

### 3.0 TRANSPORTATION PLANNING CONTROLS

A wide range of techniques have been combined to ensure mobility in the OTC and to support a wide array of travel mode choices in a cost-effective manner. These include programs, regulations, as well as recommendations for specific physical improvements. Several transportation Functional Plans are provided here to identify recommended transportation requirements. In addition to minimum requirements for both public and private development, provisions are made for development bonuses for improvements that exceed the new higher minimum standards.

#### 3.1 Priority Transportation Projects

**Intent:**

This section is intended to define the specific actions that will provide the additional traffic capacity needed to serve the growing needs of both travelers moving through OTC and travelers coming to and moving around OTC. The prioritized list of key transportation improvements, and the accompanying series of maps, illustrate the recommended improvements, and are intended to guide State, County and developer decisions on what to fund and build in the OTC.

Figure 44, Planned Road Network Plan, shows planned and existing roadways for the OTC area. The Roadway Classifications Functional Plan, Figure 45, illustrates the road classifications for the OTC road network. The following charts, Priority Project Lists, prioritize major transportation infrastructure projects in the OTC. The charts will also be used as a guide to assist in staging developments that depend on fully developing the multi-modal transportation network. Projects within each near, mid, and long-term section of the Priority Project Lists are not ranked. Delay of any one project on the list should not delay or preclude implementation of the others. This list should be reviewed and updated on an annual basis and refinements made to the priorities as needed to support the goals of this plan.

Figure 46, Public Lands Plan, illustrates the extent and location of current state owned right-of-way and property in the OTC that will affect the development of the roadway network.

*Insert Figure 44: Planned Road Network Plan*

*Insert Figure 45: Roadway Classification Functional Plan*

PRIORITY PROJECT LIST: ASSUMED ACTIONS

Project Name	Description	Network Rationale	Funding Source	Future Study Needed	Project Type*
Odenton MARC Enhancement Phase II	Direct sidewalk connection between Odenton Road & Odenton MARC Train Parking Area, sidewalk extension (south side of MD 175) between Morgan Road & MD 170 (Piney Orchard Parkway), and concept design.	Improvement to the existing parking lot located on the east side of the Odenton MARC Train Station	State/County	No	S,P
Odenton Road Sidewalk-South	To provide a residential sidewalk along the south side of Odenton Road (MD Route 677) between Piney Orchard Parkway & Green Woods Street.	Improve pedestrian network	State/County	No	S
Town Center Roads/MD 32 Link	Study potential road alignments from MD 32 ramp at MD 175 into the TC Core.	To provide direct access into TC Core from MD 32 ramp	State/County	No	R,S,B
MD 175/Odenton Town Center	Coordinate developer & state roadway improvements & permit right-of-way acquisition along MD 175 in the Odenton Town Center area (Sappington Road on the east to Clark Road on the west) in accordance with the Odenton Town Center Plan.	To begin to improve the RT 175 corridor in accordance with the OTC to meet design guidelines.	State/County	No	R,S,B,T,P
Town Center to Reece Road	This project creates a .42-mile link from Reece Road to Town Center Avenue constructed through the Seven Oaks PUD. The Seven Oaks community & communities to the north using Reece Road will have more direct access to the MARC station and the future Odenton Town Center.	The link is one of two connections needed to complete a new road linking Fort Meade North at Reece Road with the MARC train station at Annapolis Road.	State/County	No	R,S,B,T
Odenton Road Sidewalk	Provides pedestrian improvements to Odenton Road recommended in the Odenton Town Plan, including sidewalks & biking improvements.	Improve pedestrian network	State/County	No	S
WB&A Trail	Authorizes the design & construction of a paved multi-use trail on portions of the roadbed of the former WB&A Railroad.	Improve hiker/biker trail network	State/County	Yes	S,B
South Shore Trail	Authorized to acquire property, design & construct a trail utilizing the abandoned WB&A Railroad between Annapolis & Odenton.	Improve hiker/biker trail network	State/County	Yes	S,B
MD 175/Sappington Station Roundabout	Design and Construction of a Roundabout on MD 175 in East Odenton.	Improve OTC traffic circulation	State	No	R, S,B

\* R=roads S=streetscape/pedestrians B=bikes T=transit P=parking

**PRIORITY PROJECT LIST: NEAR TERM ACTIONS (1-5 YEARS)**

<b>Project Name</b>	<b>Description</b>	<b>Network Rationale</b>	<b>Funding Source</b>	<b>Future Study Needed</b>	<b>Project Type*</b>
Town Center Boulevard and West Town Center Avenue Road Construction	Build to completion Town Center Boulevard and West Town Center Ave.	Follow through to construction for core routes in the OTC	State/County /Private	No	S,P
MD 175 Bridge Construction	To provide for pedestrian access along both sides of the bridge.	Improve pedestrian network	State/County /Private	Yes	S
MD 175 Streetscape Construction	Create approved OTC streetscapes along MD 175 throughout the length of the OTC area.	To develop a streetscape presence along MD 175 and to provide pedestrian and bicycle facilities.	State/County /Private	Yes	R,S,B,P
Mid-Term Project Planning	Acquisition of rights-of-way and finalization for mid and long term projects.	Preserve rights-of-way for future projects, preserves options for future infrastructure	State/County /Private	N/A?	R,S,B,P,T
Roundabout study Watts Ave and MD 175	Authorize a feasibility study regarding building a roundabout at MD 175 and Watts Ave in order to improve retail access.	Improve transportation network and retail viability	State/County /Private	Yes	R,S
Parking Deck Construction	Begin construction on the proposed MARC parking garage.	Improve transportation network and mass transit options	State/County /Private	Yes	P,T

