

## EXHIBIT A

*Note: This Exhibit is a reformatted excerpt from "Connecting Casselberry: The Casselberry Multimodal Transportation Master Plan" (or "MTMP"), as revised and re-adopted August 26, 2019.*

### **9.3 Healthy Community Complete Streets Policy and Design Guidelines**

The City of Casselberry affirms that all road projects should be designed to comfortably accommodate all users to the fullest extent possible; that accommodations for people walking, people bicycling, people using public transit, and people with disabilities are a routine part of the City's planning, design, construction, maintenance, and operating activities; and that bicycle and pedestrian ways should be considered in new construction, reconstruction, resurfacing or other retrofit projects. In developing these accommodations, the latest, best, and context-sensitive design standards will be used, while recognizing the need for flexibility in balancing user needs.

The following section expands significantly upon the Complete Streets Policy within the Multimodal Transportation Element (MTE) of the City's Comprehensive Plan, adding specificity and guiding implementation.

Of important note, "Healthy Community" was added to the title of this Policy as part of the 2019 MTMP revision in order to emphasize the importance of viewing transportation through the lens of community health considerations, especially promoting active transportation. It is estimated that one in three children today will develop diabetes in their lifetime, and less than 5% of adults meet recommended daily physical activity guidelines. A built environment that promotes active transportation as the routine daily choice of mode is critical to help spur more physical activity and reduce health risks. As a result of this title change, for internal (within the MTMP) and external (e.g., Comprehensive Plan, City Code, external documents, etc.) cross reference purposes, this "Healthy Community Complete Streets Policy and Design Guidelines" may also be referred to as "Complete Streets Policy and Design Guidelines" or "Complete Streets Policy", or in some cases simply "Policy."

*Note: This Complete Streets Policy is modeled after a 2015 draft MetroPlan Orlando Complete Streets Policy plus certain elements of the City of Longwood's Complete Street Policy, with additional content and adjustments to suit the City of Casselberry and its Comprehensive Plan. This Complete Streets Policy now reflects a significant 2019 update.*

#### **9.3.1 Purpose**

The City, through this Healthy Community Complete Streets Policy and Design Guidelines, shall plan, design, build, and maintain a safe, reliable, efficient, integrated and connected multimodal transportation network that will provide access, mobility, safety and connectivity for all users. Complete streets design will promote improved health, economic growth, public safety, recreational opportunity, and social equity

throughout the City of Casselberry, and will ensure that the safety and convenience of all users of the transportation system are accommodated. The City of Casselberry will fund and support the planning, design, and construction of complete streets as a fundamental component of its transportation program. This Policy ensures that officials, planners, engineers, developers, and other stakeholders working on projects and programs within the City of Casselberry plan and design roadways and other transportation-related improvements with consideration for all users. This Policy also helps ensure consistency among planned/future complete streets projects within the City of Casselberry.

### **9.3.2 Background**

Today's changing financial, environmental, social, and economic realities are requiring regions throughout the country to rethink the previous approach towards transportation planning and decision-making. Increasingly, communities are being asked to develop project solutions that address the multimodal mobility, economic development, health, and livability needs of a community. The City of Casselberry recognizes this new challenge and seeks to incorporate "complete streets" thinking throughout the City's transportation investments.

Complete streets support vibrant, healthy, equitable, and sustainable communities. Complete streets expand travel choices; increase safety and comfort for people walking, people biking, and people using transit; and introduce more community recreational opportunities. Consequently, complete streets can support economic growth by providing the multimodal and efficient connections that can strengthen the region's activity centers. Various case studies provide supporting evidence that complete streets can increase property values and have a positive economic impact on a community. Implementing complete streets supports the following overarching goals:

- Safety
- Balanced Multimodal System
- Integrated Regional System
- Quality of Life
- Efficiency and Cost Effectiveness
- Energy and Environmental Stewardship
- Economic Vitality

The Multimodal Transportation Element (MTE) within the City's Comprehensive Plan contains the following Complete Streets Policy:

*Policy MTE 1.2 Complete Streets. The City shall implement the "Complete Streets" policies and design guidelines outlined in the adopted MTMP to accommodate a range of travel modes as the City reviews its roadway network and future modifications. The City, through this Complete Streets policy, shall design, build, and maintain a safe, reliable,*

*efficient, integrated and connected multimodal transportation network that will provide access, mobility, safety and connectivity for all users. The City affirms that all road projects should be designed to comfortably accommodate all users to the fullest extent possible; that bicycling, walking, the disabled, and public transit accommodations are a routine part of the city planning, design, construction, maintenance, and operating activities; and that bicycle and pedestrian ways should be considered in new construction, reconstruction, resurfacing or other retrofit projects. In developing these accommodations, the latest, best, and context- sensitive design standards will be used, while recognizing the need for flexibility in balancing user needs.*

The MTE cross references and calls for implementation of this MTMP's Complete Streets Policy and Design Guidelines. It is therefore the intent of this MTMP's Healthy Community Complete Streets Policy and Design Guidelines to provide additional policy and guidance to achieve the systemwide intent of complete streets, both from a public investment and private development perspective.

### **9.3.3 Definition**

Complete streets are planned, designed, operated, and maintained to enable safe access for all users of all ages and abilities, meaning that people walking, people biking, people with disabilities, people using public transportation, people driving, and freight and service operators are able to safely and efficiently move through the transportation network. Complete streets provide access to all users in a manner that promotes safe, efficient movement of people and goods whether by foot, bicycle, assistive device, transit, car, or truck. This Complete Streets Policy recognizes that, depending on context, streets may serve diverse activities, functions, and intensity of uses, and that not all uses are necessarily appropriate for all streets.

### **9.3.4 Vision**

The City of Casselberry's Complete Streets vision is: a safe, reliable, efficient, balanced, integrated, economically viable, environmentally sustainable, equitable, and connected multimodal transportation network that will provide access, mobility, safety and connectivity for all users while supporting a healthy and vibrant local community, where active transportation becomes a viable and routine choice for daily mobility needs.

### **9.3.5 Goal**

The City recognizes that, over many decades, the transportation system in Central Florida has become increasingly unbalanced in favor of the single occupancy vehicle to the detriment of people walking, people biking, people using public transportation, and people with disabilities, including those who use wheelchairs or other assistive devices. Further, viable active transportation options are critical for community health, as they promote daily, routine physical activity and thus help reduce risk of diseases such as diabetes. In addition, walkability increases property values and attracts talent, spurring

economic growth. Finally, walkability improves social equity, providing opportunities for independence for the elderly (especially those who do not drive); self-sufficiency for children; and better and safer mobility options for people with low income, people with disabilities, and minorities. The City, therefore, recognizes there is a need to rebalance the transportation system to effectively support multiple transportation options and make them viable choices, with a particular focus on active transportation. In light of this, the goal of this Healthy Community Complete Streets Policy and Design Guidelines is:

**By 2040, with a balanced multimodal transportation system, the City of Casselberry will become the most walkable, rollable, and bikeable City in Central Florida, where active transportation becomes a viable and routine choice for daily mobility needs, thereby increasing community health, equity, economic vitality, and environmental stewardship. This will be accomplished by:**

- 1) **COMPLETING THE NETWORK:** Create a complete multimodal network of safe streets and trails for all users, including a particular focus on features to improve walkability, rollability (e.g., wheelchair accessibility), bikeability, and transit access.
- 2) **PROVIDING SAFETY AND ACCESS:** Provide safe, accessible, and comfortable travel alternatives for vulnerable users of all ages and abilities, including greatly enhanced facilities to support and encourage people walking, people biking, people with disabilities, and people using public transportation.
- 3) **PROMOTING SITE DESIGN THAT ENCOURAGES WALKING, BIKING AND TRANSIT:** Support site design in both the public and private realm that welcomes and “rewards” people who choose to walk, roll, bike, or use transit; that promotes healthy active transportation choices; and promotes a vibrant, connected, healthy, and interactive community.
- 4) **PROMOTING DESTINATIONS AND MIXED LAND USE:** Support development/redevelopment of and multimodal connectivity to activity centers and mixed land use, including a particular focus on features to create more “useful walks”, promote multimodal connectivity between various land uses, encourage compact and mixed use redevelopment, and encourage active transportation options as the natural choice to reach a destination.

