



Built Environment
TRANSPORTATION

May 26, 2021

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- The City of Orlando joined the AARP Network of Age-Friendly Communities in 2019
- Joining this network is a strong commitment to making Orlando inviting to aging populations

**According to the American Communities Survey 2017
20% of Orlando's population is age 50+**

This age group requires transportation options according to their specific mobility needs



Built Environment – Transportation Survey Results

How Do You Get Around Orlando?

- Drive
- SunRail
- Transportation Network Companies (Uber/Lyft)
- LYNX/LYMMO
- Bicycle
- (Other)



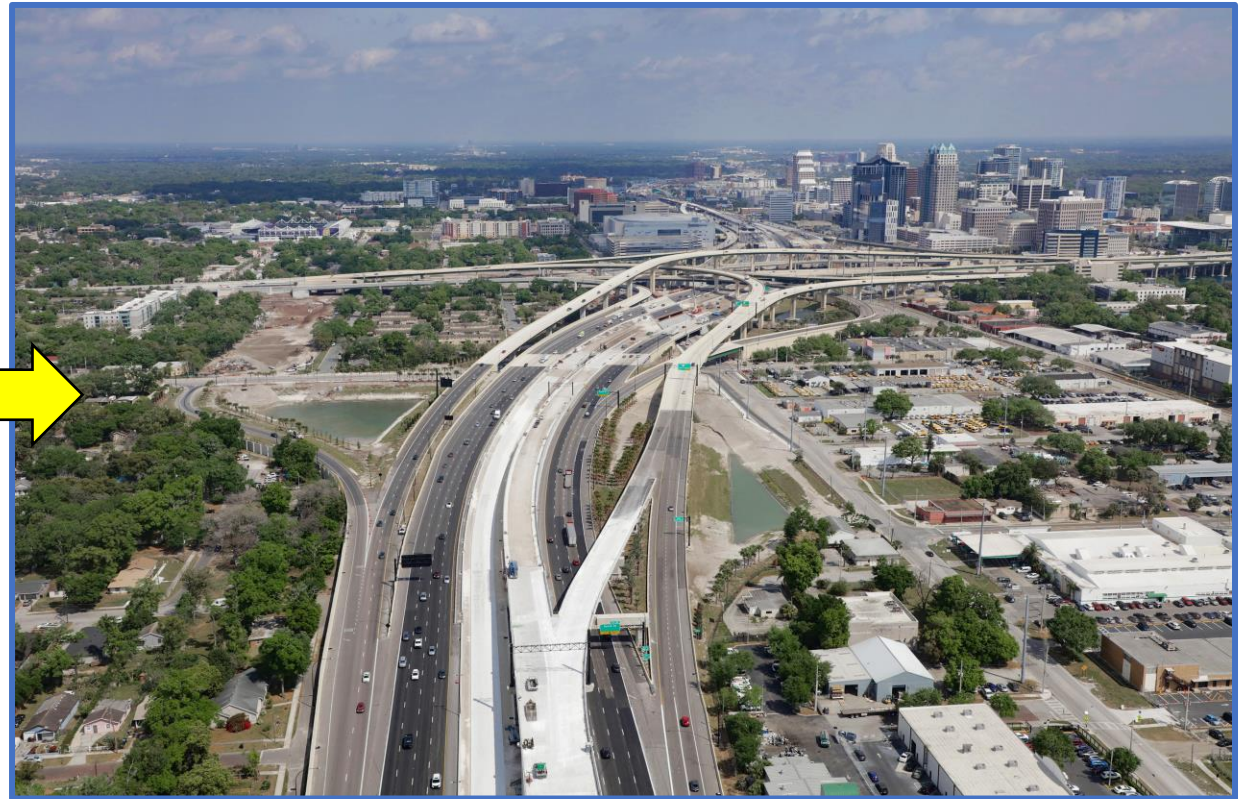
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The Ultimate Interstate 4



I-4 is getting a much-needed makeover.

A \$2.3 billion makeover.



