Local Transportation Plans

A How-To Guide for Rural Communities in the Genesee-Finger Lakes Region

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GENESEE TRANSPORTATION COUNCIL
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Acknowledgements

The following persons, agencies, and departments contributed to the development of this guide:

- Town of Conesus, Supervisor Christine Rumble
- Town of Conesus Planning Board, Chairman Jack Baldwin
- Livingston County Planning Department
- Livingston County Highway Department
- New York State Department of Transportation – Region 4
- Genesee Transportation Council
- Stantec (Lead Consultant)

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Table of Contents

INTRODUCTION

Transportation systems are a major determinant of the social and economic vitality of a community. They facilitate access to employment, labor, goods, services, and recreation. Because businesses, homes, and other origins and destinations have physical locations, it is the relationship between transportation and land use that is the foundation of transportation planning.

Two aspects of the transportation-land use relationship that are central to transportation planning are:

1. The relationship is reciprocal; land use patterns affect travel decisions and travel decisions affect land use patterns
2. The locations of residents, businesses, and institutions change in response to changing values, norms, and preferences – independently of land use and transportation

Regional state department of transportation offices, councils of governments, metropolitan planning organizations, and transit operators are typically involved in transportation planning in both rural and urban areas.

However, a number of additional local agencies may also be engaged in transportation planning in an urban area. Most cities and urban counties have road, highway, planning, and/or traffic departments with staff dedicated to transportation planning. Needless to say, there is an abundance of agencies involved in developing transportation plans in urban areas.

This "How-To" Guide recognizes that rural communities in the Genesee-Finger Lakes region may have limited staff resources available for, or experience in, preparing transportation plans compared to their urban counterparts. Accordingly, this guide presents an easy-to-use six-step process for developing plans to meet a community's transportation-related goals and objectives. The six steps are:

Step 1 – Process Initiation
Step 2 – Public Involvement Program
Step 3 – Existing Conditions
Step 4 – Future Conditions
Step 5 – Alternatives
Step 6 – Prioritization and Implementation

STEP 1
PROCESS INITIATION

GOALS AND OBJECTIVES

At the beginning of the planning process, it is important to clearly establish the goals and objectives of the transportation plan. This will determine how the planning program should be designed and who should be involved. While it is appropriate to be conservative in defining the scope of the plan in order to contain costs, it is also important to insure that all potential needs are reasonably considered.

Regardless of the resources available, a transportation plan should never presuppose an outcome. The goal of the plan in its most wide-ranging form should be to initiate and conduct an objective study to identify current and future issues and opportunities affecting the transportation system and alternatives to address issues and maximize opportunities, with an emphasis on cost-effectiveness.

The goals and objectives of a transportation plan should be consistent with the goals and objectives of the community's comprehensive (or master) plan. Most comprehensive plans contain some basic goals and objectives related to the transportation system. The development of a transportation plan allows for an in-depth analysis of the impacts of a community's transportation system on its quality of life and economic vitality.

Questions to consider when developing the goals and objectives of a transportation plan include:

- What is the community trying to accomplish with respect to transportation (e.g., safer and more efficient movement of people and goods)?
- What level of detail is the plan going to address (e.g., only key roadways or every street in the community)?
- What modes (e.g., roads, transit, pedestrian, etc.) of transportation are present? How much emphasis should be placed on each?

The answers to these questions can be based on available information from local, regional, and state data sources such as traffic volumes or pavement condition scores as well as input from the general public. Recognize that a community's goals are not always easy to determine and may not be completely determined before the transportation planning process begins.

As stated earlier, all or part of the answers to these questions may be dictated by the funding and resources available to undertake the transportation plan.

Transportation plans can be funded through local resources or through funds available from regional, state, or federal agencies and departments.

Another consideration in developing the goals and objectives of the plan is balancing the need to identify alternatives to improve the transportation system based on current and future issues and opportunities with the probable financial resources available to implement them. Transportation plans both identify the improvements necessary to optimize the performance of the transportation system and serve as a rational justification for pursuing the funds to implement them.

The justification for funding is an important consideration because implementing the improvements identified in a transportation plan usually requires financial assistance from state and federal sources. The competition for these funds is often, if not always, highly competitive. Step 6 of this guidebook outlines general funding options available for completing transportation system improvements.

COORDINATION

The stakeholders whose participation and involvement will be required in developing the plan should be identified at the beginning of the process. These stakeholders should be involved early and continuously throughout the planning process.

Certain components of the plan may be able to be completed with internal community resources such as town or village boards and staff. However, the completion of other portions of the plan will usually require additional assistance from other transportation agencies.

Contact the county planning and highway departments, NYS Department of Transportation (NYSDOT), and Genesee Transportation Council (GTC) to determine what technical resources they may have to assist in the development of the plan. Appendix A provides contact information for the departments and agencies listed above.

Coordinating with these agencies is important because it provides opportunities to obtain information and data that may already be available (e.g., traffic counts, demographic data, speed data, road conditions, accident history) as well as to identify transportation system improvements that may be planned in or near the community (e.g., a resurfacing project for one of the key roadways in the community that is scheduled to begin during the next construction season).

Depending on the resources available, it may be advantageous to retain a planning consultant to either lead or assist in the development of the transportation plan.

STEP 2

PUBLIC INVOLVEMENT PROGRAM

The key to the success of a transportation plan is to obtain "buy-in" of its process and outcomes from all affected stakeholders. The principal goal of a public involvement program is to insure that stakeholders have meaningful opportunities to participate in the development of the plan, thereby making the results of the planning process credible and supported.

To accomplish this, the public involvement program should demonstrate that the planning process is open, accessible, and responsive to citizens', businesses' and others' concerns. The public involvement program can take many forms, and many agencies have public participation guidelines that must be followed for projects that they fund. Contact GTC or NYSDOT for their guidelines or other examples.

Depending on the size of the community and scope of the plan, different public outreach program components can be developed. Two effective techniques which are discussed below are the use of a Steering Committee to guide the plan and public meetings to gather community input.

STEERING COMMITTEE

The Steering Committee should include municipal elected officials, their representatives and staff, as well as representatives from local and regional agencies. Representatives from the following should be considered as potential Steering Committee members:

- Town Supervisor/Village Mayor
- Town/Village Council
- Planning Board
- Zoning Board
- Conservation Group
- Municipal Highway/ Public Works Department
- Assessor's Office
- County Planning Department
- County Highway Department
- Genesee Transportation Council (Metropolitan Planning Organization)
- NY State Department of Transportation

There may be other important organizations in the community that merit inclusion in the Steering Committee such as a special development committee, business organization (e.g., chamber of commerce), or the local law enforcement agency. The Steering Committee should be kept to a manageable size to insure that key decisions can be made in a timely manner.

