

Route 96 Corridor Management Study

Technical Report #4: Intermunicipal Implementation Strategy

1.0 INTRODUCTION

1.1 Project Background

The Route 96 Corridor Management Study evaluates the traffic impacts associated with development along this transportation corridor from the southern boundary of the Village of Trumansburg to the junction of NYS Routes 96 and 13 (Fulton Street) and provides recommendations and mitigation strategies for these impacts. The Study quantifies existing and projected traffic and levels of service and evaluates how a nodal development pattern with mixed uses, enhanced transit service, access management, and additional transportation system improvements, including bike and pedestrian facilities, could mitigate the impacts of this traffic. The Study examines the option of promoting development nodes in the vicinities of Cayuga Medical Center and the Hamlet of Jacksonville as well as considers the impacts of anticipated development in the City of Ithaca and Village of Trumansburg, as an alternative to a sprawling suburban and rural development pattern. This plan will define the extent of nodal development and identify specific access and corridor management improvements that could be made to mitigate traffic impacts. Key considerations are multi-modal opportunities in the corridor and protecting the livability of impacted areas. The Study recommends specific land use regulatory changes and transportation system improvements that would have the effect of reducing the traffic impacts of future development in the corridor.

1.2 Project Purpose

The purpose of the Route 96 Corridor Management Study is to help the Town of Ulysses, Town of Ithaca, City of Ithaca, Tompkins County, Ithaca-Tompkins County Transportation Council (ITCTC), and Tompkins Consolidated Area Transit (TCAT) define an appropriate approach to manage anticipated growth along the Route 96 corridor from the southern boundary of the Village of Trumansburg to the intersection of Route 96 and Route 13 in the City of Ithaca.

This study will serve as a guide to define a preferred development pattern for the corridor that is consistent with the goals and vision for each of the involved communities and entities. It will recommend strategies to reduce anticipated traffic-related impacts caused by new development, as well as increased through traffic. A critical objective of this study is that findings and recommendations will assist the Town of Ulysses, Town of Ithaca and City of Ithaca in their current comprehensive plan updates.

Arguably, one of the most important outcomes of the Route 96 Corridor Management Study is to succeed in developing an intermunicipal plan of action that supports the individual goals of each community/organization involved in the study and achieves broader regional transportation, housing, and land use goals.

2.0 TECHNICAL REPORT #4: INTERMUNICIPAL IMPLEMENTATION STRATEGY

The Route 96 Corridor Management Study Technical Report #4 will draw from Technical Reports #1-3 to develop an intermunicipal strategy for mitigating traffic by promoting development in a nodal pattern along the Route 96 corridor. The first three reports are summarized in Appendix A of this document and full text is available on the Tompkins County Planning Department website at http://www.tompkins-co.org/planning/transportation_choices/Route96Ifno.htm.

A brief description of Technical Reports #1-3 follows: Report #1 presents the existing conditions on the Route 96 Corridor, including traffic conditions, physical characteristics of the road and surrounding land, and zoning and land uses. Technical Report #2 provides the transportation analysis portion of the study as three components: traffic projections, traffic impact analysis, and opportunities and constraints analysis. Technical Report #3 offers a series of recommendations for transportation infrastructure, land

use, and quality of life changes/improvements that are based both on study analysis and resident and stakeholder input.

Technical Report #4 will develop a two-pronged approach for accomplishing the recommendations of the Study. First, it will establish consensus among municipal and agency partners about the methodology for developing in a nodal pattern across municipal boundaries, including developing design guidelines and specific regulatory recommendations. Next, it will present a list of improvement projects that can be achieved through collaboration between municipalities and NYS DOT. Ultimately, the intermunicipal implementation strategy will serve as a planning tool for municipal comprehensive planning efforts and agency long-range planning.

2.1 What is Nodal Development?

A node, as used in the Tompkins County Comprehensive Plan, refers to a relatively dense concentration of mixed-use development. Nodes include, and the concept is derived from, the traditional villages in the county as well as areas with infrastructure and an existing base of housing, services and/or employment that may function as a node or support development of a node in the future. It is intended that nodes provide employment, a mix of types of residences, and commercial and community services in a walkable community that can be connected to larger employment and service centers by public transit.

In order to keep a node walkable it should encompass roughly a ½-mile radius from the commercial core to the edge, with the densest residential development within 1/4 mile of a transit stop. (Ideally there should be a distinct rural/urban edge to the node.) This means a total land area of approximately 500 acres. Studies have indicated that a population of about 2,000 to 2,500 is required to support the most basic neighborhood-scale commercial services. If half of the gross acreage, taking out land for streets, parks, public and commercial buildings, etc., is devoted to residential development and the average household size is estimated to be 2.5 persons, that requires a density of at least four to five units per acre. Of course greater densities will make it possible to provide a greater range of services (and make these services more economically viable) thus reducing further the need for vehicular trips. A well-planned node could easily accommodate a population in excess of 6,000 and still maintain the walkability standards. An average density of 5-10 units/acre is recommended with single-family development at the lower end of the range and multi-family development in the 10-15 unit/acre range. Higher densities also make it more likely that a mix of incomes can be accommodated in the residential households.

Over the long run nodes should seek to establish a balance between residential development and employment. Assuming that half of the estimated 500 acre-sized node is dedicated to residential development, then 250 acres would be supporting at least 5-10 housing units/acre. If each of these housing units had, on average, 1.5 working age adults this might mean an employment base of about 1,800 to 3,600 persons. Clearly this would be more employment than what is needed to provide neighborhood and community services and could result in demand for additional land for employment. Nodes are not intended to support regional commercial development, such as malls and large shopping centers, that would generate additional vehicular traffic from outside the node, but may tap into the market provided by non-resident employees within the node and commuters who might be served by park and rides within the node.