\* R=roads S=streetscape/pedestrians B=bikes T=transit P=parking

**PRIORITY PROJECT LIST: MID TERM ACTIONS (6-10YEARS)**

<b>Project Name</b>	<b>Description</b>	<b>Network Rationale</b>	<b>Funding Source</b>	<b>Future Study Needed</b>	<b>Project Type*</b>
Build new and retrofit existing roads within Town Center Core	Build to completion interior Town Center Roads using approved OTC streetscape standards.	Improve transportation network and retail viability	State/County /Private	No	R,S,B,T,P
Build necessary hike biker connections	Build approved hiker/biker trails to connect the OTC to adjacent communities and regional connections such as the BWI Airport.	To provide for pedestrian bicycle access to the regional trail system	State/County /Private	Yes	S
Identify and Improve pedestrian circulation at designated intersections	Construct appropriate pedestrian and bicycle facilities at the intersections of MD 170 and 175 and at Odenton Rd and MD 170.	Due to the development of off-road and on road bicycle and pedestrian facilities, safe intersection crossings will be needed	State/County / Private	Yes	R,S,B
Improve road access from MD 32 to MD 175	Look at alternative alignments to improve highway access into the Town Center Core.	Improve transportation network and retail viability	State/County / Private	Yes	R,S
Continue to retrofit existing OTC roadways per Design Guidelines	Construction of new streetscapes, bicycle and pedestrian facilities on designated OTC roadways.	Improve the streetscape, bicycle and pedestrian network			R,S,B
Long-Term Project Planning	Acquisition of rights-of-way and finalization for mid and long term projects.	Preserve rights-of-way for future projects, preserves options for future infrastructure	State/County / Private	N/A?	R,S,B,P,T

\* R=roads S=streetscape/pedestrians B=bikes T=transit P=parking

**PRIORITY PROJECT LIST: LONG TERM ACTIONS (11-15YEARS)**

<b>Project Name</b>	<b>Description</b>	<b>Network Rationale</b>	<b>Funding Source</b>	<b>Future Study Needed</b>	<b>Project Type*</b>
MD 170 Streetscape	Retrofit MD 170 per OTC Streetscape Design Standards	Improve transportation network and OTC Streetscape presence	State/County /Private	Yes	R,S,B,T,P
Identify and Improve pedestrian circulation at designated intersections	Construct appropriate pedestrian facilities at all key intersections.	Increased activity will promote the need for safe crossings	State/County / Private	Yes Ongoing	R,S,B
Identify and Improve pedestrian circulation at designated intersections	Construct appropriate pedestrian and bicycle facilities.	Due to the development of off-road and on road bicycle and pedestrian facilities, safe intersection crossings will be needed	State/County / Private	Yes	R, S, B
Study potential trail crossing over the railroad	As increased use becomes evident on major hiker/biker trails, a study may be necessary to determine the usability of a hiker/biker overpass.	Improve bicycle and pedestrian transportation network	State/County / Private	Yes	R, S
Town Center road build-out	Completion of the Town Center road network.	Provide a complete road transportation framework for the Town Center	State/County / Private	N/A?	R,S,B,P,T

\* R=roads S=streetscape/pedestrians B=bikes T=transit P=parking

*Insert Figure 46: Public Lands Plan*

**REQUIREMENTS:**

*Development applicants in the OTC, who are required to aid in improving the transportation network, will be required to assist in creating the current transportation network plan:*

**A. Arterial Corridor Improvements**

- 1. Develop the MD 175 corridor throughout the Odenton area per OTC standards as a low speed urban corridor.*
- 2. Assist in developing Town Center Boulevard and West Town Center Avenue.*

**B. Interconnected Street System Improvements and Additions**

- 1. Assist in providing for new and retrofitted streets within the OTC Town Center Core.*
- 2. Create a new urban retail street along Watts Avenue in the Town Center Core*
- 3. Assist in providing approved Urban Grid and Historic Residential Streetscapes throughout the OTC.*
- 4. Assist in providing needed pedestrian connections and safe pedestrian intersections.*
- 5. Assist in Hiker/Biker Trail development.*

**C. Highways**

- 1. Assist in improving access points from MD 32 into the Town Center Core.*

**3.2 OTC Road Classifications**

**Intent:**

This section establishes regulations for road design in the OTC. These standards work with the County and State engineering standards for road design and in some cases modify them. The purpose of these changes is to create multi-purpose roads and streetscapes that can safely move cars, transit, pedestrians, and bikes while serving as the public space network of the OTC.

Each roadway within the OTC is classified as one of the following roadway types and shall be required to meet the definition standards as road improvements are implemented.