- **56%** of the survey respondents still drive themselves around
- When Ultimate I-4 is complete in **2022**, express lanes will provide **new mobility options** for all drivers
- First highway to include advance traffic management technology for **travel time reliability**



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Mobility as a Service:



Somebody else drives:

(Transit services, Transportation Network Companies)

You drive:

(Renting Cars, Buses, Bikes, Scooters)

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Mobility services in Orlando are blooming!



*For those who may be unwilling to drive in heavy traffic, **SunRail** service provides an alternative to get to downtown easily.*

- **13%** of survey respondents currently use the SunRail service
- Easy and affordable **alternative** to driving
- Service operates **Monday - Friday** over 49 miles
- 16 stations in Volusia, Seminole, Orange & Osceola Counties
- **Seniors 65+ qualify for 50% SunRail tickets discount**



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Mobility services in Orlando are growing!



Orlando features a **free downtown bus service (LYMMO)** that shuttles passengers around downtown, stopping at:

- Downtown senior high-rise residential buildings
- Public library
- Grocery stores
- Banks
- Orange County Courthouse
- Post office
- Dr. Phillips Performing Arts Center
- Sporting arenas
- **Many more local destinations**

5% of the survey respondents use LYMMO or LYNX buses.

Seniors 65+ qualify for 50% bus tickets discount



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Mobility services in Orlando

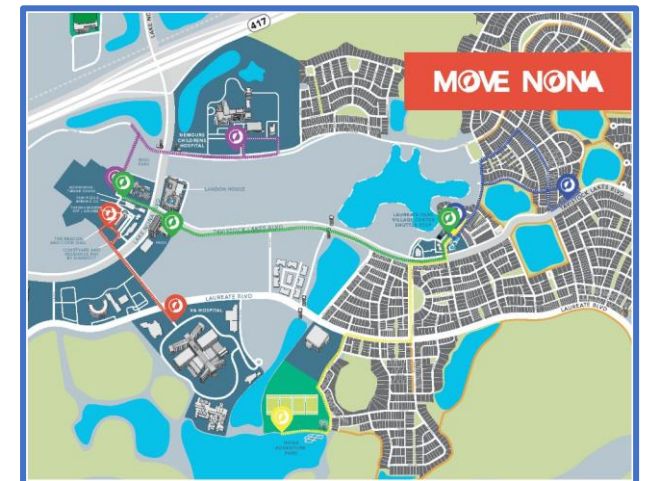
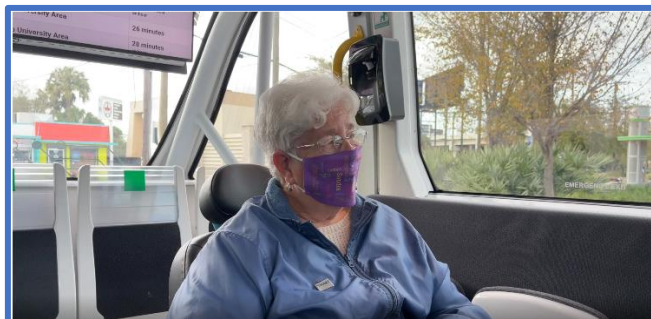


Autonomous Mobility Solutions

*The **Move Nona** autonomous vehicle program launched in September 2019 with an inaugural route connecting neighborhoods to the commercial district in **Lake Nona**.*

*The service currently **runs seven days a week**, providing mobility access to various parts of the community.*

*A total of **four routes are currently in service**, paving the way for one of the largest autonomous fleets in the world within a single community.*



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Mobility services in/out Orlando



The **BrightLine** is a new intercity rail service that will connect the Orlando International Airport with Miami, Fort Lauderdale, West Palm Beach and Tampa.