A node should be distinguished from an urban center or a residential hamlet. Urban centers are likely to be much larger in population and geographic area than what is found in a village or node, and may consist of major employment and commercial centers, and a number of neighborhoods that may function much like nodes themselves. Hamlets are often smaller in scale, more residential in nature and do not have the infrastructure to support the level of development and population necessary to provide a range of local neighborhood or community services.

The Tompkins County Comprehensive Plan supports additional development in the City of Ithaca, the urban center of the County, and recognizes that additional development may occur in hamlets throughout the county. Outside of the urban center, however, development in villages and potential new nodes centered around existing employment centers offers the best opportunity to reinforce and establish

walkable communities that will reduce vehicular trips, energy use and greenhouse gas emissions while enhancing the quality of life for residents.

2.2 Local Plans and Studies that Support the Concept of Nodal Development

Several local planning efforts and municipal studies acknowledge and identify nodal development as an effective growth pattern for Tompkins County that can help advance a number of local social, economic, and environmental goals. Such plans/studies include:

- Tompkins County Comprehensive Plan (2004)
- Town of Ulysses Comprehensive Plan (anticipated 2009)
- Town of Ithaca 1993 Comprehensive Plan (Update underway, anticipated completion 2010)
- Route 13/366 Corridor Study – Town of Dryden (2008)
- Tompkins County Housing Strategy (2007)
- Cornell University – Workforce Housing and Transportation Initiatives (2008)
- Town of Ithaca Transportation Plan (2007)
- Ithaca-Tompkins County Transportation Council Long Range Transportation Plan (2009)

A summary of each of these plans/studies is provided in Appendix B. The City of Ithaca has also begun a process to develop an update to its 1971 Comprehensive Plan (anticipated 2011).

2.3 Benefits of Implementing Route 96 Study Recommendations

In order for the preferred Nodal Development scenario to be implemented within the Study area, each of the individual communities will need to pledge to promote this pattern of development. There are numerous benefits of this development pattern that accrue to each of the partnering municipalities and organizations, assuming full support and implementation of the Route 96 Study recommendations. Some of study's benefits will be felt corridor-wide, while others will positively impact specific municipalities or involved organizations. A few examples of these benefits are:

Corridorwide

- Potential for housing and job co-location
- New neighborhood-oriented and affordable housing – a desirable housing niche that is difficult to find
- Opportunities for a multi-modal transportation system that offers people a choice - increased densities in nodes offer basis for increased transit service with more options (ex. express, commuter trips) as well as improved bicycle and pedestrian links throughout corridor
- New services and conveniences supported by nodes will benefit current and future residents
- Strong foundation is established for ongoing intermunicipal coordination and cooperation
- Intermunicipal study presents a compelling case to NYSDOT to fund infrastructure improvements

Town of Ulysses

- Infrastructure and services will be more viable with more concentration of growth in Hamlet
- Cherished rural character of Town is preserved
- Walkable, bikeable neighborhoods will be weaved into the Hamlet and revitalize an historic area

Town of Ithaca

- Safety strategies are identified for vehicles, pedestrians, and bikes
- Walkable and bikeable neighborhoods will be introduced to a new area in the Town at the Cayuga Medical Center and create a sense of place
- Agricultural and natural areas outside of the corridor can more readily be preserved

City of Ithaca

- The rate of increase in growth of traffic on the Route 96 corridor and through the City will be reduced, thereby maintaining quality of life for current residents

TCAT

- Efficiencies will be achieved through increased ridership in the densely-populated nodal areas

2.4 Density Goals for the Route 96 Corridor

The overall goal for the Route 96 corridor is to accommodate the majority of projected growth in nodes, while mitigating the impact that this growth will have on the transportation system and on corridor livability. The following average ratios propose how and where new housing could be allocated.

In Nodes

Jacksonville: 2-4 units/acre

Cayuga Medical Center: 5-10 units/acre

Trumansburg: 4-8 units/acre

Outside Nodes

Cliff Street, City of Ithaca: Maintain existing density

Town of Ulysses: 1 unit/5 acres, with a minimum 300' frontage requirement

Town of Ithaca: Maintain existing density on Route 96 and evaluate possibility of downzoning other areas

2.5 Municipal Zoning Regulation

Land use regulations and design guidelines are needed to accomplish the preferred pattern of growth. The following can provide a framework for Nodal Development zoning and design principles.

2.5.1 Route 96 Corridor Zoning and Design Guidelines

To implement the nodal development vision for the Route 96 corridor, new municipal zoning regulation is needed.

The preferred development pattern for the corridor consists of five distinct character areas:

1. **Jacksonville Mixed Use Hamlet Center** – This district marks the area within approximately ½ mile of Jacksonville Road/Route 96 intersection - from just south of the intersection of Cold Springs Road/Route 96 at the north to just beyond Colegrove Road/Route 96 to the south.
2. **Cayuga Medical Center District** - This district would be the area from just south of Dubois Road on the north to north of Bundy Road on the south along the corridor and the immediate area that is within ½ mile of Harris B. Dates Drive/Route 96 intersection. (for approximate intersection locations see Technical Report #3, pg.8 conceptual rendering)
3. **Cliff Street** – This district includes the portion of Route 96 that begins at the Town of Ithaca/City of Ithaca municipal boundary and extends south to the Cayuga Inlet, consisting primarily of densely developed housing and a few businesses.
- 4.5. **Outside Nodes** – Two districts are proposed for the remaining areas on the corridor that are outside the nodes:
 - Town of Ulysses Corridor District
 - Town of Ithaca Corridor District

Recommended zoning and design guidelines for the five character areas are as follows:

1. Jacksonville Mixed Use Hamlet District

The Hamlet of Jacksonville is an existing rural, population center that could greatly benefit from a nodal development pattern to reestablish the hamlet as a community hub. Current development within the hamlet consists of a limited variety of uses oriented in close proximity to one another. They are sited on relatively small lots with minimal or zero front yard setbacks from Route 96. Today, two-story buildings are the tallest structures in the hamlet. In order to ensure that new and/or infill development complements the existing character of this distinct area, the Town of Ulysses should

consider slightly expanding the new Hamlet District (amended 2007) to include areas to the east and west of Route 96 that fall within the ½ mile nodal zone.

