architectural treatments;
- Parking to the rear of structures; and
- Retail on the first floor.

Figure 8: Village Design Plan



VILLAGE OF HILTON CODE

The Village of Hilton has adopted separate codes for Zoning as well as an Architectural Design District.

The Village has nine zoning classifications as outlined below:

- **R** Residential District
- **PRD** Planned Residential Development District
- **PRD-S** Planned Residential Development District - S
- **MR** Multiple-Residence District
- **CB** Central Business District
- **LC** Limited Commercial District
- **C** Commercial District
- **LI** Light Industrial District
- **I** Industrial District

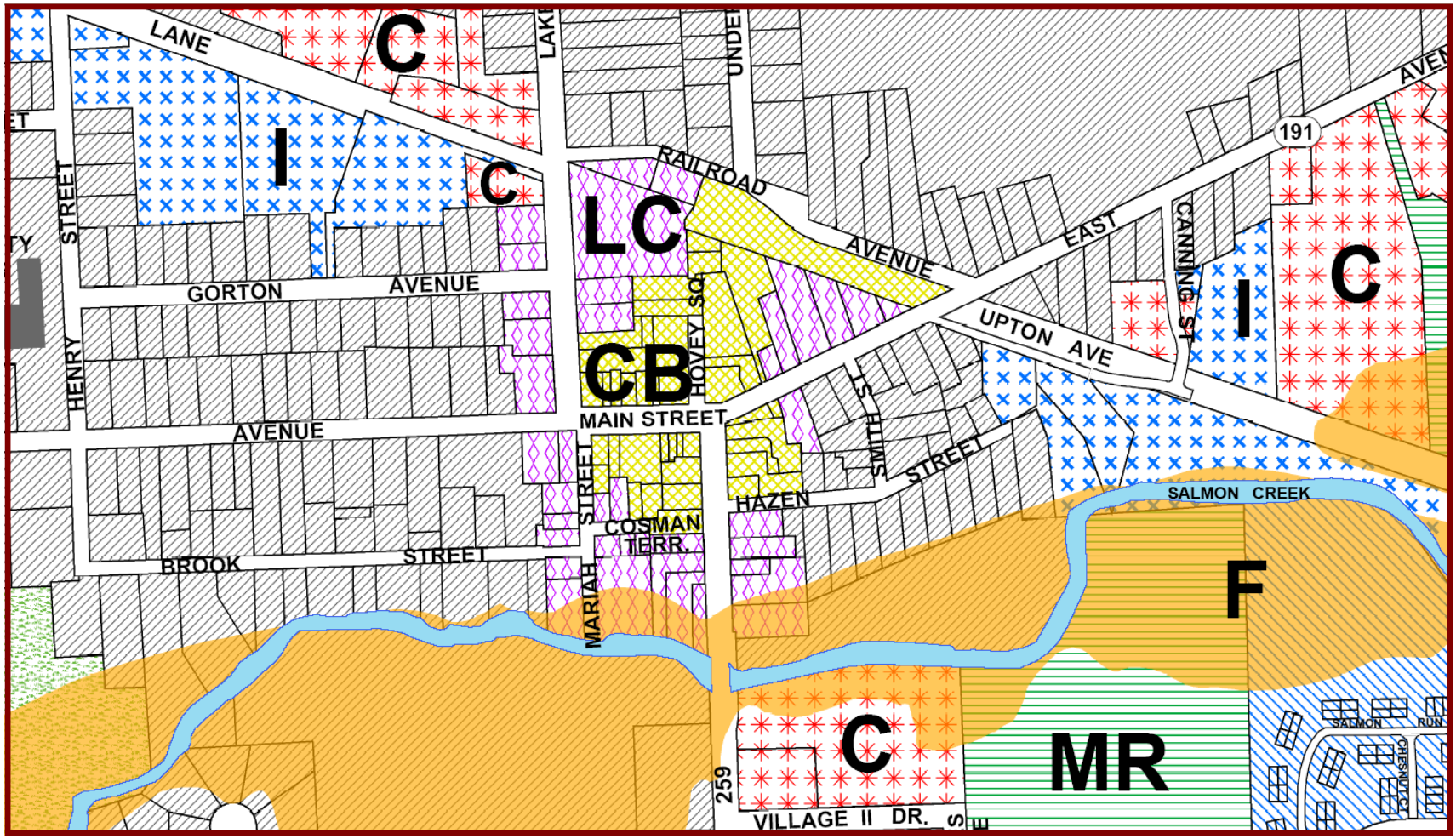
While most of these categories are found within the study area and along the major thoroughfares to varying degrees, the majority of the properties that will be considered for the purposes of this effort are included in the CB and LC districts. As can be seen in the Study Area Zoning Map (Figure 9) the CB district centers around the intersection of Main Street, South Avenue, and East Avenue around Hovey Square, north to Railroad Avenue and south to Hazen Street. The LC district surrounds the outer boundary of the CB district along Mariah Street and Lake Avenue at the western boundary of the study area, south along South Avenue to Salmon Creek, and east of the CB district along East Avenue.

The purpose of the CB district is to "…establish mixed use areas for convenient shopping and services to serve the community and to regulate the location, design and use of structures and land therein in a fashion that is consistent with the distinctive and historical character of the district." The purpose of the LC district is to, "…provide an area of mixed residential, commercial and non-commercial uses in buildings that appear residential in design and in a fashion that is consistent with the distinct and historical character of the district to act as a compatible transitional area."

The Architectural Design District was created "…to ensure that the distinctive and historical character of this shall not be injuriously affected, that the value to the community of those buildings having architectural worth shall not be impaired and that said Architectural Design District shall be maintained and preserved, in harmony with the community, to promote its use for the education, pleasure and welfare of the citizens of the Village of Hilton and others."

The Architectural Design District is defined as, "That area of the Village of Hilton identified as the Central Business District on the Land Use Plan of the Village of Hilton Master Plan, Figure 10, as well as any and all other property in the Village of Hilton that is zoned C-Commercial; I-Industrial; LID-Light Industrial, LCD-Limited Commercial" and presents administrative procedures for applicants in these areas.

Figure 9: Study Area Zoning Map



C. Main Street Transportation Characteristics

NYS Route 259/18 is a State highway that travels primarily in a north/south orientation through the Village of Hilton. On the south side of the Village, Route 259/18 is known as South Avenue. South Avenue intersects with Main Street in the heart of the CBD where Route 259/18 becomes Main Street (an east/west highway) for a short distance before it turns north/south again and is called Lake Avenue. Lake Avenue then exits the Village to the north. Route 259 is an undivided rural minor arterial roadway, that generally provides one travel lane in each direction with auxiliary turn lanes at intersections, with the following characteristics, illustrated in Figure 10:

- Functional classification.....Rural minor arterial
- Right-of-way.....72 feet typical
- Sidewalks both sides.....5 feet plus 5 feet planters
- On-street parking.....9-10 feet wide parking lane on both sides
- Travel-way width.....52 feet with two 10.8 feet travel lanes
- Speed limit.....30 mph within village limits
- Transit.....Rochester Genesee Regional Transit Authority (RGRTA)/Regional Transit Service (RTS)
- Bicycle facilities.....Permitted to share the roadway, not a designated bicycle route
- Two traffic signals.....Main & Lake (new signal) and Main & South

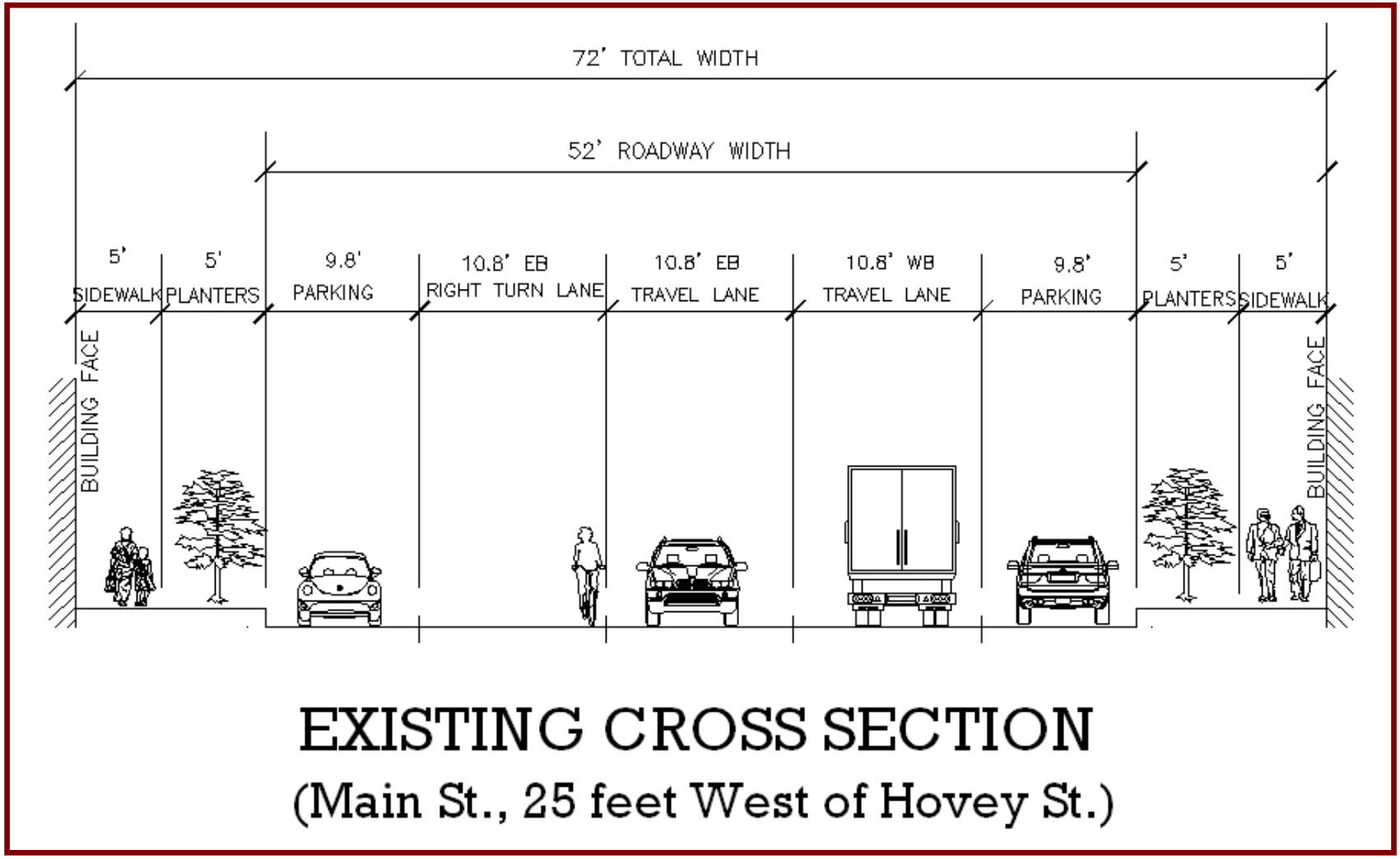
Main Street Traffic Statistics

- **One travel lane in each direction**
- **Average Annual Daily Traffic (AADT) 7,820 vehicles per day (vpd)**
- **2% truck traffic**
- **Village Speed Limit 30 mph**
- **Major school bus route for all schools**

Existing view of Main Street looking east

Existing view of Main Street looking west

Figure 10: Existing Cross-Section



EXISTING AND FUTURE TRAFFIC CONDITIONS

Weekday AM commuter/school (6:45-8:15AM) and PM commuter/school (2:00-5:15pm) vehicular turning movement count volumes and pedestrian crossing volumes were collected by SRF & Associates (SRF) at five intersections within the study area on October 16, 2007. The existing peak hour volumes are provided in the Appendix.

The data collected was used to assess the quality of traffic flow for existing peak hour conditions. Two measures of effectiveness are used, Level of Service (LOS) and Intersection Capacity Utilization (ICU). Levels of Service provides an indication of the amount of delay that a motorist experiences while traveling through an intersection, with LOS 'A' indicating free-flowing traffic flow, and LOS 'F' representing long delays, traffic congestion and queuing. The Intersection Capacity Utilization can be thought of as an intersection-wide volume-to-capacity ratio. The method calculates a sum of the critical movements' volume to saturation flow rates. ICU is an ideal technique for traffic impact studies, future roadway design considerations, and congestion management/mitigation programs. Suggested ranges of service capacity and an explanation of LOS and ICU are included in the Appendix. A Summary of LOS/ICU calculations for the study area are presented in Table 1. It is important to note that ICU is primarily used for signalized intersections but can also be used on unsignalized intersections to determine the capacity utilization if the intersection were to be signalized.

To account for normal increases in area-wide traffic growth, including any unforeseen developments in the project study area, a growth rate of 0.7% per year has been applied to the existing traffic volumes based upon historical traffic volume growth in the study area. A twenty (20) year traffic forecast was derived and used for future traffic analyses. Additionally, it should be noted that the future trip generation potential from build-out of the Barkstrom-LaCroix Plan, when distributed over the existing street network, aligns closely with this projected annual growth rate.

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: Hovey Street southbound at Main Street during the PM peak hour; Railroad Avenue southbound at East Avenue during the AM peak hour; and Village II Drive westbound at South Avenue during the PM peak hour. The study area intersections were also analyzed using the projected future traffic volumes with the existing geometry and traffic control at the intersections. The future analyses indicate that the Lake Avenue/Main Street intersection is the only intersection studied that will continue to operate at LOS "C" or better. The other four intersections are discussed in more detail below.

The eastbound, Old Hojack Lane approach to Lake Avenue is projected to decline from current LOS "C" to LOS "D" during the PM peak hour. This decrease in LOS is a direct result of increased traffic volumes both on Lake Avenue and the side roads. This type of operation is characteristic of an unsignalized side road intersection with a moderate to high volume arterial such as Lake Avenue.

