

# Transportation

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## 6.0 Transportation

### Priority Action Programs: Transportation

- Develop a strategy to implement targeted improvements to roadways with identified level of service deficiencies
- Develop a strategy to implement a comprehensive bicycle and pedestrian network

### **6.1 OVERVIEW**

Growth and development in the Town of Amherst over the last several decades have resulted in increasing levels of automobile traffic, creating the desire and necessity to improve mobility. As a part of the comprehensive planning process the Town's transportation system has been evaluated with respect to vehicular, bicycle, and pedestrian circulation and public transportation.

Amherst's existing transportation network is highly dependent upon private automobiles due to the Town's history of typical suburban style development. Improvements to streets and highways have impacted other transportation modes, including transit, bicycling, and walking. This automobile dependency has caused congestion along major roadway corridors and decreased safety for pedestrian and bicycle users. As streets are widened and lanes added to existing thoroughfares, pedestrian/automobile conflicts and impacts on adjacent neighborhoods increase.

Improvements have been made to Amherst's transportation system as a result of funded programs through New York State, Erie County, and the Town. Major capital improvement projects are identified by the Greater Buffalo-Niagara Regional Transportation Council (GBNRTC).¹ These include preferred projects with funding identified as part of the five-year Transportation Improvement Program (TIP) and longer range projects that have merit but for which funding has not yet been identified. Even with implementation of the five-year TIP and long-range projects, segments of the Town's roadway network are projected to experience Levels of Service (LOS) of E or F during peak PM hours during the time horizon (±20 years) of the Comprehensive Plan. (Amended 09-08-15; BCPA-2014-01)

Programmed and non-programmed (long-range) improvements to existing roadways contained in GBNRTC's TIP and Metropolitan Transportation Plan (MTP)are shown on Figure 8 and listed in Table 3. Roadway segments projected by GBNRTC to have deficient (E or F) levels of service during the Comprehensive Plan time horizon, and through 2040 (the time horizon for the 2040 MTP) even with implementation of the programmed and

<sup>&</sup>lt;sup>1</sup> Formerly the Niagara Frontier Transportation Committee (NFTC). As the Metropolitan Planning Organization (MPO) for the Buffalo-Niagara region, the GBNRTC is responsible for regional transportation planning.

unprogrammed roadway projects, are shown on Figure 8 and listed in Table 4. (Amended 09-08-15; BCPA-2014-01)

Table 3. GBNRTC Long-Range Transportation Plan Programmed & Unprogrammed Roadway Improvements<sup>2</sup>

5-Year TIP (funded) Projects	Description
N Forest Rd; John Muir Dr to	Reconstruction
Audubon Pkwy	
Kenmore Ave: Starin Ave to Main St	Reconstruction
Sweet Home Rd; Maple Rd to UB	Reconstruction
North Campus entrance	
I-990; I-290 to North French Rd	Highway Rehabilitation
MPO Long Range Projects	Description
I-90/I-290 Interchange	Reconfigure interchange at Blue
Improvements; Exit 50	Water tower
Toll Barrier and toll collection	Consider toll collection locations
modernization	and methods
Buffalo-Amherst Corridor Transit	Amherst – Buffalo Corridor
Enhancements; University Station to	Study underway (2014-2016)
Crosspointe	

(Amended 09-08-15; BCPA-2014-01)

Table 4. Roadway Segments with Projected Deficient Levels of Service<sup>3</sup>

Roadway	Segment
I-290	Niagara Falls Blvd to I-90
Niagara Falls Blvd (NY 62)	Ellicott Creek to Niagara County Line
N French Rd	Millersport Hwy (NY 263) to Hopkins
	Rd
Transit Rd (NY 78)	Dann Rd to N French Rd
Millersport Hwy (NY 263)	I-290 to Maple Rd
Millersport Hwy (NY 263)	North Forest Rd to Sylvan Pkwy
Main St (NY 5)	I-290 to Union Rd
Sheridan Dr (NY 324)	I-290 to North Forest Rd
Youngs Rd	Sheridan Dr (NY 324) to Main St (NY
	5)
Transit Rd (NY 78)	Maple Rd to Sheridan Dr (NY 324)
Transit Rd (NY 78)	NYS Thruway to Wehrle Dr

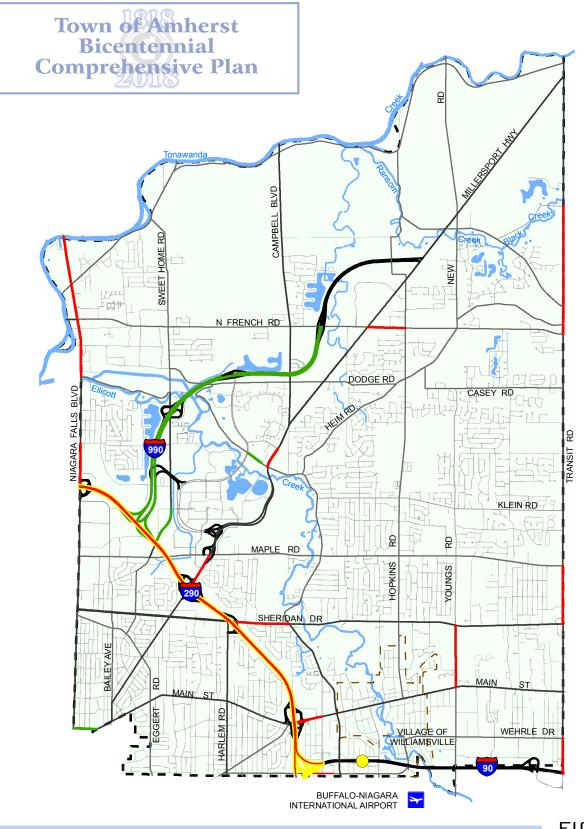
(Amended 09-08-15; BCPA-2014-01)

