





Mobility

Transportation Element

CLEARWATER | 20
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Introduction

The Mobility Chapter provides guidance for the creation of a safe, efficient, equitable, and sustainable transportation system serving the needs of residents, businesses, and visitors.

The city's position as an established and largely built-out community creates unique mobility challenges that shape the economic vitality and quality of life. Right-of-way constraints make it difficult to add capacity along major corridors; transit use, walking, and biking are not always safe or accessible alternatives to driving, especially in more auto-oriented places; and seasonal shifts in travel demand impact the daily lives of residents, workers, and business operators.

Chapter policies focus on:

- Maximizing capacity on the existing transportation network;
- Improving travel safety and accessibility for system users;
- Supporting improved connectivity and reinvestment in Downtown, in activity centers along US 19, and along key multimodal corridors; and
- Expanding options for alternative forms of travel, including transit use, walking, and biking.

Planning Context

The Existing System

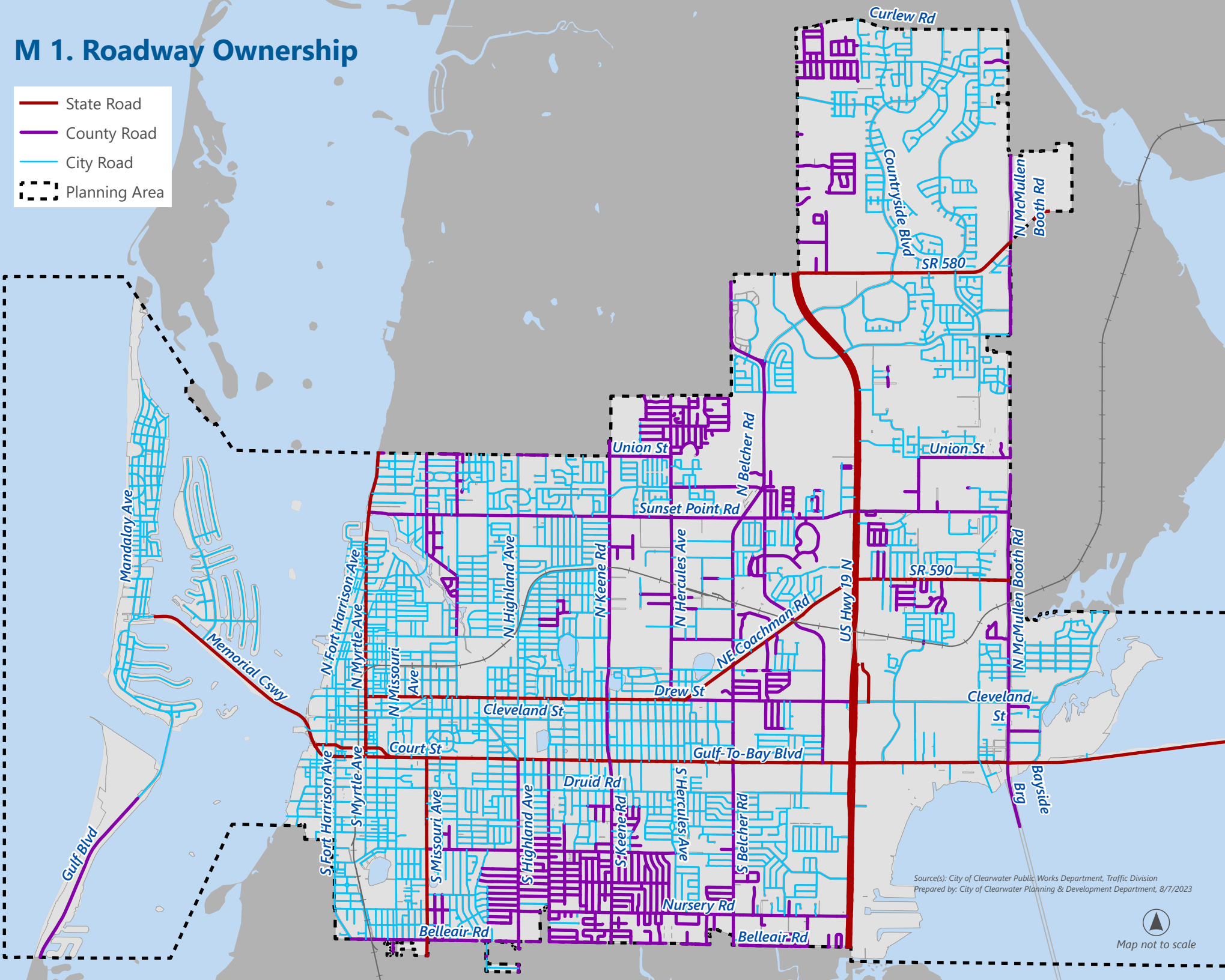
The city's transportation network includes approximately 532 miles of roads broken down into four classifications: arterials, collectors, local streets, and neighborhood streets. Of these classifications, approximately 78% are considered local or neighborhood streets. Collectors and arterials each account for 11% of the remaining mileage with 58.1 miles of collectors and 56.9 miles of arterials.

Street ownership is divided between one of three jurisdictions, the State of Florida, Pinellas County, or the City of Clearwater as shown on **Map M 1. Roadway Ownership**. Excluding neighborhood street classifications, the city owns approximately 56 miles of streets, Pinellas County owns approximately 44 miles, and the State of Florida owns approximately 32 miles. In several cases, ownership changes along a single corridor. For example, all three jurisdictions control segments along the Drew Street corridor, thus resulting in the need for careful coordination among the city and either Pinellas County or the State of Florida.

In addition to the over 500 miles of roads, the city contains over 500 miles of sidewalks, with Clearwater Beach and Downtown and the neighborhoods immediately surrounding having the best sidewalk coverage. While the Countryside and Morningside areas also have good coverage, large sidewalk network gaps exist in communities to the east and north of Downtown. Additionally, walking and biking is served by nearly 65 miles of bicycle facilities and trails. Bicycle facilities include bike lanes, marked shared lane facilities or "sharrows", and buffered or separated facilities. Trails include the Pinellas Trail, Druid Trail, and Duke Energy Trail, among others.