The Main Street/Hovey Street intersection is projected to experience a decline in overall operation from LOS "B" to "C" during the PM peak hour. This decline is due to a very slight change in delay at 3.1 seconds per vehicle.

Table 1: Intersection Capacity Analysis Results

INTERSECTION	EXISTING CONDITIONS		20-YEAR PROJECTION CONDITIONS	
	AM	PM	AM	PM
Lake Avenue (Route 259) / Railroad Avenue / Old Hojack Lane (Unsignalized)				
Eastbound - Old Hojack Lane	C	C	C	D
Westbound - Railroad Avenue	C	C	C	C
Northbound Left - Lake Avenue (Route 259)	A	A	A	A
Southbound Left - Lake Avenue (Route 259)	A	A	A	A
ICU	**29.5%**	**39.2%**	**32.9%**	**44.1%**
Lake Avenue (Route 259) / West Avenue / Main Street / Mariah Street (Signalized)				
Eastbound - West Avenue	A	B	B	B
Westbound - Main Street	A	B	B	B
Northbound - Mariah Street	B	B	B	B
Southbound - Lake Avenue (Route 259)	C	C	C	C
Overall LOS / Delay in sec/veh /ICU	**B(12.9)/53.3%**	**B(15.0)/62.5%**	**B(14.2)/59.3%**	**B(18.1)/69.8%**
South Avenue (Route 259) / East Avenue / Main Street / Hovey Street (Signalized)				
Eastbound - Main Street	A	A	A	A
Westbound - East Avenue	B	C	B	C
Northbound - South Avenue (Route 259)	B	C	B	C
Southbound - Hovey Street	C	D	C	D
Overall LOS / Delay in sec/veh /ICU	**B(12.8)/44.1%**	**B(19.5)/57.5%**	**B(13.4)/48.2%**	**C(22.6)/63.6%**
Railroad Avenue / Upton Avenue / East Avenue (Unsignalized)				
Eastbound Left - East Avenue	A	A	A	A
Westbound Left - East Avenue	A	A	A	A
Northbound - Upton Avenue	C	C	C	C
Southbound - Railroad Avenue	D	C	F(63.2)	E(38.4)
ICU	**37.7%**	**42.0%**	**41.3%**	**47.4%**
South Avenue (Route 259) / Village II Drive (Unsignalized)				
Westbound - Village II Drive	C	D	D	E
Southbound Left - South Avenue (Route 259)	A	A	A	B
ICU	**35.3%**	**56.5%**	**39.0%**	**63.0%**

The intersection of East Avenue with Railroad Avenue is projected to operate at lower levels of service on the side roads similar to the Lake Avenue/Railroad Avenue intersection. The southbound Railroad Avenue approach is projected to decline from LOS "D" to "F" during the AM peak hour and from LOS "C" to "E" during the PM peak hour. It is noted that, although the Railroad Avenue approach is projected to operate at LOS "F", the delays will be on the order of 60 seconds per vehicle and the future traffic volume projections are unlikely to support signalization of the intersection as mitigation.

Traffic exiting Village II Drive at South Avenue is projected to operate at LOS "D" during the AM peak hour and LOS "E" during the PM peak hour. The Village II Drive approach is projected to decline from LOS "C" to "D" during the AM peak hour and from LOS "D" to "E" during the PM peak hour.

All of the study intersections are currently operating at less than 65% of their capacity during both peak hours. Under the future volume conditions, the intersections continue to operate at approximately 70% capacity or less during both peak hours. These percentages indicate that there is excess capacity available at these intersections and opportunities may exist for pedestrian and bicycle enhancements without significantly compromising vehicular capacities.

MOTOR VEHICLE SAFETY

Motor vehicle travel safety can be assessed by some of the same features that are applicable to pedestrians such as medians and the number and frequency of driveways. Left-turn lanes serve to improve safety by removing slower traffic from the main travel lane. Accident reports were investigated to assess the safety history at the intersections within the study area. The accidents included in the current review collectively covered a three-year time period from October 1, 2004 through September 30, 2007. During this period, thirty-six accidents were documented within the study area; comprised of 26 accidents at 6 intersections and 10 accidents in the segments between intersections including 3 accidents involving pedestrians on Main Street.

Accident rates were calculated at the intersections where accidents occurred and compared to average rates provided by the governing agencies for similar intersections. The calculated accident rates and statewide average rates are summarized in Table 2. Accident rates are reported in accidents per million entering vehicles (ACC/MEV).

Table 2: Summary of Accidents & Comparison of Rates

Intersection:	Total No. of Accidents	Intersection Accident Rate	Agency Average Rate
Lake/Railroad	2	0.24	0.22
Main/Lake-Mariah	5	0.45	0.22
Main/South	15	0.99	0.39
East/Railroad	1	0.10	0.22
South/Hazen	1	0.08	0.10
South/Village II	0	0.0	0.10
South/Hillside	2	0.19	0.10

The accident rate at the signalized intersection of Main Street/South Avenue is nearly three times the average rate for similar intersections. It is noted that all rear end collisions that were attributed to traffic stopped as a result of the signal were included in the total intersection accidents. Nine of the 15 collisions involved rear-end accidents which are characteristic of signalized intersections. The accident history for the Main Street/Lake Avenue/Mariah intersection documents accidents that occurred prior to installation of the new traffic signal. Four of the five accidents that occurred may have been prevented by a traffic signal. The other intersections studied have accidents rates that are lower than, or similar to, the average rates for similar facilities. There are no accident clusters or apparent patterns at any of these intersections. It is noted that 3 pedestrian collisions occurred in the block of Main Street between Lake Avenue and South Avenue. This indicates that pedestrians are not crossing at the intersections within the crosswalks.

PEDESTRIAN AND BICYCLE CONDITIONS

The current configuration of Main Street requires bicyclists to "share the road" with motorists. Given the existing traffic volumes, particularly during the morning and afternoon peak hours, the shared roadway use is between motorists and bicyclists is adequate primarily for assertive, skilled bicyclists. However, the perceived "comfort level" of intermediate and beginner (e.g. children) bicyclists is less than desirable on Main Street. Currently the Village does not have any designated bike lanes or off-road shared use paths to better accommodate all bicyclists' comfort and skill levels in the Village Center. There are sidewalks along both sides of Route 259 within the Village. Crosswalks are provided on Main Street at both signalized intersections and at the unsignalized South Avenue/Village II Drive intersection. Within Hilton's CBD, the number of commercial driveways and side street intersections, along with existing traffic volumes and various turning movements make the pedestrian environment less welcoming than other Village areas outside of the CBD.

According to NYSDOT, the sidewalk system is considered to be approximately 95% complete within the Village "limits". The following sidewalk coverage is noted:

- Complete on both sides of South Avenue from Main Street to Gursslin Lane (near the South Village Line).
- Complete on both sides of West Avenue from Main Street to Quest Elementary School and the sidewalks continue west to the West Village Line
- Complete on both sides of East Avenue to Fraser Drive/Parkwood Lane and then on the north side only to the High School
- Complete on both sides of Lake Avenue from Main Street to Orchard Street and then on the west side only to Tallwood Drive.

Existing view of South Avenue

Providing safe routes of travel for cars, bicycles, and pedestrians is a responsibility and priority for all communities. The safety of the Pedestrian Realm is appraised based on factors such as sidewalk width and quality, and the presence of a buffer zone, sometimes called the tree-lawn or the furnishings and edge zones. Pedestrian safety factors present in the Travelway include crosswalk length and quality and presence (or absence) of medians as well as the type of median. Bicycle safety is judged on 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 which 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. Table 3 provides an overview of these features in the Village of Hilton.

Highways can also be evaluated to determine their user friendliness as it relates to bicycle or pedestrian users as opposed to the traditional motor vehicle. As mentioned earlier in this section, the most common measure of effectiveness used for vehicular traffic, level of service (LOS), is based on capacity of the roadway and delay incurred by motorists. Levels of service can also be calculated for bicyclists and pedestrians using the same highway by considering the users' comfort level with the highway as it relates to buffer areas, sidewalk widths,

vehicular volumes and speeds, landscaping, obstructions, conflicts, crossing opportunities, etc. These features are some of the factors that are used in evaluating the bicycle and pedestrian levels of service and compatibility levels. Levels of service for pedestrians and bicyclists can be compared to those used to describe intersection operating conditions where LOS A and B generally describe above average conditions, C and D describe acceptable roadway performance, and E and F describe deficient facilities. It is important to note that not all roadways in a community should be expected to rate LOS A or B which indicates a performance level well above average. LOS A or B may be expected in locations such as college campuses, downtowns, tourist centers, and activity centers. LOS ratings of E and F describe degrees of unacceptable performance.

The Level of Service/Compatibility analysis, summarized in Table 3, indicates that all roadways provide acceptable LOS with only Main Street with moderately low compatibility for bicyclists. The analytical results for pedestrians indicate that all roads have acceptable LOS with East and South Avenues having slightly lower compatibility than other study roads. This is due partially to the smaller sidewalk and paved shoulder widths on these two facilities.

Table 3: Summary of Pedestrian & Bicycle Features in Hilton

Feature Adequate/Appropriate? (Y/N)	East Avenue	Lake Avenue	South Avenue	Main Street
Sidewalk width (ft)	6'/Y	6'/Y	6'/Y	6'/Y
Sidewalk quality	Y	Y	Y	Y
Curb Ramps	Y	Y	Y	Y
Buffer zone (ft)	~ 6'/Y	~ 6'/Y	~ 6'/Y	~ 6'/Y
Crosswalk length (ft)	49'/Y	48'/Y	45'/Y	49'/Y
Crosswalk quantity	1	1	1	1
Crosswalk quality	Y	Y	Y	Y
Medians	n/a	n/a	n/a	n/a
Bike lanes	Y†	Y†	Y†	Y†
Left-turn lanes	1	0	0	1
Travel lane width (ft)	11'/Y	11'/Y	11'/Y	11'/Y
On-street parking width (ft)	n/a	n/a	n/a	9'-10'/Y

† Bicycles use shared travel lanes

Table 4: Existing Pedestrian & Bicycle Levels of Service/Compatibility Analysis Results

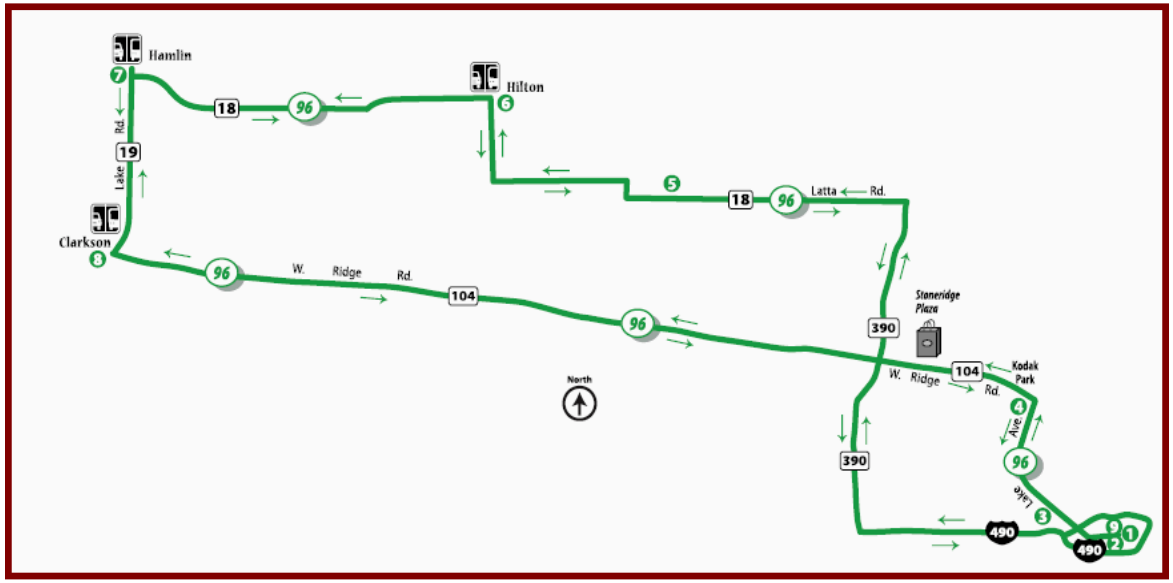
SEGMENT	Bicycle		Pedestrian	
	LOS	Compatibility Level	LOS	Compatibility Level
East Avenue	C	Moderately High	C	Moderately High
South Avenue	C	Moderately High	C	Moderately High
Lake Avenue	A	Extremely High	B	Very High
Main Street	D	Moderately Low	B	Very High

South Avenue, however, provides only average levels of service and moderate compatibility for pedestrians. These results are in line with the responses received in the community survey discussed in Section III.B. and indicate a need for improvements.

TRANSIT SERVICE

The Rochester Genesee Regional Transportation Authority has one transit route, Route number 96, that services the Hilton community. RTS Route 96 provides service from the Hilton/Hamlin/Clarkson communities to downtown Rochester during the weekdays. The transit stop in Hilton is located at the intersection of Railroad and Hovey streets. The first morning pickup leaves Hilton at 6:44 am and service runs through the evening. For the complete travel route see the map in Figure 11.