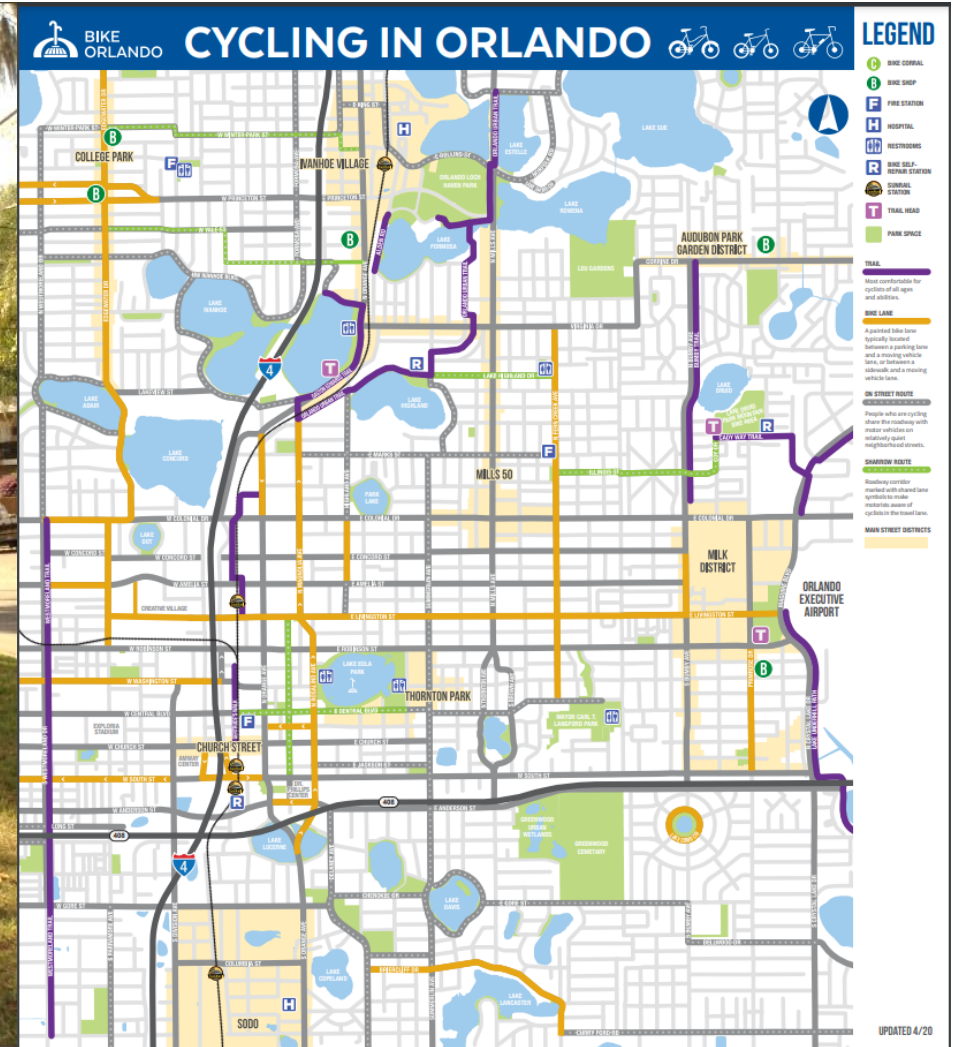


- New station at the Orlando International Airport South Terminal **near completion**
- New rail tracks being built on south side of the **Beachline (State Road 528)**
- Orlando-Miami service expected to open by **2022**



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The City of Orlando is improving “walkability” / “bikeability” by completing the **Orlando Urban Trail**





**WE ARE
ALL
PEDESTRIANS**

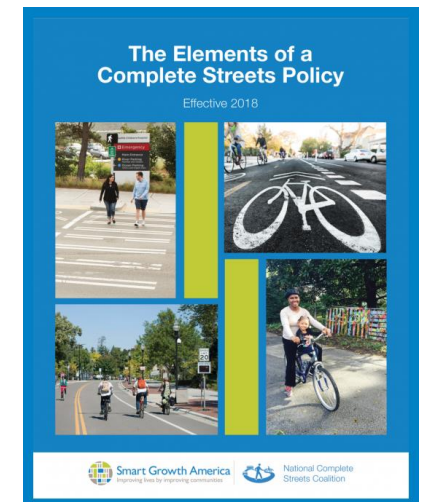


Complete Streets

- Principles consistent with Smart Growth America's **National Complete Streets Coalition**
- Ensure that streets meet the needs of **all users**
- Vision for **how** and **why** the community wants to “complete” its streets
- Complement and **add value** to the community
- All users defined: pedestrians, bicyclists, drivers and passengers of **all ages and abilities**