- A. **Alley**  
A public or private, one or two lane roadway serving a service function; generally runs along the backside of buildings; allows access to garages as well as service and loading areas. (See Figure 47, Alley Street and Streetscape Section.)
- B. **Local Service Rd.**  
A public or private, two or more lane roadway serving a local access or distribution function; lined with street trees for definition; accommodates pedestrian flow when providing a direct link between various uses served by the roadway; buildings generally well set back from the roadway with intervening parking facilities. (See Figure 48, Local Service Street and Streetscape Section.)
- C. **Urban Grid Street**  
A public, two (2) to four (4) lane roadway with on-street parking; active pedestrian frontage with buildings separated from roadway by a wide sidewalk; street trees lining the roadway with some specialty planting areas, lighting and other pedestrian features; service and major parking areas located in the rear of the buildings. (See Figure 49, Urban Grid Street and Streetscape Section.)
- D. **Urban Retail Street**  
A public, two (2) to four (4) lane roadway with on-street parking; retail frontage is predominate along the street; transparency of the first floor of buildings is maintained; buildings are separated from roadway by a wide sidewalk; some specialty planting areas line the sidewalk, lighting and other pedestrian features are provided; service and major parking areas are located in the rear of the buildings. (See Figure 50, Urban Retail Street and Streetscape Section.)
- E. **Urban Arterial**  
Four or more vehicular lanes serving an interregional function; no on-street parking; buildings separated from roadway by planting beds and sidewalk; parking and service located to the rear of the buildings. (See Figure 51, Urban Arterial Street and Streetscape Section.)
- F. **Urban Boulevard**  
A four (4) lane divided roadway serving a sub-regional function; lined with street trees and specialty planting; sidewalks along both sides of the roadway, but separated by a grass strip; no on-street parking; turn lanes provided at controlled intersections; abutting properties intensely developed with moderately active frontage; buildings with moderate setback from the road right-of-way and well landscaped. (See Figure 52, Urban Boulevard Street and Streetscape Section.)

*Insert Figure 47: Alley – Street and Streetscape Section*

*Insert Figure 48: Local Service Street – Street and Streetscape Section*

*Insert Figure 49: Urban Grid Street – Street and Streetscape Section*

*Insert Figure 50: Urban Retail Street – Street and Streetscape Section*

*Insert Figure 51: Urban Arterial – Street and Streetscape Section*

*Insert Figure 52: Urban Boulevard – Street and Streetscape Section*

**G. Residential Street**

A two (2) lane roadway serving residential development; This streetscape will reflect local historic street qualities. (See Figure 53, Residential Street and Streetscape Section.)

**H. Historic Residential Street**

A two (2) lane low volume roadway serving residential development; lined with street trees and sidewalks. (See Figure 54, Residential Street and Streetscape Section)

**I. Industrial Collector**

A two (2) lane roadway serving an interregional or sub-regional function while providing access to abutting properties of a industrial character; roadway lined with street trees separating roadbed from the sidewalk; buildings of low FAR well setback from roadbed with intervening parking well screened. (See Figure 55, Industrial Collector Street and Streetscape Section.)

These road classifications apply to all public roads, private service lanes and alleys throughout the OTC. The classification of each OTC roadway is mapped in Figure 45, Roadway Classifications Functional Plan.

In addition to the requirements set forth in this Section, the Design Standards in Chapter IV utilize the classifications to enumerate specific guidance related to roadway classification type. These Design Standards address factors including travel function, design character in the various Sub-Areas, the minimum number of travel, parking and bike lanes, medians, streetscape width and treatment, as well as minimum and maximum building setbacks.

***REQUIREMENTS:***

*All new roads, improvements to roads and development adjacent to roads shall comply with Figure 47 through Figure 55. The Planning and Zoning Officer may approve variations from these standards where full compliance is physically impossible as defined by the minor modification section in Chapter V - Process & Procedures. In multi-phased developments, interim improvements may be approved, provided that the final standards are met in increments proportional to the development size and are in place in the final phase.*

*Insert Figure 53: Residential Street – Street and Streetscape Section*

*Insert Figure 54: Residential Street (with 1-2 parking lanes) – Street and Streetscape Section*

*Insert Figure 55: Industrial Collector – Street and Streetscape Section*

*In order to reserve space for anticipated road improvements and widening, street setbacks along certain roads may be increased by the Office of Planning and Zoning and streetscape improvements may be setback from the existing curb edge. The exact depth of the setback required shall be established at the time of Concept Plan application.*

### **3.3 Right-of-way Dedication and Reservation**

**Intent:**

Right-of-way dedication and reservation is intended to preserve the land areas needed to create and expand the OTC transportation network of roads, bikeways and walkways, to enable the full development of the OTC. Additional land will be needed to achieve the Priority Project List and the OTC Road Classification Standards.

Furthermore, in urban areas, it is desirable for buildings to be placed at the edge of the site just behind the sidewalk with little or no front yard. As a result, road expansion can become very difficult and expensive. These standards are intended to allow urban style development while preserving a reasonable amount of capacity for incremental expansion.

**REQUIREMENTS:**

*Figure 46, Public Lands Plan, delineates various right-of-way areas. The plan shows general locations only. The following is a list of potential uses for public right-of-way lands.*

- A. **Roads with Future Expansion Capacity**  
*All major OTC roads not specifically designated as 'no expansion' or 'limited expansion roadways,' are designated to maintain a long-term expansion capacity. Refer to the Design Standards in Chapter IV as well as Figure 46, for specific setbacks on specific roads and road segments.*
  
- B. **Limited Expansion Roads**  
*Limited Expansion Roads shall have a limited right-of-way expansion in order to preserve their function as urban corridors and allow buildings to directly abut fixed rights-of-way and walkways.*
  
- C. **No Expansion Roads**  
*These roads are intended for low traffic levels and slow speeds with on-street parking. Development shall be designed to front directly on the designated ROW width. Traffic congestion or failure of intersections on these roads will not be corrected by right-of-way widening. Other measures such as removal of on-street parking spaces near the intersection or restriction of parking in parking lanes during peak hours may be employed to increase turning movement capacity.*