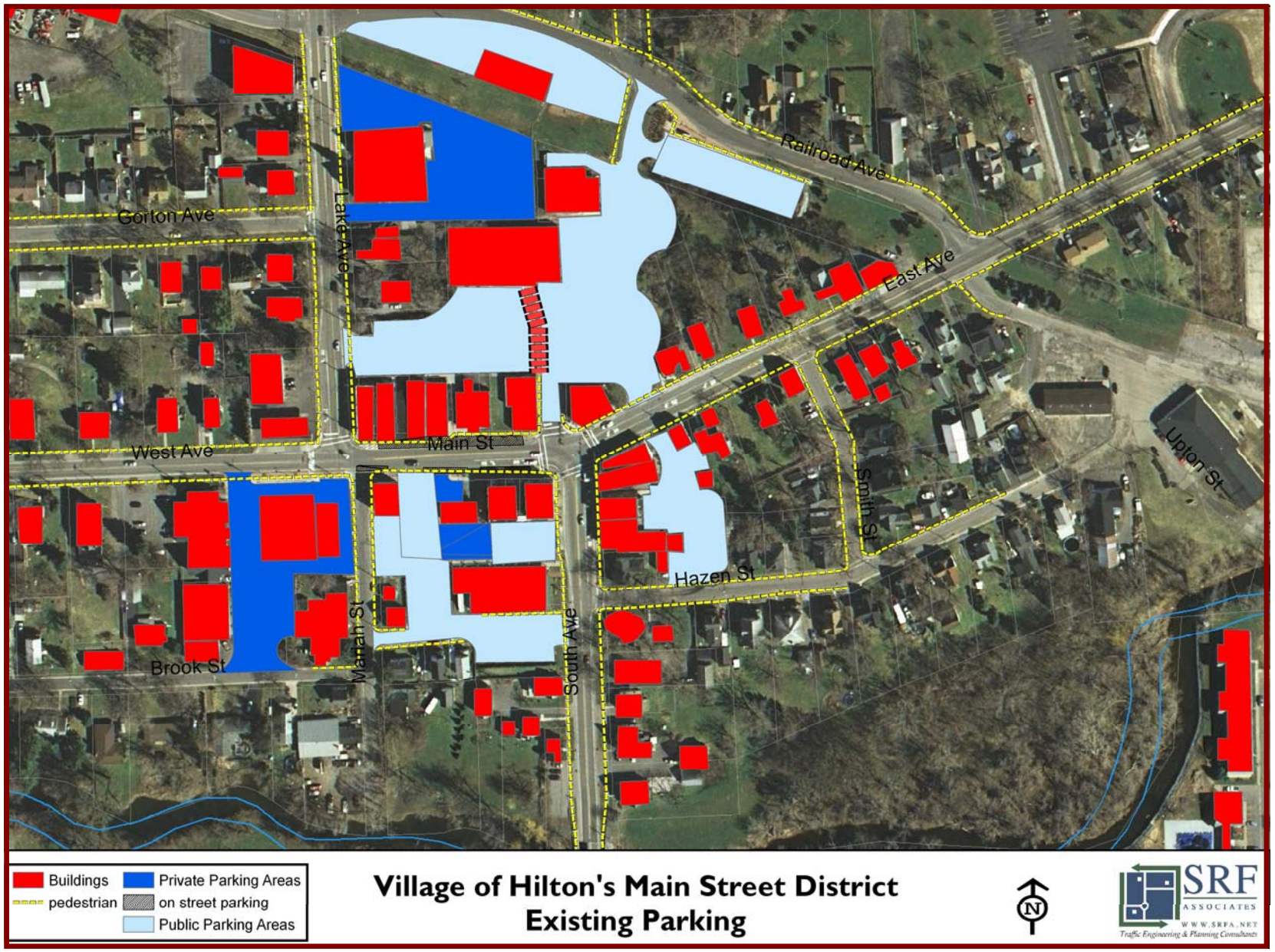
Figure 11: RTS Route 96 Hilton/Hamlin/Clarkson



D. Parking

The provision of conveniently located, adequate and safe parking is a key component to the success of a village business district. Figure 12 illustrates the location of parking facilities in the village center on the next page. On-street parking exists along both sides of Main Street within a 9- to 10-foot parking lane. Individual parking spaces are delineated with pavement markings. There are approximately 17 on-street parallel parking spaces and approximately 420 off-street parking spaces located in near-by parking lots for a total of approximately 630 parking spaces within the study area (includes parking at Hovey Square, Post Office, Hilton United Methodist Church, and Village II). In general, there is ample on and off-street parking within the heart of the Village to serve the existing business activity.

Figure 12: Existing Parking



III. Village of Hilton – Needs and Opportunities Assessment

A. Public Workshop Meeting

Meaningful community participation is critical in developing a reality based plan with support from local residents, business owners, and property owners. In order to gather meaningful public input, the Steering Committee and the Consulting Team held a community planning and design workshop on Saturday, August 18th at the Village of Hilton Community Center. The purpose of the workshop was to solicit input from Village residents, business owners, and property owners on the effectiveness of the transportation system within the central business district. The information gathered at the workshop has proven to be instrumental in identifying transportation related issues, opportunities, and the potential for improvements in the Village. Approximately 25 people attended the workshop.

The workshop began with an overview of the planning process and the status of the study. Following the presentation, attendees were separated into two working groups. The first group focused on east/west travel along West Avenue, Main Street, and East Avenue. The second group focused on north/south travel along Lake Avenue, Main Street and South Avenue.

Both groups were asked to discuss various aspects of the existing transportation system including: vehicular circulation, non-motorized travel options, traffic calming needs, potential gateway enhancements, and parking and access improvements. Each group went on a walking tour of their respective areas where they made observations and critiqued the transportation system. Upon completion of the walk-about, the groups returned to the Community Center to brainstorm the issues and opportunities with the aid of maps and drawings. At the end of the workshop, each group shared their findings with everyone in attendance, the key points from which are listed in the call-out box on this page.

Community members discuss transportation related issues on West Avenue during a walking tour at the planning and design workshop.

Key Points from the Workshop

- **Improve pedestrian circulation and safety, especially on Main Street and South Avenue near Village II.**
- **Better define the parking layout in Hovey Square.**
- **Establish a bike route south of Main Street.**
- **Address speeding into and out of the central business district.**

B. Community Transportation Survey

In order to verify the issues expressed by the Steering Committee and the attendees of the Downtown Design Workshop, a Community Transportation Survey was administered as part of this planning process. Approximately 1,800 surveys (Figure 13.)were mailed to Village residents in January, 2008. For a majority of Village residents, the one-page survey instrument was included in their quarterly Village water bills. Those residents that do not receive water bills (such as renters) were mailed the survey directly. Over 500 surveys were returned to the Village; a response rate of over 28%. The survey results are summarized on the opposite page (a detailed breakdown of the results is included in the appendix).

According to the survey results, over 56% of the residents visit the businesses located in the Main Street area, along South Avenue, and Village II Drive two to five times per week, with another 20% visiting these areas more than 8 times per week.

The survey questions were all phrased to convey a positive statement. As a result, a review of the survey results with the Steering Committee indicates that the questions with the least favorable response rate (less than 52%) represent issues that the Village should consider a higher priority and address in the near term. Questions with a favorable response rate between 57% to 63% are a moderate priority and should be addressed in the mid-term. Finally, the questions with a favorable response rate above 63% are a lower priority and should be addressed in the long term.

Figure 13: Community Transportation Survey

Village of Hilton
Circulation, Accessibility, & Parking Survey

The following survey is part of an ongoing study to make circulation, accessibility, and parking improvements within the Village of Hilton. The primary study area includes: ***1) Main Street from Lake Avenue to the South Avenue/Hovey Street/East Avenue intersection and 2) South Avenue from Main Street to Village II Drive.*** This study will also address transportation issues along the four major routes into the Village; South Avenue, Lake Avenue, East Avenue, and West Avenue. Thank you for taking the time to respond to this survey. Please be aware that the results of this survey will remain anonymous.

INSTRUCTIONS

Please respond to ALL questions. Mark only one box per question.	Shade boxes like this: ■ Not like this: ☒ ☑

	0	1	2	3	4	5	6	7	8+
1. How many times per week do you visit the businesses (stores, offices, and restaurants) located in the Main Street area (i.e. Hilton Family Pharmacy, Ben Franklin, etc), South Avenue (i.e. Ace Hardware, Post Office, etc), and Village II Drive (i.e. Big M Plaza)?	☐	☐	☐	☐	☐	☐	☐	☐	☐

Please use the scale on the right for the remaining statements.	Strongly Agree	Agree	Disagree	Strongly Disagree	No Opinion
2. I feel that walking along the sidewalks on Main Street is a safe and comfortable experience.	☐	☐	☐	☐	☐
3. I feel that walking along the sidewalks on South Avenue (north of Village II Drive) is a safe and comfortable experience.	☐	☐	☐	☐	☐
4. I feel safe crossing at the Main Street/East Avenue/Hovey Street intersection on foot.	☐	☐	☐	☐	☐
5. I feel safe crossing at the South Avenue/Village II Drive intersection on foot.	☐	☐	☐	☐	☐
6. I feel there is sufficient parking to serve the Main Street businesses.	☐	☐	☐	☐	☐
7. I feel the parking near Main Street businesses is convenient.	☐	☐	☐	☐	☐
8. If on-street parking is not available, I feel parking in a nearby parking lot is convenient.	☐	☐	☐	☐	☐
9. I feel street trees enhance the overall appearance and traditional feel of Main Street.	☐	☐	☐	☐	☐
10. I feel vehicular traffic flows well along Main Street.	☐	☐	☐	☐	☐
11. I feel vehicular traffic flows well along South Avenue (north of Village II Drive).	☐	☐	☐	☐	☐
12. I feel the current traffic and travel conditions create a safe and comfortable environment for children to walk to school along South Avenue (north of Village II Drive).	☐	☐	☐	☐	☐
13. I feel the current traffic and travel conditions create a safe and comfortable environment for children to walk along Main Street.	☐	☐	☐	☐	☐
14. I feel the current traffic and travel conditions create a safe and comfortable environment for Senior Citizens to walk along Main Street.	☐	☐	☐	☐	☐
15. I feel that riding a bike along Main Street is a safe and comfortable experience.	☐	☐	☐	☐	☐
16. I feel that riding a bike along South Avenue (north of Village II Drive) is a safe and comfortable experience.	☐	☐	☐	☐	☐
17. I feel the existing streets within the Village provide sufficient travel routes between my home and key destinations (ie. work, shopping, or schools).	☐	☐	☐	☐	☐
18. I feel that motorists obey the posted speed limits along the major routes into and out of the Village. (If you Strongly Disagree or Disagree, please indicate where you think speeding is occurring under the Comments/Issues section.)	☐	☐	☐	☐	☐

Other Transportation, Safety, Parking Related Comments and Issues: _____

Table 5: Community Transportation Survey Summary

	32% of residents feel that riding a bike along South Avenue (north of Village II Drive) is a safe and comfortable experience
	33% of residents feel that riding a bike along Main Street is a safe and comfortable experience
	38% of residents feel safe crossing at the South Avenue/Village II Dive intersection on foot
	44% of residents feel that motorists obey the posted speed limits along the major routes into and out of the Village
	45% of residents feel that the current traffic and travel conditions create a safe and comfortable environment for children to walk to school along South Avenue (north of Village II Drive)
	52% of residents feel safe crossing at the Main Street/East Avenue/Hovey Street intersection on foot
	57% of residents feel that the current traffic and travel conditions create a safe and comfortable environment for children to walk along Main Street
	61% the current traffic and travel conditions create a safe and comfortable environment for Senior Citizens to walk along Main Street
	63% of residents feel that vehicular traffic flows well along South Avenue (north of Village II Drive)
P	63% of residents feel there is sufficient parking to serve the Main Street businesses
	70% of residents feel that vehicular traffic flows well along Main Street
P	75% of residents feel the parking near Main Street businesses is convenient
	79% of residents feel that walking along the sidewalks on South Avenue is a pleasant experience
P	79% of residents feel that if on-street parking is not available, parking in a nearby parking lot is convenient
	88% of residents feel the existing streets within the Village provide sufficient travel routes between home and key destinations
	91% of residents feel that walking along the sidewalks on Main Street is a pleasant experience
	95% of residents feel that street trees enhance the overall appearance and traditional feel of Main Street

Motor Vehicle Traffic Flow
Bicycle Circulation & Safety
Street Trees & Landscaping
Pedestrian Circulation & Safety
P Parking

Higher Priority Concern
Medium Priority Concern
Lower Priority Concern

In addition to the formal survey questionnaire, the survey instrument included an area for additional comments or concerns. A sample of several comments received from the questionnaire are listed below:

Bike & Pedestrian Related Comments

- Need wider sidewalks
- Need better sidewalks, crosswalks, and pedestrian signs for South and Village II crossing. Not safe intersection for pedestrians.
- Bridge on South Ave is too narrow for pedestrians and bikes
- Crossing at Main/East/South/Hovey signal is dangerous (should consider "No Right Turn On Red" or pedestrian only phase)
- Parents won't let their kids bike or walk to school due to high speeds
- No benches for senior citizens

Traffic Flow Comments

- Install roundabout at Village II and South intersection
- Need another route into Village in addition to South Ave
- Connect Applewood Lane to East Ave
- Extend Old Hojack to relieve Main Street

Parking Comments

- Hovey Square is dangerous, poor visibility due to parked cars
- Signs needed to indicate public parking
- Could eliminate some on-street parking to improve visibility

In addition to the comments listed above, residents identified multiple locations where speeding is an issue, including;

- East Avenue
- West Avenue
- Lake Avenue
- South Avenue
- Several neighborhood streets

MEASURES OF SUCCESS

The Community Transportation Survey can be translated into measures of success for evaluating how changes to the transportation system impact the community positively or negatively. Transportation improvements often involve trade-offs: pedestrian improvements may come at the expense of bicycle lanes; bicycle lanes may require narrowing travel lanes; and pedestrian crossing improvements may result in greater delay to motorists. The community must decide which improvements meet their goals and objectives. To aid in this decision, "Community Objectives" have been developed based on the results of the Community Transportation Survey and the goals formulated by the stakeholders to address the future transportation needs of the Village. The following Community Objectives were identified:

Measures of Success

- **Survey Results**
- **Accident History/Rates**
- **Ped/Bike Levels of Service**
- **Pedestrian Conflict Survey**
- **Speed Monitoring Program**
- **Parking Surveys**

1. Multi-modal safety »»» measurement by crash analysis
2. Promote walking & bicycling »»» survey results
3. Reduce speeds on roadways entering the Village »»» measurement by periodic speed surveys
4. Maintain current vehicular access and capacity levels »»» LOS analysis, intersection capacity utilization, survey results
5. Maintain parking supply and convenience »»» maintain/update database of parking inventory and utilization
6. Improve aesthetics and community character via transportation enhancements »»» number of street trees, street furniture, etc.