The Steering Committee will lead the development and determine the direction of the plan until its completion, and may continue to meet following its adoption to monitor progress in implementing its recommendations.

Certain roles and responsibilities with respect to the development of the plan and its process should be defined by Steering Committee members. In particular, who will lead (or "chair") the committee and who will serve as spokesperson for communicating information regarding the progress and status of the plan.

The Steering Committee should meet as necessary to review information, assess findings, and determine next steps. Typically four Steering Committee meetings should suffice for the development of a plan. The following are typical objectives for each meeting:

- First Meeting – scheduled at the beginning of the process to introduce the plan, solicit input regarding goals and objectives, present information and data collected to-date, and initiate discussion of issues and opportunities facing the community.
- Second Meeting – scheduled when draft versions of the Existing and Future Conditions tasks (Steps 3 and 4) have been completed to obtain feedback on issues and opportunities facing the community now and in the future and to discuss potential alternatives.
- Third Meeting – scheduled after an initial public meeting (discussed below) to review public input as well as develop and assess alternatives based on how well they meet the goals and objectives of the plan and determine a preferred set of alternatives for further review.
- Fourth Meeting – scheduled after a second public meeting (discussed below) to further review – based on public comment – the preferred alternatives by identifying and prioritizing those that will be included in the final plan as recommendations as well as develop a schedule for implementation that includes follow-on activities.

PUBLIC MEETINGS

The general public represents the stakeholders who use the system and pay in some part for most improvements to the system (usually through taxes). As such, everyone in the community is a local transportation user and has a unique viewpoint on how the system can be improved. Providing these stakeholders with the opportunity to comment on the plan, its process, and its findings is crucial to obtaining support for implementation of the plan.

In order to acquire these viewpoints, a public involvement program must reach as many people as reasonably feasible and provide opportunities for them to express their opinions. Whether or not the members of the public express their opinions is their choice, but they must recognize that they have that opportunity.

Public meetings tend to be the most successful means for obtaining information from the community regarding their views, impressions, and opinions on the transportation system.

Providing press releases to newspapers and radio stations and posting flyers in public buildings, community centers, and shopping areas should be done to advertise the meetings. In addition, a mailing list can be developed and maintained by the community to notify interested people about upcoming meetings and other opportunities for input on the plan.

Typically two public meetings should suffice for the development of a plan. The following are typical objectives for each meeting:

- First Meeting – scheduled after the second Steering Committee meeting to introduce the plan, solicit input regarding goals and objectives, present the findings of the existing and future conditions analyses, and initiate discussion of issues and opportunities facing the community.
- Second Meeting – scheduled after the third Steering Committee meeting to present the preferred alternatives and to gather input on those alternatives as well as others proposed by the public at this meeting.

OTHER TECHNIQUES

Depending on the size and available resources of a community, the use of surveys, comment forms, newsletters, web pages, and other public mediums should be considered to inform the community and gather additional information to supplement the input gathered at public meetings.

For example, surveys may be used to obtain general information on community issues and comment forms may be used to gather information on proposed alternatives at a greater level of detail than can be expressed verbally at a meeting. In addition, some stakeholders may feel more comfortable providing input in writing instead of speaking at a public meeting.

STEP 3
EXISTING CONDITIONS

The initial analytic step in developing a transportation plan is to inventory and assess existing transportation facilities and their associated conditions and characteristics to define the community's existing transportation needs.

As stated earlier, the nature of the land use and transportation relationship is such that an assessment of current land uses in the study area is also helpful to understanding how the transportation system serves the community.

This component of the transportation plan will document the current physical and operating characteristics of the transportation system. This step involves three primary components – Inventory of Facilities and Conditions, Analysis of Operating Characteristics, and Definition of Existing Needs.

This step may require professional assistance from a planning/engineering consultant in order to gather, analyze, and interpret the technical data and information. Guidance on soliciting professional services and evaluating the qualifications of consultants can be provided by GTC.

INVENTORY OF FACILITIES AND CONDITIONS

An inventory of the existing transportation facilities and their conditions as well as factors affecting them is the first step in analyzing existing conditions. The data and information necessary for this inventory may be available from the municipal highway/public works department, county planning and highway departments, GTC, and NYSDOT. However, it is recommended that additional information be gathered through field observations and data collection to supplement existing information sources.

The following data and information is typically gathered and analyzed as part of the inventory of transportation plans. This list is not all-inclusive and can be modified based on the specific characteristics of and resources available to the community.

- Roads – mileage, number of lanes, widths of shoulders, pavement condition (NYSDOT can provide pavement condition ratings for NYS highways), posted speed limits (including changes by zone), and advisory signage on road curvature or other substandard features by route and jurisdiction (e.g., local, county, and state roads and routes).
- Intersections – traffic control devices and geometric characteristics as well as associated sight distances with special attention paid to those that may be "atypical" (e.g.., five roads at a single intersection, misaligned intersections, roads that yield to through traffic, etc.).

- Bicycle and Pedestrian Facilities – location, condition, and use of sidewalks, crosswalks, trails, and bike paths.
- Transit Services – routes serving the community (including schedule) and location of stops.
- Land Use and Zoning – current and permitted land uses and regulations, densities, and locations of historical, cultural, visual, recreational, and other community resources.
- Demographic Information – historical information on community, surrounding area, and county-wide population, employment, and housing.
- Utilities –sewer, water, gas, and electric lines and transmission facilities as well as their associated rights of way. Special attention should be paid to sewer and water as they have the most impact on future development patterns.
- Environmental Features – steep slopes, state and federal wetlands, flood plains, water bodies (e.g., streams, rivers, lakes, etc.), wooded areas and lots.

The above information should be presented in formats that are easy to analyze and are able to communicate the results in graphic and tabular layouts. The use of a Geographic Information System (GIS) is recommended for viewing multiple conditions spatially and manipulating tabular data.

ANALYSIS OF OPERATING CHARACTERISTICS

The inventory created above provides a perspective of what the transportation system *is* and the factors that affect it. In addition, what the transportation system *does* must also be understood. An analysis of the transportation system's operating characteristics provides valuable insights into how the transportation system serves a community's residents, businesses, and institutions.

As with the inventory of facilities and conditions, this list is not all-inclusive and the specific data needed for the transportation plan may need to be gathered through field observations and data collection by municipal staff, Steering Committee members, consultants and/or volunteers.

- Traffic Volumes – the number of vehicles using a section(s) of roadway expressed in relation to time; the time-period is determined by the type of information desired and the application in which it is to be used.

  Average Daily Traffic (ADT) is the most common traffic volume measurement. ADT data should be obtained, at a minimum, for key roadway locations. Ideally, counts for most or all roads in the community are desired.

  NYSDOT can provide ADT counts for State highways. Some county highway departments collect ADT counts for county and local highways.