**D. Right-of-way Dedications**

*At the time of Concept Plan, Building Permit and/or Subdivision Plan approval, all development applicants are required to provide right-of-way dedications consistent with the OTC Transportation R.O.W. Plan. Such dedications may be credited towards Adequate Public Facilities (APF) requirements and/or the OTC Bonus and Credit Program. Transfers of dedicated land within approved multi-staged developments may be delayed until needed, subject to the approval of the Office of Planning and Zoning.*

**E. Pedestrian Easements**

*On street sections where required streetscape widths exceed four (4) feet, the additional width may be provided in the form of a pedestrian easement at the discretion of the Office of Planning and Zoning.*

*On sites where full dedication of the needed right-of-way is not proportionately related to site, development applicants shall reserve undedicated portions of needed right-of-ways for up to two (2) years after the date of any building permit approval. The OTC Public Facilities District Fund, as defined in the Appendices, may be used to acquire key R.O.W. segments.*

**F. Limitations for Development in Future Road Way Areas**

*No permits for structures will be granted on land designated as future rights-of-way in order to preserve locations for new roads and road expansions. Permits for air rights to build structures over or under R.O.W. segments, may be approved, provided planned road expansions can be accommodated.*

### **3.4 Pedestrian and Bicycle Network**

**Intent:**

The intent of these standards is to encourage greater numbers of people, in and around Odenton, to walk or bike to their daily destinations. These destinations might include transit stops, work, shopping, dining, and other errands as well as general recreation. National studies have shown that by providing a safe attractive network of walks and bikeways, combined with compact mixed-use development that people will choose this option in significant numbers. As a result, car trips will be reduced significantly and community health will improve. Additional specific intentions are to:

Provide bikeways or shoulders for safer bicycle travel. The use of bicycles for trips other than recreation is beginning to grow in popularity. Where safe facilities are provided, the use of bicycles is noticeably greater. The B&A Trail, from Glen Burnie to Winchester Road has attracted an impressive number of riders. With the development of the WB&A Trail and the South Shore Trail in the near future, Odenton residents will have variety of alternative to motor vehicle transportation.

A system of coordinated bikeways is recommended by this Plan. All plans for commuter rail and light rail stations include provisions for bicycle racks or lockers. All road projects in the Baltimore region, excluding controlled access expressways and interstates, are considered for the inclusion of bicycle facilities. These range from wide shoulders or striped curb lanes to separate bikeways.

Pedestrian circulation systems are important in providing a means for people to walk between land use activity areas, eliminating unnecessary short vehicle trips that add to traffic congestion. This Plan recommends a system of pedestrian walkways throughout the OTC area and recognizes the need for pedestrian safe intersections. Walkways are coordinated in the development Plan review process and are generally built as part of new developments. Certain parts of Odenton are good locations for pedestrian systems due to the proximity of housing areas to retail centers and other community facilities.

The Pedestrian Network Functional Plan, Figure 56 and the Bikeway Network Functional Plan, Figure 57, identifies the planned Pedestrian and Bikeway Network in the OTC. Chapter IV - Design Standards, defines the design conditions for the design of bikeways and walkways in the OTC both on development sites and along roadways.

Anne Arundel County adopted its first Pedestrian and Bicycle Master Plan in 2003. This plan identifies the Odenton Town Center as a recommended Pedestrian Improvement Zone. It also recommends the installation of appropriate bicycle facilities on MD 175 and MD 170. Overall, the Anne Arundel County Pedestrian and Bicycle Master Plan supports the construction of key on-road bicycle and pedestrian facilities throughout the County, building on the successful County trail system and integrating bicycling and walking as a standard part of each new development and transportation project.

*Insert Figure 56: Pedestrian Network Functional Plan*

*Insert Figure 57: Bicycle Network Functional Plan*

**REQUIREMENTS:**

**A. On-site Improvements**

- 1. Development applicants are required to provide the on-site improvements identified in the OTC Roadway Classifications Functional Plan, Pedestrian Plan, and Bikeway Plan (Figures 45, 56 and 57) and to comply with the detailed design standards for bike and pedestrian systems and facilities in the Design Standards, Chapter IV. Additional rights-of-way and/or pedestrian easements shall be provided as needed to accommodate these improvements through right-of-way dedication.*
- 2. Multi-phased Developments are required to establish a continuous perimeter pedestrian network on-site and to connect to the OTC pedestrian network as part of phase one improvement. Such staged projects may use an interim standard for streetscape design initially and construction of final streetscape treatments proportionate to the site construction of each phase.*

**B. Road Projects**

- 1. All new roads and road improvement projects, in the OTC, will incorporate space for, and improvements to, the pedestrian and bikeway network along the affected road segment that complies with the Pedestrian and Bikeway Functional Plans, at the time of road construction. Streetscape areas that are wider than four (4) feet may be created in the form of a pedestrian easement, rather than a right-of-way, if approved by the Planning and Zoning Officer.*
- 2. All improved intersections shall accommodate pedestrians and bikes with marked crossings, green light time, and other design protections such as ADA standards, pedestrian refuges and/or walkway bump-outs on wider streets and appropriate signage.*
- 3. All road widening, repaving and other maintenance projects shall be used as opportunities to add pedestrian and bike facilities to existing roads.*
- 4. Major bikeways shall be suitable for commuter uses as well as the recreational facilities for area residents, and shall be open both day and night, year round.*
- 5. All bridges shall be designed to accommodate both pedestrians and bikes.*

### 3.5 Corridor Access Management

**Intent:**

The intent of this section is to ensure that traffic on the major OTC roads flow smoothly and that traffic delays are not caused by drivers attempting to turn into driveways along the major roads. Currently, many major roads have a large number of curb cuts. The high volume of left turn movements is causing congestion. Further, many developments have no point of access other than onto these major roads. Therefore, a high degree of connectivity between developments is desirable throughout Odenton. The creation of alleys, frontage roads, shared driveways, curb cuts, and parking lot connections must be provided in order to manage congestion, create multiple access routes and preserve traffic capacity on arterial roads. The Design Standards in Chapter IV provide regulations to achieve this condition throughout Odenton.