The Community Transportation Survey results will serve as a key tool in gauging the Community's satisfaction with any improvements in the future.

In addition to the Community Transportation Survey, five other metrics can be used to measure the success of the proposed improvements. Accident records, pedestrian and bicycle levels of service, and pedestrian conflict surveys provide quantitative methods for evaluating safety improvements. Speed monitoring programs provide information related to the effectiveness of the proposed traffic calming enhancements and parking surveys can be used to evaluate the quantity and quality (i.e. convenience) of the parking modifications.

IV. Recommendations

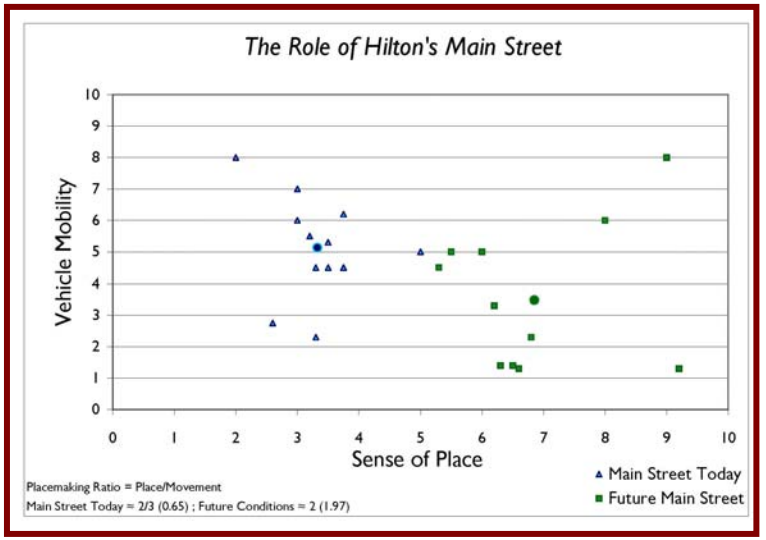
A. The Future Role of Main Street

MOVEMENT VS. SENSE OF PLACE

Land uses and the built environment often create a sense of place along highways, and the most important places are usually located near the center of a settlement or built up area. The importance of movement of motor vehicles can vary along the length of a highway and can change over time. Movement and place considerations are important in determining the appropriate design speeds, speed limits, and road geometry. Similarly, the form and character of the adjacent context must also be considered. As the importance of movement increases, the emphasis on place can take on less importance. Alternatively, as the importance of place and character increase, the emphasis on vehicular movement diminishes and becomes secondary to maintaining the qualities and features of a place. Each community member was asked to mark on the Movement vs. Place graph their view of Main Street's role in the future. Figures 14 and 15 illustrate examples and the results of this survey, respectively. The consensus indicates that Hilton's Main Street currently has more of an emphasis on vehicular movement than sense of place. Based on an analysis of data obtained at the workshop, there is a desire to place more emphasis on Main Street having a sense of place than serving as a conduit for vehicular movement.

Figure 14: Examples of Vehicular Movement vs. Sense of Place

Figure 15: Community Assessment: Vehicular Movement vs. Sense of Place



B. Proposed Main Street Modifications

A PLAN FOR MAIN STREET

A plan for the Main Street must address issues for all users; it must also address opportunities to compliment and enhance the entire "street", not just the travelway for motorists. A Preferred Plan for Main Street was developed based upon the Community Transportation Survey, input received at the Public Workshop, and guidance from the Steering Committee. The plan, shown in Figure 16: Cross Section and Figure 17: Main Street Preferred Plan Rendering, includes:

- Widening the pedestrian realm 4 feet on both sides of Main Street,
- Peak hour parking restrictions on the south side of Main Street near South Avenue,
- Conversion of Hovey Street to One-way northbound (enter-only), and
- Modification of the traffic signal at Main/East/Hovey/South to enhance pedestrian crossings and safety.

Figure 16: Proposed Main Street Cross Section

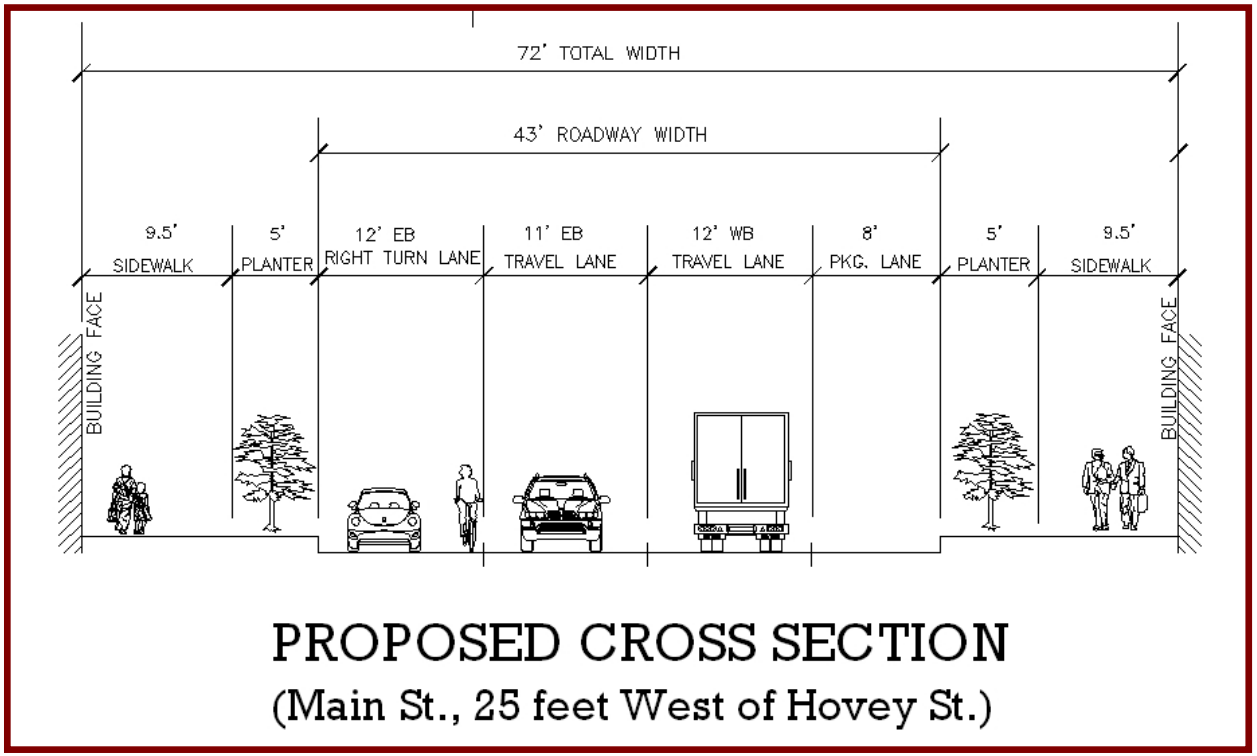
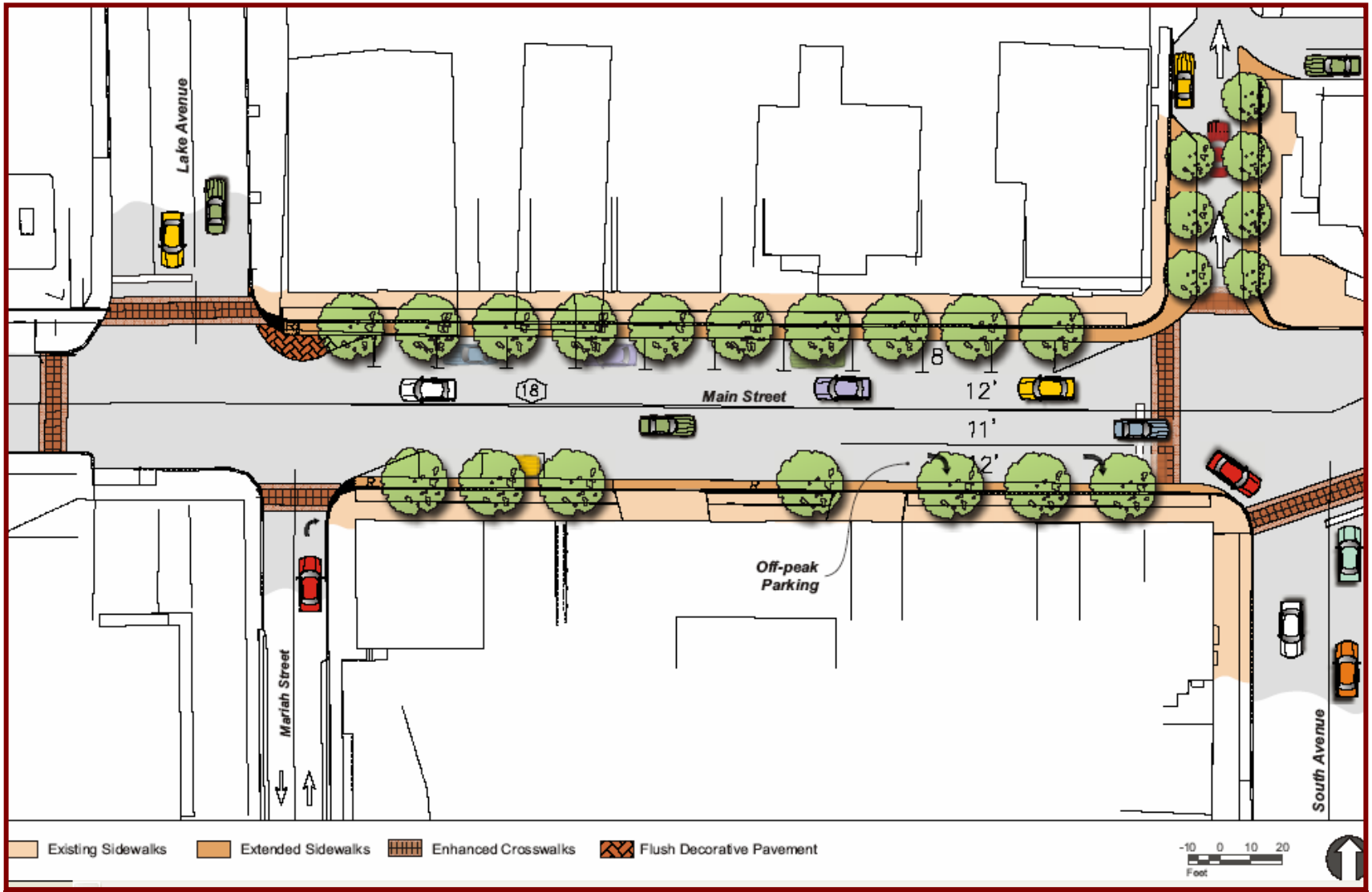


Figure 17: Main Street Preferred Plan Rendering



The Preferred Plan shown in the above rendering, includes flush decorative pavement, an extension of the existing sidewalks, new tree plantings, and enhanced crosswalks.

MAIN STREET SIDEWALKS

The built environment on any Main Street influences travel choice and conveys a feeling or sense of place, most importantly for pedestrian traffic. Sufficient space for pedestrians to walk, browse shop and relax contributes largely to whether or not a downtown Main Street is perceived as inviting to residents, shoppers, visitors and tourists. A vibrant and successful Main Street exhibits vitality with activity, predominantly pedestrian activity.

The existing pedestrian realm on Main Street is approximately 10 feet wide. It includes approximately 5 feet for walking and window shopping adjacent to shops, and another 5 feet for tree and other amenities in the curbside zone. There are currently no benches, trash receptacles, or bike racks on Main Street. The recommended reconfiguration of the Main Street travel lanes and on-street parking will allow for the expansion of the sidewalks by 4 feet on each side. Expanding the sidewalks to14 feet provides greater room for pedestrian flow and it also creates opportunities to expand the relationship between the buildings and the street with space for outdoor seating and merchandise display. There is also sufficient room for streetscape amenities such as benches, trash receptacles, and bike racks.

Sidewalk materials should be a combination of pavers and concrete which would improve the character and enhance the unique identity of Main Street. Stamped concrete and asphalt should be avoided. When color is added as an integral part of the concrete mix it generally works well for sidewalk applications. However, it requires correct installation and periodic maintenance to maintain the original appearance.

Figure 18 provides a visual rendering of the recommended sidewalk and streetscape improvements.

OTHER STREETSCAPE ENHANCEMENTS

As previously stated, an attractive public realm is one of the primary factors in creating a strong sense of place on a Main Street. The streetscape is certainly part of the public realm and there are several enhancement opportunities in Hilton.

Street Trees – Street trees are an important defining element for many cities and villages. As with historic architecture, porches, granite curbs, and sidewalks, street trees are features that are not often found in typical suburban developments. They provide shade which is not only beneficial to people but it extends the life of pavement as well. Along with aesthetic benefits, trees can improve the function and feel on the street by creating enclosure which makes the street feel narrower, therefore slowing traffic. They also bring life to the street and have proven to enhance the overall experience of a place.

Street trees can coexist with Main Street businesses. Rather than avoiding street trees, as business owners often suggest, it is important that the growth habit and placement of trees be well thought out to compliment commercial activity.

