

IV IMPLEMENTATION

This land use and access management study was initiated based on the Towns' desire to collaborate with transportation agencies to examine Transit Road and to identify improvements that would increase safety and mobility along the corridor. The recommendations developed for each of the four focus areas were designed to balance the corridor's role as a major regional arterial with the towns' desire to establish context sensitive solutions.

While the narrative and images included in the previous section are effective tools for defining the towns' vision for the corridor and identifying the general improvements that could be made in future reconstruction projects, a more detailed examination of potential improvements and changes to the towns' approach to access management is needed. In order to meet the towns' needs, the recommendations contained in this section of the report may be:

- Added to current site plan and/or subdivision review processes outlined in the towns' respective zoning codes;
- Developed into a special corridor overlay zone; or
- Incorporated into an access management chapter in the towns' respective codes.

The recommendations included in this section are intended to provide a general overview of the types of

improvements and modifications that could be made to enhance transportation and land use conditions along the Transit Road Corridor. The following list of tasks and issues have been organized by category and are designed to guide the towns regarding the specific actions that may need to be taken in order to implement access management strategies.

It is important to note that some of the items contained in this section would require more detailed consideration and modification at the final design stage in each of the municipality's specific permit and zoning processes.

Transportation

- Establish a clearance zone along the corridor 35 feet from the edge of the right-of-way to any structure or use, including parking, storage, and waste facilities. Allowable uses within the clearance zone shall include lighting and other utilities, drainage, sewer, water, sidewalks and bikeways, signs, and landscaping and street furniture. An exception to this standard may be required in Swormville in order to maintain the character of the Hamlet.
- Traffic signal location may be no closer than 1,320 feet to another signal on the same road.
- Traffic signals required for access to businesses or development must be located to serve an opposite driveway or, preferably, aligned to connect to the local road system. In addition, the signal must

provide access to abutting properties, including through properties where possible. An easement (wide enough for four lanes the length of the easement and six lanes at the intersection with Transit Road) for a future road or shared access driveway shall be provided to the appropriate municipality (Amherst or Clarence).

- Driveways to Transit Road should not be allowed within 220 feet of an intersecting road. Driveways to a local road or to driveways serving multiple developments should not be allowed within 110 feet of an intersection. In the functional area of an intersection, access points and turning movements should be eliminated or limited. The functional area of an intersection, illustrated in Figure IV-1, is the area beyond the physical intersection of two controlled access facilities that comprises decision and maneuver distance, plus any required vehicle storage length, and is protected through corner clearance standards and driveway connection spacing standards. If an access point or driveway must be located in the functional area, then it should be restricted to the use of directional driveways. The towns should require that interconnections and driveway sharing be explored and implemented if feasible when frontages are inadequate. If that fails then the driveway may be located as far from the intersection as available frontage would allow. At minimum, driveway spacing near corners and