Purpose

The purpose of the Mixed Use Hamlet District should be to encourage the development of a small-scaled, mixed use area with an average residential density of 2-4 units/acre and that includes shopping and services that meet the needs of this local community, offers pedestrian access and amenities, and is in keeping with the historic nature of the hamlet. The Mixed Use Hamlet District would regulate location, design, and use of structures and land to create a dense concentration of activity that is pedestrian-friendly.

Permitted Uses and Site Requirements

The current permitted uses and site requirements set forth in the Hamlet District (2007) designation are supportive of the goals of the Route 96 Corridor Management Study. The full description for the current Hamlet District Zone can be viewed at the Town of Ulysses website at http://www.ulysses.ny.us/zoning-law_10-10-07.pdf, Town of Ulysses Zoning Law, 2007, Article XI – H1-Hamlet District.

Density Standards

Establishing a density standard is critical to growing a compact, walkable node. Should large lot development occur in the limited area within the ½ mile node center, it will be difficult to impossible to develop at the density needed to support businesses and services. Also, large lot development could preclude the possibility of knitting new and old development into a seamless neighborhood fabric.

The Mixed Use Hamlet District should have an average density of 2-4 housing units/acre, with a minimum density of 2 units/acre. The current lack of sewer infrastructure in the Town of Ulysses limits permitted density at present. However, consideration should be given to the possibility of future sewer alternatives (e.g., smaller-scaled package facility), which could significantly increase density potential. It should also be noted that the existence of municipal water in the hamlet allows for slightly increased densities even now.

Parking and Site Access

Parking requirements should be amended to prohibit future development from allowing parking in the front or side yards of parcels adjacent to Route 96. In conjunction with minimal setbacks, this strategy creates a pedestrian-friendly, traditional development pattern that is very dense along the corridor. Additionally, the Town of Ulysses should consider adopting a shared parking ordinance to reduce the parking requirements within the hamlet.

To provide better access management on the Route 96 corridor, it is suggested that any new access to Route 96 be submitted for required site plan review. New access points onto Route 96 should be minimized and favor should be given to shared driveways and access from lower volume side roads. Where no road currently exists, developers should be required to 1) begin to construct all or part of an access road as part of their project or 2) provide a cross access easement and a performance bond in order to ensure their participation upon development of the adjacent parcel. Through site plan review, the Town of Ulysses should seek to determine safe distances between access roads (normally a minimum of 300' for intersections on a State Highway).

Other Considerations

The Town may also consider modifying its Planned Unit Development (PUD) requirements within this district in order to reduce the minimum acreage necessary for a PUD, to as little as 3-5 acres, to encourage developers to prepare development plans consistent with the intent of the district.

The Town of Ulysses might consider adding design guidelines to this district that are in keeping with the scale and character of the existing hamlet. Suggested Nodal Design Standards are described in Technical Report #3 (pgs. 34-39).

2. Cayuga Medical Center District

The Cayuga Medical Center node is already developing, with its primary center at the hospital, and includes PRI and the Fingerlakes School of Massage as well as new housing - Overlook apartments and the proposed Holochuck development. Growth in this area should seek to concentrate additional housing and commercial uses as well as neighborhood amenities densely around the existing collection of uses. To accomplish this, the Town of Ithaca should consider creating either a Mixed-Use (MU) District or utilize its Planned Development Zone. Any new district should include a provision to assure that commercial uses such as retail and services are located in the central core of the node to guarantee walkable access for residents.

Purpose

The purpose of a Mixed-Use (MU) District should be to create a moderately compact zone with a variety of uses including residential, commercial, and institutional. In order to accomplish this, the MU District could regulate the location, design and use of structures, and land to create a cluster of activity and to ensure the safe and efficient movement of vehicles along the corridor.

Permitted Uses

The Town of Ithaca should consider permitting the following uses in this district: retail and service (similar to those identified in the current Town of Ithaca Neighborhood Commercial Zone); office, institutional (hospitals, medical and medical support, museums, assisted living); single, two-family, and multi-family residential; parks and recreational facilities; and possibly gas sales. Specially-permitted uses might include child care and elder care centers; health or fitness related use; clubhouse, lodge or community facility; schools, churches; and fire and emergency medical services.

Density Standards and Site Requirements

Establishing a density standard is critical to producing a compact, walkable node. The MU District should have an average density of 5-10 housing units/acre, with a minimum density of 5 units/acre, and a maximum density of 15 units/acre.

The dimensional requirements for the MU zone should strive for minimal setbacks and cap building heights at 60 feet, or 4 stories.

Parking and Site Access

Parking requirements should prohibit future development from allowing parking in the front or side yards of parcels adjacent to Route 96. This requirement along with a 25 to 40 foot front yard setback will create defined building frontage edge with a minimal green space frontage. Removing parking from side yards allows for reduced side yard setbacks and encourage structures to be closer together, resulting in the moderate density development pattern described in the purpose statement. The Town of Ithaca parking requirements should be reduced within the Cayuga Medical Center node so as to accommodate multiple uses located in close proximity to each other that will have a reduced parking ratio when compared to stand alone uses. As a result, the Town can 1) develop a second set of parking requirements for the node or 2) adopt a shared parking ordinance to take advantage of different uses with complimentary peak hours of operation sharing this support infrastructure.

Direct access from Route 96 should be prohibited for new development within the node, with the key exception of planned access roads depicted and described in Technical Report #3 on pgs. 8-11 (ie. Fire Station Road at southern edge of node and potential northeastern access from Route 96 to housing). Access should be provided from lower volume collector side roads. Collector roads should be laid out in advance and placed on the Official Map so planned development can be accommodated. Where no road currently exists, developers should be required to; 1) begin to construct all or part of

an access road as part of their project or 2) provide a cross access easement and an agreement or performance bond in order to ensure their participation in the construction of the road upon development of the adjacent parcel. The Planning Board should strive to maximize the distance between access roads within the MU District through site plan review.