Recommendations:

a. Strategically place trees as to not obstruct storefront views and merchant signs.
b. Consider developing a tree management program (e.g. Tree City USA) to ensure that street trees remain a defining village element.
c. Include street trees on both sides of East Avenue from the Village line near Bennett Road to Main Street.

Street Furnishings – Currently there are very few street furnishing on Main Street. Strategically placed benches, trash receptacles, bike racks and planters will provide the needed amenities for both residents and visitors and add color and life to the streetscape. People watching is a popular and entertaining activity on the street and the benefits should not be overlooked.

Recommendations:

a. Develop standards for streetscape furnishings that include the manufacturer, model, and color for benches, trash receptacles, ash urns, bike racks, and planters.
b. Install furnishings on Main Street, Hovey Street and other streets where a high level of pedestrian activity takes place.

Figure 18: Proposed Main Street Sidewalks & Streetscape Enhancements Looking East from Lake Avenue

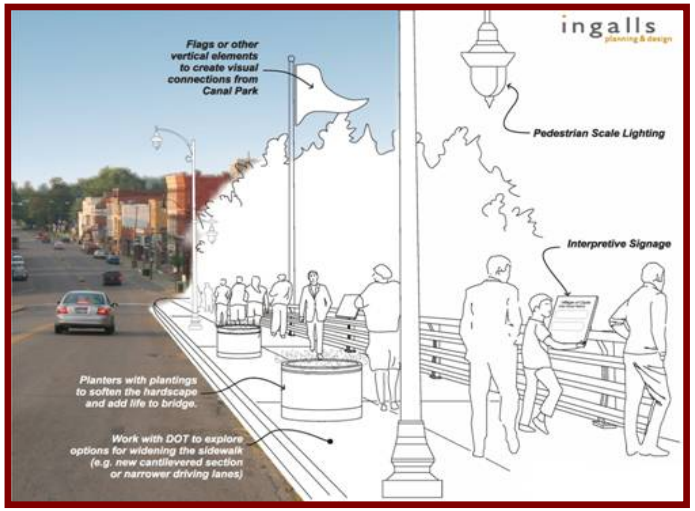
C. Pedestrian Enhancements

Pedestrian safety can be enhanced at the Main/Hovey/East/South intersection by modifying the traffic signal operation to provide a Leading Pedestrian Interval or LPI. Right and left turning vehicles can present safety concerns for pedestrians crossing during the WALK interval at signalized intersections. These safety concerns can be alleviated by programming the traffic signal to allow pedestrians to begin crossing before the vehicle traffic on the parallel street is given a green light. This is commonly referred to as a leading pedestrian interval (LPI). Research has shown that this treatment is associated with a decrease in pedestrian/motor vehicle conflicts and an increase in the percentage of motorists that yield right of way to pedestrians.

In addition to the LPI at the Main/Hovey/East/South intersection, countdown pedestrian signals are recommended at this intersection. Countdown pedestrian signals (CPSs) can be used to supplement or replace traditional pedestrian signals with flashing numbers that count down the number of seconds remaining until the end of the pedestrian change interval. This means that pedestrians can evaluate how much time they have to cross the street before the traffic signal changes. The combination of these two improvements will greatly enhance the safety of the pedestrian crossings at these two intersections.

Additional pedestrian enhancements include a gateway treatment at Railroad Street (discussed in detail in the section on Traffic Calming) and enhanced crosswalk treatments on West, South, East, and Lake Avenues. Some longer term pedestrian enhancements are proposed along South Ave in the vicinity of the bridge (listed in the box below). The photos to the right show the bridge today and a rendering of potential long-term pedestrian enhancements on a similar type bridge.

Existing view of South Avenue bridge



South Ave Pedestrian Enhancements

- **Create visual connection between the two sides using flags or other vertical elements**
- **Decorative bridge railing (e.g. art)**
- **Interpretive signage**
- **Plantings with multi-season interest**
- **Long term – wider sidewalks**

Pedestrian crossing improvements are also recommended along West Ave at Henry Street and at the Quest Elementary School (see Figure 19). These include enhanced crosswalks as well as in-road signing as shown in the photograph in Figure 20.

Figure 19: West Avenue Enhanced Crosswalks

Figure 20: In-road Pedestrian Crossing Sign

Enhanced Crosswalks – Clearly identifiable crosswalks are critical in creating a safe and pedestrian friendly streetscape. Concrete or brick pavers will help to bring prominence to the Main Street District and send a visual cue to motorists that pedestrian crossings are critically important. Stamped concrete and asphalt do not work well in crosswalks and should be avoided. The patterns and colors can not withstand high levels of traffic. Piano key type crosswalks are an effective, low cost alternative to pavers.

Recommendations:

Consider enhanced crosswalks at:

a. Main Street / South Avenue /East Avenue / Hovey Street intersection
b. Railroad Avenue / East Avenue intersection
c. Main Street / Lake Avenue
d. West Avenue in front of the Village Hall
e. South Avenue / Village II intersection (future roundabout)

Existing Sidewalks – Sidewalks exist on most village streets including South Avenue, West Avenue, Lake Avenue, and most of East Avenue. The sidewalks appear to be in good condition and part of the overall village sidewalk network.

Future Sidewalks – A contiguous pedestrian circulation network is an important component of any Village's transportation system. As new development and recreational opportunities take place, connections should be made to the existing sidewalk network.

Recommendations:

a. Connect the multi-use trail and pedestrian bridges as described on the following page to the existing sidewalks on Mariah Street and Upton Avenue with new sidewalks.
b. Develop sidewalks along both sides of East Avenue near the High School.

BICYCLE ENHANCEMENTS & CIRCULATION

The proposed Main Street plan and other proposed improvements also allow for the potential of providing designated bicycle lanes along West, East, Lake and South Avenues, connecting Village neighborhoods with downtown and other points of activity (e.g. Hovey Square, Schools, parks, etc). The New York State Department of Transportation (NYSDOT) has expressed their support of this proposal.

Existing 5 Mile Bike Route – The Village currently has a 5 mile bike route that is located primarily in the northwest quadrant. The route is marked with signs and, with the exception of short segments on East Avenue, Lake Avenue and Railroad Avenue, is located on residential streets with relatively low traffic volumes.

Recommendations:

Include bike lanes or "signed shared roadway" facilities on East Avenue and Lake Avenue as described below to enhance the existing 5 Mile Bike Route. The addition of bike lanes to roadways helps define road space for both vehicle traffic and bicyclists.

Future Bike Lanes – In a village, developing "complete" streets is an important transportation planning objective. When possible all users should be accommodated. There is room for bike lanes on South Avenue, West Avenue, Lake Avenue, and East Avenue if the travel lanes are narrowed. The existing street width will accommodate a 5 foot bike lane and a 10 foot travel lane in each direction. Main Street is a constrained condition and cannot accommodate an exclusive bicycle lane nor the typical 14 ft wide shared lane.

Recommendations:

Narrow travel lanes to 10 feet and include 5 foot bike lanes on South Avenue, West Avenue, Lake Avenue with approval from governing agencies. For East Avenue an alternative treatment is a "signed shared roadway." It is noted that this results in discontinuous bike

lanes through the Village due to the lack of bike lanes on the segment of Main Street between Lake and South Avenues. In this section a "signed shared roadway" is recommended. In the long-term alternative travel routes will be available for bicyclists through the Village connecting to the segments that have bike lanes.

Future Multi-use Trail & Pedestrian Bridges – Salmon Creek is an underutilized asset that should be incorporated into the long term transportation and recreational planning for the Village. Existing north-south pedestrian and bicycles connections are limited to South Avenue. Salmon Creek currently functions as a barrier. Developing a trail along Salmon Creek would provide an alternative route to traveling through the Main Street area and provide an additional recreational opportunity. New pedestrian bridges over the creek near Mariah Street and from Village II Drive to the Canning Street area would provide access for users on both sides of Salmon Creek. Sitting areas, picnic tables, and other amenities could be incorporated into Creek corridor plans.

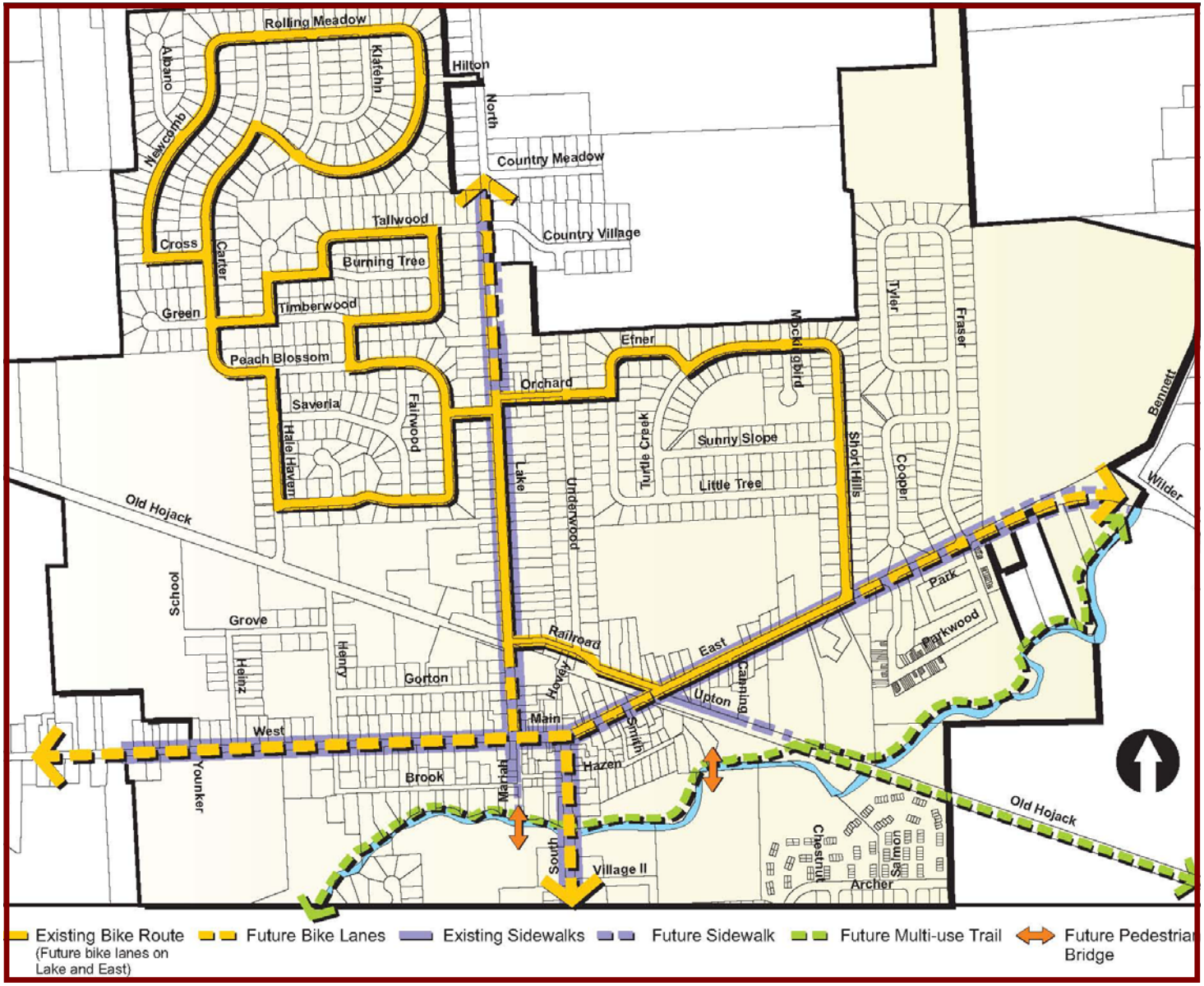
Recommendation:
Initiate a feasibility study for a multi-use trail along Salmon Creek with strong consideration given to developing the segment between the two pedestrian bridges as Phase I (see Figure 21).

VILLAGE PLANNING AND POLICY FOR A PEDESTRIAN & BICYCLE FRIENDLY COMMUNITY – The principal tools for the advancement and implementation of pedestrian and bicycle enhancements in the Village are the Comprehensive Plan, Subdivision and Zoning Regulations and Site Plan Review requirements. The Village recognizes that walking and bicycling are important forms of transportation and recreation that contribute to the health and quality of life of the community. The Community Transportation Survey Summary on page 29 also indicates that pedestrian and bicycle circulation and safety are a priority among Village residents.

Recommendations:

a. Amend the current Village Comprehensive Plan, and other regulations and procedures to encourage and support greater pedestrian and bicycle activity and safety.
b. Form a Pedestrian Safety Advisory Board to serve as a forum for identifying pedestrian and bicycle safety needs. This function may also be assigned to an existing group such as the Planning Board.
c. Develop a Pedestrian Safety Action Plan consistent with the amended goals and objectives of the Comprehensive Plan and transportation goals contained in this Study.
d. Form public and private partnerships to help fund pedestrian and bicycle improvements such as bike racks.

Figure 21: Bicycle & Pedestrian Circulation



D. Vehicular Levels of Service

The proposed modifications to Main Street will effect vehicular travel through the intersections of Main Street with Lake Avenue and Hovey Street. Peak hour parking restrictions on the South side of Main Street will allow the curb lane to be used for on-street parking during off-peak hours while the lane can be used as an exclusive right turn lane during peak travel times providing additional capacity at the Hovey Street intersection. Intermittent enforcement of parking restrictions may be required.

Hovey Square One-way Entrance (see Figure 22)
Conversion of Hovey Street to one-way northbound (enter only) operation is recommended in an effort to significantly improve safety and efficiency of the signalized intersection at Main and Hovey Streets. This change also provides an opportunity to create an exciting aesthetic treatment that instills a sense-of-arrival at the confluence of the major roadways in the village.