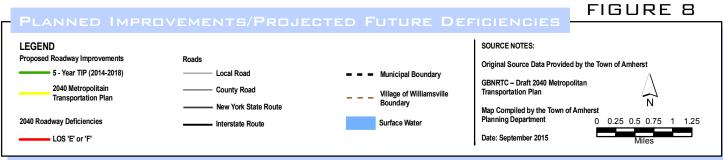
To create a more efficient and sustainable transportation system in the Town of Amherst, the following issues must be addressed:

• Lack of a comprehensive, multi-modal transportation capital improvement program

<sup>&</sup>lt;sup>2</sup> As programmed in the GBNRTC **2014-2018** TIP

<sup>&</sup>lt;sup>3</sup> As reported by the GBNRTC in July 2014





## Level of Service (LOS)

The LOS is the best indicator of the operation of a roadway. It is a qualitative measure of a driver's comfort and safety perception as related to speed, travel time and delay, traffic interruptions, freedom to maneuver, driver frustration, comfort, convenience and safety. LOS is measured on a scale of A to F as follows:

- LOS "A" represents free flow, where drivers are unaffected by others in the traffic stream.
- LOS "B" represents stable flow, however the presence of others in the traffic stream is noticeable.
- **LOS "C"** is in the limit of stable flow, where maneuvering within the traffic flow requires significant vigilance.
- LOS "D" represents high density but stable flow. Freedom and speed to maneuver are highly restricted. This condition usually warrants improvement.
- LOS "E" represents operating levels at or near capacity.
  Comfort and convenience levels are very low, driver frustration is high, and very long delays ensue.
- LOS "F" is used to define a breakdown of flow. The amount of traffic arriving at a point exceeds the amount departing and queues begin to form. Extreme delays are encountered.

- Need for more connections among neighborhoods (e.g., sidewalks, paths, roadway linkages, etc.)
- Need for more bicycle and pedestrian routes, sidewalks, and trails
- Need to address safety issues and conflicts between pedestrian/bicycle and vehicular traffic
- Need to address the effects of roadway improvement projects on adjoining neighborhoods

In planning for future improvements, the Transportation Element should be used in conjunction with other elements of the Comprehensive Plan, including Land Use and Development (Chapter 3.0) and Infrastructure (Chapter 8.0). When implementing the policies set forth in this chapter, it is important that the Town consider the regional context of Amherst's transportation challenges. Increased congestion on the Town's roadway corridors is tied to growth and commuting patterns in Erie and Niagara Counties. Studies relevant to the Town of Amherst that should be consulted include:

- Town of Amherst Bicentennial Comprehensive Plan Inventory and Analysis Report (December 2001)
- Town of Amherst *Traffic Study Final Summary Report* (February 1997)
- GBNRTC 2040 Metropolitan Transportation Plan for Erie and Niagara Counties (May 2014) (Amended 09-08-15; BCPA-2014-01)
- Niagara Frontier Transportation Committee Regional Bikeway Implementation Plan (April 1998)
- Niagara Frontier Transportation Committee Regional Pedestrian Master Plan (December 1997)

### 6.2 GOALS, OBJECTIVES, AND POLICIES

#### **GOAL**

An efficient, multi-modal transportation system that accommodates the automobile, maintains neighborhood character, and emphasizes alternative means of travel, including walking, biking, and public transportation

### **OBJECTIVES**

- Create a roadway network that improves efficiency and connectivity while preserving neighborhood character
- Develop the existing bicycle/pedestrian system into a townwide, interconnected network that facilitates connections between vehicular and non-vehicular transportation

- Work with the Niagara Frontier Transportation Authority to provide adequate public transit service, particularly to mixeduse activity centers identified in the Conceptual Land Use Plan
- Establish a town traffic assessment and planning capability to manage and maintain local highways

#### **POLICIES**

#### A. Road Network

Figure 9 illustrates the following characteristics of the Town's future road network:

- Functional classifications of roadways
- Roadway connections and completions to enhance the connectivity and efficiency of the network