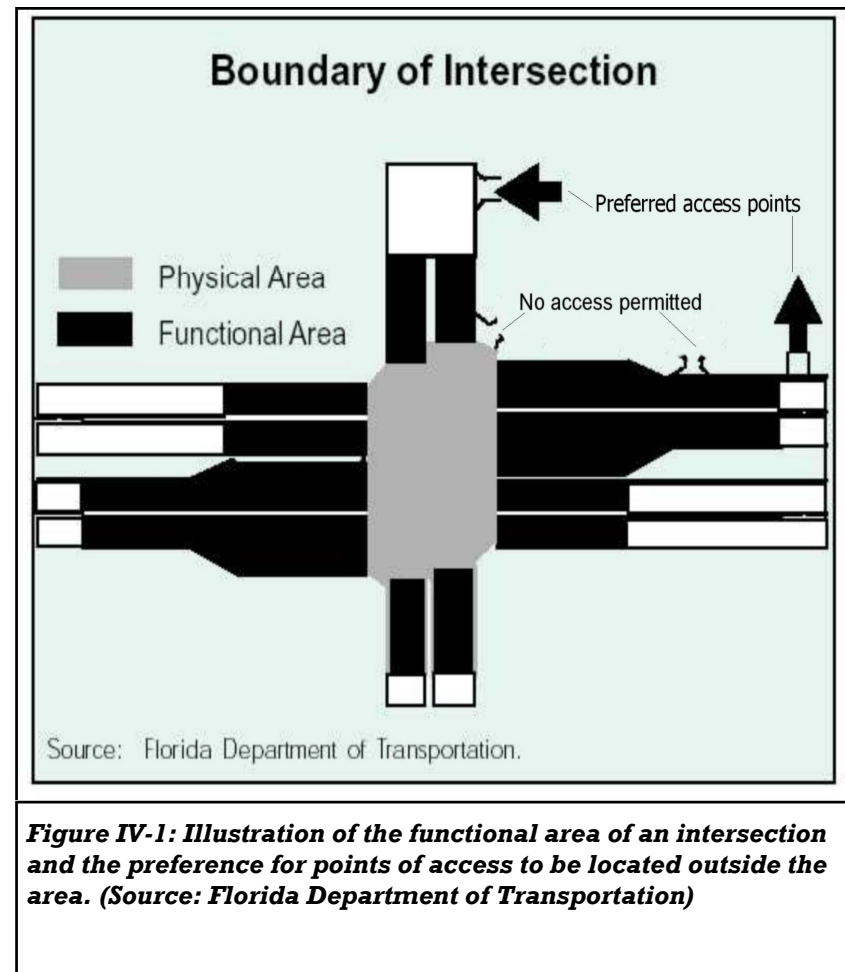


Figure IV-1: Illustration of the functional area of an intersection and the preference for points of access to be located outside the area. (Source: Florida Department of Transportation)

intersections should provide adequate site distance, response times and stacking space at intersections.

- As mentioned previously, driveway (curb cut) spacing has a critical impact on the efficient operation and safety of a corridor. There are two measures to use when establishing driveway spacing minimums: speed limit and trip generation.

Table 1 Minimum Driveway Spacing Standards (Per Posted Speeds)	
Posted Speed Limit	Spacing Between Driveways
35 mph or less	125 feet
36-44 mph	245 feet
45 mph or greater	440 feet
<i>Source: SRF & Associates</i>	

Table 2 Minimum Driveway Spacing Standards (Per PHT)	
Peak Hour Trips (PHT)	Spacing Between Driveways
<= 150	125 feet
151-300	250 feet
>300	400 feet
<i>Source: SRF & Associates</i>	

It is recommended that speed limit be the primary factor in determining minimum spacing between driveways (Table 1). However, the Towns could utilize peak hour trips (Table 2) as one criteria in its decisions to grant variances to applicants seeking alternative spacing. It is important to note that these standards are based on the current road configuration. If a non-traversable median were to be installed in the corridor, driveway spacing requirements in those sections could be reduced significantly given the reduced number of conflict points and turning movements that would result.

- Minimum driveway spacing requirements may be reduced for driveway systems serving multiple properties or modified in situations deemed appropriate by the towns' Planning Boards.
- A factor of fifty percent of the minimum spacing guidelines contained in Tables 1 and 2 should be applied to driveways with right-in and/or right-out movements. In addition, the Towns should have the power to compel developers to do the following if they are not in compliance with spacing or corner clearance standards:
 1. Utilize access roads as major access.
 2. Explore interconnection of parking lots and shared driveways, and if immediately feasible, implement.
 3. Provide easements for future connections.

- Driveways of minor traffic generators located on opposite sides of the road that create left turn overlaps must be spaced a minimum of 60 feet apart, measured along the edge of the right-of-way (with exceptions given to driveways that only allow right-in and right-out movements). Larger generators need to align access directly across from another driveway or local road if they are to be signalized. The left turn storage bays along the arterial road needed would require significantly more separation, perhaps 250 feet or more, depending on the storage needed.
- The length of driveways should be designed in accordance with the anticipated storage length for entering and exiting vehicles to prevent vehicles from backing into the flow of traffic on the public street or causing unsafe conflicts with on-site circulation. General standards are included Table 3. However, it is important to note that requirements will vary according to the projected volume of traffic at the individual driveway and are specific to the principle access to a property and are not intended for minor driveways. Variation from these standards should be permitted for good cause upon approval of the Towns and the NYSDOT
- Work with the NYSDOT to explore additional access points along Millersport Highway in order for it to

Table 3 Driveway Length Standards	
Development	Driveway Throat Length
Shopping centers greater than 200,000 Gross Leasable Area	200 feet
Smaller developments less than 200,000 GLA	75-95 feet
Unsignalized driveways	40-60 feet

Source: Transportation and Land Development, Institute of Transportation Engineers, 1988

serve an alternative travel route for Transit Road. Potential access points to consider in Focus Area I include an extension of Dann Road or the direct link to the proposed/planned residential development north of Dann Road.

- Install cross-access drives and sidewalks to alleviate traffic and improve safety on Transit Road. Adjacent commercial or office properties classified as major traffic generators (i.e., shopping plazas, office parks, etc.) should provide cross-access drives to allow circulation between sites.
- Medians separating opposite direction travel lanes

are installed primarily for the purpose of insuring the safe and efficient movement of traffic. The introduction of unwarranted median openings exposes the motorist to added conflict points and also impedes the smooth flow of traffic, thus reducing the safety and capacity of the road. The following requirements are recommended in the corridor.