M 1. Roadway Ownership

- State Road
- County Road
- City Road
- Planning Area



Source(s): City of Clearwater Public Works Department, Traffic Division
Prepared by: City of Clearwater Planning & Development Department, 8/7/2023

Congestion & Capacity

During peak morning and evening travel periods, arterials across the city, including segments of Gulf to Bay Boulevard, McMullen Booth Road, and US 19, operate at or above capacity. During winter and spring months, congestion worsens as tourist traffic contributes to increased use of the network. Given right-of-way constraints, road widening is not often feasible or cost-effective, so planning activities focus on defining strategies to maximize operational efficiency, expand travel alternatives, and manage demand across the network.

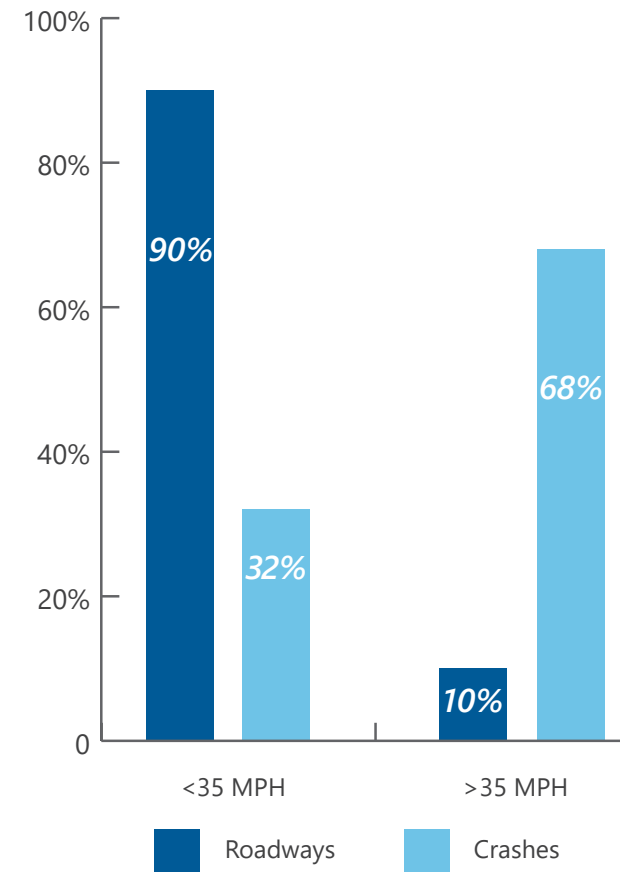
Travel Safety

Travel safety is a significant city concern. Between 2016 and 2020, there were nearly 19,000 crashes in the city, over two thirds of which occurred on roadways with speed limits above 35 MPH. (Roadways where the speed limit is over 35 MPH only account for about 10% of the entire road network.) **Figure 6. Percentage of Crashes vs. Speed** shows the percentage of roadways within the city with speed limits above or below 35 MPH compared to the percentage of crashes on the roadways based on their speed. Crashes that occur at speeds above 35 MPH have a greater potential to result in fatalities or incapacitating injuries as shown in **Figure 7. Injury Rate vs Speed in Crashes**. Specific crash hotspots were identified at the following intersections: Gulf to Bay Boulevard at US 19 and at Belcher Road; US 19 and Drew Street; and Coronado Drive and South Gulfview Boulevard.

Crashes between vehicles and either pedestrians or bicyclists accounted for about 3% of the total crashes, but due to the higher travel speeds on road segments where the crashes occurred, nearly 19% of the pedestrian and bicyclist crashes resulted in fatalities or incapacitating injuries. Bike crashes were concentrated at intersections along Gulf to Bay Boulevard at Keene Road, Belcher Road, Old Coachman Road, and McMullen Booth Road.

Forward Pinellas' *Safe Streets Pinellas Action Plan* identifies several locations as part of Pinellas County's High Injury Network (HIN), which identifies roadways with especially high incidences of fatalities and serious injuries. The city has signed on with Forward Pinellas to adopt a Vision Zero approach to dealing with crashes on the HIN through adoption of Resolution No. 22-12. This Vision Zero approach aims to identify and implement projects and programs that work towards reducing the number of serious injuries and fatalities on roads within the city, with the ultimate goal of having zero serious injuries or fatalities by 2045.

Figure 6. Percentage of Crashes vs. Speed



Transit Service

Pinellas Suncoast Transit Authority (PSTA) operates bus service within the city as well as throughout Pinellas County. Within the city there are 19 routes including six core service routes, one frequent service route, 10 supporting service routes, and two trolley service routes as shown in **Figure 8. PSTA Services**. These existing routes provide an important transportation alternative for the local workforce and a critical lifeline to transit-dependent communities across the city. (Nearly 10% of the occupied households within the city do not have access to a personal vehicle.)

General Aviation

Clearwater also has a general aviation airport, Clearwater Airpark. The airport has about 125 aircraft based at the airport with nearly 50,000 annual operations. There is only one runway, designated 16/34, that is 4,108 feet in length with a parallel taxiway. Clearwater Airpark is the highest airport in Pinellas County at an elevation of 71 feet above sea level, making it an important component to recovery efforts after storms or disasters. The airport is currently leased to FlyUSA and is governed by a Federal Aviation Administration (FAA) mandated *Airport Master Plan*, recently updated in 2020.