### **9.3.6 Applicability**

This Healthy Community Complete Street Policy and Design Guidelines applies to all City-owned transportation facilities in the public right-of-way, public property, and public easements including, but not limited to, streets, sidewalks, and all other connecting pathways. This Policy also applies to mobility-related elements of all City parks and facilities. All phases of project implementation are covered, including planning, design, right-of-way acquisition, construction, and operations and maintenance. (The City

considers maintenance and operations activities as opportunities to provide safer and more accessible transportation options for all users.)

Recognizing the important linkage between and interdependence of transportation and land use, this Healthy Community Complete Streets Policy and Design Guidelines also applies to all land use planning within the City of Casselberry, as administered by the Community Development Department.

This Healthy Community Complete Streets Policy and Design Guidelines also applies to private site development and redevelopment. New and redeveloped privately constructed streets, parking lots, and other mobility-related elements must adhere to this Policy and related policies as expressed through the City of Casselberry Comprehensive Plan, City Code/Unified Land Development Regulations, and other relevant documents, with a key focus on achieving a viable interface between private development and the City's multimodal transportation system, and promoting design features that support the Goal of this Policy.

To the extent practicable, these guidelines and standards should also apply to State and County transportation facilities within the City of Casselberry, as coordinated with appropriate agencies including the Florida Department of Transportation and Seminole County. The City understands that these facilities are not under the City's purview and ultimately policy, standards, planning, design, and construction decisions rest with their respective jurisdictions.

The City of Casselberry recognizes the need for interdisciplinary and cross-jurisdictional coordination to effectively develop, operate, and maintain bicycle and pedestrian networks and transit facilities. The City of Casselberry supports a systems approach to developing transportation projects, especially to ensure coordination with nearby jurisdictions, projects, and plans. If projects are linking to or in proximity to each other, the projects should be coordinated to ensure a facility's consistency and to allow for utmost resource efficiency in project implementation.

Exceptions to this Policy require the approval of the City Engineer. For private development projects that are required to go through Development Review, exceptions must be formally requested during the Development Review process in order to allow opportunity for public transparency. Requests for exceptions must provide clear, supportive documentation justifying the exception.

### **9.3.7 Design Standards and Guidelines**

Designs shall consider accommodations for all users and be sensitive to the context of the project setting. Complete streets may look different for every project and road type. Facilities will be designed and constructed in accordance with current applicable laws and regulations, using best practices and guidance from a variety of organizations and resources, including but not limited to the following:

- FDOT guidelines and manuals, including the latest edition of the **Florida Greenbook** (*Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways*)
  - The **Florida Greenbook** provides the primary minimum standards for City-owned streets and applies except when superseded by a more restrictive local standard (see “[Key Local Standards and Design Guidance](#)” below)
  - The Traditional Neighborhood Development (TND) criteria in the Florida Greenbook should be applied when contextually appropriate. *Note it is anticipated the TND Chapter will be removed starting with the 2020 Florida Greenbook, and its components will be distributed to/addressed by other chapters as appropriate, as the Greenbook continues to better address context sensitivity and complete streets.*
- FHWA **Manual on Uniform Traffic Control Devices** (MUTCD)
- **Americans with Disabilities Act Accessibility Guidelines** (ADAAG)
- **Public Rights-of-Way Accessibility Guidelines** (PROWAG)
- **Urban Bikeway Design Guide**, the **Urban Street Design Guide**, **Don’t Give Up at the Intersection**, and other relevant guidance by the National Association of City Transportation Officials (NACTO)
- **Walkable City Rules** by Jeff Speck
- American Association of State Highway and Transportation Officials (AASHTO) publications, including **AASHTO Guide for the Development of Bicycle Facilities** (latest edition) and **Guide for the Planning, Design, and Operation of Pedestrian Facilities**
- ITE ([www.ite.org](http://www.ite.org)) publications and guidance, including **Designing Walkable Urban Thoroughfares: A Context Sensitive Approach: An ITE Recommended Practice** and **Recommended Design Guidelines to Accommodate Pedestrians and Bicycles at Interchanges**
- Association of Pedestrian and Bicycle Professionals **Essentials of Bicycle Parking** ([www.apbp.org](http://www.apbp.org))
- **Smart Growth America** publications ([www.smartgrowthamerica.org](http://www.smartgrowthamerica.org))
- **Pedestrian and Bicycle Information Center** ([www.pedbikeinfo.org](http://www.pedbikeinfo.org))
- FHWA Office of Safety ([www.safety.fhwa.dot.gov](http://www.safety.fhwa.dot.gov))
- NHTSA ([www.nhtsa.gov](http://www.nhtsa.gov))
- **Crash Modification Factors Clearinghouse** ([www.cmfclearinghouse.org](http://www.cmfclearinghouse.org))
- TRB Highway Safety Performance Committee ([www.safetyperformance.org](http://www.safetyperformance.org))
- **Highway Capacity Manual (HCM) 2010 or latest edition**
- **Highway Safety Manual** ([www.highwaysafetymanual.org](http://www.highwaysafetymanual.org))
- Mark Fenton’s Resources ([www.markfenton.com](http://www.markfenton.com))
- **US Access Board** (including for Public Rights-of-Way and Shared Use Path Guidance) (<https://www.access-board.gov/guidelines-and-standards/streets-sidewalks>)

## Context Sensitivity

The City of Casselberry recognizes that complete streets solutions vary according to each street's land use context (both existing and planned). Appropriate design standards and input from community members should be considered within each context that provide for a flexible, innovative, and balanced approach resulting in safety for all users and supportive of the Goal of this Policy.

## Key Local Standards and Design Guidance

Additional design standards and policy updates are recommended as a future task (see Chapter 10; also note that this Policy was updated in 2019), but below is specific guidance on certain key issues. This should not be construed as exhaustive guidance, as the above design standards and guidance references should be employed. Rather, these specific points serve as a quick reference tool for planners, engineers, and developers in designing certain transportation components within the City of Casselberry. In addition, certain guidance below purposefully sets more restrictive local standards. It is important to note that feasibility and appropriateness in context should be considered when applying these design standards and guidelines; not all will apply to every project. In addition, human behavior should be considered as a factor in all design.

1. **“Design Speed = Posted Speed” Approach.** Nearly all City-owned streets have a posted speed limit of 25 mph (and none more than 30 mph). In most City contexts, new public and private projects should be designed for a target speed no higher than a 25 mph speed limit. All public and private streets shall be designed with appropriate features such that the “design speed” approaches the “posted speed”, which should equal the target speed (also known as the desired operating speed). This represents an overarching approach to street design to encourage a more walkable City.
  - a. Note the FDOT Design Manual (FDM) Table 202.3.1 provides a listing of potential speed management strategies. Example speed management techniques that may be employed (depending on context) include but are not limited to roundabouts, lane narrowing, horizontal deflection (e.g., chicanes), vertical deflection (e.g., raised intersections, raised crosswalks, or speed tables), speed feedback signs, Rectangular Rapid Flashing Beacons (RRFB's), Pedestrian Hybrid Beacons (PHB's), on-street parking, street trees, terminated vistas, short blocks, and curb extensions (bulb-outs).
  - b. Multiple speed management strategies will often need to be employed to effectively achieve desired operating speed.
  - c. Context should be considered in all speed management considerations, but particularly use of vertical deflection should carefully consider context, emergency services, drainage issues, and human behavior. Use of raised crosswalks at key logical

crossing points and/or raised intersections is encouraged over using speed tables/humps in isolation.