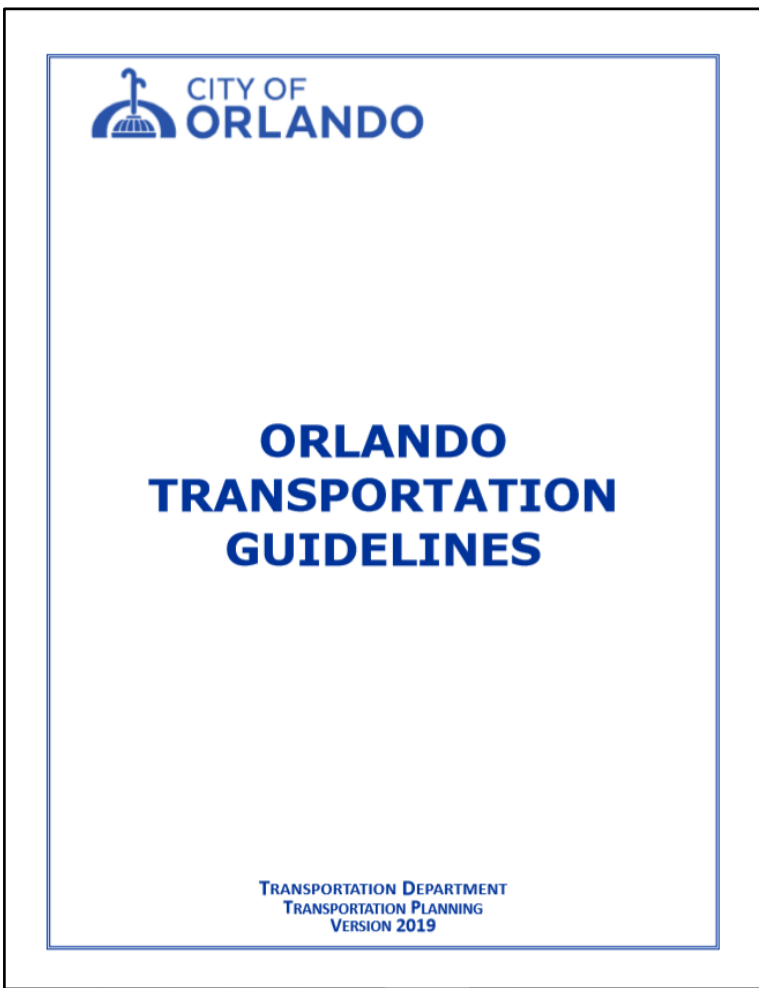
- Encourage **connectivity** for a comprehensive, integrated network for all travel modes
- Applicable to **all** transportation projects
- Encourage **best design criteria** while recognizing **flexibility** in balancing user needs
- Establish performance **standards** with **measurable outcomes**

- Streets for **everyone**
- Designed and operated to enable **safe access for all users**
- Users able to safely travel **along** and **across**, regardless of travel modes



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The **Orlando Transportation Guidelines** is a strong commitment to improve mobility for aging communities



PART 1 - Transportation Policies and Planning

Section 1B.5 - Designing the Corridor
Complete Streets vary in scale and design; design elements include: street type, street width, street layout, and street furniture. Streets are classified into three categories: *Streetside Area* and *Transit Way Area*.

- 1 Landscape features - Separate carway zone from sidewalk for
- 2 Peds accessibility improvements - ADA-compliant features for
- 3 Drive-way crossings - Safe peds crossing at same level as drive
- 4 Wide sidewalks - Increase pedestrian comfort & allows more ac
- 5 Transit stops - Shelters, benches, ADA-compliant access to tra

1 Carway - width - Combined vehicle travel lanes width.
2 Raised medians - Provides a refuge to pedestrians crossing a ro
3 Pedestrian crossings - Marked / safer places for pedestrians cr
4 Curb extensions - Decrease overall road width for pedestrian cr

PART 2 - Corridor Elements

Section 2B.8 - Transit Amenities
Every transit trip begins and ends as a pedestrian trip; hence, sidewalks are an integral part of the functioning transit system layer. Access to transit services must comply with two general characteristics: 1) Allow pedestrians to travel along the sidewalk and 2) Provide adequate space for waiting, queuing and disembarking vehicles. Meeting the demands for those two elements can be challenging in constrained transit services must meet all applicable ADA accessibility requirements, and should have them to the larger network and area destinations. Transit access fixtures require careful coordination with other elements of the street edge like street trees, street lights, signal lights and others.