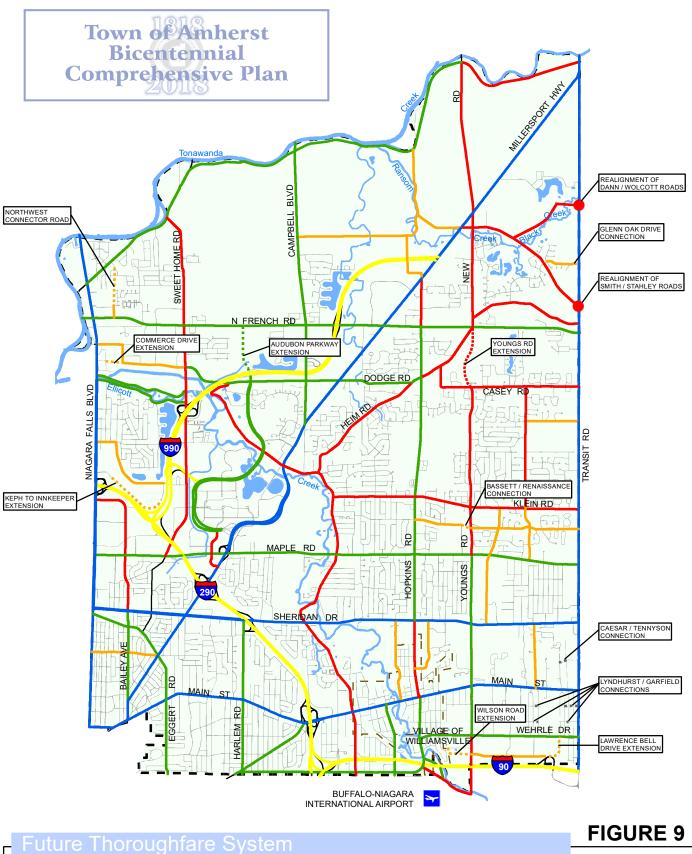
#### **Functional Classifications**

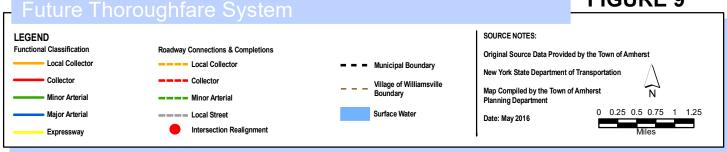
"Functional classifications" refer to the grouping of streets and highways into classes, or systems, according to the character of service they are intended to provide. Basic to this process is the recognition that roads do not function independently, but rather as a system-wide network. The classifications shown in Figure 9 are based upon projected land uses, traffic volumes, and roadway configurations during the time horizon of the Comprehensive Plan. In general, the classifications are defined as follows:

- Expressways: Roadways devoted entirely to traffic movement with little or no direct land service function. Expressways are multilane, divided roads with controlled access and few, if any, intersections at grade. Expressways serve large volumes of high-speed traffic and are primarily intended to serve commuters or long trips within and between metropolitan areas.
- Major Arterials: High volume roadways that carry the major portion of daily trips to centers of activity in the metropolitan area. Major arterials (also called principal arterials) place a greater emphasis on mobility rather than access to land and include fully and partially controlled access. A major arterial serves major through movements between important centers of activities in a metropolitan area, and a substantial portion of trips entering and leaving the area. It also connects expressways with major traffic generators.
- Minor Arterials: Streets that connect and augment the major arterial system. Although its main function is still traffic mobility, a minor arterial performs this function at a somewhat lower level and places more emphasis on land access than does a major arterial. A system of minor arterials serves trips of moderate length and distributes travel to geographical areas smaller than those served by a major arterial.

### Vision Statement Directions: Transportation

- Functional, safe, efficient transportation system
- Multi-modal choices:
  - Interconnected roadways
  - Sidewalks
  - Bike lanes
  - Trails
  - Transit





- Collectors: Streets that distribute trips from and channel trips
  to arterials. Additionally, these roadways provide access and
  circulation within residential neighborhoods. Collector streets
  provide for both access and circulation within residential,
  commercial, and industrial areas. Their access function is more
  important than that of arterials, and unlike arterials, their
  operation is not always dominated by traffic signals.
- **Local Collectors:** Streets that distribute lower volumes of traffic from predominantly residential developments to collector streets and arterials. Local collectors carry through traffic, but at lower volumes than collectors.
- Local Streets: Streets that provide for local traffic with the highest level of property access and the lowest level of mobility. Through traffic movement is discouraged on local streets.

The road network consists of routes owned and maintained by local, county and state agencies. A high level of coordination between these agencies is required when considering improvements to any roadways within the Town.

#### **Roadway Connections and Completions**

Roadway connections/completions shown on Figure 9 include: (Amended 09-08-15; BCPA-2014-01)

- Youngs Road extension from Casey Road to North French Road
- Northwest Connector Road from Wegmans Access to Tonawanda Creek Road
- Glen Oaks Drive connection to Transit Road
- Bassett Road/Renaissance Drive connection to Youngs Road
- Smith Road / Staley Road / Transit Road intersection realignment
- Dann Road / Wolcott Road / Transit Road intersection realignment
- Keph Drive to Innkeepers Lane extension parallel to I-290
- Wilson Road extension loop to Youngs Road at Lawrence Bell Drive
- Lawrence Bell Drive extension loop to Wehrle Drive
- Lyndhurst Road connection from Berkley Road to Transit Road
- Lyndhurst Road connection from Amherston Drive to Oakwood Road
- Garfield Road connection from Ferndale Road to Harding Road
- Garfield Road connection from Amherston Drive to Oakwood Road

- Caesar Boulevard connection to Tennyson Terrace
- Commerce Drive extension to Irvington Drive

These improvements are designed to increase the connectivity and efficiency of Amherst's local road network by providing drivers with alternative ways of reaching their destinations, thus helping to reduce congestion along major corridors. In general, connections should be provided in the Town's overall road network and within/between subdivisions to enhance vehicular circulation and reduce congestion. Traffic calming measures should be used where needed to protect neighborhoods from non-local, "cut-through" traffic (see Transportation Policy 6-2). It should be noted that levels of service on some of the roadway segments shown on Figure 8 to have projected future deficiencies may be improved by the roadway connection/completion projects.