Figure 8. PSTA Services

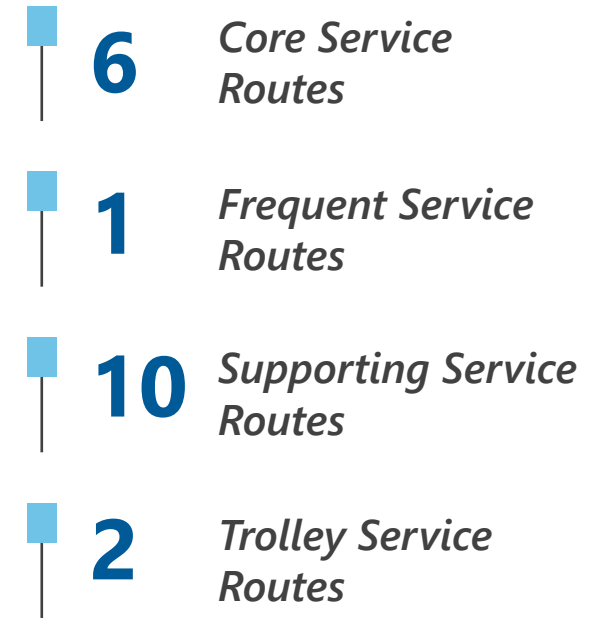
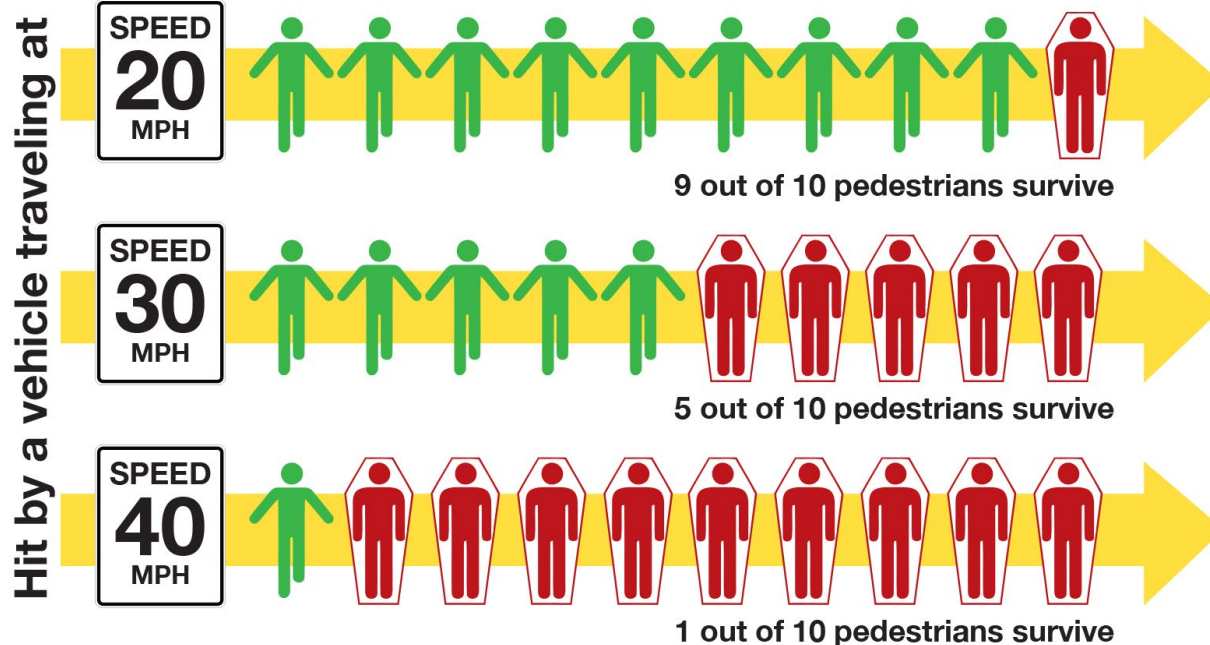


Figure 7. Injury Rate vs. Speed in Crashes



Into the Future

Vision Zero Focus

Planning policies and programs presented in this chapter reinforce the city's Vision Zero approach to reduce roadway fatalities to zero and create a safe system that meets the needs of all users. Goals, objectives, and policies focus on identifying and prioritizing improvements in places with the highest incidents of fatalities and severe injuries. A Vision Zero approach can also lead to shifts in travel patterns and behaviors. Support for transit and active transportation can lead to reductions in single-occupancy vehicle trips and trip lengths, thus reducing crash exposure and conflict potential. Adopting a safe systems approach, which takes all users into consideration so that potential conflicts are minimized and eliminated, is a critical step in securing safe travel.

System Optimization

With limited opportunities to increase roadway capacity, the city is working to maximize operations on the existing network. From increasing efficiency through coordinated and adaptive traffic signal timing to planning for the introduction of autonomous and connected vehicles, the city is working with local partners to find innovative system design and management solutions to address long-standing challenges.

Transit Potential

Transit has the potential to play a stronger role in serving the travel needs of city residents, visitors and workers. This chapter calls for the city to work with PSTA improve the quality and frequency of service along core routes and create better walking and biking connections between transit stops and nearby neighborhoods, employment centers, and mixed-use destinations. Through support

for signal prioritization and improvements like intersection queue jumps along key corridors, transit can become a more attractive and reliable alternative to driving and better serve local and regional needs, including the critical needs of transit-dependent populations.