Sidewalks and pedestrian paths are critical intranodal infrastructure, therefore sidewalks should be required on both sides of Route 96 within the Cayuga Medical Center node, as well as internally within new developments. The development of links to the Black Diamond Trail directly from the node will provide further support to a multi-modal system.

Non-Residential and Multi-Family Architectural Standards

It is recommended that structures within the MU District have a minimum level of design to create visual interest and minimize negative visual distraction. Facades, rooflines, exterior walls, windows, awnings, and entrances should all be considered for design aesthetic. Building entrances should front Route 96, or the internal road on which they are located, and provide a direct connection to the sidewalk system. Other entrances may be placed to the rear or side of buildings to serve visitors entering from other access points, such as rear parking. Commercial tenants should have separate entrances. Material composition of the façade should be non-reflective, give a sense of proportion, and be pedestrian-friendly. Dumpsters, HVAC, and other machinery should be screened from view. Landscaping, including street trees, should be included in development plans.

The planning of each segment of the node should be done so that overall development fits within the larger planning framework of the Town Comprehensive Plan.

3. Cliff Street

The Cliff Street portion of the Route 96 corridor requires its own zoning consideration, particularly related to site access and redevelopment, that is different from that proposed in the Corridor District and within the nodes. Currently, Cliff Street consists of dense residential development and businesses along the last steep mile of Route 96 entering the City of Ithaca.

Site Requirements and Access

On the east side, lower reach of Cliff Street, where there is opportunity to gain access via Park Road, existing residences and/or future redeveloped parcels should be permitted to reverse front and rear yards. This would improve quality of life for residences sited immediately adjacent to the corridor, and it would also reduce turning and traffic conflicts by reducing access points in the most congested area of Route 96. All parcels being redeveloped should be required to consolidate access, where possible.

Consideration may also be given to establishing a conservation steep slope zone on portions of select parcels on Cliff Street, to prohibit future dense development of particularly sensitive sites.

4 & 5. Outside Nodes – Corridor Districts

The area outside of the nodes can be described as rural in character in the Town of Ulysses and in the northern portion of the Town of Ithaca, suburban in the Town of Ithaca portion between the Medical Center and City of Ithaca, and densely developed in the City of Ithaca (see Cliff Street above). Currently there are a variety of land uses along the corridor including agricultural, residential, commercial, institutional, light industrial, and office. It is recommended that zoning and regulatory provisions be established outside the nodes to preserve and encourage low-density development. In order to accomplish this, the Towns of Ulysses and Ithaca should consider creating Corridor Districts.

Purpose of Corridor Districts

The purpose of both of the Corridor Districts is to support development of low density, low-intensity uses that preserve the current character of the corridor within each of the Towns. A Corridor District

would regulate the location, design and use of structures and land to create a low concentration of activity and to ensure the safe and efficient movement of vehicles along the corridor.

- **Town of Ulysses Corridor District**

Permitted Uses in Ulysses Corridor District

Agriculture and agriculture support businesses, public buildings, parks and recreation facilities and single-family residential would be appropriate permitted uses in the Ulysses Corridor District. Specially Permitted Uses might include office and multi-family residential in this district. The Draft Town of Ulysses Comprehensive contemplates focusing light industrial uses around Krum's Corners Road.

Density and Dimensional Requirements for Ulysses Corridor District

To maintain low density along the corridor outside the node in the Town of Ulysses, development should keep a minimum 90-100' setback from Route 96 with a minimum lot width of 300', as measured 50' from the right of way in the front yard. Maximum building height should be capped at 40' for a habitable structure, though agricultural structures such as silos or grain elevators may be taller in height.

Parking & Site Access for Town of Ulysses Corridor District

Front yard parking should be prohibited for all new development on the corridor. Instead, side and rear yard parking should be permitted. Only one driveway or access should be permitted per parcel and shared driveways should be encouraged. Planning review should strive to maximize the distance between driveways on adjacent parcels through site plan review.

Non-Residential Architectural Standards in Ulysses Corridor District

It is recommended that structures within the Ulysses Corridor District be constructed to mimic the appearance of building types typically found in rural landscapes. These include but are not limited to farmhouses, barns, stables, and country stores. This is accomplished through the use of building materials, rooflines, and decorative treatments.

- **Town of Ithaca Corridor District**

Permitted Uses in Town of Ithaca Corridor District

Agriculture and agriculture support businesses, and low density single and two-family residential should be permitted uses in the northern, rural portion of the Town of Ithaca Corridor District. Institutional, including medical uses; public buildings; parks and recreation facilities; and single and two-family residential should be permitted uses in the southern, suburban portion of the Town of Ithaca Corridor District. Specially Permitted Uses might include office and multi-family residential in the suburban portion of this district.

Density and Dimensional Requirements for Town of Ithaca Corridor District

In order to preserve low-suburban densities and the parkway character in the Town of Ithaca Corridor District it is important to focus efforts on the several large, vacant or underutilized parcels, as most parcels along the corridor in this area are already developed. Some of these parcels should be targeted for downzoning to a lower density (currently zoned MDR might be rezoned to LDR) to encourage development to occur within the Cayuga Medical Center node and to establish a defined edge between the node and the surrounding area. The front yard setback for newly developed or redeveloped parcels should, at a minimum, reflect setbacks of adjacent properties. Where possible, a 90' setback should be considered in order to buffer residences from corridor noise and provide adequate space for pedestrian amenities to be built between the road and structures.

Non-Residential Architectural Standards in Town of Ithaca Corridor District

New development in the suburban portion of the Corridor District should reflect the current residential and institutional development character of this portion of the corridor in the Town of Ithaca. This could be accomplished through establishing guidelines regarding the use of building materials, rooflines, and decorative treatments.