Figure 22: Hovey Street - One-way Northbound (Enter Only)

Wider sidewalks on each side of Hovey Street would create a friendly pedestrian zone by providing ample room for a wider pedestrian travel way and for streetscape amenities such as benches, trash receptacles, bike racks, and street trees. Both the Arlington Restaurant and the M&T Bank building are one-story buildings that provide minimal enclosure on the street so planting large trees with wide canopies will help to compensate for this existing deficiency along Hovey Street.

The existing decorative clock situated inside the Hovey Square parking lot is an underutilized feature. As part of the redevelopment of the Street, it is recommended that the clock be moved to a more prominent location, such as in a landscaped area on axis with Hovey Street. This would not only create an interesting vista down Hovey Street, but it will also improve the usefulness of the clock by enabling more people to see it from Main Street.

Converting Hovey Street to a one-way, enter-only roadway provides additional capacity at the Main Street intersection by eliminating an approach competing for green time at the traffic signal. This in turn allows additional green time to be allocated to the other approaches as well as to provide the Leading Pedestrian Interval (LPI) for enhanced pedestrian crossings. Table 6 shows a comparison of the vehicular levels of service for existing, future no-build (future traffic volumes with no geometric or operational changes), and future conditions (future traffic volumes) with and without each of the proposed improvements (One-way Hovey Street and LPI).

The Level of Service Comparison indicates that adding an LPI has a very small impact on the vehicular levels of service at Main and Lake. However, adding an LPI without also converting Hovey Street to one-way will add moderate delay (approximately 9 seconds per vehicle on average). Therefore, both intersection modifications are recommended to both improve vehicular capacity and operations as well as enhance the pedestrian crossings and safety.

Table 6: Vehicular Levels of Service Comparison

Existing	Existing with LPI	Existing LPI One Way
Main @ Lake B (12.3)	Main @ Lake B (12.3)	Main @ Lake B (13.0)
Main @ Hovey C (20.9)	Main @ Hovey C (29.4)	Main @ Hovey B (19.1)
Future No-Build with LPI		**Future One Way LPI**
Main @ Lake B (14.3)		Main @ Lake B (15.3)
Main @ Hovey D (35.3)		Main @Hovey C (20.4)

Figure 23: Hovey Street — Existing Conditions

Figure 24: Hovey Street — One-way Entrance Rendering

Preserving Capacity on Major Thoroughfares - The intensity of land use directly impacts the generation of traffic, total vehicular movements, roadway capacity and the number of pedestrian and vehicular conflicts. As vehicular left-turn movements from major thoroughfares increase due to new development pressures, the greater the impact and delay experienced by motorists traveling these routes,

Various design, safety, and land use elements preclude the opportunity for constructing dedicated left-turn lanes on major routes without significant impact to the existing environment. These include existing driveway and roadway locations, drainage structures, parking areas, right-of-way constraints and nominal building setbacks, and existing land uses. The uncontrolled use of left-turn lanes on the major routes serving the Village would be detrimental to the character of the Village of Hilton.

The Village of Hilton recognizes this and the need to provide a practical balance between the need for access to land development and the need to preserve the safe and efficient flow of traffic along major travel routes, while preserving the village character.

Recommendation:

The widening of village arterial routes for the purpose of accommodating left-turn site development traffic should be discouraged. If a traffic impact study performed in accordance with NYSDOT study requirements determines that a left-turn lane is justified along Routes 18 and 259, and East Avenue, the intensity of land development should be limited to a level such that a left-turn lane is not warranted. Under such conditions, further development shall be limited until alternative means of access for future development beyond the warrant threshold can be attained.

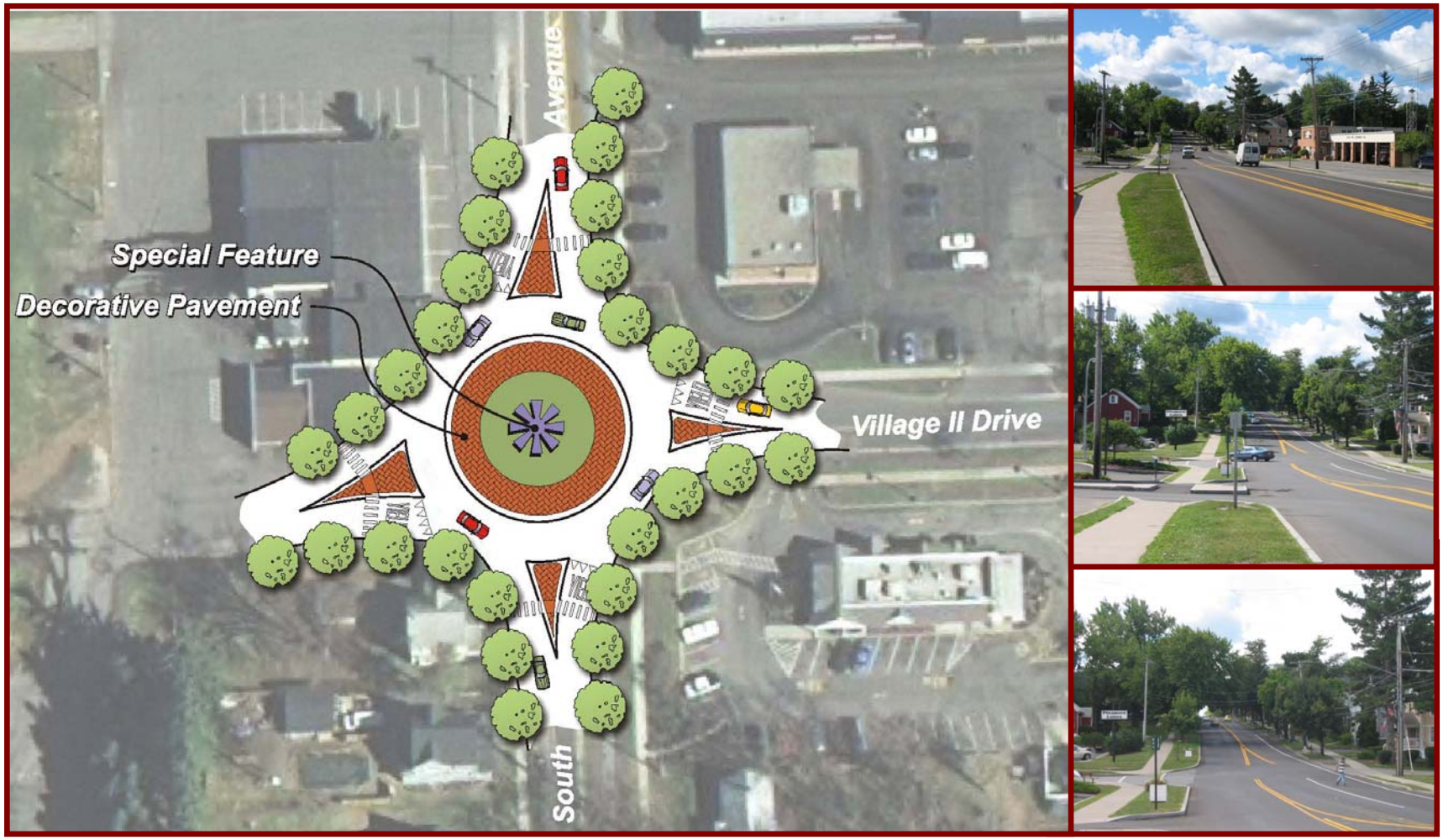
E. Proposed Roundabout at Village II Drive

In addition to the improvements proposed for Main Street, a new modern roundabout is proposed at the intersection of South Avenue with Village II Drive. As previously indicated, traffic exiting Village II Drive at South Avenue is projected to operate at LOS "D" during the AM peak hour and LOS "E" during the PM peak hour and the Village II Drive approach is projected to decline from LOS "C" to "D" during the AM peak hour and from LOS "D" to "E" during the PM peak hour. While a new traffic signal at this location would provide improved control of right-of-way at this intersection, the traffic volumes exiting Village II Drive are greater during the PM peak hour and are not sustained throughout the remainder of the day indicating that traffic signal warrants may not be met in the future. In addition, a new traffic signal would reduce delays for traffic exiting Village II Drive but would do so at the expense of increased delays for through traffic on South Avenue. An alternative to a new traffic signal is to install a modern roundabout at this intersection to control right of way as well enhance safety and provide traffic calming benefits. Benefits of a roundabout compared to traditional intersections and traffic signals are listed in Table 7. Analysis of the future (20 Yr) AM and PM peak hour traffic volume conditions with a roundabout in place, yields highly acceptable operation, indicative of LOS A on all approaches during both peak hours periods. The potential for installation of a roundabout at this intersection should be

Table 7: Roundabout Benefits

Safety • Fewer conflict points • Lower speeds • Easier decision making	***Environment*** • Less cars waiting/idling • Reduced fuel consumption • Less air pollution
Capacity • Less delay • Higher capacity thresholds • More efficient in off-peak hours	***Aesthetics*** • Creates a gateway that provides a sense of place • Can be used to celebrate local culture & heritage

Figure 25: Village II Drive Conceptual Roundabout Layout & Existing Condition Photos



kept in mind as development occurs in the vicinity of the intersection. Appropriate measures should be taken to insure that the necessary land area is available if and when a roundabout is constructed at this location. Figure 25 depicts a conceptual layout for a proposed roundabout at the South Ave/Village II Drive Intersection.

F. Traffic Calming Enhancements

In many cases, concerns regarding traffic speeds and high traffic volumes (and the associated residential issues such as noise and air quality) can be addressed using three important tools: education, enforcement, and engineering.

EDUCATION

Public education can be an effective tool to help change the attitude and behavior of drivers. Some educational efforts that can be used include: neighborhood meetings, a traffic safety newsletter, speed trailer, signing, and turn restrictions.

ENFORCEMENT

Increased levels of law enforcement may encourage motorists to drive at the posted speeds or penalize those who do not. This approach is effective when consistently high levels of enforcement are implemented, which is a costly response to the problem.

ENGINEERING

A structural modification is made to the roadway environment that either prohibits certain vehicular movements or encourages vehicles to drive at reduced vehicle speeds.

Menu of Applicable Tools

- **Raised Crosswalks**
- **Raised Intersections**
- **Curb Extensions at Intersections**
- **Pavement Narrowing**
- **Gateway Treatments**
- **Streetscaping Techniques (e.g. land-scaping, street furniture, etc.)**
- **Enhanced Crosswalks w/in-road sign**
- **On-street Parking**
- **Bike Lanes**

Traffic calming enhancements previously discussed include enhanced crosswalks and a roundabout at Village II Drive. In addition to these improvements, the following menu of applicable tools may be used in the future to provide enhancements throughout the Village. A gateway treatment is proposed at the East Avenue/Railroad Avenue intersection on the east side of the Village. The existing and proposed conditions for this intersection are shown in Figures 26 and 27 on the following page. Additional examples are shown in the pictures to the right.

Figure 26: Traffic Calming Enhancements at East/Railroad

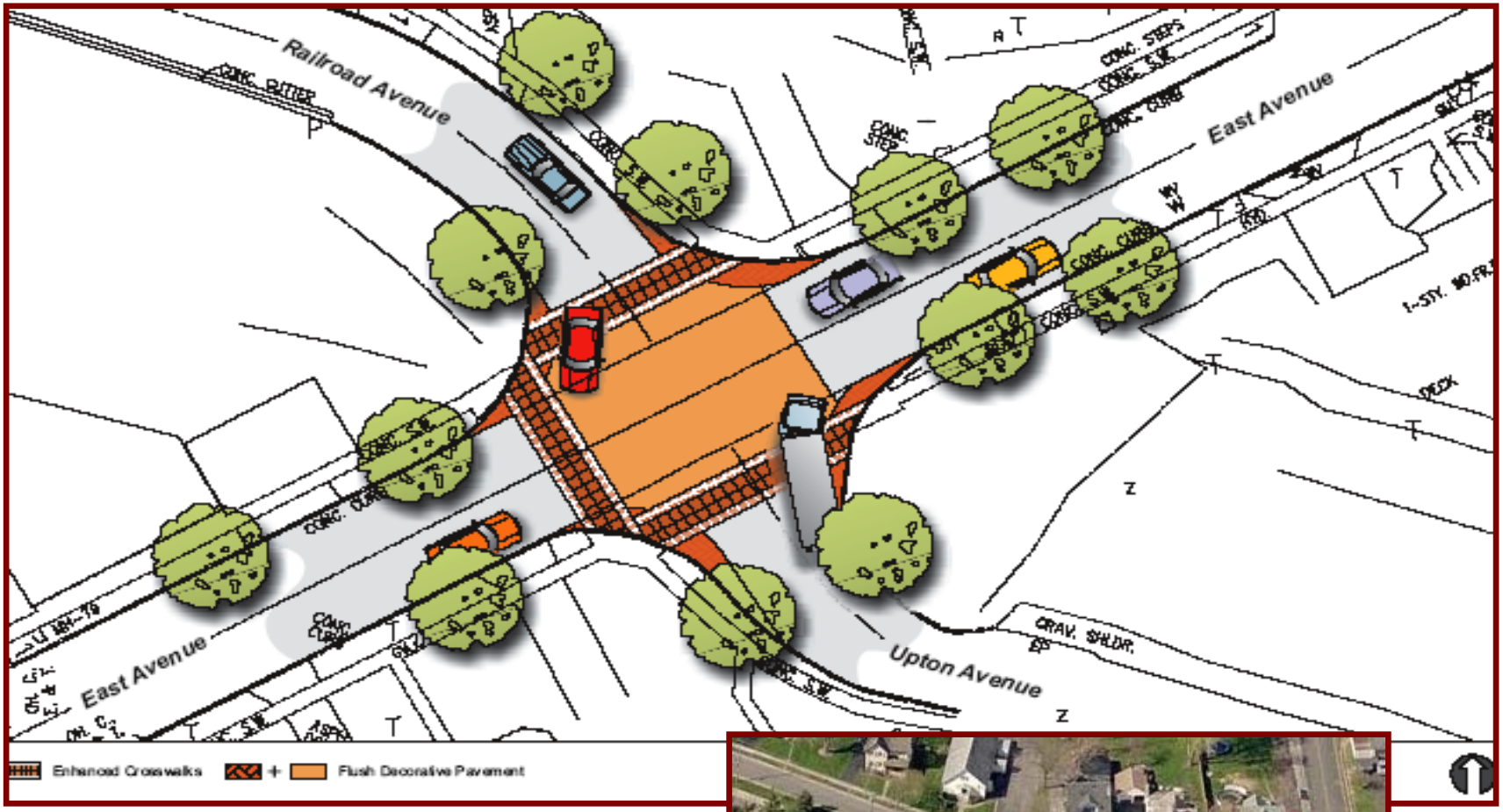


Figure 27: Existing Conditions at the Railroad and East Intersection

G. Community Connections

"To disperse traffic and avoid bottlenecks, the street network must provide many connections between activities. To encourage walking, bicycling, and transit use, the network must provide reasonably direct routing. Curvy, discontinuous streets are no problem for automobiles at 35 miles an hour, but make trips long for pedestrians at three miles an hour."