2. **PROWAG** (Public Rights-of-Way Accessibility Guidelines) should be used in the design of all public streets, including shared use paths. PROWAG is currently in draft form and is anticipated to be adopted later, but use of draft guidance now is encouraged: <https://www.access-board.gov/guidelines-and-standards/streets-sidewalks/public-rights-of-way/proposed-rights-of-way-guidelines>.
3. **Curb ramps and other accessibility improvements** necessary for ADA/PROWAG compliance should be provided concurrently with microsurfacing or more advanced road rehabilitation.
4. **10 ft wide travel lanes as the default standard.** For City-owned streets and private developments, 10 ft wide travel lanes are typically sufficient. Any deviations from this standard require detailed, written engineering justification. Where resurfacing of an existing facility is proposed, the facility should generally be striped to achieve 10 ft travel lanes.
5. **Constrain geometry.** Considering context, provide curb extensions (bulb-outs), protected intersections, minimum turning radii, and other features to shorten crossing distances and improve safety for people walking and people biking to the maximum extent practicable. Protected intersection guidance can be found in the NACTO publication *Don't Give Up at the Intersection* at [www.nacto.org](http://www.nacto.org)
6. The **sidewalk zone system** (curb, furniture, pedestrian, frontage zones) should be employed in streetscape/sidewalk design.
7. **New sidewalks** should generally be 6 feet or greater in width where feasible. 8 feet is preferred, especially where it is anticipated people may choose to bike on sidewalks. (See also #12 Bicycle Facilities.)
8. **Driveways** should be built as driveways not intersections, i.e., use of concrete aprons and integrated sidewalk (as opposed to asphalt with a striped crossing). This type of design encourages slow-speed turns.
9. **Facilities Connectivity**
  - a. At a minimum, designated accessible paths must be provided from street sidewalk systems to public and private facilities.
  - b. To the maximum extent practicable, designated accessible paths should be provided for connectivity *between* facilities within both public and private developments (e.g., between two different buildings).
  - c. Where feasible, direct pedestrian access should be provided to public and private facilities with no vehicular conflicts.
10. **Crosswalks**
  - a. Crosswalks must be designed for safety and accessibility. They should be provided frequently and at logical locations, as

appropriate in context and with considerations for convenience of people walking.

- b. Crosswalks must be designed for vehicular visibility, including:
  - i. For all crossings, white longitudinal and transverse markings should be used (i.e., “ladder style” or “special emphasis”), especially at midblock/unprotected crossings.
  - ii. Advance stop lines should be properly placed a sufficient distance from the actual crossing on multilane roads to reduce risk from “multiple threat” crash scenarios at crossings.
  - iii. Use of rectangular rapid flash beacons (RRFB’s) may be appropriate at certain crossing locations on low speed roads. Pedestrian Hybrid Beacons (PHB’s, a.k.a. “HAWKs”) or dedicated pedestrian signals may be appropriate in certain contexts.
- c. Where pedestrian refuges are provided, angle paths through them as appropriate so that pedestrians have a more direct view of approaching vehicles.
- d. Design should consider realistic crossing behavior, including:
  - i. Placement of at-grade crosswalks should be at logical and convenient crossing points that are likely to be used by people walking. For all-way stop intersections, typically all legs of the intersection should have crosswalks.
  - ii. Planning and design for potential pedestrian bridges, tunnels, and other grade separated crossings should consider potential for actual use vs. avoidance by people walking, rolling, or biking. Generally these should only be used where an at- grade crossing is not a viable, convenient, and safe alternative.
- e. Road alignments, radii, curb extensions, and other design elements should facilitate short pedestrian crossing paths and avoid awkward skew angles that decrease visibility.
- f. Curb ramps for crosswalks should be directional in placement, i.e., typically two channelized ramps (one in each direction of pedestrian travel) are preferred at each intersection corner as opposed to a single, diagonally oriented curb ramp.
- g. Crosswalk materials should be evaluated for safety and comfort of all users during the design phase of a project, including aesthetic and striping materials. By default, all crosswalks should be constructed of either asphalt or concrete and shall provide a smooth and safe walking and rolling surface. Brick pavers, concrete pavers, and other textured features within actual crossing paths are to be avoided. This does not preclude the use of such materials for