Parking & Site Access for Town of Ithaca Corridor District

Front yard parking should be prohibited for all new development on the corridor. Instead, side and rear yard parking should be permitted. Only one driveway or access should be permitted per parcel and shared driveways should be encouraged. Planning review should strive to maximize the distance between driveways on adjacent parcels through site plan review.

2.6 ROUTE 96 INFRASTRUCTURE IMPROVEMENTS

2.6.1 Route 96 Corridor: Looking to 2028

Today, the character of the Route 96 corridor in Tompkins County is comprised of rural, suburban, and urban environments. As envisioned, the future Route 96 corridor would retain much of its current character with additional, thoughtful development primarily located in the Village of Trumansburg, Hamlet of Jacksonville, Cayuga Medical Center node and downtown City of Ithaca.

The Village of Trumansburg would continue to be a vibrant village with a slightly greater mix of uses and housing than exists today. Within the study area of Route 96, the broader corridor could be expected to maintain much of its agricultural and scenic views in the Town of Ulysses, low-density housing and institutions in the Town of Ithaca, and dense housing and businesses in the City of Ithaca. The majority of changes along the corridor would be apparent at the two nodes proposed in the Route 96 Corridor Management Study: Cayuga Medical Center and the Hamlet of Jacksonville.

Cayuga Medical Center Node

It is anticipated that the Cayuga Medical Center node will be a population and employment center in 2028, that includes new mixed use development, with a variety of shopping and service options for residents of more than 300 new housing units. Two new intersections (potentially with roundabouts) will be located at the north and south ends of the node of the corridor, which will service new internal access roads to the neighborhoods. In addition to landscaping and signage, this will notify passersby that they have arrived at the new West Hill node. Along Route 96, sidewalks and landscaping will promote pedestrian and biking opportunities within this new community.

A lively mix of uses will be visible in storefronts, and those wishing to live in this area will be able to select from single-family homes, duplexes, condominiums or apartments. Neighborhoods will have interior open space amenities and will all be located with 1/4 –1/2 mile walk of a transit stop. Biking to and from work in this node will be possible, as bike lanes will be provided on all internal roads as well as Route 96. These bike links and sidewalks will be directly connected to transit stops and linked to the Black Diamond Trail.

The tenants and uses already located in this node – the hospital, PRI, Finger Lakes School of Massage, Overlook housing development and others – will be well integrated within this live-work neighborhood.

Hamlet of Jacksonville

The Hamlet of Jacksonville will be a reinvigorated, rural hamlet in 2028. The hamlet's historic attributes will be supported by context-sensitive infill and redevelopment projects along the Route 96 corridor. The hamlet will be defined at its entrance and exit points by new gateways with signage– one near the community park at the north and one by Colegrove Road in the Town. Tree-lined sidewalks will border both sides of a narrowed Route 96 corridor, with crosswalks, and bike lanes connecting to transit stops, residences, and businesses, allowing residents to get around the hamlet more easily.

Approximately 125 new housing units will be sited in neighborhood settings off the main corridor that include pedestrian connections to the Town park via a park path as well as to the new business district at the intersection of Jacksonville Road and Route 96. Small businesses will be in residence at this

intersection: food establishments, small grocers, offices, and services will help the hamlet meet everyday needs of residents and provide some local work opportunities.

Outside Nodes

In 2028, the Route 96 corridor outside the nodes will appear much the same as it does today. By managing and minimizing growth outside the nodes, the Town of Ulysses will preserve its rural agricultural character while the Town of Ithaca will maintain its suburban, parkway feel. New development will be thoughtfully planned and built with consolidated access points (ie. shared driveways) and rear or side parking. A defined edge will separate the nodes from the rest of the corridor.

2.6.2 Route 96 Study Area Improvements

Technical Report #3 of the Route 96 Corridor Management Study recommends a number of improvements to be made throughout the corridor. Recommendations are proposed for specific intersections; speed reduction; transit, bike and pedestrian amenities; park and rides; and gateways into the new nodes and City of Ithaca. Many of these improvements require NYSDOT funding or action as lead agency for implementation.

2.6.3 Intersections

Five intersections were selected for a greater level of study and analysis based on their existing and potential future conditions. Project Sheets, showing existing conditions as well as recommended conceptual alternatives, are presented in Appendix C, for each intersection and are posted on the Tompkins County Planning Department website with Technical Report #3. In addition to the graphic depictions of the intersection, each project sheet includes background, intersection concerns, and recommended tools. Project Sheets have been completed for the following intersections:

- Route 96 & Jacksonville Road: recommendations include improvements for bicycles and pedestrians, street amenities, new curbing, recessed/delineated parking, and potential new traffic signal or a roundabout.
- Route 96 & Harris B Dates Drive-West Hill Drive: recommendations include improvements for bicycles and pedestrians, street amenities, new curbing, and potential replacement of the existing traffic signal with a roundabout.
- Route 96 & New Cayuga Medical Center Node intersection: recommendations include improvements for bicycles and pedestrians, street amenities, new curbing, and potential for a new traffic signal or a roundabout.
- Route 96 & Taughannock Boulevard: recommendations include improvements for bicycle and pedestrian crossing and travel and signal phasing/timing improvements.
- Route 96 & Krum's Corners Road: recommendations include replacing existing warning signs with new style, larger signs and removing vegetative obstructions.

Intersection improvements would be the coordinated responsibility of municipalities and NYSDOT, other than the improvements suggested for Krum's Corners/Route 96 intersection. The Tompkins County Public Works Department will complete this action in 2009.

2.6.4 Speed Reduction in Nodes

Residents living on Route 96 who completed a community survey identified speeding to be the top concern impacting quality of life. The Nodal Development scenario offers an opportunity to reduce speeds within the nodes, which could greatly improve the livability of the proposed population centers as well as adjacent areas.