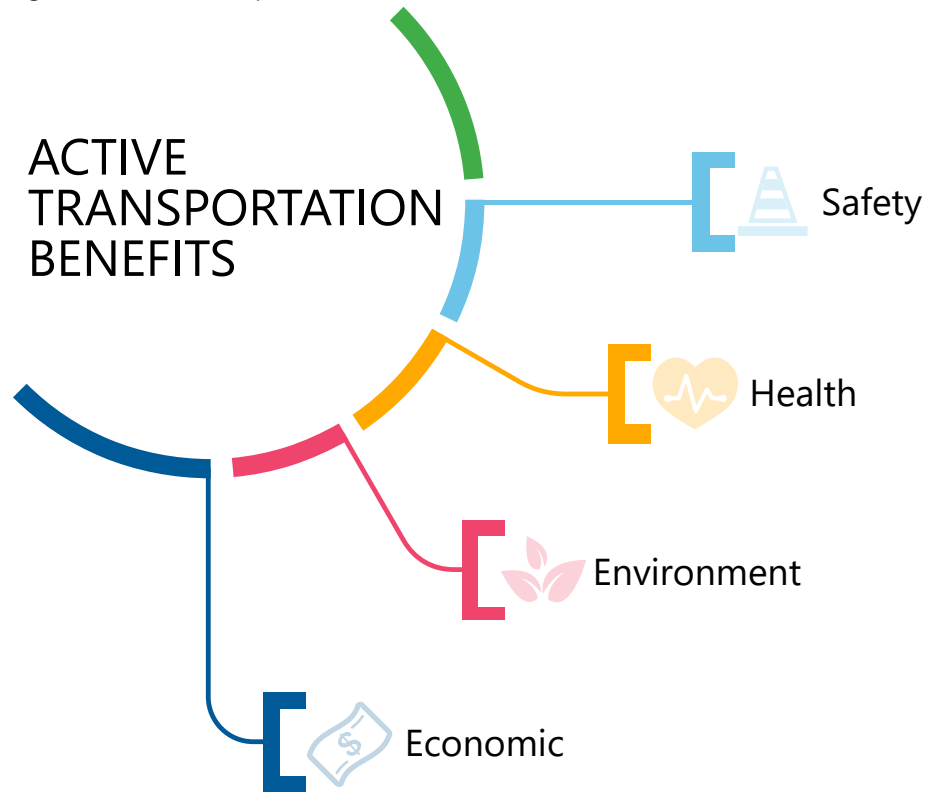
Jolley Trolley on Clearwater Beach

Active Transportation & Micromobility

Chapter goals, objectives, and policies recognize the ways walking, biking and micromobility use, especially in and around more walkable, mixed-use places, improves accessibility, enhances livability, and promotes resilience and sustainability. Walking, biking and micromobility use offer important benefits to the city, including reduced roadway congestion and crash exposure, lower greenhouse gas emissions, and increased economic activity Downtown, on Clearwater Beach, and in activity centers across the city. As highlighted in **Figure 9. Active Transportation Benefits**, there is an important correlation between the presence of active transportation infrastructure and improved safety, health, economic, and environmental impacts.

Micromobility is a broad term used to describe transportation over short distances by lightweight, low-to-moderate speed, and usually less than single-person wheeled vehicles, including e-bikes, electric scooters, electric skateboards, and shared bicycle fleets. These modes are meant to help people commute over shorter distances without using single-occupancy vehicles and provide a “last mile” mobility alternative for transit users. “Last mile” options connect transit users to their final destinations in places where there’s no scheduled transit service.

Figure 9. Active Transportation Benefits



Land Use & Transportation

Integration

Leveraging the mobility benefits of compact, mixed-use development is a central part of the city's strategic direction. Land use strategies included in the Quality Places Chapter are designed to reduce single-occupancy vehicle travel and promote the use of transit, walking, and biking as safe and convenient alternatives to single-occupancy vehicle travel.

Emerging Technologies

Other areas of focus include new and emerging technologies such as connected autonomous vehicles (CAV) and air taxis or vertiports. The city should focus efforts on expanding fiber optic connectivity throughout the city so that these future technologies can be accommodated on the roadway network in a safe and efficient manner.

Freight Movement

As populations and tourism activities increase, delivery services will continue to need safe opportunities for delivery of goods. Options to consider include creating delivery times for different areas of the city, creating off-street delivery zones, or including development standards that specifically address delivery vehicles so that deliveries are made in a safe manner without impeding traffic flow, especially during peak travel times.

Regional Collaboration

Transportation is not just a city issue or a city problem. A regional approach needs to be considered and coordination efforts need to continue with regional partners to best address transportation not only within Clearwater, but also within Pinellas County as well as the Tampa Bay Region.

Chapter Goals

This chapter contains four goals:

Goal M 1. Transportation System

Provide a convenient, efficient, and interconnected transportation system that is safe and equitable for all users, expands opportunity, and improves access to local and regional destinations.

Goal M 2. Multimodal Mobility

Increase transportation alternatives to lessen dependence on single-occupancy vehicle trips by expanding multimodal travel options.

Goal M 3. Airport

Plan for the safe and efficient operation of the Clearwater Airpark.

Goal M 4. Freight & Logistics

Plan for the safe and efficient movement and delivery of goods throughout the city.

Goal M 1

Provide a convenient, efficient, and interconnected transportation system that is safe and equitable for all users, expands opportunity, and improves access to local and regional destinations.

Objective M 1.1

Maintain transportation network performance that furthers development of a multimodal transportation system and improves mobility and safety for all roadway users - pedestrians, bicyclists, motorists, and transit users.

Policies

M 1.1.1

Preserve and protect existing and future transportation corridors.

M 1.1.2

Continue to monitor transportation conditions in the city, including roadway level of service, active transportation, and travel safety by user group.

M 1.1.3

Monitor seasonal changes in travel demand and traffic patterns and operations.

M 1.1.4

Expand alternative transportation strategies to address seasonal congestion.

M 1.1.5

Continue implementation of the current Mobility Management System, including the multimodal impact fee, through the *Community Development Code (CDC)* to generate funding for multimodal mobility improvements.

M 1.1.6

Continue directing expenditures towards alleviating the city's most severe congestion problems while providing continuity in roadway lane arrangements and providing for economic development and redevelopment needs.

M 1.1.7

Evaluate the feasibility of creating a Transportation Management Association to implement a Transportation Demand Management Program for Downtown Clearwater and Clearwater Beach.

M 1.1.8

Develop traffic management plans for use on Clearwater Beach, Downtown, and other locations with significant fluctuations in demand due to special events or seasonal impacts.

M 1.1.9

Consider implementing a multimodal screening tool to evaluate multimodal elements, such as sidewalks, bike lanes, or transit access, during the review of site plans or future land use or zoning amendment applications.

M 1.1.10

Analyze impacts of roadway design on the ability to evacuate populations during emergencies.

M 1.1.11

Evaluate the impacts of prolonged road closures on road performance, mobility, and safety of all users.

M 1.1.12

Study the use and effects of micromobility within the city and use the findings to prioritize future projects and programs.

M 1.1.13

Support educational and outreach initiatives to promote safe travel behavior and increase public awareness of alternative forms of transportation, including transit, active transportation, and micromobility.

M 1.1.14

Evaluate opportunities to re-establish a transportation grid and improve pedestrian connectivity.

M 1.1.15

Review right-of-way vacation requests to ensure vehicular and pedestrian connectivity is not reduced and superblocks are not created.

M 1.1.16

Continue to limit or consolidate direct access points (curb cuts), require cross-access easements, and prohibit new access points for out-parcels through the site plan review process.