accents outside actual crossing paths (on the contrary, they are encouraged). It also does not preclude the use of color (e.g., paint, thermoplastic, or colored concrete) on crossing paths, as long as it does not result in unacceptable texture, safety, maintenance, or accessibility concerns. Existing crosswalks composed of brick and other texture materials may remain, but when they are due for significant maintenance (such as a resurfacing project), the crossings should be evaluated and modifications should be considered. In addition, such crosswalks must be maintained properly for ADA compliance.

## 11. **Streetlighting**

- a. Streetlighting should be designed to also effectively serve pedestrians, not just vehicles.
- b. Crosswalks should be effectively illuminated and lighting positioned to eliminate the “silhouette” effect on pedestrians.

## 12. **Bicycle Facilities**

- a. Generally, bicycle facilities should be provided in order to promote more people biking, connectivity, and safety. Context should be considered when selecting the appropriate bike facility for a particular project, including reference to the latest MTMP Bicycle Facilities Map, which may help elucidate opportunities for enhanced connectivity. However, in general, the following facilities should be considered (listed in order of most preferred to least preferred in order to promote those options that are more likely to increase the number of potential bicycle facility users):
  - i. Shared use paths (separated facilities that are typically at least 10 ft wide but preferably 12 ft wide or more to encourage people walking, rolling, and biking)
    - Note only shared use paths with typical widths of 10 ft or more will count as a bicycle facility. While 8 ft wide sidewalks are encouraged, they generally will not count on their own as a bicycle facility, and so additional bicycle facilities should be provided.
  - ii. Protected bike lanes/Cycle-tracks (may consist of two one-way installations or a two-way installation; must provide features that physically separate them from both sidewalks and vehicular lanes, not just striping)
  - iii. 7 foot buffered bike lanes (using Florida Greenbook standards)
  - iv. 6 foot buffered bike lanes (using Florida Greenbook standards)
  - v. 5 foot bike lanes
  - vi. 4 foot bike lanes

vii. Shared Lane Markings (aka “Sharrows”)

**13. Intersection Control**

- a. Intersections where new or replacement signals are anticipated should first consider (in preferential order) whether 1) an all-way stop or 2) roundabout is a viable alternative. Generally, if warranted, an all-way stop should be used. When considering all-way stops vs. roundabouts vs. signals, safety and convenience for people walking and biking, vehicular capacity, right of way impacts, and context should be considered.
- b. If roundabouts are selected as the best alternative, they typically should have pedestrian crossings on all legs.
- c. If signalized intersections are selected as the best solution, the remaining guidelines in this section apply.
- d. Signalized intersections should have marked and signalized pedestrian crosswalks on all legs of the intersection.
- e. Bicycle detection must be provided.
- f. Proper pushbutton and pedestrian signal head placement must be provided. In addition, in some cases automatic walk cycles that do not require button activation should be employed.
- g. Pushbuttons should have visible, tactile, and/or audible cues to communicate with pedestrians.
- h. Accessible Pedestrian Signals (APS) are encouraged.
- i. To help discourage pedestrians from walking against signals, signal cycles should factor in pedestrians, balancing vehicular traffic flow with reasonable wait times for pedestrians.
- j. Pedestrian detection and dilemma zone detection, where feasible, allowable, and appropriate in context, should be considered.
- k. Where feasible and appropriate in context, use of ITS (intelligent transportation systems) technology to adjust signal timing (including pedestrian signals) is encouraged, as long as such timing adjustments do not decrease the convenience for people walking and people biking.
- l. Signage and various other countermeasures (such as “No turn on red”, leading pedestrian intervals, and protected-only left turns when pedestrian buttons are pushed) should be considered to reduce pedestrian/vehicle conflicts. Similarly, bike boxes and/or leading bicycle intervals should be considered when appropriate in context.