The creation of nodes along Route 96 results in village-type activity centers within which Route 96 should be treated more like a neighborhood street (similar to Route 96 treatments within the Village of Trumansburg). In a village, speeds are controlled through careful design of streets and the streetscape. Narrow street widths, pedestrian crossings, and special design treatments help induce drivers to stay within the speed limits. At slower speeds, the frequency of vehicular accidents declines, and those that do occur are less severe.

The following traffic calming tools are recommended for reducing vehicular speeds. These would primarily be the responsibility of NYSDOT in coordination with local municipalities, except for design and installation of gateway treatments and sidewalks, which would be the responsibility of the municipalities, but which might qualify for State or Federal funding programs.

Cayuga Medical Center Node

Install curbing within the nodal zone along with narrowed travel lanes, proposed walkways, and streetscape improvements to provide visual cues to motorists to reduce travel speeds

- Petition NYSDOT to reduce the speed limit from 45 mph to 40 mph throughout the node (and possibly all the way from the City line to the new northerly node gateway.) Install gateway treatments at the north and south ends of the node at the new northerly driveway (north of Hayts Road) and at the new southerly driveway (near the Finger Lakes School of Massage and the West Hill Ithaca Fire Department station).

Hamlet of Jacksonville

The main objective of providing traffic calming in the Hamlet of Jacksonville node is to encourage motorists to travel at the posted speed limit of 40 mph. The wide expanse of pavement currently causes motorists to travel too fast through this area.

- Install curbing throughout the node with narrowed travel lanes to provide visual cues to motorists to reduce travel speeds
- Delineate travel lanes at approximately 14 feet and either narrow the pavement accordingly or delineate recessed on-street parking areas with the excess pavement width.
- Provide sidewalks along both sides of Route 96 throughout the node.
- Provide curb-bump outs wherever possible to shorten crossing distances for pedestrians. Delineated pedestrian crosswalks should be provided on all four legs of the Jacksonville Road intersection.
- Delineate pedestrian crossings at the new roadway intersections with Route 96 within the node. Consideration should be given to providing marked crosswalks on Route 96 at these locations. These crosswalks would likely require safety enhancements on Route 96 such as curb bump-outs and/or a raised median treatment.
- Install gateway treatments at the north and south ends of the node.

Speed limits should be reviewed in these areas as development densities increase over time.

2.6.5 Transit Infrastructure and Services

A successful multi-modal Route 96 will depend heavily on a strong, local transit system being integrally linked with the nodes on the corridor. Transit infrastructure improvements that have been identified through the Route 96 study, include updating existing bus shelters, adding new bus shelters, and creating bus pull off lanes on the corridor.

Cayuga Medical Center Node

West side – Southbound

The existing bus stop on Route 96 (on Overlook property) should be enhanced and possibly integrated with a park and ride on the adjacent developable parcel, as a key transit location, servicing people traveling to destinations within the City of Ithaca. Inclusion of bicycle facilities on the bus shelter property might be considered to accommodate the needs of transit users. There may be future need for an additional bus stop at the projected intersection at Fire Station Road.

East side – Northbound

A designated, covered bus stop is recommended within the proposed mixed-use commercial center near the intersection of Harris B. Dates Drive and Route 96, which would require relocating the hospital bus stop. The location would allow bus service to reach a significant concentration of people without having

to leave the Route 96 corridor. The bus stop does not need to be a freestanding building but may be incorporated into a commercial or mixed-use structure where transit users arriving at the hospital area will have access to goods and services available.

A bus pull-off area on Route 96 is recommended in order to improve traffic flow along the corridor. The new bus stop would complement the location of the existing transit stop located in the Overlook housing development.

Hamlet of Jacksonville

West side – Southbound

The existing bus stop in Jacksonville needs improved amenities such as bike racks and a bench, and should be better connected with the pedestrian network of sidewalks proposed for this node. Additionally, a recessed bus pull off should be provided, as space permits.

East side – Northbound

The existing commercial building identified on Route 96 just south of the Jacksonville Road intersection is a recommended location for a covered transit stop. A multi-use building would provide retail establishments, offering additional amenities and services in immediate proximity to transit users as they disembark.

Enhanced and flexible transit service could do much to increase transit use on the corridor, which would in turn, assist in mitigating many of the traffic impacts along the corridor. Many current corridor residents expressed interest in using transit in the resident survey and in public meetings, should it become more accessible to them. Anticipating growth along corridor, it will be critical for municipalities to work with TCAT to determine how enhanced transit services can best be incorporated into the nodes as they develop over time.

Future considerations for transit services should be:

- Route Alignment – As development begins to occur on the corridor, review of current routes, route alignment (particularly in the nodes), and consideration for ending flag pickups on express trips as well as within the node areas.
- Potential for Alternative Service
 1. Express Route - Similar to the Town of Dryden, express service should be considered on the Route 96 corridor to encourage quick, efficient trips to employment.
 2. Vanpool – Expanding vanpool opportunities on this high in-commuter route may help to alleviate traffic concerns during the highest peak (AM in-commute) on the corridor.
- Pilot Projects – The possibility for small, flexible service to complement fixed route service would be a future consideration on the corridor.

TCAT's Transit Development Plan, which is currently in development, proposes enhanced service to the hospital and Trumansburg, which would greatly improve service on the corridor and support the goals of nodal development.

It should be noted that short-term projections for this study would not likely result in immediate or significant changes in service, as current routes are often underutilized and have the ability to accommodate a larger number of riders. To make longer-term transit options feasible, municipalities along the Route 96 corridor may need to directly support TCAT to maintain or enhance vital services. Tompkins County and each of the involved municipalities will continue to coordinate with TCAT as future development occurs to help determine whether any changes to the existing public transportation system are warranted.