While Figure 9 emphasizes the function of town roads in terms of moving vehicular traffic, the Comprehensive Plan policies for Amherst's future road network are not designed to dramatically increase levels of service for the automobile through a capitalintensive program to widen existing roadways and construct new ones. Even if funding were available for such a program, experience has shown that increasing capacity tends to attract additional automobiles, often resulting in even more congestion while impacting adjacent neighborhoods, pedestrians, and bicyclists. As a fundamental principle, enhancing mobility for automobiles must be balanced with other considerations, such as protecting neighborhood character and providing for safe pedestrian and bicycle movement. Thus the first two policies below (6-1 and 6-2) address the need for a context-sensitive approach to planning and design of roadway improvements in coordination with adjacent land uses. Policy 6-3 involves establishing a town planning capability to manage the local road network. Policy 6-4 focuses on operational (as opposed to capital-intensive) measures to enhance roadway capacities. Policy 6-5 proposes a targeted capital program by the Town to address congestion problems on local roads. Recognizing that it is unrealistic to expect that operational and capital programs will eliminate traffic congestion in the Town of Amherst, Policy 6-6 emphasizes the need for a broader strategy that includes investment in alternative travel modes and coordination of transportation and land use policies.

### 6-1 Designate roadway corridors for application of contextsensitive design standards to maintain their character.

The Vision Statement expresses the importance of Amherst's diverse physical environment – including distinct urban, suburban, and rural areas – to community character. Growth in recent decades has resulted in the lessening of distinctions between these areas, due in large part to the proliferation of automobile-oriented residential subdivisions and commercial strip development typical of suburbanizing communities. To help reestablish and reinforce physical diversity and sense of

Traffic calming refers to physical or operational measures to reduce vehicular speeds or volumes of "cut-through" traffic. Examples of physical traffic calming measures include traffic circles or roundabouts, textured pavements, raised crosswalks, and mid-block street narrowings or "chokers" (often in conjunction with pedestrian crossings).

Context-sensitive design is an emerging approach to transportation planning that emphasizes collaborative planning with stakeholders to develop transportation improvements that preserve local values and resources (e.g., neighborhood quality), while maintaining safety and mobility (as opposed to "one-size-fits-all" engineering solutions).

place within Amherst, the Town should develop and adopt roadway design standards that are sensitive to the established context. These standards should address the treatment of the public right-of-way, the form and appearance of adjacent development, and land use in an integrated fashion. The standards should incorporate flexibility consistent with the approach to planning for transportation improvements known as "Context Sensitive Design," which emphasizes collaborative planning with stakeholders to develop solutions appropriate to local conditions (see Policy 6-2). The Town should work with the Erie County Department of Public Works and the New York State Department of Transportation (NYSDOT) to implement the standards on highways under their jurisdiction.

Four types of character appropriate to different contexts have been identified:

- Traditional character
- Suburban character
- Commercial character
- Rural/special character

Figure 10 illustrates the locations of corridors within each of these types.

Traditional character: "Traditional" refers to corridors located within higher intensity centers and older neighborhoods such as Williamsville, Eggertsville, and Snyder. Design standards for these areas should promote a pedestrianfriendly environment through crosswalks and sidewalks, trees and other landscaping, commercial buildings located at established centers and pulled to the front of the lot with parking to the rear, and interconnected (grid) street patterns. Main Street between Kenmore Avenue and Kensington Avenue and through the Village of Williamsville is an example of a traditional corridor. Other traditional corridors include:

- Bailey Avenue from Main Street to Maple Road
- Eggert Road from the City of Buffalo line to Bailey Avenue
- Grover Cleveland Highway
- Harlem Road
- Kensington Avenue
- Union Road from Main Street to North Forest Road
- South/North Forest Road from Wehrle Drive to Union Road
- Niagara Falls Boulevard from Kenmore Avenue to Eggert Road
- Kenmore Avenue from Niagara Falls Boulevard to Main Street

Main Street between Kenmore Avenue and Kensington Avenue and through the Village of Williamsville is an example of a *traditional corridor* with commercial buildings pulled to the sidewalk and parking located to the rear.

- Garrison Road/Evans Street
- Wehrle Drive from Harlem Road to Cayuga Road
- Wehrle Drive from Aero Drive to the Village of Williamsville Line
- Cayuga Road
- Park Club Lane
- Getzville Road
- LeBrun Road