~ Reid Ewing

The sketches on the opposite page provide examples of two types of street networks, a highly connected network on the left and a network with low connectivity on the right. More specifically, the sketch shown on the left is a generic example of a traditional street grid network associated with a village setting found across the northeast United States, including Hilton. By comparison, the sketch on the right is a generic example of a more suburban street pattern, consisting of cul-de-sacs that have been developed in Towns since the 1960's. The advantages of the traditional street network and the disadvantages of a suburban network are summarized on the following page.

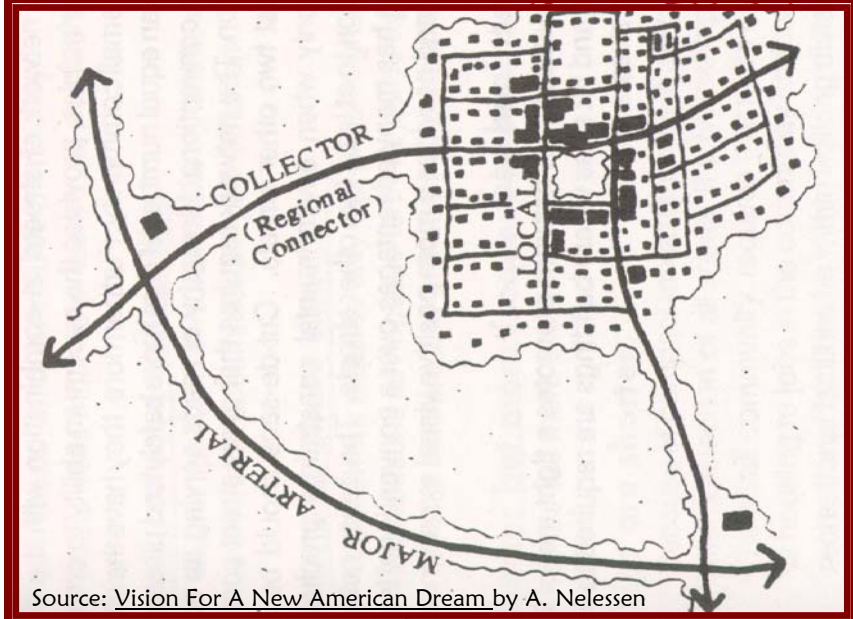
Over the past four decades, the Village of Hilton has grown by 4,522 residents, occupying neighborhoods in each quadrant of the Village. As the Village and surrounding areas continue to experience residential growth, the pressure on the local transportation system has increased. As the Village has grown, it has fostered the development of a neighborhood street pattern that is dominated by inter-connected streets and sidewalks. In addition, Hilton has used "stub roads" to provide opportunities for future connectivity between the existing Village neighborhoods and undeveloped areas of the Town. These "stub roads" should be continued as the areas adjacent to the Village are developed for new residential uses.

Throughout this planning process, the need for additional travel routes between existing neighborhoods, commercial areas and community resources has been articulated by residents. These include connecting:

- The neighborhoods in the southeast quadrant (Hillside Drive, Parma View Drive, Archer Drive) to East Avenue or Wilder Road, possibly using Old Wilder Road as a terminus.
- West Avenue to Dunbar Road with a north/south collector road between Collamer Road and the School Campuses.
- The Canning Street area to Manitou Road using the abandoned railroad bed.

These connections will increase travel options for residents and reduce the pressure on the Main Street area to accommodate north/south and east/west travel through the Village. For example, one of the primary destinations within the Village is the High School Campus. The only reasonable travel route from the neighborhoods located in the southeast quadrant of the Village to the High School is to use South and East Avenues. A direct connection to East Avenue or Wilder Road eliminate the need for residents to travel through the Central Business District in order to visit the High School. A good example of the benefits of additional network connections is Old Hojack Road. The development of Old Hojack Road between Collamer Road and Lake Avenue has provided existing and new residents moving into All Seasons Subdivision with direct access into the Village. As a result, pressure on Dunbar Road, Lake Avenue, the southern portion of Collamer Road, and West Avenue has been reduced.

Example of a street network with high connectivity

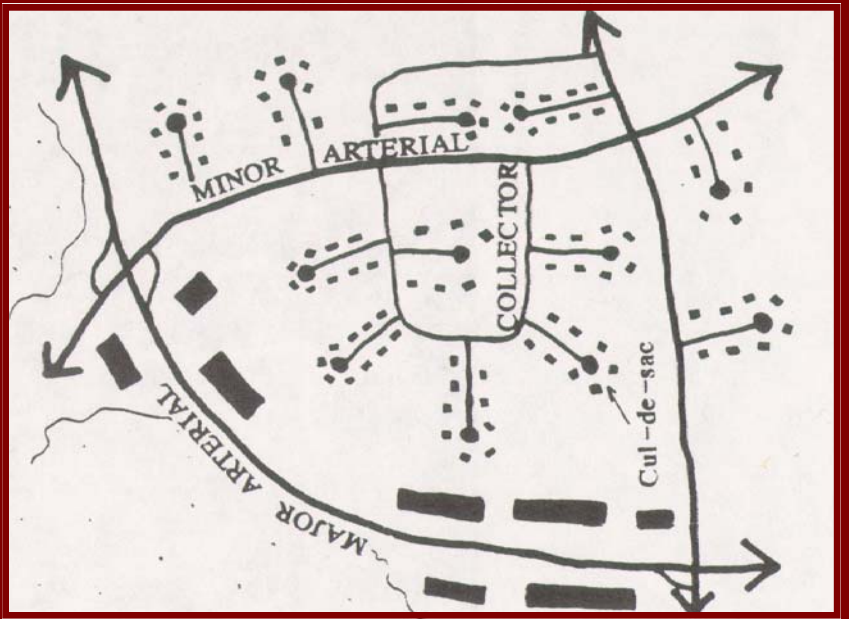


Source: Vision For A New American Dream by A. Nelessen

Advantages

- Disperses vehicular traffic evenly throughout neighborhoods; reducing the need for traffic signals; Provides an environment that is conducive to walking and bicycling; and
- Creates a "sense of place" within a community.

Example of a street network with low connectivity



Disadvantages

- Concentrates traffic congestion at a small number of intersections;
- Discourages walking and biking; and
- Increases the reliance on the automobile, increasing the number of vehicle miles traveled in a community.

The proposed network connections can be developed over time by the public or private sector. The Town and Village should work cooperatively to identify the preferred alignments of the future road segments. Once the locations have been identified, the community could choose to undertake the construction of new collector streets as a publicly funded project. A good example of this is the Old Hojack Lane project undertaken by the Village. A second option is to require developers to build a new collector road facility that is consistent with the preferred alignments previously identified or construct an interconnected series of residential streets as new neighborhoods are constructed.

H. Hovey Square Parking

Two alternatives have been developed for reconfiguration of the Hovey Square parking area. Figure 28 shows the existing Hovey Square parking area which currently provides access for through traffic using Hovey Street through the parking lot. Figures 29 and 30 depict two options for reconfiguring and expanding the Hovey Square parking area. The primary difference between the alternatives is the presence or absence of a convenient north/south route through the parking area from Hovey Street. Alternative A (Figure 29) allows vehicles to travel along a "spine" through the parking area and out to Railroad Ave to the north. Alternative B (Figure 30) severs the "spine" using landscaped islands creating a circuitous route from Main Street to Railroad Avenue through the parking lot. Both alternatives will improve the overall operation and safety of the existing and future parking area. Table 8 summarizes the Americans with Disabilities Act (ADA) guidelines for providing accessible parking spaces.

Figure 28: Hovey Square Parking Area

Table 8: ADA Guidelines for Accessible Parking

Total Parking in Lot	Required Minimum Number of Accessible Spaces
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1000	2 percent of total
1001 and over	20 plus 1 for each 100 over 1000

Figure 29: Hovey Square Parking Alternative A

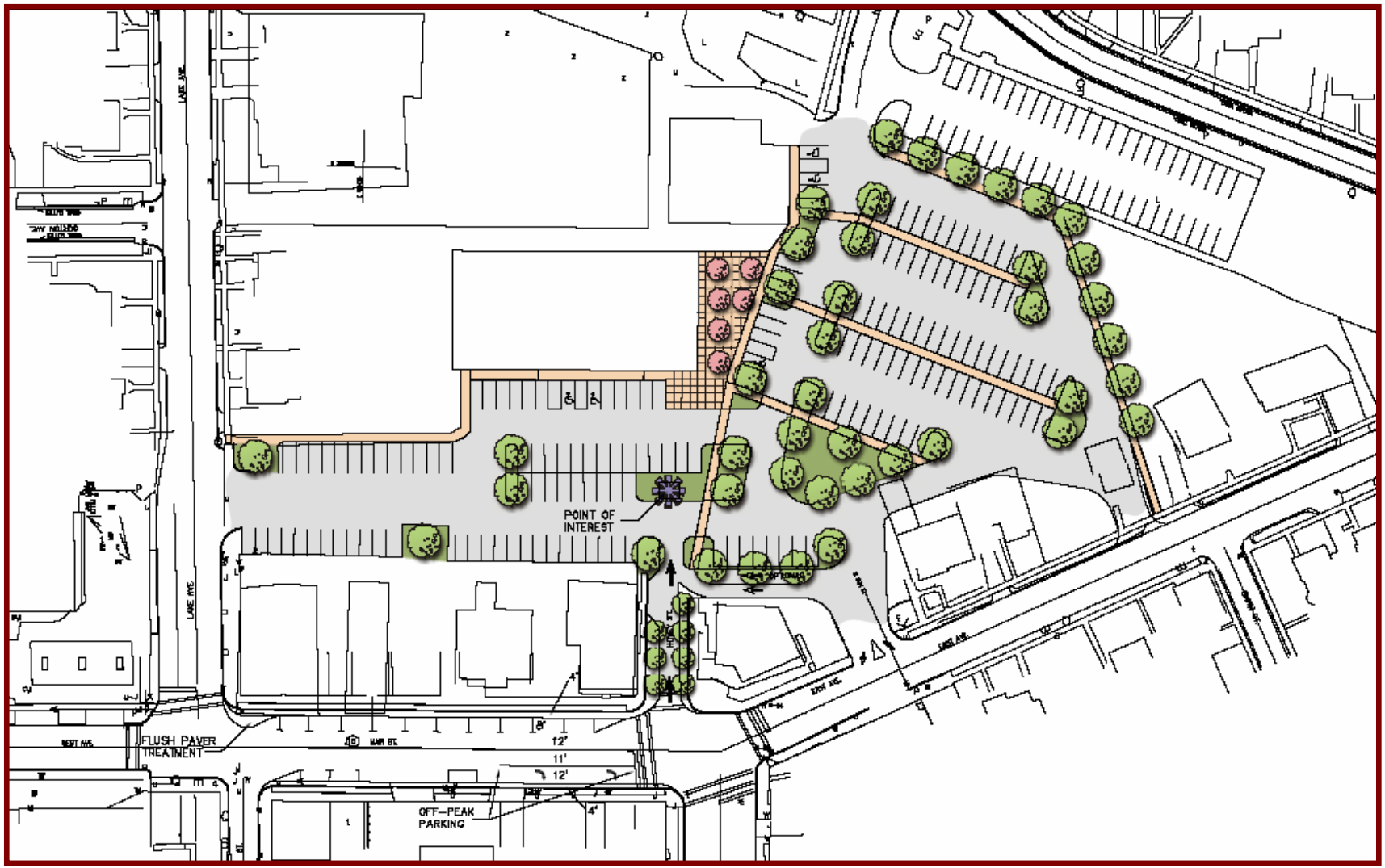
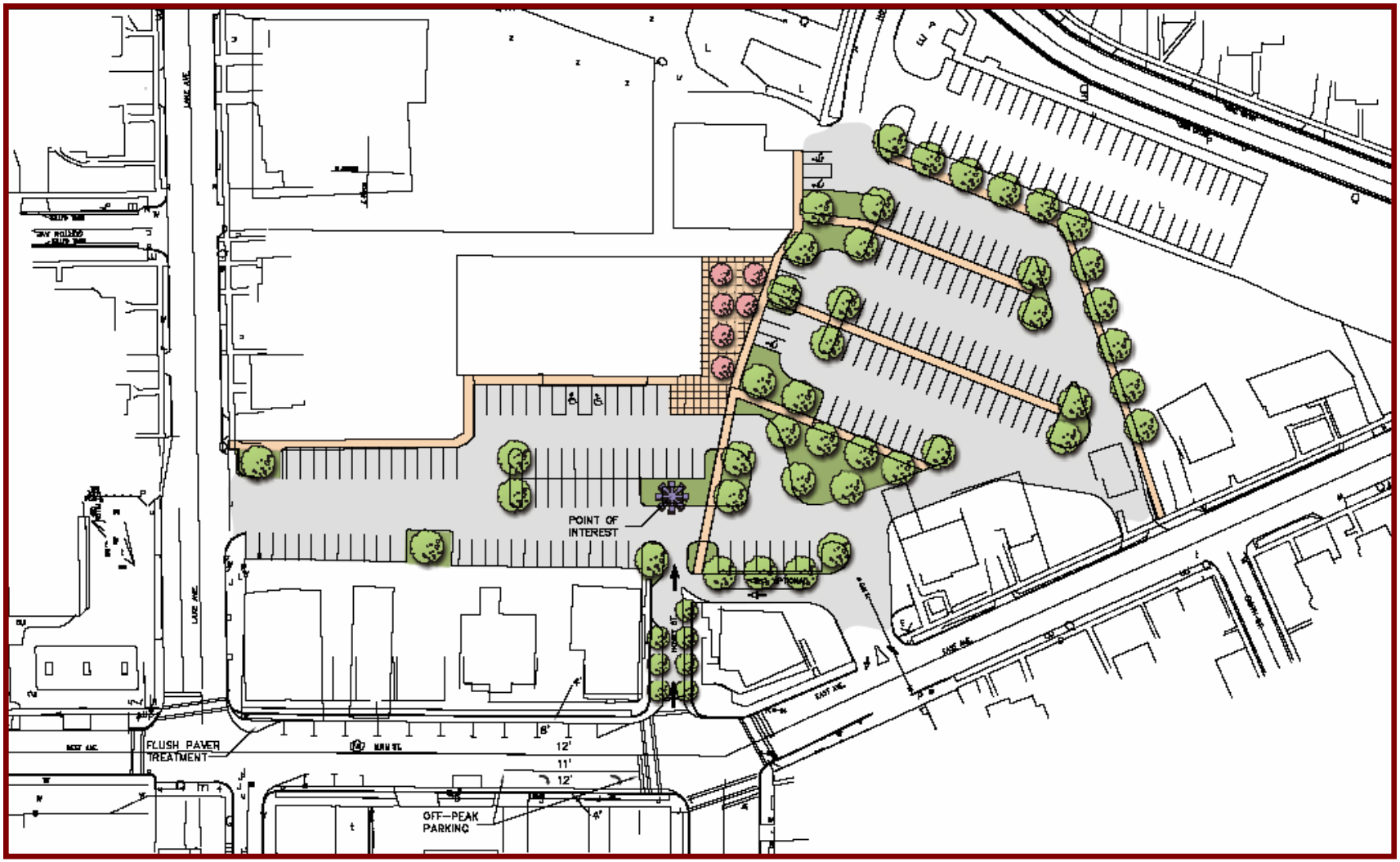