Several roadway segments are designated as access managed corridors. These include MD 175 and MD 170.

***REQUIREMENTS:***

*Access to sites along these corridors shall be managed as follows. Left hand turning movements that cross opposing lanes will be restricted to signalized intersections. Median cuts in existing medians and planned median strips will be limited to those needed for safety and for mid block u-turns, where approved, to increase road capacity. Curb cuts for right-in, right-out movements will be restricted. Developments along these corridors shall be required to provide shared alleys, drive lanes, frontage roads and/or parking connections that will direct movements to signalized intersections, and to coordinate these improvements with adjoining properties. Recommended locations for these shared conditions are also shown on the series of Illustrative Vision Plans in Chapter I.*

### 3.6 Adequate Public Facilities (APF) for Traffic

**Intent:**

The intent of these OTC Adequate Public Facility (APF) requirements is to permit urban levels of congestion within the OTC, but not on regional through roads. This will modify travel behavior. It will permit regional through roads to function at lower levels of congestion while permitting outside traffic to move through in a reasonable amount of time on roads designated for that purpose. The APF requirements restrict development that cannot meet defined standards for mobility and ensures that all development activities contribute a fair share to the effort to maintain adequate traffic capacity in the OTC.

These requirements are based on the concept, that all new OTC development shall pay their fare share for needed public road capacity. As part of this requirement, all developments that generate more than a very modest amount of traffic will be required to prepare traffic studies and may be required to help improve specific parts of the

transportation network if studies reveal problems. New development shall have the right to use available traffic capacity on a first come, first serve basis and permanent reserves of capacity by inactive projects will not be approved unless that capacity was created and paid for by that development. Further, required mitigation for inadequate capacity must be functional before occupancy can occur.

***REQUIREMENTS:***

*The following requirements shall apply for traffic circulation with regard to all Concept Plans, Building Permits, Subdivision Plans and/or Change of Use applications submitted after this plan takes effect.*

***A. Standards***

*Each intersection, inside the OTC, from all site access points to and including the first arterial intersection, shall operate within a defined measurement of intersection congestion during peak hours. Intersection congestion shall be measured using either Critical Lane Volume (CLV) or the comparable Highway Capacity measurement of delay (LOS). Congestion levels shall be at or less than those listed below.*

*The acceptable level of congestion on OTC intersections during peak hours shall be as follows:*

- 1. 1450 CLV at all intersections within the OTC that are outside the Core.*
- 2. 1600 CLV on all other intersections in the OTC Core.*

*In order to analyze traffic during the most congested times of the day, traffic volumes and congestion will be measured during weekday, midday, and PM peak hours and Saturday mid-day peak hours. Measurements for weekday AM peak hours, are required unless waived by the County. Measurements should generally be taken during the spring or fall of the year.*

***B. Mitigation Measures***

*If the traffic generated to or from the site, fails to meet the standards set forth in this section, as determined by an approved traffic impact analysis, a site shall not be developed unless an applicant agrees to undertake one or more of the following mitigation measures as directed by the Planning and Zoning Officer. In selecting mitigation measures, an applicant must demonstrate through a traffic analysis that the mitigation measures will:*

- 1. Maintain projected Intersection CLV/LOS at acceptable levels; or*
- 2. Demonstrate that the projected intersection failure(s) will not be caused by or worsened by the project's projected trips.*

*Mitigation measures include, but are not limited to the following:*

- 1. Improvements to each substandard intersection that bring the intersection's critical lane volume (CLV) or LOS to its acceptable level; or*
- 2. Construction of one or more new roads, improvements to other existing roads, or provision of smart signalization systems that will have a positive effect on the substandard intersection(s) and will bring the failing intersection's critical lane volume (CLV) or LOS to its acceptable level; or*
- 3. Contribution to a County capital project for road improvements and construction within the OTC; or*
- 4. A significant improvement that will improve the County's ability to provide public transportation in the Odenton Town Center Growth Management Area; or*
- 5. Provision or contribution of long-term satellite parking placed beyond the congested intersection (either inside in the vicinity of the OTC) and served by adequate transit, shuttle service and/or ride sharing; or provide shuttles service to the satellite parking; or*
- 6. Provision of traffic design and traffic directions using Intelligent Transportation Systems (ITS), Transportation System Management (TSM) and other measures to direct traffic to alternate routes through less congested intersections.*

*In areas where, as a result of these requirements, multiple construction projects may be needed along the same road network over a short period of time, the County may elect to require developer contributions to a single County project rather than permit numerous small and over-lapping construction projects to occur. The OTC Credit Exchange Program is designed to help the County and developers track the fair share and timing of contributions in these cases. See the Appendix, Bonus and Credit Exchange.*

*Whenever feasible, applicants shall select mitigation measures that are part of, or consistent with, the OTC Transportation Priority Project List shown previously.*

**C. Traffic Impact Study Procedures**

- 1. All development sites in the OTC  
All development applicants submitting for a Concept Plan, Subdivision Plan, Building Permit or Change of Use Permit are required to provide a traffic generation calculation for the site defining the number of net new*