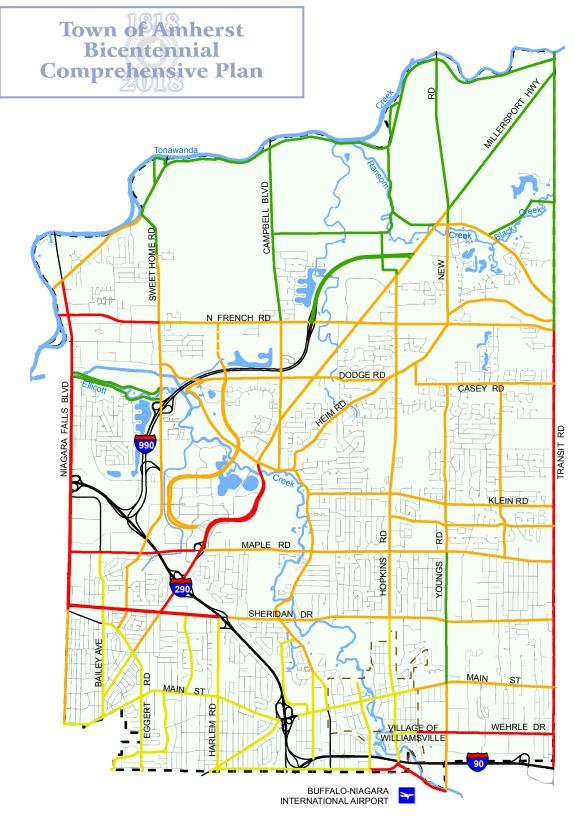
Suburban character: "Suburban" refers to corridors serving newer residential subdivisions and arterial or collector roadways serving non-local traffic and which typically support automobile-oriented development. Standards for residential subdivision roads should provide appropriate (not excessive) street widths, planting strips with street trees, sidewalks, and connected (not necessarily grid-like) patterns. Standards for arterial or collector corridors should balance the movement of traffic with the protection of adjacent residential areas. Segments of North Forest Road provide examples of a suburban roadway with unique characteristics that can be protected through standards. Desired treatments of suburban character corridors include controlled access as opposed to multiple curb cuts; treed planting strips, medians, and/or buffers adjacent to the roadway; and bike lanes and sidewalks. Consistent with Land Use and Development Policy 3-4, land use strategies for arterial and collector roadways should focus commercial development in centers with residential uses maintained between the designated center locations. Suburban character corridors include:

Standards for *suburban character corridors* should balance vehicular movement with streetscape enhancements (landscaping and tree planting projects, bike lanes and sidewalks, etc.) and the protection of adjacent residential

- Maple Road east of Millersport Highway
- Sheridan Drive east of I-290
- Youngs Road from Maple Road north to Casey Road (Amended 09-08-15; BCPA-2014-01)
- Hopkins Road from Sheridan Drive to Millersport Highway
- North Forest Road from Union Road to Dodge Road
- John James Audubon Parkway
- North French Road from Sweet Home Road to Transit Road
- Casey Road
- Heim Road
- Klein Road
- Dodge Road
- Sweet Home Road from Eggert Road to North French Road
- Covent Garden Lane/Paradise Road
- Renaissance Drive/Bassett Road
- Millersport Highway from Eggert Road to New Road



Youngs Road: a suburban character corridor, limited access arterial with reverse frontage residential lots.





Smith Road

**Commercial character:** Several of Amherst's roadway corridors have an established linear commercial development pattern. These corridors include:

- Niagara Falls Boulevard from Eggert Road/Sheridan Drive north to Tonawanda Creek Road
- Transit Road south of North French Road
- Maple Road west of Millersport Highway
- Sheridan Drive west of I-290
- East Robinson Road/North French Road from Niagara Falls Boulevard to Sweet Home Road
- Wehrle Drive east of the Village of Williamsville
- Main Street east of the Village of Williamsville
- North Bailey Avenue from Maple Road to Niagara Falls Boulevard
- Youngs Road from Aero Drive to Main Street
- Aero Drive from Wehrle Drive to the Town boundary and Youngs Road

Standards for commercial character corridors should emphasize access management, visual improvements (e.g., signage controls, landscaping, etc.), and introduction of pedestrian elements such as sidewalks and connections to building entrances. The Town will need to continue to work with adjacent municipalities to ensure that roadway corridor standards and related land use policies for Niagara Falls Boulevard and Transit Road are coordinated.

**Rural character:** "Rural" character corridors possess a unique visual character within Amherst due to their rural and/or scenic qualities. Typical characteristics include:

- Predominantly undeveloped, with significant open space, tree cover, or other vegetation along the road frontage
- Developed uses generally limited to residences with direct access to the road; "backlands" are undeveloped
- Lack of modern road improvements (narrow widths, no curb/gutter and sidewalks, etc.)
- Fit into/provide views of the rural landscape or significant visual resources (e.g., follow creeks)

The following rural character corridors have been identified:

- Campbell Boulevard between North French Road and Tonawanda Creek Road
- Dann Road between Smith Road and Transit Road
- Smith Road between Hopkins Road and Millersport Highway

Standards for *commercial character corridors* should emphasize access management, visual improvements, and increased pedestrian access.

Standards for *rural character corridors* should help maintain the special visual character of these roadways.

- Hopkins Road between Millersport Highway and Tonawanda Creek Road
- New Road between Smith Road and Tonawanda Creek Road
- Orbit Drive (Entire loop off Tonawanda Creek Road)
- Sweet Home Road between North French Road and Tonawanda Creek Road
- Tonawanda Creek Road
- Brenon Road (access to Veterans Park)
- North and South Ellicott Creek Roads between Niagara Falls Boulevard and Sweet Home Road
- Transit Road between North French Road and Tonawanda Creek Road
- Youngs Road between Main Street and Maple Road
- I-990 corridor north of North French Road
- Schoelles Road
- Millersport Highway between New Road and Transit Road

Standards should be established for both roadway design and the treatment of adjacent land uses to help maintain the visual character of rural corridors. Roadway design standards should limit roadway width, provide natural rather than structural drainage controls (e.g., drainage swales rather than curb and gutter), and maintain tree cover and vegetation. With respect to land use, past development practices have resulted in individual homes lining rural roadways within the Town, impacting visual character and isolating larger properties behind the frontage house lots. To address this trend, land use standards for rural corridors should encourage development setbacks and clustering to maintain open character and scenic views from the roads.