Figure 30: Hovey Square Parking Alternative B



V. Implementation & Funding

Recommendations for implementation of the proposed improvements are outlined on the following pages. They are subdivided into three categories: immediate to near term(0-5 years), medium term (5-10 years), and long term (10-20 years). Many of the Immediate to Near Term recommendations can be implemented as part of ongoing maintenance and other programs while others in this phase of implementation are either relatively low cost modifications or funding for these types or improvements may be available. Medium Term recommendations require more planning and funding to implement and can likely be accomplished in the 5 to 10 year timeframe. The Long Term recommendations are generally more expensive and are likely to require significant planning to implement. It is noted that the longer timeframes may more closely align with typical NYSDOT timeframes used for programming funding. Specific improvements may be made sooner as funding becomes available. Opportunities for funding and a description of the funding sources that are available are included on the following pages.

The Village of Hilton may also consider implementing a Capital Improvement Program to providing their own funding for various projects and improvements.

FUNDING OPPORTUNITIES

RECOMMENDATIONS	CHIP	MSP	SRTS	EPA - SG	TEP	SC	DEC-UFG	QC	TIP	RTP	MISC
IMMEDIATE TO NEAR TERM (0-5 YEARS)											
Modify existing signal to include Leading Pedestrian Phase			●		●						1
Install pedestrian "countdown" signals @ Main & South			●		●						1
Add striping or other treatment (e.g. Streetprint) to highlight crosswalks			●		●						1
Modify existing striping to include bike lanes			●		●						1,2
Install parallel parking space "tees" along Main Street					●						1,2
Install gateway treatment @ Railroad & East			●		●						
Convert Hovey Street to one-way northbound with pavement markings & signal modifications			●		●						2
Work with Town to designate new street connections				●		●		●			3
Complete feasibility study for trail along Hojack railbed										●	4
Develop connector roadways linking Town & Village	●					●					5
Install minor pedestrian enhancements on South Ave at the bridge (flag poles, interpretive signage, etc)		●	●		●						
Develop pedestrian, bicycles, & trails master plan											3
Work with Sheriff Department to implement speed limit enforcement program (ticketing, education, etc)			●								6

CHIP - New York State Consolidate Local Street & Highway Improvement Program; MSP - Main Street Program; SRTS - Safe Routes to School; EPASG - US Environmental Protection Agency Smart Growth Program; TEP - Transportation Enhancement Program; SC - Small Cities Grant; DECUFG - Department of Environmental Conservation Urban Forestry Grants; QC - New York State Quality Communities; TIP - Transportation Improvement Program; RTP - Recreational Trails Program

FUNDING OPPORTUNITIES

RECOMMENDATIONS	CHIP	MSP	SRTS	EPA-SG	TEP	SC	DEC-UFG	QC	TIP	RTP	MISC
MEDIUM TERM (5-10 YEARS)											
Install enhanced crosswalks (e.g. Streetprint, stamped concrete) throughout the study area			●		●	●					1
Install gateway treatment at East/Railroad (aesthetic gateway treatment)			●		●						
Construct physical improvements to Hovey Square parking lot to achieve desired Alternative						●					
Install roundabout at Village II intersection	●				●	●			●		
Install major pedestrian enhancements on South Ave at the bridge (lighting, planters, decorative railing)			●		●				●		
Construct pedestrian and bicycle bridges over Salmon Creek			●		●				●	●	
Develop trail along Salmon Creek between Mariah Street and the Canning Street Area			●		●				●	●	
Develop connector roadways linking Town & Village	●					●					**5**
LONG TERM (10-20 YEARS)											
Construct segments of pedestrian, bicycle and trails plan	●	●	●		●	●			●		
Reconstruct Main Street & Hovey with wider sidewalks	●	●	●		●	●	●		●		2
Develop connector roadways linking Town & Village	●					●					**5**

MISC Funding Sources

1. NYSDOT ongoing programs
2. NYSDOT in partnership with the Village
3. GTC - Unified Planning Work Program
4. GTC - Regional Trails Initiative/Priority Trails Advancement
5. Public / private partnership
6. Monroe County Sheriffs Dept.

GRANT FUNDING OPPORTUNITIES

NAME OF FUNDING SOURCE	DESCRIPTION	WEB SITE	APPLICATION DEADLINE	FUNDING AMOUNT AVAILABLE
NYS Quality Communities Clearinghouse	Listing of Grants and Financial Assistance for NYS	http://www.qualitycommunities.org/grants.shtml		
New York State Consolidated Local Street & Highway Improvement Program (CHIP)	The objective of the New York State Consolidated Local Street & Highway Improvement Program (CHIP) is to assist localities in financing the construction, reconstruction, or improvement of local highways, bridges, sidewalks, or other facilities that are not on the State highway system. Projects must have a useful life of at least 10 years and be located in the public right-of-way.	https://www.nysdot.gov/portal/page/portal/programs/chips	Requests can be made quarterly; Feb, May, August, & Nov 2008	The annual allocation is calculated according to the formula specified in Section 10-c of the Highway Law.
New York Main Street Program (MSP)	The NY Main Street grant program provides funds from the New York State Housing Trust Fund Corporation (HTFC) to business improvement districts and other not-for-profit organizations that are committed to revitalizing historic downtowns, mixed-use neighborhood commercial districts, & village centers.	http://www.nymainstreet.org/	Most recent deadline was March 25, 2008	Maximum $200K; up to $25K available for streetscape improvements with no match requirement
New York Safe Routes to School (SRTS)	Safe Routes to School (SRTS) is a federal, state and local effort to enable and encourage children, including those with disabilities, to walk and bicycle to school — and to make walking and bicycling to school safe and appealing.	https://www.nysdot.gov/portal/page/portal/divisions/operating/opdm/local-programs-bureau/srts	Most recent deadline was April 1, 2008	$25K-$150K for non-infrastructure projects; $25K-$400K for infrastructure projects
Community Development Block Grant (CDBG)	The Small Cities CDBG Program provides funding to eligible communities for the development of projects that address new or aging infrastructure. Although streetscape enhancement projects are not eligible, the Village could obtain funding to re-construct the water and sewer lines under Main Street at the time the enhancements are put into place. Technical Assistance grants to develop strategic planning documents are also available by this agency.	http://www.nysmallcities.com/FundingOpportunities/fundingavailability.asp?gid=30	Most recent deadline was April 21, 2008	$400K-$650K for Towns, Cities, or Villages depending on the nature of the project
US Environmental Protection Agency, Office of Smart Growth (EPASG)	The SGIA program is an annual, competitive solicitation open to state, local, regional, and tribal governments (and non-profits that have partnered with a governmental entity) that want to incorporate smart growth techniques into their future development.	http://www.epa.gov/smartgrowth/index.htm	Most recent deadline was May 8, 2008	Technical Assistance from EPA Smart Growth Team

GRANT FUNDING OPPORTUNITIES

NAME OF FUNDING SOURCE	DESCRIPTION	WEB SITE	APPLICATION DEADLINE	FUNDING AMOUNT AVAILABLE
Transportation Enhancement Program (TEP)	In recognition that transportation systems are influenced and impacted by more than the condition of the traditional highway and bridge infrastructure, this program enables funding for transportation projects of cultural, aesthetic, historic and environmental significance.	https://www.nysdot.gov/portal/page/portal/programs/tep	June 27, 2008	Varies, 20% local match required
NYS Small Cities Technical Assistance Grants (SCTAG)	Municipalities across New York State often have some specific issues or goals that they would like to achieve, but do not have the resources to turn the ideas into a plan of action. The Office for Small Cities provides technical assistance grants to communities to conduct research, analysis and development of a strategic plan that will guide local community development efforts.	http://www.nysmallcities.com/ProgramInformation/documents/TA.pdf	Every Year, Late Summer	Varies, 40% match required
NYS DEC Urban Forestry Grants (DECUFG)	Grants are designed to encourage communities to actively enhance tree cover along their streets and in their parks, to properly care for and maintain their community trees, to develop tree inventories and management plans, and to inform their residents of the value and benefits of urban trees.	http://www.dec.ny.gov/lands/5285.html	Most recent deadline was June 4, 2008	$25K to $75K depending on community size with a 50% local match requirement
NYS Quality Communities Program (QC)	Funds are available for planning projects that revitalize downtowns, develop strong economies and protect environmental resources.	http://www.qualitycommunities.org/index.asp	Last round, Nov 2006	No minimum match requirement
Statewide Transportation Improvement Program (TIP)	The TIP includes both highway and transit projects as well as urban and rural projects on both State and local facilities.	http://www.gtcmpo.org/Docs/TIP.htm	2007-2012 TIP Adopted by GTC Board June 21, 2007	Varies
Recreational Trails Program (RTP)	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.	http://www.nysparks.state.ny.us/grants/programs/recreation.asp	Last round, Oct 2006	Varies

CONSTRUCTION COST ESTIMATES

The costs associated with many of the immediate to near term recommended improvements are relatively low and inexpensive. A number can be implemented with little or no cost, (e.g. LPI signal operational change, pedestrian countdown signals at Main/South, speed enforcement program, enhanced crosswalk striping), while other recommendations require a more significant infrastructure investment. The cost for these as well as the for more substantial improvements such as the recommended Main Street Plan were estimated based upon recent bid prices for comparable elements.

It should be noted that there is significant variability in the degree to which improvements can be implemented and the costs associated with the improvements. For example, the gateway treatment at East Avenue and Railroad Street can include special features, decorative pedestrian lighting and significant landscaping, or other less expensive treatments with only plantings and pavement treatments. Other improvements in the village transportation system such as the continued expansion of connector roadways linking Town and Village, or trail additions, may likely evolve over an extended time through a combination of private/public partnerships.

Table 9: Cost Estimates

RECOMMENDATIONS	PLANNING LEVEL COST ESTIMATES
Enhanced crosswalk markings/treatments (each):	$3,000
Leading Pedestrian Interval at Main/South/Hovey:	$2,500
Pedestrian "countdown" signals at Main/South/Hovey:	$6,000
Decorative pedestrian enhancements on South Ave. at bridge	$7,000
Conversion of Hovey St. to one-way (markings, signs, signal mods):	$10,000
Enhanced textured crosswalks (e.g. pavers, concrete) per location:	$26,000
Crosswalk/corner radii paver-concrete treatment at Railroad/East Street:	$35,000
Hovey Square parking lot physical improvements:	$125,000
Single Lane Roundabout at Village II intersection:	$800,000
Reconstruct Main St. & Hovey w/wider sidewalks, landscaping, furnishings:	$750,000

VI. Meeting Minutes & Correspondence

The following pages include the written comments received as part of the community survey, meeting minutes from the steering committee meetings, public workshop, and other public meetings as well as relevant project correspondence.