As such, some county highway departments may have automated traffic counters that can be loaned to a municipal highway/public works department for the collection of additional data.

Obtaining peak-hour traffic volumes at specific locations such as intersections can be useful as well, particularly if congestion during morning and evening rush hours is a common occurrence.

In addition, be sure to account for seasonal variations in traffic volumes. For example, lakefront roads and those leading to recreation facilities may experience very high traffic volumes only during certain times of the year.

- Capacity Analysis – the Highway Capacity Manual[1], the widely-accepted resource on capacity, defines capacity as "the hourly rate at which persons or vehicles can reasonably be expected to traverse a point or section of a lane or roadway during a given time period under prevailing conditions."

  ADT is the most useful measure for determining the physical capacity of a roadway segment. While there are technical procedures, according to the Highway Capacity Manual, there are rule of thumb capacity applications that can be used for rural communities.

  Based on local upstate New York information the following capacity threshold can be applied:

Road Characteristics *(Lanes per Direction)*	**Volume Capacity** *(Per Hour per Lane)*
1 Lane	700-900
2 Lanes	900-1,200

  Should a given location come close to this threshold, a more detailed technical method should be employed to determine if the volume of traffic is more than the roadway can reasonably be expected to handle in a safe and efficient manner.

- Turning Movement Counts – the number of vehicles collected by direction approaching an intersection and any change of direction (e.g., 150 vehicles approach from the north and 75 continue through south, 30 turn east [left], and 45 turn west [right]).

  The highest volume intersections are often well known in smaller communities and turning movement counts should be collected at these intersections during morning and evening rush hours (peak periods).

  Collecting turning movement counts at other intersections that may have geometric, safety, or operational concerns should be considered. In

addition, collecting turning movement counts during Saturday mid-day periods should be considered if the community has intersections that serve commercial or recreational facilities.

Appendix B outlines a methodology and provides sample forms for collecting and summarizing turning movement counts.

- Accident History – the number, location, and potential causes of accidents is an important factor in assessing the safety of the transportation system.

  Accident records for all key roads in the community over the latest 3-year period available should be gathered and analyzed. This information may be obtained from the local law enforcement agency or from the NYS Department of Motor Vehicles. Accident history reports require long lead times to obtain. A standard form letter requesting this information is provided in Appendix C.

  Accident history data can assist in identifying locations with higher than usual numbers of accidents, understanding why accidents occur, determining which alternatives should be implemented, and evaluating the effectiveness of these alternatives.

  The accident history analysis can be a highly technical process. Appendix D provides an overview of how to conduct and interpret an accident history assessment based on guidance contained in the Manual of Transportation Engineering Studies[2].

- Travel Speeds – travel speed data may be useful if public feedback identifies speeding as a concern. This information is not always readily available, but in some instances can be obtained from local law enforcement agencies. This information, however, may be very important and the collection of it could be considered as a "Follow-On" activity to the transportation plan.

- Other information – various other types of information may be needed depending on the type of comments or concerns brought up at the first public meeting. Each community is unique and different elements or concerns may arise that need to be addressed.

DEFINITION OF EXISTING NEEDS

Existing needs should identify what the current issues are and where they exist summarized in list form with a corresponding map. Existing needs should initially be defined based on the inventory of facilities and conditions and the analysis of operating characteristics conducted above. This list of existing needs should be presented at the first public meeting and revised based on comments received there.

A comparison of the inventory of facilities and related conditions against the operating characteristics is good way to begin identifying existing needs. Some obvious questions to ask are:

- Are the community's roadways able to handle the volumes of traffic on them (e.g., is the pavement condition poor on the most heavily traveled road in a community)?
- Are traffic control devices at various intersections appropriate given common turning movements and sight distances (e.g., are left turns too difficult to perform at a particular intersection)?
- Are there higher than usual numbers of accidents at locations where advisory signage is not present (e.g., do weather conditions affect the ability of motorists to safely navigate a curve during the winter)?
- Are persons deterred from using public transit (e.g., do less people use the bus in the winter because there is no shelter from weather-related elements)?

STEP 4
FUTURE CONDITIONS

The second analytic step in developing a transportation plan is to forecast or project what the community's transportation needs will be in the future. These projections will be assessed to determine how the transportation system will be affected given future development and land uses and resulting changes in traffic volumes, assuming no modifications are made to the system itself.

The forecasting of future conditions is important because it provides a view of what the local transportation system *may* have to handle years from now; thereby enabling a community to determine if and what changes need to be made to the transportation system to achieve their goals and objectives. If the future conditions are not acceptable, a community can develop transportation alternatives to mitigate or remove operational deficiencies that may occur.

Ideally, the time period covered by the transportation plan will be consistent with the time period covered by the community's comprehensive plan. However, this is not always necessary and often transportation plans will cover time periods of up to 25 years.

As with Step 3, this step involves three primary components – Estimate Changes in Land Use, Forecast Growth in Traffic Volumes, and Definition of Future Needs.

Accordingly, this step may require professional assistance from a planning/engineering consultant in order to gather, analyze, and interpret the technical data and information. Guidance on soliciting professional services and evaluating the qualifications of consultants can be provided by GTC.

ESTIMATE CHANGES IN LAND USE

Given the relationship between transportation and land use, determining changes in land use and physical development is the first step in analyzing future conditions. Many of the factors that will determine future land use are currently in place. In addition, previous changes in land use can also serve as an indicator of what is likely to happen in the future with regard to development. As such, reviews of current regulations and historical trends in land use are an important part of estimating changes in land use.

- Current Land Use Regulations – primarily, but not limited to, comprehensive plans and zoning ordinances (along with associated maps) should be consulted to determine the types of allowable development by location.

In addition, other land use regulations such as open space plans, agricultural district boundaries, watershed protection plans, and others should be reviewed to determine factors that will supplement the comprehensive plan and zoning ordinances in determining what type of growth will occur and where.

If a community is in the process of updating any of its land use regulations, refer to the committee(s) preparing the updates for likely changes to the existing plans.

- Historical Trends – changes in land use over time should be reviewed to determine past development activity that can be assessed to determine historical trends. These trends can then be analyzed and discussed by the Steering Committee to determine if they are likely to continue; if not, determine if future development will be more or less and where compared to past development.

  Much of the information needed is available through the municipal code/zoning enforcement officer and/or the assessor's office. In addition, the Genesee/Finger Lakes Regional Planning Council produces an annual land use monitoring report that includes the number of permits issued for new buildings by type.