# 6-2 Modify the Town's engineering standards for roadways to reduce neighborhood impacts.

Consistent with Policy 6-1, the Town should review existing engineering design standards with the intent of incorporating measures that reduce impacts of roadway improvement projects on adjacent neighborhoods and promote a more pedestrian-friendly environment. Examples include:

- Emphasis on targeted improvements (e.g., turning lanes at intersections) rather than extensive widening that will adversely affect adjacent land uses
- Traffic calming measures (i.e., changes in street alignment and other physical measures such as roundabouts and medians to reduce traffic speeds, cut-through volumes, or other negative impacts of automobiles on neighborhoods)
- Reduced lane widths and turning radii
- Provisions for landscaping (e.g., planted medians, street trees, etc.) and sidewalks



An example of traffic calming measures, such as reduced lane width, crosswalk, landscaping, and on-street parking.

Source: www.pedbikeimages.org

In revising the engineering standards, the Town should incorporate flexibility to address local conditions consistent with a nationally emerging approach to transportation planning referred to as "context-sensitive design." This concept has been defined as:

A collaborative, interdisciplinary approach that involves all stakeholders to develop a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic and environmental resources, while maintaining safety and mobility.<sup>4</sup>

Applied to Amherst, this approach means that top-down engineering standards emphasizing movement of vehicular traffic will be replaced by a design approach that involves residents and other stakeholders in developing solutions to achieve locally defined objectives (e.g., promoting pedestrian character and reducing impacts on neighborhood and environmental resources).

Information on revisions to roadway design standards should be conveyed to the Erie County Department of Public Works and the NYSDOT. The Town should work with these agencies to apply the concept of context-sensitive design to county and state roadway improvements within the Town. The agencies should be asked to keep the Town informed of future improvement projects and to incorporate the Town's standards and approach into these projects. NYSDOT's Highway Design Manual contains a section on traffic calming measures that can be applied to state highways. All agencies contemplating reconstruction or realignment of major roadways should hold public workshops prior to initiating conceptual design as a means of identifying local concerns and expectations. The public comment period for environmental review of road projects will provide another forum for improving roadway improvement design and reducing impacts on neighborhoods within the Town.

# 6-3 Establish a town highway planning capability to manage the local road network.

The GBNRTC tracks current and projected future conditions of state and county roads in the Town of Amherst for the Metropolitan Transportation Plan. However, GBNRTC's programs do not address local roads within the Town not included in the Federal-Aid system. The Town should work with GBNRTC to establish a planning capability that addresses the entire network of state, county, and local roads within Amherst. This capability will be used to plan for operational and capital improvements in accordance with Policies 6-4 and 6-5. (Amended 09-08-15; BCPA-2014-01)

A town highway planning capability is needed to proactively plan for operational and capital improvements to Amherst's entire road network, as well as to assess the traffic impacts of major developments.

<sup>&</sup>lt;sup>4</sup> Project for Public Spaces website, www.pps.org/CSS/cssonline.htm

As part of the highway planning capability, the Town should institute a comprehensive approach to the review of site plans for future developments to assess the impacts on the transportation network. This will involve the application of traffic impact analyses and mitigation requirements to developments projected to generate large amounts of traffic. Mitigation requirements exceeding the feasibility of a single project to implement may provide a substantial benefit if the costs were shared by several projects. As an example, continued growth in the Ransom Oaks area may eventually lead to the requirement of a traffic control device along New Road. Developers could be required to share in the costs of such traffic improvements as part of the development review and approval process.

# 6-4 Enhance transportation system capacities through operational improvements, including improved access management and a comprehensive signal-timing plan.

Access management strategies should focus on coordinated roadway design and land use practices such as the following:

- Limiting the number of driveways and intersections on major and minor arterial highways
- Constructing medians and other devices to control turning movements
- Encouraging compact development patterns, shared curb cuts, and internal connections and service drives

The Towns of Amherst and Clarence have developed collaborative access management concepts along Transit Road. Similar access management strategies should be applied to all major roadway corridors within Amherst. Design standards and incentives should be provided for commercial and residential developments to implement access management plans consistent with the Town's overall strategies.

In addition to access management strategies, a signal-timing plan should be developed to improve the coordination of the traffic signal system throughout the Town. Coordinating traffic signals means connecting them so that they work together to create the smoothest possible operational conditions and traffic flow along major corridors. The plan should address the following<sup>5</sup>:

- Adequate time for cross-traffic to clear intersections
- Provisions for pedestrians and emergency vehicles



Access management along Sheridan Drive in Tonawanda.