- - ⇒ A median opening shall not be installed or allowed simply to service or benefit any particular property, site or business, but only when it can be demonstrated that such an installation will benefit the overall safety, traffic flow, and efficiency of the highway.
 - ⇒ Priority will be given to establishing median openings at appropriate intersections of existing public roads before other locations.
 - ⇒ Minimum median opening spacing shall meet the criteria in Table 4.
 - ⇒ Adequate sight distance, as recommended by AASHTO, in all travel directions, shall be available at a median opening.
 - ⇒ Adequate deceleration for an auxiliary turn lane shall be provided at a median opening.
 - ⇒ A proposed full median opening shall not be allowed unless NYSDOT MUTCD warrants for traffic control signals are met.
- These median opening guidelines may be waived at the discretion of the NYSDOT in order to maximize traffic and safety benefits to the traveling

Table 4		
Minimum Spacing Between Median Openings		
Posted Speed	Directional Opening*	Full Opening**
Less than 45 mph (70 km/h)	660 feet (200 meters)	1320 feet (400 meters)
45 mph (70 km/h) or greater	1320 feet (400 meters)	2640 feet (800 meters)
* Directional openings do not allow all traffic movements		
** Full openings allow all traffic movements		
<i>Source: SRF & Associates</i>		

public.

- The following factors should be examined in assessing the potential for a mid-block median opening:
 - ⇒ The length of the turn bay at each signalized intersection for both peak and off-peak conditions.
 - ⇒ Ascertain the length available for a mid-block opening;
 - ⇒ Determine the length(s) of the proposed mid-block left-turn/U-turn bays.
 - ⇒ Evaluate the likelihood that turn bays at the signalized intersection may need to be lengthened.
- Multi-modal transportation should be accommodated throughout the corridor. Each focus area may need to consider different options:

Focus Area I—The short-term solution to multi-modal access is the provision of wide travel lanes (14 feet) and well-defined shoulders (five-foot minimum width, paved and striped) for pedestrians and bicyclists. A more long-term approach could include the development of an off-road trail system that runs parallel to Transit Road, which would provide pedestrians and bicyclists a safer location for non-motorized transit.

Focus Area II — Construction of a eight-foot sidewalk along the corridor in the hamlet, including a six-foot tree lawn, to encourage pedestrian activity throughout the hamlet area.

Focus Area III & IV—Enhance the sidewalks in both areas by installing street trees in the tree lawn area. The treatment will provide a buffer to pedestrians and enhance the aesthetic appeal of the corridor in these areas. The travel speeds in this portion of the Transit Road are consistent with arterial design. Although the “share the road” policy applies to the corridor, speeds and corridor design in this area may create an uncomfortable atmosphere for bicycling. Consequently, the towns may not want to discourage bicycle use on the sidewalks in this area.

Focus Area IV—Additional pedestrian

accommodations should be provided in parking areas, especially for developments with extensive setbacks (more than 200 feet) to increase the likelihood and safety of pedestrian activity between existing sidewalk systems and commercial establishments located in this focus area. Additionally, pedestrian linkages to surrounding residential areas should also be provided.

Land Use and Zoning

- Consider amending local law to include access management standards and requirements in site plan review processes and subdivision regulation.
- Several zoning modifications should be considered so that the conceptual plans laid forth in this report can be implemented. Zoning modifications include:
 - ⇒ Hamlet Overlay District—(Focus Area II) The overlay zone would allow for a wide variety of land uses located in close proximity to one another. A mix of retail, consumer oriented services, office uses and community resources would be interwoven with residential development that is characterized by smaller lot sizes. Although the land uses found in this overlay zone would vary, their scale, style and density should remain consistent.

⇒ Transfer of Development Rights (TDR) — (Focus Area I) Transfer of development rights programs permit a property owner to transfer the right to develop from one area to another. The “right to develop” is based on the zoned use and density allowed under current regulations. TDR programs are established around particular resources in need of protection from development. Two areas are involved: a sending area and a receiving area. Sending areas are generally established around a particular area in need of preservation (e.g. prime farmland; open space areas; future rights-of-way). Receiving areas for development rights may be areas intended for development or more intense uses.

As an example, in Focus Area I, existing open space and farmland fronting along Transit Road would be the sending area and the mixed use center at the commercial node at Millersport Highway, Smith and New could be the receiving area. Development rights may also be transferred to another portion of the same property to save portions of the land for preservation or future use (e.g. a future access road). The towns could also consider the transfer of vehicle trips to ensure that more intense uses are maintained in areas where it makes the most sense.