It is important to consider several other factors in estimating future development:

- The amount of developable land available and likelihood of redevelopment
- The potential for extensions of utility services, primarily water and sewer
- Proximity to regional employment and commercial centers

Based on the land use regulations and historical development trends, future land uses should be estimated considering the following elements:

- Type – residential, commercial, office, industrial, agricultural, etc.
- Number – housing units for residential, square feet for commercial/office/ industrial, etc.
- Location – in relation to the existing transportation system
- Access Points – how vehicles and persons access these land uses

Once these variables have been considered, multiple land use scenarios can be developed for analysis purposes (i.e. low, medium and high density scenarios). Maps of the various scenarios should be produced to view the estimated changes in a spatial context.

FORECAST GROWTH IN TRAFFIC VOLUMES

People make trips for many different reasons, and the factors that affect trip decisions vary with the purposes of the trips. Once the development scenarios are complete, projections of future traffic volumes can be calculated.

Traffic volume estimates can be generated based on trip generation rates. Appendix E provides general guidelines for the number of trips that individual land uses generate. Distributing the projected trips along the existing transportation system can produce future traffic volumes.

At this time, it is valuable to perform quantitative analysis based on the estimated land use scenarios and associated trip generation rates as well as qualitative analysis based on input from Steering Committee and the general public.

Calculate the number of new trips and assign them to roads based on the estimated changes in land use and the maps displaying the locations of these changes created above. Steering Committee members should discuss the calculations of new trips and make adjustments based on knowledge of the area and comments received by the public at the first public meeting.

DEFINITION OF FUTURE NEEDS

Future needs should identify what and where issues are likely to arise, summarized in list form with a corresponding map. Future needs should initially be defined based on the estimated changes in land use and forecasts of growth in traffic volumes conducted above. This list of future needs should be presented at the first public meeting and revised based on comments received there.

A comparison of the forecasted traffic volumes against the current operating characteristics determined in Step 3 is good way to begin identifying future needs. Some obvious questions to ask are:

- Will the community's existing roadways be able to handle the forecasted volumes of traffic on them (e.g., if traffic on the most heavily traveled road in a community increases by 50 percent, will it be above its capacity)?
- Will the locations of new development require new or modified transportation facilities (e.g., could a new subdivision be permitted in an area that is only served by a narrow road that would be inefficient in handling additional volumes)?
- Will transit routes adequately serve new development (e.g., does an existing bus route service the location of a publicly-subsidized housing complex)?

It is also helpful to consider amending land use regulations when they are updated to insure that future development is coordinated with improvements to the transportation system.

STEP 5
ALTERNATIVES

In order to develop a list of potential alternatives, you first must start with an open slate; no boundaries, no limits, and no restrictions. This section of the transportation plan can become highly technical and may warrant professional traffic engineering assistance.

The transportation plan is guided by the local community's goals for development as expressed in the comprehensive plan or land-use plan. It is also important to consider the current conditions of travel and the transportation system as well as community attitudes toward various transportation services and facilities.

Lastly, political, financial, and institutional factors will also have important influence on the alternatives that are recommended for inclusion in the transportation plan. Alternatives should be analyzed against a set of criteria that is based on all of these factors.

DEVELOPMENT OF ALTERNATIVES

Before you can understand how potential alternatives will affect the transportation system, you have to understand the existing system. Assessing the performance of the existing roadway system under current and future conditions, as discussed in Steps 3 and 4, will identify the baseline condition.

The first alternative to consider is to do nothing except routine maintenance; this is a "no build" or "do nothing" alternative. The "do nothing" alternative demonstrates what and why improvements are needed and can be useful to justify funding. In the longer-term, pursuing a "do-nothing" alternative can have extensive opportunity costs for maintaining a transportation system that does not maximize its contribution to the community.

The next step is to evaluate any previously planned improvements to determine if they will meet the future needs of the community. If not, these planned improvements should be reconsidered.

If a "do nothing" alternative and previously planned improvements are not sufficient to meet the needs of the community, other alternatives need to be developed and considered. Several packages of alternative improvement options that provide additional travel capacity, options, and safety should be considered. These alternatives may include a variety of modes, new facilities, different policies, or merely different levels of improvement.

The following steps should be used to develop and evaluate alternatives:

- Determine a set of evaluation criteria and that has the approval of the Steering Committee. These factors should cover economic, social, environmental, mobility, and safety considerations.

- Develop a list of potential improvements, policies, and strategies that advance the community's goals and objectives as determined in Step 1, and satisfy the existing and forecast future transportation needs as determined in Steps 3 and 4.
  - Physical improvements to consider:
    - Capital projects that improve capacity, condition, drainage, etc.
    - Spot improvements at individual intersections or locations
  - Policies to consider:
    - Maintenance program enhancements
    - Access management principles
    - Traffic calming measures
    - Development regulation enhancements
    - Land use and zoning requirements
  - Alternative mode options to consider:
    - Sidewalk systems and crosswalks
    - Multi-use trails
    - Transit opportunities
- Conduct analyses of proposed alternatives based on the criteria identified earlier to determine which alternatives, policies, and strategies would be most effective in meeting the transportation needs. Some of the alternatives may require more thorough assessment or technical evaluation.
- Assess the feasibility of the alternatives. Are they achievable financially? What impacts might the alternative have on adjacent properties? Are there other alternatives that may be more efficient or acceptable to the community for a similar cost?
- Recommend preferred alternatives for consideration by the Steering Committee, community officials, and the general public.

Municipal boards and committees will consider the recommended preferred alternatives from the Steering Committee and make the decision of whether or not to adopt the transportation plan based on these recommendations. Including members of these boards and committees that are not already on the Steering Committee in the evaluation of alternatives can go a long way in ensuring that the transportation planning process is successful.

STEP 6

PRIORITIZATION AND IMPLEMENTATION

The transportation plan should include strategies for funding and implementation as well as for legislative and/or regulatory changes to facilitate project implementation. Priority for each recommended project should also be included to guide the implementing agencies in preparing their capital improvement programs. Preparing a financial plan is a major activity that is very important but is often overlooked.

The plan should have a strategic element that addresses specific actions necessary to implement the recommendations of the transportation plan. The specific actions for near-term recommendations will be quite detailed as to the schedules and responsibilities for those actions.

The longer-term program should identify the actions requiring considerable lead-times including legislative, regulatory, policy, and institutional changes. Both the near- and longer-term programs should provide explicitly for actions needed prior to funding or implementation.

PRIORITIZATION LIST

- Based on the identified needs, work with the Steering Committee to develop a prioritized list of recommendations. To establish priorities, determine the areas of greatest need from severity, demand, and/or funding availability perspectives.
- Revisit the list of recommendations and identify near- and longer-term recommendations.
- Develop an implementation plan for the near- and longer-term recommendations which is coordinated with other planned or expected changes in the community, as well as the implementation of the comprehensive plan. Determine key development thresholds or milestones that would trigger implementation of each recommendation.
- Investigate possible funding strategies and sources for the recommendations. Public funds, developer mitigation programs, and other methods should be explored. There are numerous other funding options available including both public and private sources.