 $<sup>^5</sup>$  Information based on the Ames, IA traffic signal coordination program: http://www.cityofames.org/index.aspx?page=959

- Motorists' expectations of a "no-stop" progression with as little delay as possible
- Increased safety by reducing the number of red-signal violations and rear-end collisions
- Changing signal timing for different periods during the day to serve varying demands

A significant amount of information must be collected to develop such a plan, including:

- Information related to the present signal timing and physical layout of the street system
- Current turn movement counts at signalized intersections

The plan could be developed and applied to selected intersections/corridors on a trial basis and gradually extended throughout the Town.

# 6-5 Undertake a capital program to maintain or improve the efficiency of the existing road system.

The Town should work with NYSDOT, GBNRTC, Erie County, and other agencies involved in transportation planning to develop a long-range program to address identified problems through targeted improvements. Components of this program should include:

- Develop a local highway capital improvement program. Amherst's road system is in need of a capital program that identifies ways to improve capacities by:
  - 1. Targeting improvements to address traffic congestion problems on local roads
  - 2. Promoting a more interconnected (grid) roadway system through roadway connections/completions as shown on the Future Thoroughfare System Plan (Figure 9)

Local roads not eligible for funding under the Federal-Aid system would benefit from a program addressing level of service improvements. As an example, simply adding a left turn lane and modifying the traffic signal could correct low level of service resulting from congestion at intersections. Such improvements can be rated and weighed against similar improvements on local roads throughout the Town, and implemented through the new capital program funding.

Greater connectivity would be promoted by developing a hierarchy of streets (arterial, collectors, and local collectors), combined with a standard for the streets to be spaced approximately ½ mile or less apart from each other. This spacing will increase the efficiency of transit

# Components of a *capital program* for roadways:

- Local highway capital improvement program
- Targeted intersection improvements
- Improved pedestrian/ vehicular connectivity between neighborhoods
- Provisions for pedestrian, bicycle, and transit movement

operations, reduce the time allotted for access trips along local streets, and relieve congestion and the pressure to widen major thoroughfares. While implementation of this concept will depend upon the availability of funding and will need to be sensitive to neighborhood impacts, the Youngs Road Extension, Northwest Connector Road and other roadway connections/completions shown on Figure 9 are good examples of the opportunities that exist within the Town. (Amended 09-08-15; BCPA-2014-01)

- Implement improvements to improve traffic flow at congested intersections. Congestion is a problem at many intersections within the Town of Amherst. Strategies that could be used to address this problem include addition of turn lanes, other measures to reconfigure the intersection (e.g., reviewing turning radii, encouraging four-way alignment of streets at intersections), and improved signalization (see Policy 6-4). As an example, recently completed highway improvements along Niagara Falls Boulevard and Transit Road include the addition of a landscaped island/raised median in place of continuous left-turn lanes, thereby eliminating a source of congestion from queued vehicles in the center lane that currently conflict with busy oncoming travel lanes.
- Improve pedestrian/vehicular connectivity between neighborhoods. Providing street linkages would allow local traffic to move between neighborhoods without having to use high traffic volume roadway corridors. This would help to diminish corridor congestion and improve vehicular and pedestrian safety. Also, future trail and bikeway projects could include spurs and thus access to neighborhoods, and commercial/mixed-use activity centers.
- Accommodate pedestrian, bicycle, and transit service in roadway improvements. While this policy focuses on road improvements, the overall goal for Amherst's future transportation network is to develop an interconnected, multi-modal system, including pedestrian, bicycle, and transit service. Thus roadway improvement projects should be designed to accommodate other modes of travel by incorporating features such as pedestrian sidewalks, bicycle lanes, and dedicated bus pull-off lanes and shelters.
- 6-6 Accept a certain level of traffic congestion as a "given" and expand investments in alternative transportation modes and compact, mixed-use development patterns.

Given the limits placed on future roadway improvements by funding constraints and the need to preserve neighborhood character, combined with Amherst's established and growing function as a regional employment center, it is not expected that the above policies will "solve" congestion problems in the Town. Instead, the Comprehensive Plan transportation policies involve a shift away from an emphasis on functional efficiency for the automobile towards a more balanced transportation system that achieves other community objectives. As described in Sections B and C below, this shift includes expanded investment in facilities to support alternative travel modes (e.g., trails, sidewalks, bikeways, and transit). Equally important is the coordination of transportation and land use policies to promote compact, mixed-use development patterns that reduce automobile dependency and encourage walking.

### B. Bicycle/Pedestrian Network

The Town of Amherst is actively developing a system of off-road trails to support both bicycle and pedestrian use. The existing Ellicott Creek Trail and proposed Lehigh Valley Trail are examples of quality projects that support non-vehicular transportation. The Town also continues to construct or support construction of sidewalks within Amherst, although there are significant gaps in the connectivity of the system. On-street bicycle facilities are relatively limited, with only two bicycle routes currently designated. Future projects to expand the coverage and connectivity of the bicycle/pedestrian network and provide additional amenities should be supported. The concept for developing an interconnected bicycle/pedestrian network as part of a town-wide greenways system is described in Land Use and Development Policy 3-13 and illustrated in Figure 4 (Parks, Open Space and Trail Map) and Figure 5 (On-Street Bicycle/Sidewalk Network).

Bicycle level of service is a system that evaluates the suitability of roadway corridors for bicycle travel and which can be used to identify and prioritize needed improvements.