*off-site trips for the site during each of the defined peak periods, unless specifically exempted.*

*This calculation shall include both base development and any requested bonus development.*

*Off-site means all the trips that leave or enter the site, and excludes the trips that occur between the uses on the site. This calculation shall be undertaken in accordance with the standard form and guidelines issued by the Planning and Zoning Officer and shall consider the following:*

- a. The number of existing off-site trips generated by the site.*
- b. Estimates of the number of trips generated by each proposed land use using the County approved standard trip generation resource.*
- c. Off-site trip reductions of up to fifteen (15) percent, with written justification, due to one or more of the following:*
  - (i.) The planned mix of uses on-site; or*
  - (ii.) Public transit service availability, proximity to a transit center, and adequacy of the existing pedestrian and bikeway network; or*
    - An acceptable para-transit operation or TDM program such as car and van pooling, telecommuting or staggered hours that reduces peak hour trips; or*
    - Provision of a series of off-site improvements such as walkways, and bikeways.*
- d. Estimates of the total net new off-site trips during each required peak hour period.*

*Land use mixes and site designs that replace vehicle trips with walking, biking, or transit trips, encourage chaining of trips through the provision of multiple convenience destinations, or that delay trips beyond peak hours through the provision of evening activities and housing can make significant reductions in a development's off-site trip counts.*

*All new development projects that generate new off-site trips during any of the defined peak periods shall be assessed a standard traffic impact fee as their fair share of OTC transportation improvements. Fees will be determined based on a fixed rate for the number of new off-site trips generated during each peak period. This proposed OTC Trip Fee Program is defined in Chapter V - Process and Procedures. Trip Fees will be*

*deposited in an OTC Public Facilities District Fund and shall be used to fund County CIP projects or County contributions to State CTP projects within the OTC. For projects required to mitigate congested intersections, trip fees shall be counted towards mitigations.*

*The County will maintain an OTC traffic model for purposes of monitoring transportation adequacy, establishing OTC trip fees and evaluating development requests. All applicants are required to provide traffic data in a format suitable for inclusion in the County transportation database in order to maintain the transportation model. OTC Vehicle Trip Fees may be used to fund the maintenance and annual review of this model.*

2. *Sites with 250 average daily trips (ADT) or more off-site trips*  
*All applicants for Concept Plan, Subdivision Plan, Building Permit, Change of Use or other permit that will generate two hundred fifty (250) or more new average daily off-site trips are required to prepare a traffic impact study to determine whether traffic generated on roads within the OTC complies with the acceptable level of congestion. This study shall be undertaken in accordance with the traffic impact analysis guidelines issued by the Office of Planning and Zoning.*

*In order to better promote timely funding and construction of needed projects, Capital projects must be listed as construction projects on a County Capital Improvement Plan (CIP) or a State Consolidated Transportation Plan (CTP), or be fully bonded by a private party before they can be counted in traffic impact studies.*

*After completing the traffic impact analysis, if mitigation measures are required, the applicant shall develop a traffic mitigation plan with the following elements, if they cannot meet the standards.*

- a. *A list of mitigation measures for each proposed development phase and full build-out.*
- b. *A developer's cost and schedule of contributions to County CIP projects and/or State CTP projects, if any.*
- c. *A schedule and staging plan for both public and private construction projects.*
- d. *A Public Works Agreement and/or an agreement with MDOT.*

### 3.7 Private Parking

**Intent:**

The intent of this section is to make parking more efficient so that it uses a smaller share of the OTC land area. It is intended to facilitate the shift away from single use surface parking lots that stand empty much of the time and to focus on cost effective shared use parking lots and parking structures that serve the needs of OTC businesses. The Design Standards, Chapter IV, establishes standards to make the design of parking lots and parking garages more environmentally friendly, more attractive, and less visually dominating in the landscape.

In order to promote and facilitate shared use of private parking, the development of public parking, and the redevelopment of existing surface parking lots throughout the OTC, applicants for new development and redevelopment are required to comply with standards for parking that are specific to OTC. Developers will also be eligible for development bonuses or credits if they meet certain parking standards as defined in the Bonus Eligible Actions List. Careful mixing of land uses allows each parking space to be used numerous times over a twenty-four (24) hour period while still providing each user with ample parking.

Property owners are encouraged to work with adjoining property owners to create shared parking arrangements, shared access and circulation patterns to achieve this goal. Parking issues addressed by this section include:

- Parking Requirement Calculations
- Parking Reduction Calculations
- Overflow Parking
- Off-site Parking

The OTC Permitted Land Uses, Figure 31, classifies commercial parking lots and garages as a permitted use in several Sub-Areas. This is intended to encourage developers who need to fulfill their second or third use requirement to consider using public parking to meet that requirement.