M 1.1.17

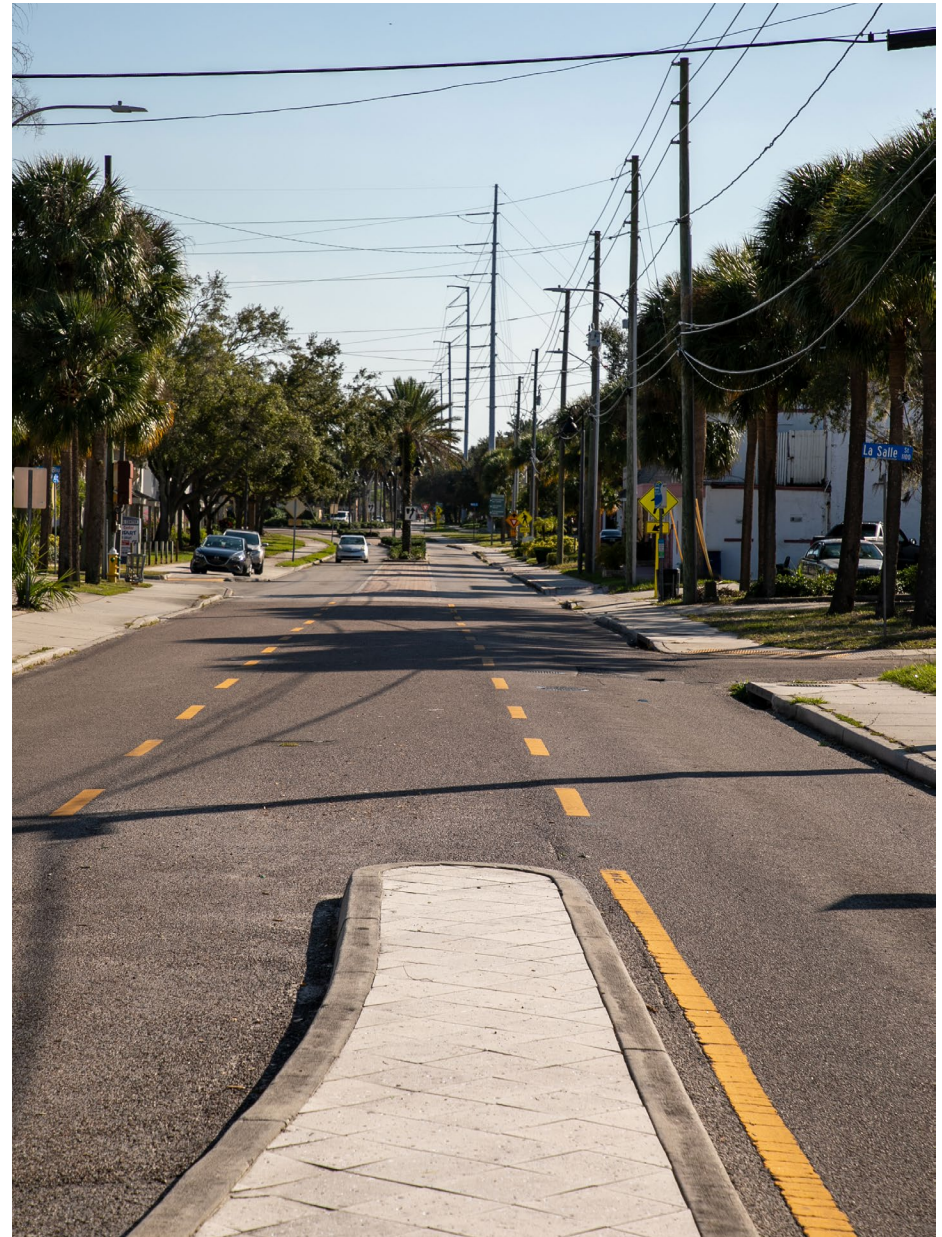
Consider completing a comprehensive mobility study throughout the city.

M 1.1.18

Encourage the consolidation of public surface parking facilities into structured parking facilities open to the public.

M 1.1.19

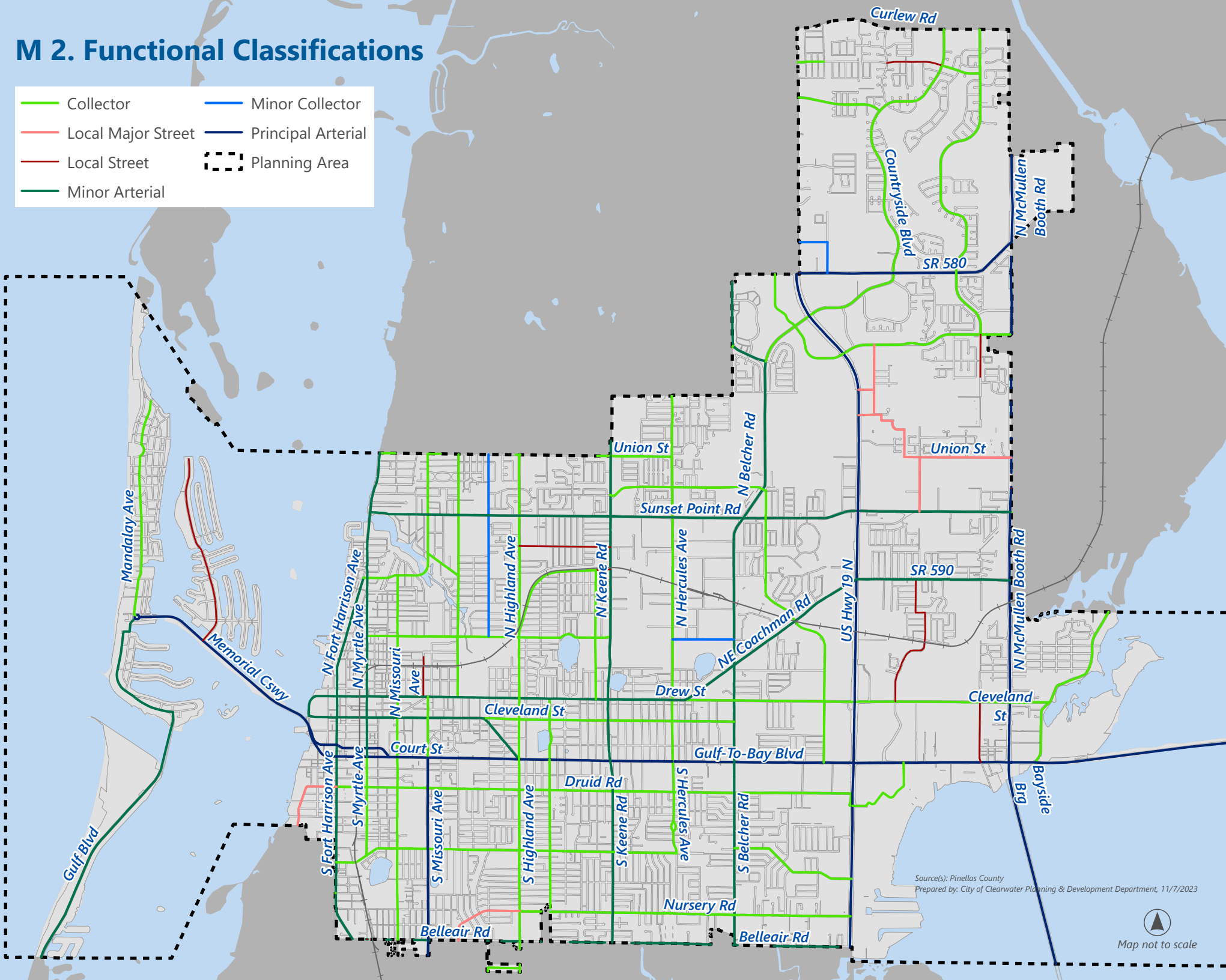
Evaluate the functional classifications found on **Map M 2. Functional Classifications** and coordinate updates to the map with Forward Pinellas and Pinellas County.