ROLES AND RESPONSIBILITIES

Recommend appropriate roles and responsibilities for various municipal boards or committees, and county, state, or regional agencies for implementing the recommendations. Assess who should take the lead role and who should monitor the progress of the implementation process.

Long-term evaluation should take place when the comprehensive plan is updated.

If the implementing agency is not on the Steering Committee, it is recommended that they be consulted during the development alternatives to ensure their support for the recommendation that they will be responsible for.

FOLLOW-ON ACTIVITIES

Developing a transportation plan for a community is a complex and involved undertaking. The formal plan development process may be finished when the transportation plan is approved, but the responsibility of implementing the recommendations is ongoing.

In order to facilitate the implementation of the recommendations, the transportation plan should include:

- Identification of specific and achievable follow-on activities and schedules that are needed to advance the findings of the transportation plan, including potential sources of funding to conduct these activities.
- Identification of specific important factors that were not able to be examined within the transportation plan scope/budget and should be addressed through follow-on activities.
- Establishment of a timeline to re-evaluate the assumptions and recommendations made and update or modify the transportation plan as needed.

REFERENCES

1. Transportation Research Board, Highway Capacity Manual, 2000.

2. Institute of Transportation Engineers, Manual of Transportation Engineering Studies, 2000.

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APPENDICES

APPENDIX A

Contact List

Metropolitan Planning Organization (MPO)

- Genesee Transportation Council (GTC)
  50 West Main Street, Suite 8112
  Rochester, NY 14614-1227
  Tel: (585) 232-6240

New York State Department of Transportation (NYSDOT)

- **Region 4** *(Covering Genesee, Livingston, Monroe, Ontario, Orleans, Wayne, and Wyoming Counties)*
  1530 Jefferson Road
  Rochester, NY 14623
  Tel: (585) 272-3310

- **Region 3** *(Covering Seneca County)*
  State Office Building
  333 East Washington Street
  Syracuse, NY 13202
  Tel: (315) 428-4351

- **Region 6** *(Covering Yates County)*
  107 Broadway
  Hornell, NY 14843
  Tel: (607) 324-8404

County Departments

- **Genesee County**

  Highway Department
  153 Cedar Street
  Batavia, NY 14020
  Tel: (585) 344-8508

- **Genesee County (continued)**

  Planning Department
  3837 West Main Street Road
  Batavia, NY 14020
  Tel: (585) 344-2580
  Website: www.co.genesee.ny.us
  Email: planning@co.genesee.ny.us

- **Livingston County**

  Highway Department
  4389 Gypsy Lane
  Mt. Morris, NY 14510
  Tel: (585) 243-6700

  Planning Department
  Government Center
  6 Court Street, Room 305
  Geneseo, NY 14454
  Tel: (585) 243-7550

- **Monroe County**

  Department of Transportation
  50 West Main Street, Suite 6100
  Rochester, NY 14614
  Tel: (585) 760-7760

  Department of Planning & Development
  50 West Main Street, Suite 8100
  Rochester, NY 14614
  Tel: (585) 428-2970

- **Ontario County**

  Department of Public Works
  2962 County Road 48
  Canandaigua, NY 14424
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Ontario County (continued)

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20 Ontario Street
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Highway Department
225 West Academy Street
Albion, NY 14411-1591
Tel: (585) 589-6145

Planning & Development Department
14016 Route 31 West
Albion, NY 14411
Tel: (585) 589-7004

- **Seneca County**

Department of Public Works
2017 Prospect Street
Romulus, NY 14541
Tel: (315) 549-8454

Department of Development & Planning
1 DiPronio Drive
Waterloo, NY 13165
Tel: (315) 539-1722

- **Wayne County**

Highway Department
7227 Route 31
Lyons, NY 14489
Tel: (315) 946-5600

Planning Department
9 Pearl Street
Lyons, NY 14489
Tel: (315) 946-5919

- **Wyoming County**

  Highway Department
  4328 State Route 19
  Rock Glen, NY 14550
  Tel: (585) 786-8955

  Department of Planning & Development
  6470 Route 20A, Suite 4
  Perry, NY 14530-9796
  Tel: (585) 237-4110

- **Yates County**

  Highway Department
  939 Route 14A
  Penn Yan, NY 14527
  Tel: (315) 531-3200

Regional Planning Council

- Genesee/Finger Lakes Regional Planning Council (G/FLRPC)
  50 West Main Street, Suite 8107
  Rochester, NY 14614-1227
  Tel: (585) 454-0190

APPENDIX B

Conducting Intersection Movement Counts

Count Initiation & Preparation

a) Identify all intersections to be counted and discuss special characteristics associated with the count time periods, days or individual intersections that may require special attention.
b) Identify time periods to be counted. The typical commuter peak periods include the weekday morning (7:00-9:00AM), the weekday evening (4:00-6:00PM), and weekend – Saturday Noon (11:00AM-2:00PM). Depending on the characteristics of the study area, these hours may be expanded to cover either school hours of operation or a major industrial facility that may be operating with shift hours.
c) Counts should NOT be performed during the following periods or conditions, as they will not represent average road volume conditions: school holidays, federal or state holidays, during significant storms (snow, ice, rain, subzero temperatures, etc.). In addition, if counts are being performed in a commercial area of a community, traffic counts should not be performed during the Christmas holiday shopping season (Thanksgiving – New Years).
d) Obtain detailed roadway maps of the area. The maps should be provided to all counters ahead of time with the meeting site and their assigned intersection highlighted.
e) Based on traffic control, geometry and magnitude of volume being served by the intersection determine the number of counters required at each location. In rural settings or smaller intersection, one counter per intersection is sufficient at most locations.
f) Assemble count equipment
    1) If trucks, buses or pedestrians are to be counted, additional enumerators must be provided.
    2) Clip board for each counter
    3) Pencils or pens
    4) Data collection sheets and instructions – attached are example count sheets. Fill out street names, location, and other related project information on the sheets. Any movements or approaches not being counted should be crossed out. If more than one count period is to be performed, all sheets should be prepared, stapled and placed on the clipboards.
    5) Hard hats and vests (if necessary)

Materials Required

a) All persons participating in the traffic counts survey must bring a watch (or other time keeping piece).
b) All persons participating in the count should have transportation to the site. Individual automobiles are required during inclement weather conditions. The positioning of the vehicle for counting purposes cannot obstruct traffic operations, violate traffic laws or put the counter in an unsafe situation. Locating the vehicle in a parking lot near the intersection is preferred over parking on a shoulder or median.
c) If the use of a vehicle is not possible, bring a lawn chair, blanket, or umbrella in the event of inclement weather. All people participating in the survey will be facing the elements (rain, shine, and snow) over the course of the day (including evenings) and should dress accordingly.

d) A meeting time and place will be arranged where counters will meet 30 minutes prior to the count. This time is essential in establishing procedures, locations, and hand out count materials and emergency instructions.