⇒ The Town of Clarence should utilize Planned Unit Development in order to encourage commercial

development that preserves the appearance of open space. Planned Unit Development provides the town with considerable flexibility along the corridor through the use of generous landscaping buffers, “campus” like development and shared parking.

- ⇒ Consider revising the present zoning code to preserve open space in designated areas by establishing an Agriculture Restrictive zone, in which residential, commercial, and/or industrial development would be prohibited. This zoning modification only makes sense in Focus Area I.
- ⇒ Modify zoning code to encourage nodal commercial development in areas where a nodal approach makes sense (e.g. Millersport Highway/Transit Road area in Focus Area I). In addition to preserving open space, it will limit the proliferation of strip development and minimize the number of curb cuts along the corridor.
- ⇒ Consider zoning code revisions that would reduce, where feasible, the minimum parking space requirements associated with various uses. For example, the Town of Clarence currently requires a minimum of 10 spaces per 1,000 square feet of shop or store space in the Major Arterial District. If a 100,000 square-foot retail store was built in this district, 1,000 spaces would be needed under this provision. In this example, the parking area would require a minimum of

160,000 square feet for surface parking spaces; additional space for internal travel lanes and site circulation would also be required. It is likely that this amount of parking would exceed consumer parking demands, even at peak shopping times. Additionally, this requirement makes the creation of efficient and pedestrian-friendly site designs advised in this plan more difficult for developers and town officials to achieve.

The Towns should provide the Planning Board with discretion to lower the minimum parking requirements to avoid the development of excess parking facilities, especially in cases where shared parking is an option.

- ⇒ Take measures to obtain right-of-ways necessary for future circulation improvements along the corridor (raised median, sidewalks).
- ⇒ In order to ensure that residential development adjacent to the corridor does not negatively impact Transit Road's safety and efficiency, subdivision review should ensure that the following provisions are addressed:
 1. Establish internal street system that provides connections to existing streets as well as adjacent commercial and residential developments;
 2. Provide a minimum of two entrances to large residential development, one of which should

be located on a local as opposed to a state road. In Focus Area I, for example, the proposed 600-unit housing development at Transit near Dann and Wolcott Roads is providing a second entrance from Millersport Highway in addition to the Transit Road access point;

3. Include, when possible, sidewalks or other pedestrian facilities to ensure multi-modal access within the development and between adjacent land uses.
- ⇒ Review zoning regulations to ensure that corner lot standards for properties abutting the corridor (or any major urban arterial) are adequately sized to meet front yard setbacks and corner clearance minimums.
 - ⇒ Continue Clarence's current policy not to extend infrastructure (e.g. sewer and water) into Focus Area I in order to limit development in this area. The Town of Amherst's recently completed Bicentennial Comprehensive Plan calls for limits to District 16 expansion and construction. Amherst town officials should consider limiting and/or prohibiting any new extensions of existing infrastructure.
 - ⇒ Main parking areas shall be located along the side or rear of the property for businesses with frontage on Transit Road. Only convenience parking (1-2 parking rows) should be permitted in front of the structure along the corridor. If site development constraints of large parcels require main parking areas in front, out

parcel development should be encouraged to establish a consistent streetscape.

- ⇒ A system of joint use driveways, cross-access easements and shared parking shall be established where feasible along Transit Road. Shared parking areas shall be permitted and should facilitate a reduction in the required number of parking spaces if peak demand periods for proposed land uses do not occur at the same time periods.
- ⇒ Consider establishing an inter-municipal committee to monitor development and redevelopment along and near Transit Road to ensure that the unified visions established in the planning process are supported in both towns' decision making processes. The towns could consider taking this inter-municipal cooperation a step further by incorporating both towns review and feedback on large-scale development projects (e.g., commercial retail or office space projects larger than 75,000 to 100,000 square feet).

Information Sharing

- Communicate findings of this report to interested property owners, businesses, residents and other affected government agencies to ensure that they are aware of the towns' objectives regarding future improvements to Transit Road.
- Ensure that any future highway improvement

projects include comprehensive communication and public participation components to ensure that affected businesses, owners and residents are informed and engaged throughout the process.

- Accessibility of the plan to other municipalities along Transit Road to utilize as a resource for future decision making regarding Transit Road.

Acknowledgements

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References

Campoli, Julie, Elizabeth Humstone, and Alex MacLean. Above and Beyond. Chicago, IL: Planners Press, 2002.

“Iowa Access Management Research and Awareness Report: Executive Summary”. Iowa State University, 1997.

Transportation Research Board. Access Management Manual. Washington, D.C.: National Academy of Sciences, 2003.