North Martin Luther King, Jr. Avenue Corridor

M 2. Functional Classifications

- Collector
- Local Major Street
- Local Street
- Minor Arterial
- Minor Collector
- Principal Arterial
- Planning Area



Source(s): Pinellas County
 Prepared by: City of Clearwater Planning & Development Department, 11/7/2023

Objective M 1.2

Provide an equitable transportation system that delivers equal outcomes regardless of age, race, ethnicity, income, ability, or disability.

Policies

M 1.2.1

Consider conducting a needs assessment to inventory and assess mobility needs of city residents.

M 1.2.2

Continue to fund maintenance, retrofit, and construction of sidewalks to meet *Florida Accessibility Code* and Americans with Disabilities Act (ADA) standards.

M 1.2.3

Continue to upgrade right-of-way signage during scheduled replacements with ADA-compliant signage as set forth in the *City of Clearwater ADA Transition Plan*.

M 1.2.4

Support the creation of expanded transportation service options and types to service traditionally underserved neighborhoods.

M 1.2.5

Study and design transportation network improvements that harmonize with the context of the adjacent neighborhood and ensure that all users are considered and are not disproportionately affected.

M 1.2.6

Develop capital planning strategies that improve sidewalk and trail connections for underserved neighborhoods and populations to access opportunities and services.



Crossing guards allowing students to cross a street

Objective M 1.3

Recognize safety as the number one transportation priority through implementation of the Vision Zero approach.

Policies

M 1.3.1

Address travel safety and utilize the Federal Highway Administration’s Safe System elements as part of all transportation planning, complete streets, active transportation, and transit planning processes.

M 1.3.2

Identify crash hotspots and assess the feasibility of data-driven safety countermeasures in all transportation improvement projects within the city, whether undertaken by Florida Department of Transportation (FDOT), Pinellas County, the city, or Pinellas Suncoast Transit Authority (PSTA).

M 1.3.3

Focus education and enforcement activities in areas identified as crash hotspots.

M 1.3.4

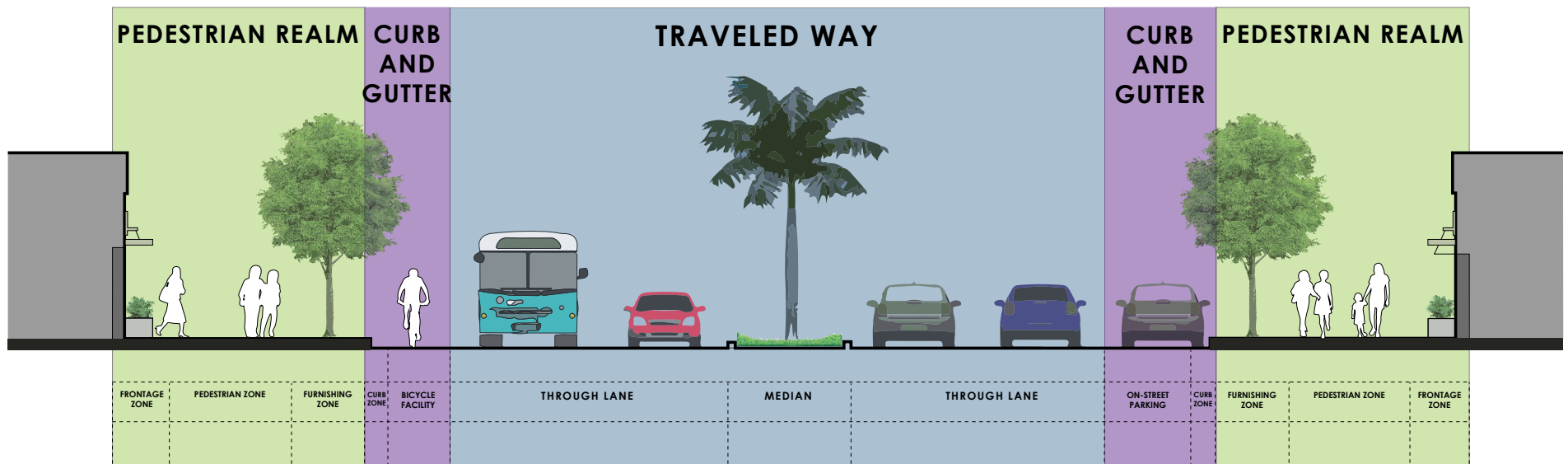
Focus improvements to the transportation network on those High-Injury Network (HIN) roadways as found within the *Safe Streets Pinellas Action Plan*.

M 1.3.5

Continue to provide access to residential, commercial, and recreational areas by providing direct routes such as continuous trails and sidewalks between destinations in order to minimize potential conflicts between pedestrians and motor vehicles.

M 1.3.6

Research grant opportunities to re-establish a Safe Routes to School Program.



Typical Complete Streets concept plan

Objective M 1.4

Promote travel safety and support multimodal mobility through city codes.

Policies

M 1.4.1

Establish complete streets and context classifications design standards in the *CDC* consistent with the approved *Complete Streets for Clearwater Implementation Plan*.