**14. Vehicular and Bicycle Parking and Pickup/Drop Off Areas**

- a. Parking lots should be configured such that sidewalks are not encroached upon for parking or backing.
- b. Where angled parking is proposed, back-in style (“heads out”) parking should be considered for improved safety.

- c. When used, on-street parking (and bike lanes, if provided) should be designed to mitigate door zone/cyclist conflicts.
  - d. Bicycle parking should be provided as appropriate in context. The Association of Pedestrian and Bicycle Professionals *Essentials of Bicycle Parking* should be used as a guide in the provision, placement, and design of bicycle parking facilities.
  - e. Careful considerations should be employed during design to ensure facilities are not “overparked” for cars, which wastes valuable land area and discourages walkability.
  - f. As appropriate in context, designated pickup/drop off zones should be provided to encourage shared rides and various personal mobility options (as opposed to single occupancy vehicles).
- 15. Incorporate trees and provide shade.** Protect existing trees to the extent practicable and plant new trees (preferably canopy trees) to provide shade for pedestrians. Where trees are not a viable option, consider use of shade structures or other features to provide shade.
- 16. Limit use of brick and other textured materials for sidewalks, shared use paths, and shared lane roads.** Unless separate bike facilities such as protected bike lanes or shared-use paths that are composed of smooth materials are provided, for the comfort of people biking, streets should not be composed of brick or other highly textured materials, except for relatively short segments where appropriate in context. For the comfort of people walking, biking, or using a wheelchair, sidewalks and shared use paths should not be composed of brick or other textured materials except for very short distances of no more than a few feet where appropriate in context. Further, when used for sidewalks and shared use paths, such materials must be designed, installed, and maintained to be fully ADA compliant. See also #10 Crosswalks for material guidance specifically for crosswalks.
- 17. Limit the use of turn lanes and stripe them properly.** Turn lanes should only be installed where really needed. Analysis must be provided to justify turn lanes, and such analysis must balance walkability considerations. Turn lanes typically increase crossing distances and tend to encourage speeding. Left turn lanes, as appropriate in context, should be striped to an urban standard, eliminating anticipatory “no-go” zones that are typical in highway standards. “Slip lanes” for right turns should be avoided.
- 18. Minimize use of centerline striping.** For most City-owned streets and many private developments, use of centerline striping should be limited to the minimum necessary. This promotes slower speeds and increased safety.
- 19. Transit stops**
- a. Transit stops should be placed to avoid “multiple threat” scenarios to pedestrians on multilane roads.

- b. Where practicable and where transit service is provided or planned, shelters at transit stops consistent with those the City has installed on US 17-92 should be provided, with special considerations for shading, accessibility, and convenience when locating and orienting shelters.
- 20. **Traffic studies, walking audits, and level of service.** Where **level of service (LOS)** is evaluated, the HCM 2010 (or latest edition) multimodal approach to LOS evaluation should be used. Further, traffic studies, if conducted, must account for **induced demand** before recommending capacity improvements, and they should include or be accompanied by **walking audits** to better assess site-specific issues, especially in the context of multimodal safety, connectivity, and comfort. See also #21 below.
- 21. **Enhancements to walkability, rollability, bikeability, and transit access take precedence over vehicular capacity improvements.** In other words, all else being equal, and considering project constraints, improvements addressing active transportation are the priority over any capacity improvements, especially since induced demand often results in no long term reduction in congestion soon after capacity improvements are completed.
- 22. **Incorporate small blocks and grid networks into site development.** To the maximum extent practicable, site development, especially mixed use redevelopment, should be designed for limited block size and incorporate a porous, grid-style street network (e.g., by breaking up existing large tracts and avoiding branching/dendritic street systems). This promotes a flexible, safer, and more walkable transportation network.
- 23. **Construction Zone Temporary Traffic Control (TTC, also known as Maintenance of Traffic or MOT)**
  - a. TTC shall consider and accommodate people walking, rolling, biking, and driving and must meet accessibility requirements.
  - b. Use of steel plates for people walking, biking, or motorcycling is discouraged due to potential slip hazards.