The Central Florida Regional Transportation Authority, d.b.a. LYNX, is currently the main public transit service provider within the City of Orlando. Access to the LYNX services are categorized by facilities hierarchy, based on the number of daily passengers and number of routes (links) served; the five (5) types of access to the LYNX transit facilities are: *Local Transit Stops, Primary Local Stops, Superstops, Transit / Intermodal Centers and Park-and-Ride Lots*.

LYNX AMENITIES	Superstop	Transit / Intermodal Center	Primary Local Stop	Local Transit Stop	Park-and-Ride Lot
LYNX shelter	Yes	Yes	Yes	Yes	Yes
LYNX bench	Yes	Yes	Yes	Yes	Yes
LYNX sign	Yes	Yes	Yes	Yes	Yes
LYNX lighting	Yes	Yes	Yes	Yes	Yes
LYNX bicycle rack	Yes	Yes	Yes	Yes	Yes
LYNX trash receptacle	Yes	Yes	Yes	Yes	Yes
LYNX newspaper stand	Yes	Yes	Yes	Yes	Yes
LYNX bicycle repair station	Yes	Yes	Yes	Yes	Yes
LYNX drinking fountain	Yes	Yes	Yes	Yes	Yes
LYNX restroom	Yes	Yes	Yes	Yes	Yes
LYNX bicycle repair station	Yes	Yes	Yes	Yes	Yes
LYNX bicycle repair station	Yes	Yes	Yes	Yes	Yes
LYNX bicycle repair station	Yes	Yes	Yes	Yes	Yes
LYNX bicycle repair station	Yes	Yes	Yes	Yes	Yes
LYNX bicycle repair station	Yes	Yes	Yes	Yes	Yes

Local transit stops are transit access points serving primarily residential areas and generating the minimum transit stops are identified with the LYNX bus sign (S) number(s); the stop signposts have a seven-digit LYNX telephone number is also included for user information.

Primary local stops are transit access points with regular use several times a day; these facilities may be located in residential, urban or commercial areas, and will have additional passenger amenities like shelters, benches and others.

Superstops are transit access points with significant serving volumes between centers; they are neighborhood focal points, community centers, schools, government centers, Transit/intermodal centers are the main station of local circulator service, express routes, commuter rail service and other transportation Park-and-Ride lots are outlying suburban transit access point lots.

Depending on the transit access type (see the LYNX AMENITIES matrix above), passenger amenities can include signs, special paving, shelters, route maps, benches, leaning rails, trash receptacles, newspaper stands, lighting, bicycle parking, drinking fountain, bathrooms and specialty vendor amenities.

Premium transit stops for the LYMMO circulators service in Downtown Orlando have larger shelters, comfortable waiting spaces, enhanced rider services, and place-making elements like custom lighting and/or public art.

PART 3 - Intersection Elements

Section 3B.2 - Crossing Islands
Crossing islands are raised islands that provide a refuge for pedestrians crossing multilane roads. Pedestrians feel unsafe when crossing wide intersections with several vehicle lanes; crossing islands allow pedestrians to find gaps in traffic and safely cross multilane roads in a two-stage movement. Signalized intersections with crossing islands should be designed to allow pedestrians to cross in a single stage movement.

Crossing islands can be installed where there is a demand for crossing pedestrians but not enough to warrant a signalized crossing. Crossing islands include an at-grade cut-through as wide as the connecting crosswalk, detectable warnings, and be gently sloped to prevent standing water. The crossing islands should be at least 6' wide, based on a bicycle length or a person pushing a stroller, or preferably 8-10' wide. A narrower raised median is still preferable to no median where a 6' wide median cannot be achieved. Crossing islands should be considered on pedestrian crossing distances greater than 50'.