M 1.4.2

Continue to evaluate the *CDC* for opportunities to include and enhance safety measures for vehicular stacking, vehicular and pedestrian connections, circulation, and cross-parcel access.

M 1.4.3

Review and update the *CDC* to address multimodal or new forms of transportation such as e-bikes and scooters.

M 1.4.4

Explore the feasibility of permitting low-speed, non-motorized vehicles, such as golf carts, to operate on certain city roads.

M 1.4.5

Establish requirements for electric vehicle (EV) charging infrastructure in new development and redevelopment.

M 1.4.6

Create standards for bicycle parking in new development or redevelopment.

M 1.4.7

Develop curb management solutions to address impacts of ride-share services such as Uber and Lyft.

M 1.4.8

Provide safe on-site traffic circulation and connections to adjacent roadways consistent with FDOT, Institute of Traffic Engineers (ITE), National Association of City Transportation Officials (NACTO), or other applicable roadway design standards, policies, and guidelines.



Bicycle parking

Objective M 1.5

Research, develop, and deploy technological applications and projects to support connected vehicles, enhanced mobility, and safety while minimizing impacts to equity, livability, and sustainability.

Policies

M 1.5.1

Utilize 5G technologies for near-term implementation and expansion of the city's fiber network to allow for enhanced traffic and parking management projects and programs.

M 1.5.2

Evaluate and implement the use of integrated parking management systems and pricing to best-utilize the city's public parking lots and garages.

M 1.5.3

Encourage private-sector participation in a city-run integrated parking management system.

M 1.5.4

Research projects and programs to best support Connected Autonomous Vehicles (CAV) and their safe movement throughout the city.

M 1.5.5

Research the use of air-taxis and study the feasibility of allowing vertiports to be constructed within the city.

M 1.5.6

Consider implementing standards for aerial or other autonomous delivery methods.

M 1.5.7

Develop programs to educate the public about new technologies.



The Autonomous Vehicle Advantage (AVA) connected autonomous vehicle

Objective M 1.6

Continue to plan for and implement improvements to the transportation system as recommended in *Greenprint 2.0*.

Policies

M 1.6.1

Develop street design standards, including pedestrian realm improvements, that maximize energy efficiency and minimize heat island effect.

M 1.6.2

Support improvements to enable increased use of transit, walking, and cycling for a greater percentage of overall travel and reduce the number and length of vehicle trips.

M 1.6.3

Reduce the greenhouse gas emissions of the city vehicle fleet by shifting to cleaner fuels and more fuel-efficient vehicles.

M 1.6.4

Expand publicly accessible electric vehicle (EV) charging infrastructure, especially at city facilities and future park-and-ride locations.



EV charging station at Sand Key Park. Photo credit: Pinellas County

Goal M 2

Increase transportation alternatives to lessen dependence on single-occupancy vehicle trips by expanding multimodal travel options.

Objective M 2.1

Design future improvements to transportation corridors to support multimodal mobility, land use, and economic development.

Policies

M 2.1.1

Collaborate with local and regional partners to promote the safe use and enjoyment of multimodal mobility systems serving the city.

M 2.1.2

Continue to implement complete streets design in roadway redesign projects to provide for safe and alternative means of transportation.

M 2.1.3

Create internal guidelines or policies that assist in determining which roadway projects should prioritize complete streets.

M 2.1.4

Implement priority recommendations from the *Complete Streets for Clearwater Implementation Plan* to incorporate into the Capital Improvement Program and develop a monitoring and reporting program to track progress.

M 2.1.5

Utilize pilot or quick-build projects on roadways to analyze the operational effects of complete streets techniques.

M 2.1.6

Improve access, safety, and walkability through the provision of improved pedestrian and bicycle connections and enhanced transit accommodations.

M 2.1.7

Connect commercial and employment areas to neighborhoods with sidewalks or other pedestrian pathways.

M 2.1.8

Develop a program to prioritize the use of the city trails as alternative modes of transportation to help reduce vehicle trips and miles traveled.

M 2.1.9

Continue exploring options to expand the operational hours and safety measures of the Pinellas Trail to allow for increased usage.



Pinellas Trail

Objective M 2.2

Encourage mobility investments that support increased levels of internal trip capture, reduce vehicle trips and miles traveled, and promote walking and biking as attractive alternatives to driving.

Policies

M 2.2.1

Prioritize capital investments to support walking, biking, and micromobility that connect city neighborhoods to Downtown, Clearwater Beach, and commercial areas.

M 2.2.2

Prioritize pedestrian safety along sidewalks and crosswalks through solutions such as better lighting, pedestrian scrambles, rectangular rapid flashing beacons (RRFBs), leading pedestrian intervals, and raised crosswalks.

M 2.2.3

Continue to implement the pedestrian and bicycle improvement policies and design guidelines set forth in *Beach by Design: A Preliminary Design for Clearwater Beach and Design Guidelines*.

M 2.2.4

Update the city's *Shifting Gears: Bicycle and Pedestrian Master Plan*, building on the research and analysis conducted to support the *Advantage Pinellas: Active Transportation Plan*.

M 2.2.5

Promote educational and awareness programs to ensure physical safety of non-motorized transportation users in accordance with the city's *Shifting Gears: Bicycle and Pedestrian Master Plan*, the *Advantage Pinellas: Active Transportation Plan*, and the *Safe Street Pinellas Action Plan*.

M 2.2.6

Use the *Parks and Recreation System Master Plan* to guide development of new and enhance existing trail systems throughout the city.

M 2.2.7

Consider opportunities to improve the city-owned portion of the Pinellas Trail through Downtown to increase usage.



Bicycle parking on Clearwater Beach. Photo credit: Pmsmith455

Objective M 2.3

Support transit projects and initiatives that expand the multimodal mobility network.

Policies

M 2.3.1

Support the implementation of operational techniques that allow the prioritization of high-ridership bus routes such as dedicated bus lanes, signal prioritization, or queue jumps.

M 2.3.2

Continue active participation and support for transit feasibility and project development activities for transit service improvement projects and initiatives.

M 2.3.3

Work with developers, PSTA, and other partners to determine the best locations for park-and-ride services and promote these services to the public.

M 2.3.4

Coordinate with partner agencies to increase micromobility options for aging populations.