During the Count

a) Meet 30 minutes before the first count period to establish that all personnel are present and provide count instructions.
b) Distribute equipment and data sheets. Show counters how to use the data sheets. Stress the importance of knowing which way is north and how that relates to the data sheets. Each counter is responsible to print name and telephone number on the respective count sheets. This is important if questions arise later during data review process.
c) Provide location map and what particular traffic movements they will be assigned at the intersection. Vehicles observed are to be documented every 15-minute interval on the data sheets.
d) Stress the importance of being on time in registering the 15-minute interval totals.
e) Throughout the course of the count period, counters should make note of any areas of congestion that develop (back-up, blocking of cross traffic, etc.) record the time and length of occurrence, including the number of cars involved and what appeared to be the cause(s). Other peculiar occurrences should be noted on the data sheets.

Summarize Data

a) Sum 15-minute counts for all movements, approaches and intersection. The spreadsheet on page B-5 shows a typical form to summarize traffic counts. This spreadsheet can be used for most intersections and easily duplicated in Microsoft Excel.
b) Within each of the Peak Periods, the hour with the highest volume should be identified. This hour may occur at any time during the Peak Period counted (i.e. 4:45-5:45PM).
c) The Peak Hour for each period observed will be summarized at the bottom of the spreadsheet. These numbers will be used to represent peak conditions and may be used later in the project to perform capacity analysis.

Data Analysis

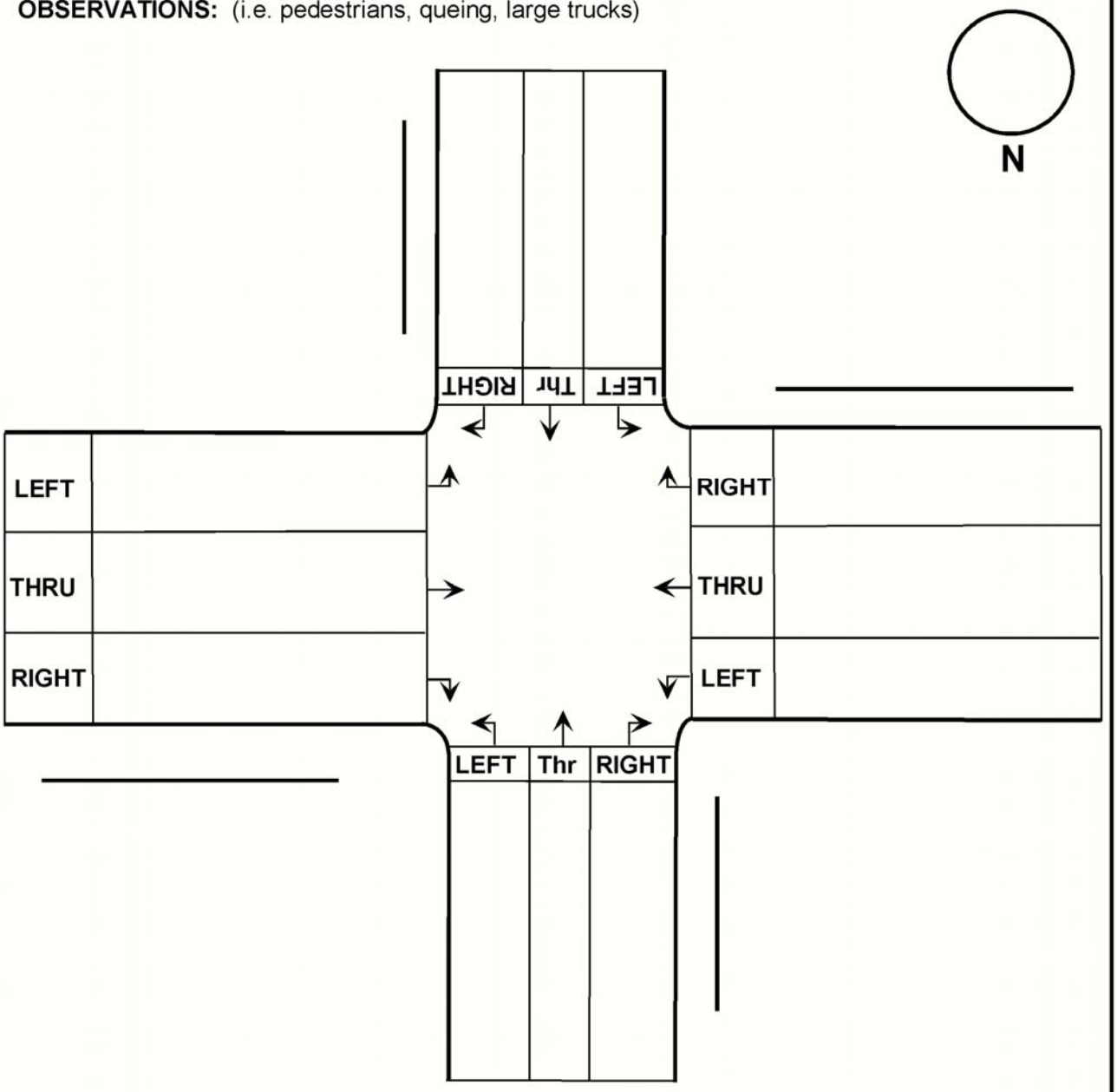
The traffic counts obtained at a given intersection can be used in a variety of different ways. The data can be used for capacity analysis purposes, for determining travel patterns, for use in calculating intersection accident rates, etc. Prior to the use of these counts, review and compare the observed counts with available count information or historical counts that may be available from NYSDOT or other agency.