Crossing islands should have a nose to protect pedestrians waiting on the island and to slow down turning vehicles; other features to be considered include curbs, bollards, illumination, signs, reflectors, planting or street trees. Planting will require additional maintenance responsibilities and shall ensure proper visibility.

Crossing islands at mid-block locations should be designed with a stagger, or in a "Z" pattern to ensure pedestrians are facing oncoming traffic before progressing to the second stage of the crossing movement.

Crossing islands must be approved by the City of Orlando Transportation Department and comply with all ADA accessibility requirements. Further detailed information can be found in the NACTO Urban Street Design Guidelines (Pedestrian Safety Island section).

Kirkman Road at International Drive intersection

Semoran Boulevard at Lee Vista Boulevard intersection

NACTO Example - New York

Temporary Painted Crossing Island at Curry Ford Road

Orlando Transportation

Orlando Transportation Guidelines | Intersection Area 3-5



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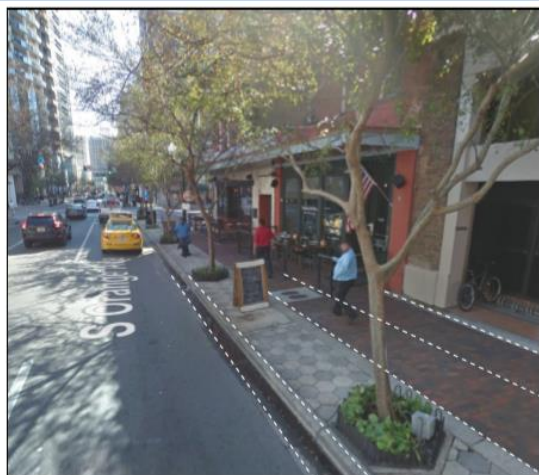
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Users able to safely travel along and across, regardless of travel modes



Chapter 2B - Streetside

Sidewalks are one of the most vibrant and active sections of the overall corridor **Streetside**, since:

- Play a critical role in the character, function, enjoyment and accessibility of neighborhoods throughout the city.
- The function and design of sidewalks significantly impact the character of the street.
- They extend from curb to building face or to property lines.
- Are the place typically reserved for pedestrians, but they also accommodate street trees, stormwater, street lights, bicycle racks, and transit stops.
- Are a place of transition and economic exchange as restaurants engage the public space and retailers attract people to their windows and shops.

Curb Furniture Zone Pedestrian Clear Zone Frontage Zone



Exclusive Pedestrian Phase at South St.



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New developments in **Baldwin Park**, **SODO** (*SOuth of DOwntown*), **Creative Village** and the **Packing District** all emphasize **pedestrian and bike friendly facilities** where residents can live, work, learn and play



VISION ZERO

ORLANDO



Orlando's Vision Zero **MISSION** is to eliminate traffic deaths and serious injuries within the City by 2040.



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Vision Zero starts with the ethical belief that everyone has **the right to move safely** in their communities, and that system designers and policy makers share the responsibility to ensure **safe systems** for travel.

TRADITIONAL APPROACH

Traffic deaths are **INEVITABLE**

PERFECT human behavior

Prevent **COLLISIONS**

INDIVIDUAL responsibility

Saving lives is **EXPENSIVE**

VS

VISION ZERO

Traffic deaths are **PREVENTABLE**

Integrate **HUMAN FAILING** in approach

Prevent **FATAL AND SEVERE CRASHES**

SYSTEMS approach

Saving lives is **NOT EXPENSIVE**



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Orlando's Vision Zero Goals



Adopt a safe systems approach in roadway design, operation and maintenance



Increase everyone's understanding of the leading causes of crashes resulting in fatalities and serious injuries



Support law enforcement efforts to eliminate behaviors leading to fatal and serious injury crashes