2.7.6 Bicycle and Pedestrian Amenities

Improved circulation and safe pedestrian and bicycle routes along the corridor and within the nodes will be priorities for implementing the recommendations of this study. Efforts should be made to ensure that all portions of the corridor outside of the City of Ithaca (which currently has sidewalks) and nodes (where separate facilities are proposed) have shoulders with a minimum width of 6-8', in order to allow for the safe movement and circulation of pedestrians and bicyclists. Pedestrian sidewalks along Route 96 within the Town of Ithaca portion of corridor have already been identified in the needs assessment completed for the Town of Ithaca Transportation Plan (2007).

Cayuga Medical Center Node

There are no sidewalks along Route 96 within the node and actual vehicular speeds often exceed the 45 mph posting during off-peak times. The following pedestrian and bicycle improvements are recommended within this node:

1. Install sidewalks, pathways and/or trails along both sides of Route 96;
2. Incorporate internal node connections from sidewalks and bike lanes directly to the Black Diamond Trail on the east and south).
3. Incorporate sidewalks into all new developments within the node; and
4. Provide a 5' designated bike lane along both sides of the road within the nodal boundary areas.
5. Complete the planned trail on the west side of Route 96 that will connect this portion of the node south across Bundy Road to other Town developments and ultimately to the City of Ithaca sidewalk system.

Hamlet of Jacksonville

The following pedestrian and bicycle improvements are recommended within this node:

1. Provide a curbed roadway section throughout the Hamlet of Jacksonville;
2. Revise the geometry of Route 96 within the node so there are two 11' travel lanes. The remaining pavement width can either be used for an 8' on-street parking lane or can be eliminated and used to provide a bike lane, sidewalk, and buffer area;
3. Install curb-bump outs to narrow crossing widths and to delineate recessed on-street parking areas;
4. Install sidewalks along both sides of Route 96 throughout the Hamlet;
5. Install crosswalks for all legs of the Route 96 Jacksonville Road intersection as well as for crossing of Route 96 at new intersecting roadways within the node; and
6. Provide a 5' designated bike lane along both sides of Route 96 within the nodal boundary areas.

2.7.7 Black Diamond Trail Linkage

Creating linkages within each node to the Black Diamond Trail to provide a non-vehicular connection between nodes and outlying areas is important for developing a truly multi-modal transportation system. Multi-use trails within nodal areas should connect these neighborhoods to the Black Diamond Trail. Proposed links to the Black Diamond Trail would be:

City of Ithaca

This is a critical link for the residents in the City, as bicycle travel on the Cliff Street portion of Route 96 is dangerous with the few inches of shoulder available at the edge of the vehicular travel lanes. A link at or near the proposed gateway entrance to the City of Ithaca, with appropriate signage and a crosswalk treatment, could help facilitate travel between Town of Ithaca to downtown City of Ithaca where it will connect with the existing and proposed sections of the Cayuga Waterfront Trail.

Cayuga Medical Center Node

The link to the Black Diamond Trail from this node would likely occur from the hospital grounds or PRI, and the Holochuck Homes development may also tie into the trail at the south end of the node. Directional signage starting at internal neighborhood trails/bikeways in the node to the Black Diamond Trail will be needed.

Hamlet of Jacksonville

A link to the Black Diamond Trail from the hamlet will require a road link along Kraft Road. Signage from the node connector should be continued along any public road to clearly direct users. Implementation of these trail linkages should coincide with new development in the nodes.

2.6.8 Gateway Treatments

Gateway treatments will locate and identify the new Cayuga Medical Center node, the Hamlet of Jacksonville, as well as the entrance to the City of Ithaca along the Route 96 Corridor.

City of Ithaca

- Gateway treatment on Route 96 just north of the City line consisting of signage and landscaping. This could be co-located with an access link to the Black Diamond Trail.
- Landscaped median treatment may also be considered in the wider section of Route 96 just north of the City line.

Cayuga Medical Center Node

- Landscaped signs that announces the entrances to the node from the north and south.
- Raised, landscaped median at the north end of the node on Route 96 at the intersection of the new internal feeder road.
- Roundabout at the new southerly intersection of Route 96 at Fire Station Road.

Hamlet of Jacksonville

- Landscaped sign that announces the entrance to the node at the north end by the Town park and at the south end near Colegrove Road,
- Raised, landscaped median at the north and south ends of the node on Route 96.

2.6.9 Route 96 Priority Infrastructure Projects

The comprehensive infrastructure improvement project list identified in this Technical Report #4 is expected to be achieved over time as the corridor develops. Municipalities working together can utilize the study as a whole, with a focus on the project list, to make a stronger case to NYSDOT that any future scheduled State maintenance or reconstruction in the corridor include local priorities and that mid- to long-term projects from this Technical Report be incorporated into NYSDOT's 7-year program plan.

The infrastructure projects outlined are important and needed to attain the 2028 vision for the corridor. However, as the Route 96 Corridor will likely develop incrementally, the select shortlist of projects below are priorities for immediate, coordinated implementation.

City of Ithaca

- Design and install gateway treatment to reinforce City entrance
- Add pedestrian crosswalks at Vinegar Hill and Brookfield Road

Cayuga Medical Center

- Design and begin development of an internal pedestrian/bikeway that is parallel to Route 96 and connects to City of Ithaca sidewalk system and Black Diamond Trail
- Identify locations of proposed intersections and access roads and add to Official Map
- Design and install gateway treatments to denote new node being developed on corridor
- Add sidewalks along Route 96 as opportunities arise

Hamlet of Jacksonville

- Identify and apply for small area improvement/Main Street grant to begin building pedestrian amenities, including sidewalks, lighting, and crosswalks
- Design and install gateway treatments to reinforce sense of place on corridor

2.7 NODAL DEVELOPMENT TOOLS

A series of regulatory tools is presented below to assist individual municipal implementation of nodal growth and traffic mitigation along Route 96. Several of these tools support an intermunicipal approach to Route 96 Corridor planning. In addition, Technical Report #3 (pgs.34-39) provides corridor design principles and techniques that support the study's transportation and land use objectives.