# 6-7 Develop a comprehensive bicycle network, using a rating system to identify and prioritize improvements.

As part of the capital improvement program discussed under Policy 6-5, an ongoing program to identify and prioritize improvements to achieve a town-wide bicycle network should be established. Both on-street bicycle lanes and off-street trails should be developed consistent with Figures 4 (Parks, Open Space and Trail Map) and 5 (On-Street Bicycle/Sidewalk Network). GBNRTC's Regional Bikeway Implementation Plan for the Buffalo-Niagara Region can be consulted for guidance in planning for on-street facilities. The GBNRTC Plan establishes a Bicycle Level of Service rating system that evaluates the suitability of roadway corridors within the Town for bicycle travel based upon vehicular traffic, number of travel lanes, average outside lane width, posted speed limit, pavement surface condition, and land use. This rating system can be used to help identify and prioritize on-street improvements needed to accommodate bicycle travel. Future developments should be required to provide connections to the town-wide pedestrian/bicycle network. Provisions for such connectivity could be incorporated into the existing process for site plan, subdivision, and/or special use permit review.

## 6-8 Develop a comprehensive pedestrian network of sidewalks, crosswalks, and trails.

A comprehensive network of pedestrian facilities should be developed and safety improvements made to roadways that are recognized pedestrian hazards. As with the bicycle network, an on-going program to identify and prioritize improvements to achieve this network should be established. This program should focus on eliminating discontinuities in the current network and providing linkages between neighborhoods and major pedestrian destinations, such as schools and mixed-activity centers. For example, Federal/State funding can be available to complete the sidewalk networks near schools. (Amended 09-08-15; BCPA-2014-01)

Discontinuous sidewalks may result from varying development standards applied to different highway functional classifications and requirements. For example, sidewalks may not have been required for a road with a lower function or classification, and thus development occurred without sidewalks. As traffic levels increase and the road takes on characteristics of a higher function road, development may occur with sidewalks, resulting in a discontinuous pattern. The Town should consider providing for continuous sidewalks along roadway segments as road classifications change. The Engineering Department uses its GIS capabilities to identify discontinuous sidewalks. (Amended 09-08-15; BCPA-2014-01)

The goals set forth by GBNRTC's *Pedestrian Policy Statement* (Spring 1997) should be used as a guideline in implementing this policy. These goals are:

- Increase pedestrian mobility by meeting pedestrian demands with improved infrastructure
- Improve safety and comfort of the pedestrians
- Encourage pedestrian activity
- Provide pedestrian accessibility to all destinations
- Educate bicyclists, pedestrians, and motorists

Achieving these goals will improve the quality of life of residents of Amherst.

To address existing needs the Town should consider the feasibility of creating sidewalk improvement districts to repair and maintain sidewalks in established and new neighborhoods. Pedestrian improvements also need to be coordinated with land use and development policies to promote more compact, walkable development patterns. Such policies include promoting the establishment of mixed-use activity centers that increase opportunities to walk between home, shopping, and/or employment. Multiple uses should be encouraged

Improvements to Amherst's *pedestrian network* should focus on eliminating discontinuous sidewalks and on providing linkages to schools and other major pedestrian destinations.

within many of the Town's industrial and office parks to offer residents and employees the opportunity to complete necessary errands at lunch or after work hours without impacting the external road system.

#### C. Transit Service

Public transit is a vital component of the Town's transportation system, both to reduce the number of vehicles on the road and to serve segments of the population who do not have access to private automobiles. Annual demand for public transit service has seen both declines and increases since 1995. Currently, the number of Amherst residents who choose to ride on the Niagara Frontier Transportation Authority's Metro Bus system is increasing as a result of creating routes that access industrial parks within the Town. There has also been an increase in ridership of City of Buffalo residents traveling to retail and employment centers located in Amherst.

# 6-9 Work with NFTA to improve transit service and provide connections to activity centers (e.g., UB and Eggertsville).

Utilization of the NFTA Metro Bus system is limited, primarily due to the relative affluence of the community and the corresponding absence of need to use public transportation, and the perceived inconvenience of the present system. Establishing more extensive and frequent service that connects to mixed-use activity centers as described in Land Use and Development Policy 3-1 will increase the benefits and utility of public transit service.

Better-defined activity centers established in accordance with Policy 3-1 will result in better utilization of public transit, particularly as projected increases in congestion on Amherst's road network occur. Encouraging a variety of activities in these locations combined with compact residential development within walking distance will create nodes for transit service. Traffic flows would be enhanced through dedicated bus pulloffs. In addition, better service and bus shelters within industrial and office parks would increase ridership.

Light rail currently extends to the south campus and has been proposed for extension to the north campus in the past. Transit service in this corridor, whether light rail or other option such as dedicated bus service, would support Comprehensive Plan policies related to alternative transportation modes, mixed-use activity centers, and better integration of UB into the community.

The above policies establish a coordinated strategy to improve vehicular, bicycle, pedestrian, and transit mobility for Town of Amherst residents. To assess progress in implementing these policies, bi-annual transportation surveys should be conducted

Transit service should be provided to existing and new *mixed-use activity centers* established in accordance with the Comprehensive Plan land use policies.

through collection of data (e.g., traffic counts and transit ridership) and distribution of questionnaires to residents. The results of these surveys should be used by the Town in prioritizing and modifying transportation programs to address citizen needs.