Demonstrate continuous progress toward Vision Zero



Improve access and travel time to Level 1 Trauma Center and other hospitals



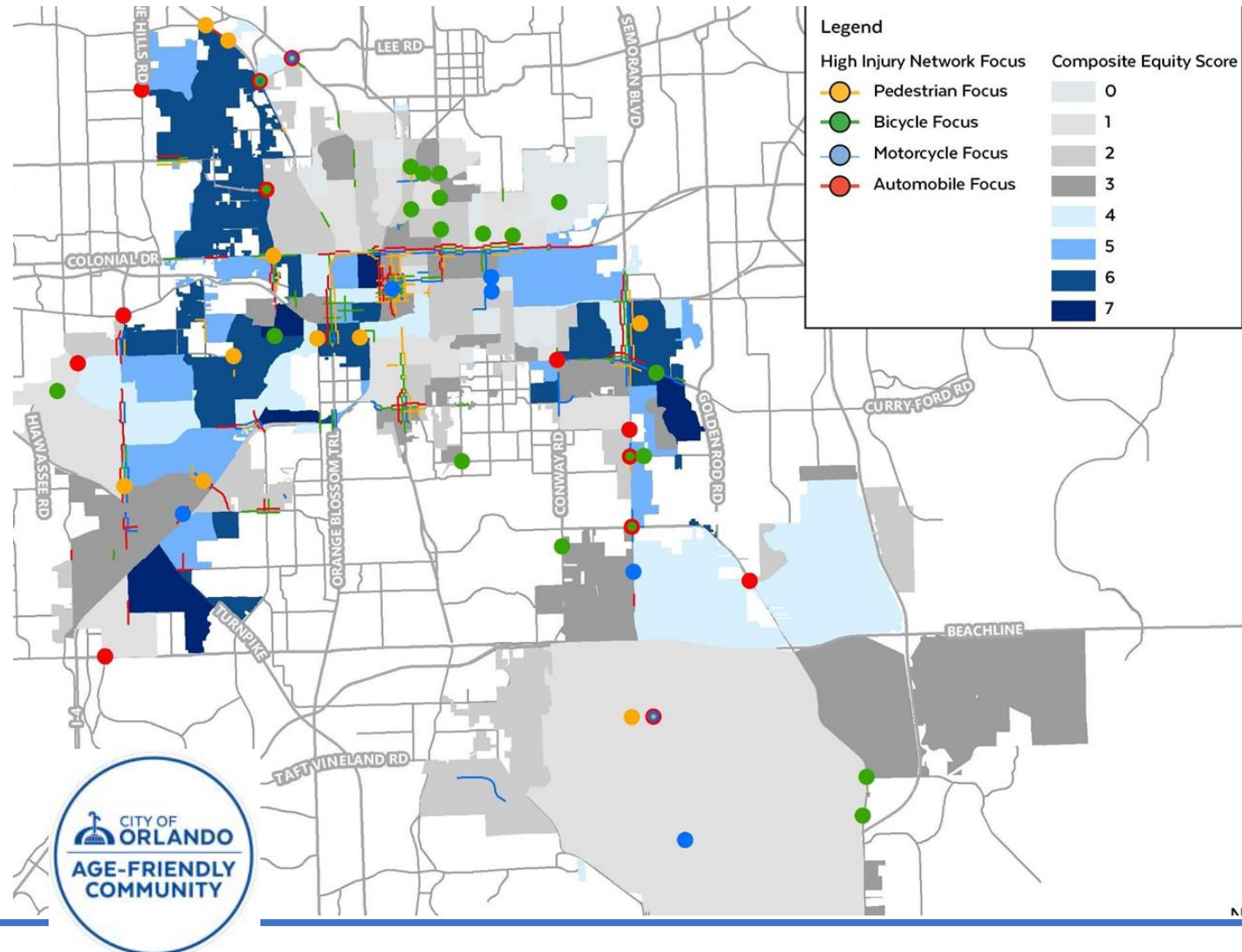
Prioritize investments and programs in communities of concern



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Data based approach to promote **equitable safe transportation** for all people in the city