2.7.1 Small Area Plans

A refined area plan should be completed for each of the nodes to help identify specific design opportunities and constraints and to consider how design principles could be realistically incorporated in the overall design and development of these areas. Moreover, these plans should result in changes to each Town's Official Map to identify future roads and easements required for implementation of the nodes.

2.7.2 Route 96 Overlay District

In both the Towns of Ulysses and Ithaca a Route 96 Overlay District is recommended to manage development and access to the corridor and allow for a change of density within the district without changing the underlying zoning. An overlay district could address how properties are redeveloped and could encourage that parcels be reassembled when redevelopment occurs. Within the overlay district, consolidation of access could be promoted in the form of shared driveway requirements and/or allowed increase in density in exchange for reduced number of driveways. Parking could be mandated to be in rear or side yards within the overlay district.

2.7.3 Transportation Improvement District

A Transportation Improvement District is a funding tool that levies an assessment on property owners within a designated distance from the "benefit area" to pay for needed transportation infrastructure improvements such as intersection upgrades, bus stops, etc. This mechanism would have to be established and evolve in tandem with future developments, and would likely be feasible only in the Cayuga Medical Center node.

2.7.4 Incentive Zoning

The following list of six incentive zoning options is presented to make the type of development sought in the nodes more desirable to prospective developers. Examples of developer incentives may include:

- Density increases for targeted housing types, such as moderate-income or energy-efficient
- Density increases for public amenities – trail links and parks
- Reduced parking requirements
- Reduced building permit fees
- Tax abatements, PILOTS (payments in lieu of taxes)
- Financing incentives – financial assistance for preferred land uses, tax increment financing

2.7.5 Purchase of Development Rights (PDR)

Purchase of Development Rights (PDR) is a land protection tool that pays landowners to protect their land from development. Agricultural parcels in the Town of Ithaca and Town of Ulysses that fall within the identified Northwest Agricultural Resource Focus Area and/or in the designated area of agricultural importance in the Town of Ithaca could be targeted for purchase of development rights on the Route 96 Corridor. These municipalities, in an effort to preserve active agricultural, rural character, and scenic viewsheds, may work cooperatively with the County and New York State to buy development rights and create conservation easements in order to limit development in these areas and to restrain growth outside the nodes. The County or municipalities may also want to consider this tool to protect sensitive natural areas within the corridor.

2.7.6 Transfer of Development Rights (TDR)

A TDR is a regulatory tool designed to facilitate land-use planning to control where development will and will not occur. This approach involves severing the right to develop an area that the public wishes to preserve in low density or open space and transferring those rights to another site where higher than normal density would be tolerated and desirable. In order to work, there must be clear sending and

receiving areas, such as the proposed node in its entirety or specific parcels within the node.

Transfer of development rights is used to protect land by transferring the development rights from one area and giving them to another. Along the Route 96 corridor this would occur by placing a conservation easement on a property in a designated agricultural area while simultaneously permitting an increase in development density (density bonus) within a target area – the identified nodes of Jacksonville, Cayuga Medical Center, or Trumansburg. The costs of purchasing the easements would be recovered from the developers who receive the building bonus.

TDR programs should be investigated and included in the municipal comprehensive planning processes of each municipality that is contemplating using them. Four requirements for using TDR are:

1. A designated protection zone (the sending area)
2. A designated development area (the receiving area)
3. A pool of development rights that are legally severable from the land
4. A process to transfer development rights between properties and monitor the program over time.

The two TDR program types to consider are where landowners sell the development rights to a developer who then uses them in a permitted area or a local government-based TDR bank, where developers who seek higher densities purchase the rights from the government. In the case of the Route 96 nodes, it may be desirable to designate as sending areas those areas directly adjoining the nodes to create a clear rural/urban edge and an open land buffer around the node.

2.7.7 Land Banking

Land banking properties on the Route 96 corridor would entail developing a strategic land acquisition program to purchase land in each node to achieve specific housing and neighborhood goals identified in municipal comprehensive plans, such as affordable housing or commercial development. This tool may be particularly useful for critical parcels identified within each node. For example, the seven Exxon-Mobil properties in the Hamlet of Jacksonville may be disposed from this company's inventory and made available in the near future.

2.7.8 Planned Unit Development (PUD)

Planned Unit Development (PUD) could be a useful tool in developing mixed-use nodes that incorporate housing, shopping, offices and personal services within walking distance. PUD allows for flexibility with regard to use, setbacks and minimum lot sizes and allows developers to include these in one development plan. Local municipalities retain design oversight authority for PUD development. The evaluation of PUD as a regulatory tool should consider minimum size thresholds, appropriate allowances for bonus height and density, the types of public benefits that may be provided, and review and approval procedures. The Town of Ithaca already uses this tool in its Planned Development Zone (PDZ).

2.7.9 Park and Ride Partnership

At least one park and ride in the Cayuga Medical Center node, and potentially a second in the Hamlet of Jacksonville, will be essential in order to support increased transit ridership and to accommodate commuters. The development and maintenance of this infrastructure should be undertaken through a partnership between future developers, municipalities, and TCAT. A developer building in a node may be required to build, fund, or provide land for a park and ride facility. Meanwhile, maintenance would be supplied by the sponsoring municipal entity. TCAT, as the service provider, should work with both developers and municipalities to identify needed services/changes (ie. route, service type, location, etc.).

2.7.10 Affordable Housing

There is significant need for more affordable¹ housing across Tompkins County and, therefore, any new development plans proposed in the study area should include an affordable component, particularly within the nodes on the corridor. Density increases requested by developers building within nodes should be considered in exchange for increased percentage of affordable units in development proposals.

¹Affordable housing refers to housing that costs less than 30% of a household's gross income, as stated in the Tompkins County Affordable Housing Needs Assessment (2006), available on the Tompkins County Planning Department website at <http://www.tompkins-co.org/planning/HNA/countywidehousingneedsassessment.htm>.