**REQUIREMENTS:**

*The following standards and requirements supercede Title 7 and 9 of the Anne Arundel County Zoning Ordinance to the extent that conflicts exist.*

**A. Parking Requirement Calculations**

- 1. Location - Required off-street parking spaces shall be located so that the parking structure's pedestrian entrance is within six hundred (600) feet and the furthest required surface parking space is within seven hundred (700) feet of the primary building entrance as measured along a defined pedestrian route. Except that designated overflow parking spaces shall be within eight hundred (800) feet.*
- 2. Quantity - Within the OTC, applicants shall build the least number of parking spaces necessary to support proposed site uses. Large single use parking lots that greatly exceed minimum requirements are discouraged. The required minimum number of spaces shall be determined by either the County's parking code or by another recognized standard for parking requirements that is approved for use by the Planning and Zoning Officer.*

**B. Parking Reduction Calculations**

*Development applicants can reduce the number of parking spaces needed to support their development by several means as follows:*

- 1. Reduced need for parking by providing uses within walking distance of each other.*
- 2. Shared parking between on-site uses over a twenty-four hour period.*
- 3. Shared parking between adjoining and nearby uses (within six hundred (600) feet).*
- 4. Use of leased or shared off-site public or private commercial parking spaces.*

*Several methods for calculating the parking needs of each user in shared parking areas are available. Applicants are required to use a method that is approved by the Office of Planning and Zoning. One example is attached in the Appendices. The total maximum reduction from parking requirements shall not exceed thirty-five (35) percent. Reductions may be permitted for the following factors at the discretion of the Office of Planning and Zoning.*

*Up to a thirty-five (35) percent reduction in the number of parking spaces required for all uses may be approved based on demonstrated sharing of parking spaces between uses.*

*Up to a fifteen (15) percent reduction in the number of parking spaces required may be approved based on one or more of the following factors:*

- 1. Reductions due to trips converted to walking between on-site uses.*
- 2. Reductions due to walking to nearby existing uses within six hundred (600) feet of the buildings front door as measured on existing or planned sidewalks.*
- 3. Reductions due to public transit service availability, if the development is within six hundred (600) feet of a Transit System route, or within thirteen hundred (1300) feet of the MARC Station as measured on walkways, and not divided by a major highway.*
- 4. Reductions due to existing or proposed connections to the existing pedestrian and bikeway network within thirteen hundred (1300) feet of the site.*
- 5. A para-transit operation or TDM program such as car and van pooling, telecommuting or staggered hours that reduce peak hour trips.*

*Shared parking may not include reserved parking for residential uses. Parking spaces that are reserved for a specific business (e.g., reserved for doctors only) or designated and marked for use by handicapped persons shall not be counted toward meeting the general shared parking requirements.*

*The sharing of the required parking shall be guaranteed by a legally binding Shared Parking Agreement duly executed and acknowledged among all owners of record.*

**C. Overflow Parking**

*Development applicants are permitted to designate up to twenty (20) percent of parking as “overflow parking.” Overflow parking is defined as those spaces that are anticipated to be used less than twice a week on average or only for peak periods, such as holidays, during the year. Overflow parking areas may be surfaced with grass, paved with semi-pervious materials, or placed on existing pervious surfaces as approved. See Design Standards, Chapter IV.*

**D. Off- Site Parking**

*Development applicants are permitted to meet up to one hundred (100) percent of their parking needs in off-site lots or structures, provided those spaces are within six hundred (600) feet of the primary door of the building as measured from the edge of the parking lot along a planned or existing walkway.*

*Off-site parking, not controlled by the applicant, shall be guaranteed with a legally binding Shared Parking Agreement duly executed and acknowledged*

*among all owners of record. Joint-use or reserved-use agreements shall have a term of no less than five (5) years with a provision that the agreement may not be abrogated unless a new source of parking can be obtained if the need ceases to exist. The same standard applies to reserved public spaces.*

*Remote parking lots or structures, that are over six hundred (600) feet away, may be approved by the Office of Planning and Zoning if adequate transit or shuttle service is made available and these spaces are used by employers who require employees to use the spaces. For instance, retail centers may use these standards for employee parking during peak seasons.*

### **3.8 Public Parking**

#### **District System**

##### **Intent:**

A Public Parking District system is recommended for the OTC in order to establish a mechanism to fund, construct and operate public parking. A parking management entity would be designated to run this system. This entity would be charged with managing, leasing, acquiring, and/or contracting public parking lots and/or structures in the OTC. The district would be funded through an ad-valorem tax that will allow businesses to pay in lieu of building onsite parking.

The OTC Public Parking District would be organized into sub-parking districts of a size suitable to share one or more parking facilities. Each facility would serve the activities within walking distance. Figure 58, Core Parking District Functional Plan, illustrates the conceptual location of these sub-districts and highlights several suggested locations for public or public/ private parking structures.

It is envisioned that each sub-parking district will be activated when interest and demand is demonstrated for public parking or for public participation in public/ private parking facility. Activation means that the ad-valorem tax is collected in that sub-district and a facility is created. Parking facilities may be built either in anticipation of projected parking demand, or in response to existing parking demand with a defined sub-parking district area. Development applicants will most likely locate interim parking lots on-site to be built upon in later development stages, as off-site parking facilities become available.

*Insert Figure 58: Core Parking District Plan*

**REQUIREMENTS:**

*Developers of new OTC projects within activated sub-parking districts shall pay an ad-valorum tax in lieu of constructing or leasing the required number of parking spaces in areas where it can be shown that an adequate supply of parking spaces can be made available during the time periods needed.*

**Parking Structure Recommendations**

Development applicants are encouraged to create private shared use parking structures, to propose public/private shared use structures in association with planned parking districts. The general site selection criteria for public or shared private/public parking structures are as follows:

1. Sites where the greatest amount of development intensification, redevelopment and greatest amount of multi-modal travel is desired and anticipated particularly in the Core and Village Sub-Areas.
2. Sites in the larger OTC blocks where a critical mass of parking needs can be generated within walking distance of six hundred (600) feet without crossing a major arterial, and where a diversity of existing and planned land uses will promote twenty-four (24) hour use of constructed spaces.
3. Sites should be near existing or planned transit routes, near focal areas, or on or near streets with an active street-front and retail uses that activate the area during the evening hours to make garage users feel more secure.
4. Locations where land has been dedicated for use as public parking.
5. Locations such as under or over public roads will be considered.
6. Sites where private partners step forward to demonstrate need and a desire to cooperate.