Manual Count Sheet

INTERSECTION COUNT SUMMARY

INTERSECTION OF:_____ AND:_____
DAY:_____WEATHER:_____TIME PERIOD:_____

OBSERVATIONS: (i.e. pedestrians, queing, large trucks)

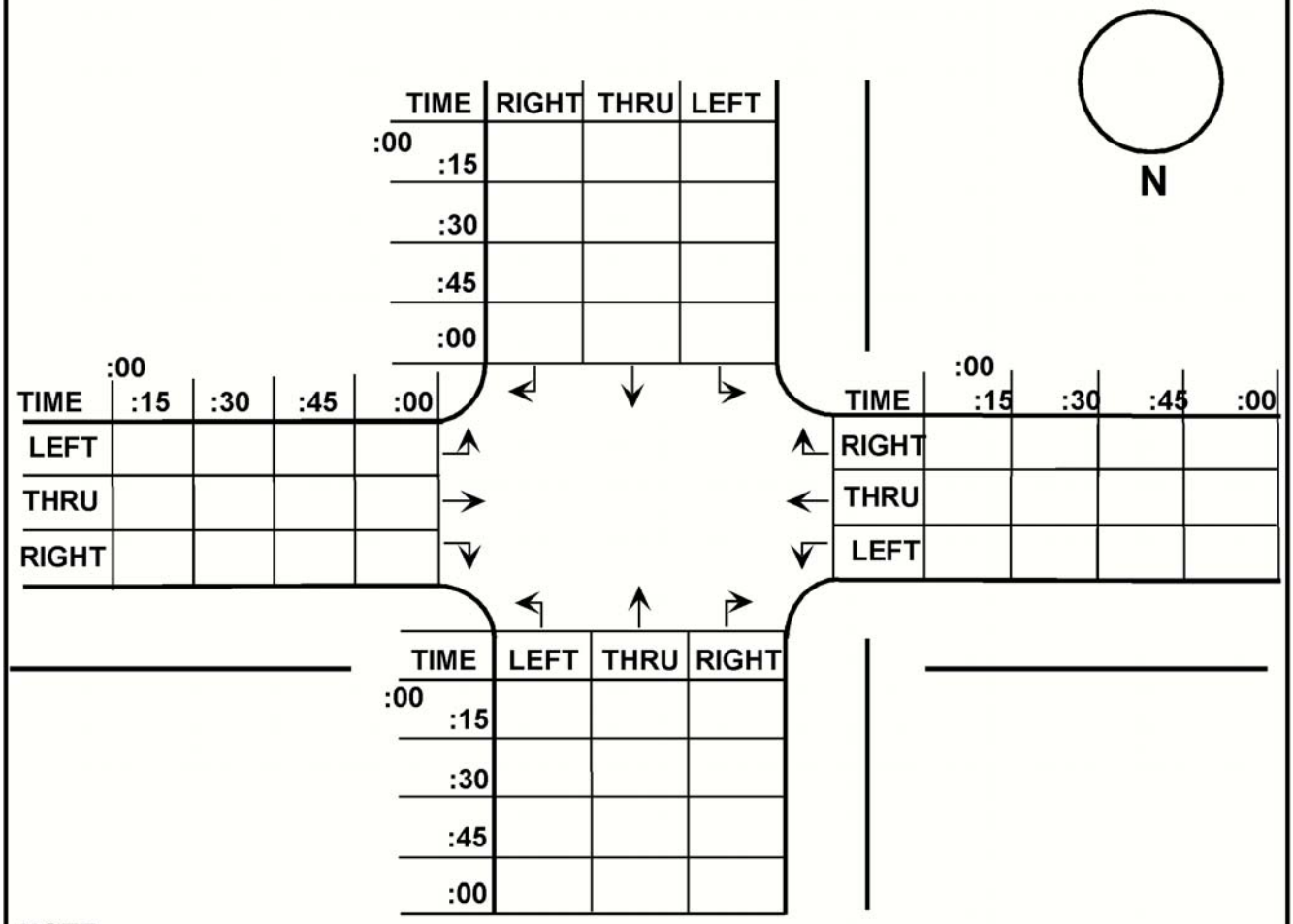


NOTE:
Be sure to note time period counted.
IT IS IMPORTANT THAT ALL COUNTS ARE ACCURATE. Analysis and conclusions will be based upon these numbers.
Make notes in the space provided of any significant observations such as blockages due to queing or large trucks, or large amounts of pedestrians affecting traffic flow.
Don't forget to keep a close eye on the clock and change sheets every 15 minutes.

INTERSECTION COUNT SUMMARY

INTERSECTION OF:_____ AND:_____
DAY:_____ WEATHER:_____TIME PERIOD:_____

OBSERVATIONS: (i.e. pedestrians, queuing, large trucks)



NOTE:
Be sure counters are set to zero before count begins.
DO NOT reset the counters at the end of each fifteen minute interval. Counters should only be reset after the numbers have been recorded at the end of the last interval.
Be sure to record the cummulative numbers in their appropriate box at the end of each interval.
IT IS IMPORTANT THAT ALL COUNTS ARE ACCURATE. Analysis and conclusions will be based upon these numbers.
Make notes in the space provided of any significant observations such as blockages due to queing or large trucks, or large amounts of pedestrians affecting traffic flow.

								INTERSECTION		COUNT	REDUCTION						
		INTERSECTION OF:			0			CITY:	0		DAY:	0			JOB #:		0	
			AND:		0			STATE:	0		DATE:	0			OBSERVER:		0	
HOUR	NB	NB	NB	SB	SB	SB	EB	EB	EB	WB	WB	WB	NB	SB	EB	WB	SUB	PEAK
BEGINS	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	HOUR
6:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

PEAK HOUR SUMMARY

INTERSECTION OF:		0			CITY:	0		DAY:	0			JOB #:		0			
AND:		0			STATE:	0		DATE:	0			OBSERVER:		0			
	NB	NB	NB	SB	SB	SB	EB	EB	EB	WB	WB	WB					
HOUR	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT					
10:00	0	0	0	0	0	0	0	0	0	0	0	0			0		
10:15	0	0	0	0	0	0	0	0	0	0	0	0			0		
10:30	0	0	0	0	0	0	0	0	0	0	0	0			0		
10:45	0	0	0	0	0	0	0	0	0	0	0	0			0		
------	------	------	------	------	------	------	------	------	------	------	------	------			------		
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0			0		
														PHF=	######		

APPENDIX C

Sample Accident Information Request

Date

Mr. Robert Limoges, P.E.
Civil Engineer
New York State Department of Transportation
1220 Washington Avenue
State Office Building #5
Room 314
Albany, NY 12232

Re: Accident History –*Town/Village of* _____

Dear Mr. Limoges:

The *Town/Village of* _____ is currently performing a Transportation Plan for our community. As part of this process an assessment of the accident history will be conducted:

Therefore, we are requesting the most current three (3) years of accident history (CLASS Summary Report with verbal descriptions) for the following intersections:

- (list specific intersections or limits of the corridors to be evaluated)
- (list specific intersections or limits of the corridors to be evaluated)
- (list specific intersections or limits of the corridors to be evaluated)
- (list specific intersections or limits of the corridors to be evaluated)

This information can be emailed to me at _____.

If you have any questions regarding this request please do not hesitate to contact me.

Sincerely,

(Town/Village Representative)

APPENDIX D

Accident History Assessment Overview

Accident study techniques have improved dramatically in recent years due to technological advancements and continued research into improved study methods. This appendix highlights some of the steps in evaluating accident reports. It is highly recommended that the Town seek assistance in this process from the New York State Department of Transportation (NYSDOT) or a Professional Traffic Engineering consultant. Some steps and techniques are not mentioned in this appendix because they require expertise, effort, and/or equipment not readily available to most jurisdictions.