### 9.3.8 Implementation

- A. All public transportation projects funded by the City shall be analyzed from the perspective of this Healthy Community Complete Streets Policy and Design Guidelines during the planning and design phases. This analysis may not necessarily need to be in-depth, especially for small projects, but documentation of what analyses were completed and the outcomes should be a standard operating procedure for each project design.
- B. To the extent that the City is involved in the review process of transportation projects not under the City's purview (e.g., FDOT, Seminole County), reviews performed by the City shall include analysis from the

perspective of this Healthy Community Complete Streets Policy and Design Guidelines, and relevant resulting comments shall be provided to the appropriate jurisdiction.

- C. The City shall incorporate complete streets into budgeting processes, work plans, and staffing projections and consider complete streets one of the highest priorities in transportation planning and funding decisions.
- D. In addition to using its own readily available funding sources, the City will actively seek additional sources of funding to implement complete streets, including but not limited to MetroPlan Orlando, FDOT, Seminole County, State and Federal agencies, and private foundations.
- E. In planning for capital transportation and maintenance projects, the City shall give extra weight to those projects that can provide a meaningful benefit to improvement of the multimodal transportation network consistent with this Policy, especially projects that promote active transportation.
- F. The City shall prioritize the safety and mobility of people walking, people biking, people with disabilities, and people using public transportation in decisions regarding the use of limited public right-of-way, with consideration given to roadway context and land use (including future land use).
- G. City staff shall reference, provide, and enforce this Healthy Community Complete Streets Policy and Design Guidelines during the Development Review process to ensure private development is designed to support this Policy. City staff shall also enforce this Policy as part of the Engineering Permit process.
- H. As appropriate, the City will participate in and support efforts conducted by MetroPlan Orlando and other agencies to assist local agencies in implementing complete streets policies; training elected officials, community leaders, and private development partners on the benefits of complete streets; and distributing current best practice information on complete streets design.

### **9.3.9 Evaluation/Performance Measures**

The City of Casselberry shall, at a minimum, evaluate this Policy every five years. The City of Casselberry will report the performance of the Complete Streets Policy based on the measures listed below, compared to the previous review period, in order to evaluate the success of the policy's implementation:

- Total mileage of bike lanes and trails built or designated
- Total mileage of shared lane markings installed
- Linear feet of new or improved sidewalks
- Number of new curb ramps installed

- Number of new pedestrian and/or bicycle wayfinding and safety signs installed

### **9.3.10 Interagency Coordination and Policy Updates**

Complete streets is a regional vision, not just a local one. It is important that complete streets policies from various jurisdictions are congruent and coordinated sufficiently to achieve regional goals.

The Florida Department of Transportation (FDOT) has completed both a statewide Complete Streets Policy and a Complete Streets Implementation Plan. In 2015, MetroPlan Orlando established a Complete Streets Task Force and is working to complete and adopt its own regional Complete Streets Policy. (As previously noted, the MTMP's Complete Streets Policy is based in part on a draft policy from MetroPlan Orlando.)

The City of Casselberry has also worked with the Winter Park Health Foundation, Smart Growth America, the City of Winter Park, the City of Longwood, the City of Maitland, the City of Orlando, FDOT, Bike/Walk Central Florida, LYNX, and other stakeholders to strategize implementation of complete streets.

All of these efforts are important to an efficient and effective regional transportation system that promotes vibrant and healthy communities. As regional work continues on complete streets, future additional updates to the City's Healthy Community Complete Streets Policy and Design Guidelines, related standards, and programs may be needed to ensure policies and plans are well coordinated. (See also Chapter 10 for recommended additional tasks.)