Several general locations have been tentatively identified for parking structures. These locations include: Blocks 11, 9 and 25 (MARC STATION) shown on Figure 58. The surface parking in Block 7 is temporary and will be redeveloped pending construction of the parking garage.

### 3.9 Transit Service, Facilities and Development

**Intent:**

The OTC is intended to be a transit-oriented area. Elements throughout this document are designed to ensure that transit becomes an increasingly important mode of travel. Current 2000 Census data estimate that 4.5% of commuters use public transit and 14.5% use another mode of travel other than a single occupancy vehicle. The Transportation Plan has set a target of twenty (25) percent of OTC trips to be non-SOV of which 10% would use public or private transit by the year 2020.

As a result of this target, the objective is to increase the existing transit area of service, number of routes, route frequencies and ridership of both the local and regional bus system. The possibility of more intensive fixed rail transit use in the mid-term to long-term future should be taken into account. This strategy for transit use addresses the following forms of transit.

- A. Internal Odenton Transit
  1. Para-transit, van and car pools
  2. Seasonal shuttle buses/jitneys
- B. Future MTA Commuter buses to Washington D.C. and Baltimore.
- C. Transit fixed rail connections to BWI, Baltimore, and Washington, D.C.
- D. Park and ride lots, for bus riders and carpoolers.

The OTC Zoning and Design Standards are intended to help ensure a critical mass of compact mixed-use development that is pedestrian-oriented with generous streetscapes arranged around focused public space nodes as well as on internal transit routes. The purpose is to encourage a change in travel behaviors including:

- Reduced vehicle trips, replaced with walking, biking, or transit trips for commuting and mid-day travel.
- Chaining of trips through the provision of multiple destinations nearby.
- Delayed trips beyond peak hours through the provision of evening activities and housing.

***REQUIREMENTS:***

***All developments are required to be designed in a manner that supports transit use and that links their development to adjoining or nearby transit stops. As described in the Design Standards in Chapter IV, development applicants are required to design sites in specific ways to encourage transit ridership and are encouraged to provide transit amenities through the OTC Bonus Program. Recognition is given to the reduced traffic***

*impact that results from increased transit use as defined in the APF requirements earlier in this section.*

**A. Transit Oriented Design**

*Provide a high quality pedestrian environment, with direct and safe pedestrian links to the transit center.*

**B. Transit Demand Management (TDM) Participation or Transit Fee**

*All employers with more than fifty thousand (50,000) square feet of office development or with more than one hundred fifty (150) employees are required to:*

- 1. Provide their own Transit Demand Management program that will reduce their weekday PM peak hour off-site trip generations by at least eight (8) percent; or*
- 2. Participate in a County approved, OTC-wide, Transit Demand Management program; or*
- 3. Participate in a County approved, annual transit funding program for transit in the OTC; or*
- 4. Make a County approved, one time significant contribution to a County transit facility or program.*

**3.10 Bonus Eligible Actions**

**Intent:**

In order to help achieve the Plan's transportation related goals and objectives, the following bonus eligible actions have been created to reward developments that exceed the minimum requirements. Figure 39, OTC Development Bonus Chart describes the development bonus rewards.

**REQUIREMENTS:**

*In order to be eligible to receive a development bonus, applicants shall meet or exceed one or more of the following transportation actions.*

**A. Public Facilities Contribution**

*Provision of a proportionate contribution to the OTC Public Facilities Fund.*

**B. Roadways**

*Provision of, or funding for, off-site road improvements and/or road right-of-ways that will improve traffic flow to and through OTC and/or the site, beyond that which is required.*

- C. Access Management Improvements  
*Provision of, or funding for, off-site access management improvements such as alleys, parking lot connections, and other elements as recommended by the County.*
- D. Pedestrian and Bikeway Network Improvements  
*1. Provision of, or funding for, off-site pedestrian or bikeway improvements, that will link the site to the regional network, transit stops, other developments, open areas in the OTC, and/or residential neighborhoods near the OTC beyond that which is required. Included in this is the provision of, or funding for, key pedestrian bike overpasses.*  
*2. The provision of showers and lockers for the use of employees who commute to work on bike or on foot.*
- E. Private or Public Parking Improvements  
*1. Dedication of land for public parking lots and/or structures or contributions to the development of public/private parking facilities.*  
*2. On-site provision of general public parking spaces, commuter park & ride spaces or leased parking to other off-sites users, and/or an equivalent contribution to the public parking program. On-site spaces may be in parking lots or structures, on new streets, within a development.*  
*3. Provision of more than 50% of a site's required parking in parking structures.*  
*4. Conversion of more than 75% of the site's existing site surface parking area to structured parking, buildings or green space.*
- F. Transit Improvements  
*1. Provision of land for a significant on-site transit facility.*  
*2. Contribution to the Transit Fee Program, beyond that which is required.*  
*3. Provision of a public transit vehicle.*  
*4. Provision of a public transit vehicle fueled by means other than gasoline or diesel fuels such as natural gas power or a hybrid fuel system.*  
*5. Provision of significant bus stop amenities that are designed to encourage ridership such as a heated or indoor shelter with seating, or a nearby staffed source of coffee, snacks, and/or periodicals. And/or provision of new and/or improvements to existing off-site pedestrian links/streetscape to transit stops within six hundred (600) feet of the site.*