Accident data used by traffic engineers are primarily recorded by law enforcement on report forms soon after an accident. New York State has a standard accident form that requests information on the drivers and passengers, the vehicles, the roadway, and the conditions at the time of the accident. Most forms require a sketch of the accident showing vehicle paths and objects struck and a narrative describing the accident.

Some studies will require retrieval of accident data from hard copies or computer filing systems. For instance, NYSDOT keeps accident reports in computerized files. These files are developed from the police accident reports. Accident information can be obtained by street name or highway being investigated and the distance from a point of reference intersection or milepost.

Reducing Accident Data

Accident assessments normally review the last three years of information available. The three-year time frame represents a compromise between the desire for larger sample sizes and the desire for a time frame within which conditions were unlikely to have changed a great deal. The specific time frame of the investigation can be requested and the reports will be filtered to reflect that time frame. It is good practice to review the accident data to insure that specific accident locations have not been biased by construction and/or other major, but temporary, traffic events during the time frame selected.

The data provided should be sorted to reflect the focus areas of the accident investigation. Analysts usually summarize accidents into those that occurred at spots and those that occurred in roadway sections. A spot can be an intersection or a short segment of highway that helps identify problem "point" locations in the Town. Spot lengths of 0.2 – 0.3 miles and section lengths of 1 to 2 miles are recommended.

There are numerous limitations to the accident data. It is important to recognize that the number of accidents occurring at a particular location does not necessarily reflect the relative safety of that location. Since accidents are rare and somewhat random events, high-accident locations or accident-prone drivers may be unlucky rather than unsafe. Also, there are a great number of unreported accidents. Non-reportable accidents are those where property damage is below $1,000 and the law enforcement agency declines to investigate further. Some motorists do not report minor accidents in order to minimize their insurance costs, thereby further limiting the comprehensiveness of the

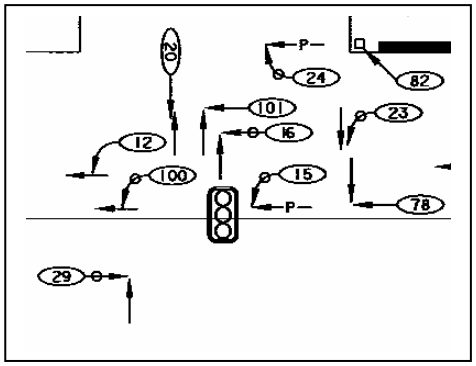
database. There are other limitations to the accident data as well, including reporting errors incurred along every step of processing.

Analyzing Accident Data

Engineers, policymakers, news media, and others often want to know the number of accidents of some type that occurred at a particular location or set of locations during a given timeframe. Such summaries are useful for a number of reasons, including: comparing highway safety with other competing modes, noting trends with time, or grasping the magnitude of the problem. Analysts preparing summaries of the number or trend of accidents should provide the audience with more than just a number. Summaries of accident data must emphasize whether the statistics presented are injury, fatal or property damage accidents.

Due to limited budgets, it is essential that agencies making highway safety improvements direct their resources to real problem locations. Good litigation risk management also demands that agencies identify accident-prone locations through a logical process. Thus engineers have developed procedures to identify accident-prone locations using accident data. This data and the related procedures look at spot areas, accident frequency, and accident rates, accounting for severity of the accident types.

Agencies can identify accident-prone locations by ranking locations by accident rate. Highway section accident rates are usually computed in terms of accidents per 100 million vehicle miles. Intersection accident rates are computed in terms of accidents per million entering vehicles. Statewide rates are available for various facility types for comparison.



For the purposes of transportation planning at a rural community level, the accident analysis does not need to be greatly detailed. The evaluation should primarily review the number, severity and patterns of accidents as well as identify if further review is recommended should the accident rates exceed the statewide rates. Further accident investigations can be undertaken to determine the cause of the accident trends occurring at any given location. Professional consultants or the jurisdictional agency should undertake this task. Normally, more detailed information is required including obtaining the actual police reports, developing collision diagrams to show the cause and effect of each accident, identifying and selecting countermeasures, and evaluating countermeasures.

APPENDIX E

Trip Generation Guide

The following table provides a quick guide on standard trip generation rates for general land uses. The intent of this guide is to provide a general overview of the number of trips a specific development can generate in order to provide an order of magnitude on identifying transportation impacts on a given network. For specific rates consult the Institute of Transportation Engineers, Trip Generation Manual, 7th Edition or your traffic-engineering consultant.

Sample Trip Generation Rates

Land Use	Units	Morning Peak Hour	Evening Peak Hour	Daily Rate
Single Family Housing	/ Dwelling	0.75	1.01	9.57
Apartments	/ Dwelling	0.51	0.62	6.72
Condo/Townhouses	/Dwelling	0.44	0.52	5.86
Mobile Homes	/ Dwelling	0.44	0.59	4.99
Hotel	/Occupied Room	0.67	0.70	8.92
Church	/ 1,000 SF	0.72	0.66	9.11
Day Care Centers	/ 1,000 SF	12.79	13.18	79.26
Nursing Homes	/ 1,000 SF	0.38	0.42	6.10
General Office Building	/ 1,000 SF	1.55	1.49	11.01
Medical Office Building	/ 1,000 SF	2.48	3.72	36.13
Office Park	/ 1,000 SF	1.74	1.50	11.42
Discount Superstore	/ 1,000 SF	0.84	5.06	56.02
Hardware/Paint Store	/ 1,000 SF	1.08	4.84	51.29
Shopping Center	/ 1,000 SF	1.03	3.75	42.94
Supermarkets	/ 1,000 SF	3.25	10.45	102.24
Restaurant (quality)	/ 1,000 SF	0.81	7.49	89.95
General Light Industrial	/1,000 SF	0.92	0.98	6.97
Industrial Park	/1,000 SF	0.84	0.86	6.96
Warehouse	/1,000 SF	0.45	0.47	4.96

Other land uses available through the ITE Trip Generation Manual are: Senior Housing, Parks, Marina, Golf Driving Range, Movie Theater, Horse Racetrack, Amusement Park, Soccer Complex, Racquet/Tennis Club, Military Base, Elementary School, Middle School, High School, Private School, College/University, Library, Hospital, Nursing Home, Corporate Headquarters Office, DMV Office, Post Office, Government Office, Research & Development, Garden Center, Specialty Retail, Car Sale, Tire Store, Convenience Market, Gasoline Station, Discount Club, Electronic Store, Pharmacy, Furniture Store, Video Rental, Bank, Fast Food Restaurant, and others.