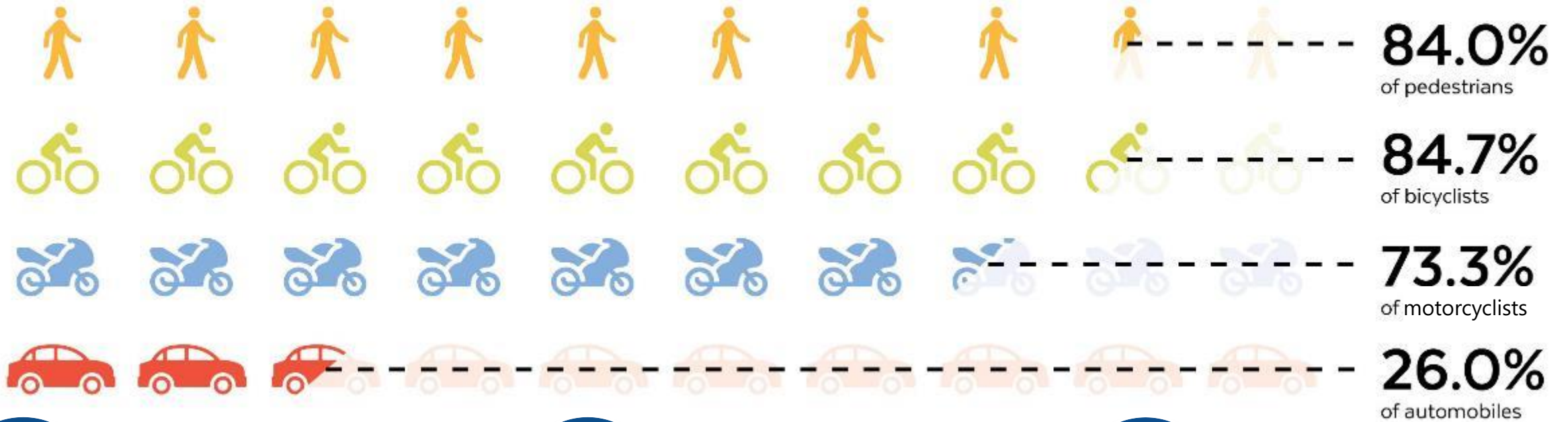
1. Percentage of population below poverty level
2. Percentage of minority population
3. Percentage of zero-vehicle households
4. Percentage of population age 65 or above
5. Percentage of population 18 years old or below
6. Percentage of means of transportation to work other than personal motor vehicle
7. Percentage of population with limited English proficiency (LEP)



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Trends and Conditions

Percent of crashes with injury by mode



41.8% of all crashes occur in the afternoon



23.1% of all crashes occur under dark skies on lighted roads



84.6% of crashes occur at intersections



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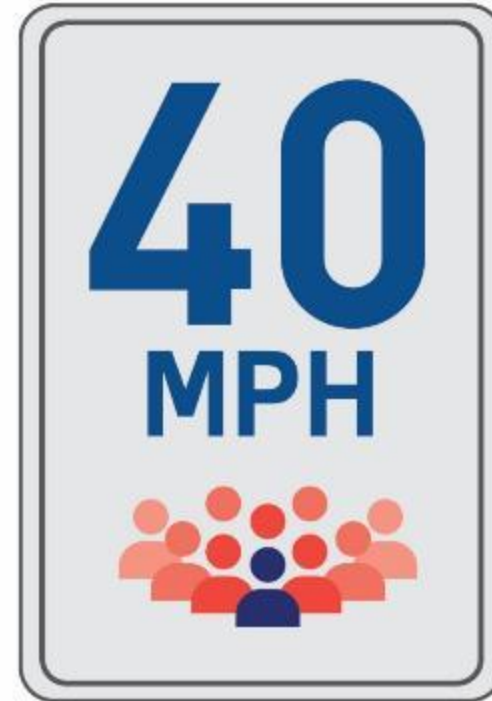
Hit by a vehicle traveling at:



9 out of 10
pedestrians survive



5 out of 10
pedestrians survive



Only 1 out of 10
pedestrians survives



City Safety Projects

- Bumby Path Green Trail Crossings
- Crosswalks/Rectangular Rapid Flashing Beacons (RRFBs)
 - Mercy Drive Raised Crosswalks
 - Virginia Drive Raised Crosswalks and Green Trail Crossings
- Roundabout Feasibility Study
- Driver Speed Feedback Signs
- Streetlights

Funded through Orlando STOPS



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Thank You!