M 2.3.5

Prioritize capital investments that support transit use and improve transit stop accessibility.

M 2.3.6

Ensure development plans provide safe and accessible connections to transit stops.

M 2.3.7

Support the free spring break Jolley Trolley service through free parking at city-owned parking lots.

M 2.3.8

Promote more intense, walkable, and transit-supportive forms of development along corridors identified as Multimodal Corridors and Future Transit Corridors on the Countywide Plan Map.

M 2.3.9

Continue to explore surface, aerial, and waterborne transit opportunities to increase mobility options throughout the city and from Downtown Clearwater to Clearwater Beach.



Clearwater Ferry

Goal M 3

Plan for the safe and efficient operation of the Clearwater Airpark.

Objective M 3.1

Support long-range planning for expenditures, maintenance, improvement, and possible expansion of the Clearwater Airpark.

Policies

M 3.1.1

Continue implementation of recommendations in the *Airport Master Plan*.

M 3.1.2

Update the *Airport Master Plan* by 2040 to ensure compliance with Federal Aviation Administration (FAA) safety standards.

M 3.1.3

Review proposed developments to ensure they are consistent with requirements found in the *Airport Master Plan*.

M 3.1.4

Encourage aviation-related industrial uses to be developed on any surplus airport or adjacent city-owned land.

M 3.1.5

Continue exploring federal, state, and county funding sources to supplement city expenditures for airport operations.

M 3.1.6

Continue maintaining aviation facilities through funds from facility users, grants, and enterprise and general funds.

M 3.1.7

Continue to review and approve all leases, planned facility improvements, and airpark management with the city retaining ownership of land.



Clearwater Airpark runway. Photo credit: Google Earth

Goal M 4

Plan for the safe and efficient movement and delivery of goods throughout the city.

Objective M 4.1

Ensure delivery service (e.g. UPS, FedEx, Amazon) access is considered in planning to serve new development and redevelopment.

Policies

M 4.1.1

Ensure that *CDC* standards adequately address safety and functionality for delivery services within the city.

M 4.1.2

Evaluate existing and proposed truck routes to ensure safe and efficient movement of goods while protecting neighborhoods.




M 4.1.3

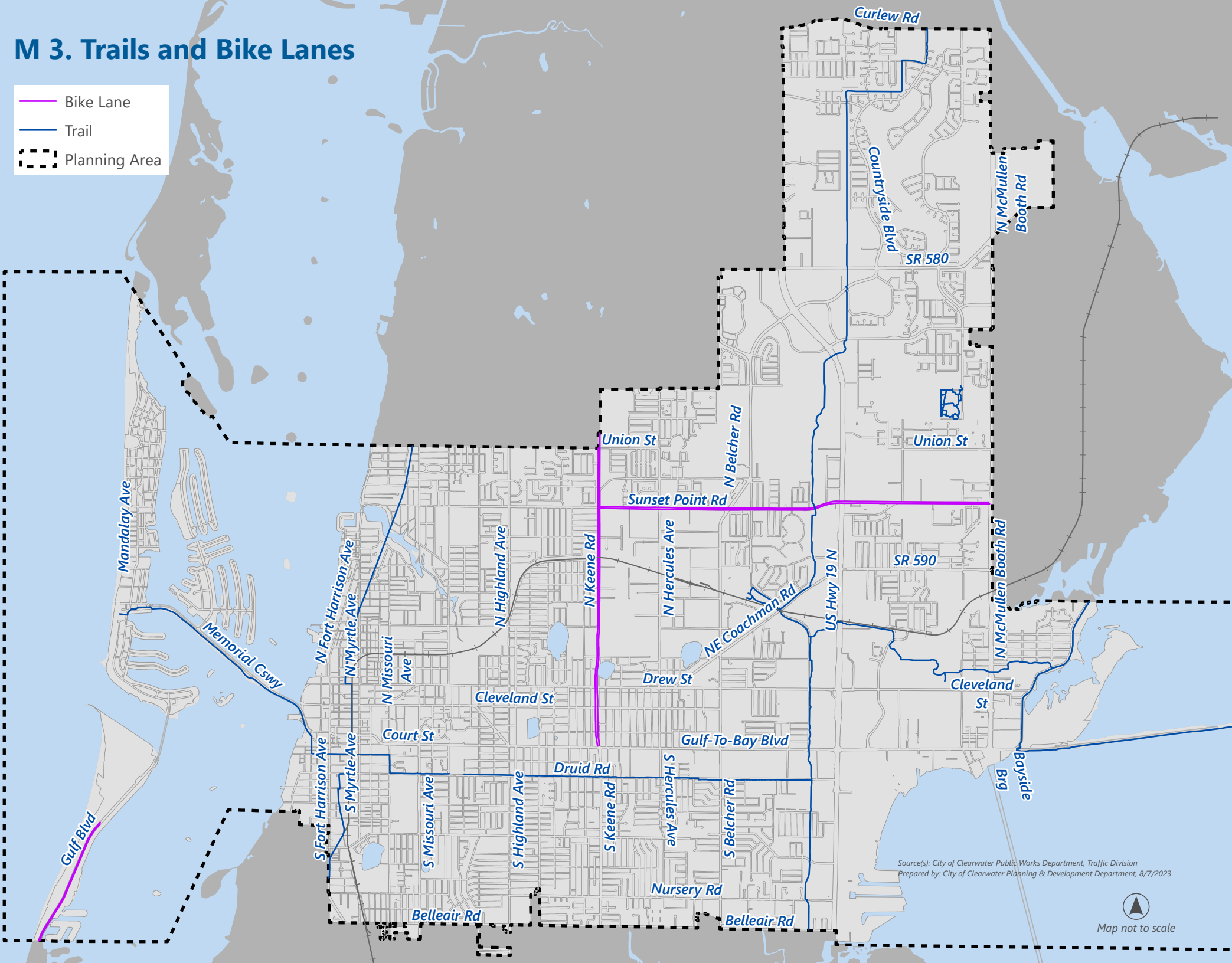
Evaluate potential areas for on-street loading/delivery zones on Clearwater Beach and in Downtown Clearwater.



UPS delivery truck. Photo credit: Newsnation, Getty Images

M 3. Trails and Bike Lanes

-  Bike Lane
-  Trail
-  Planning Area





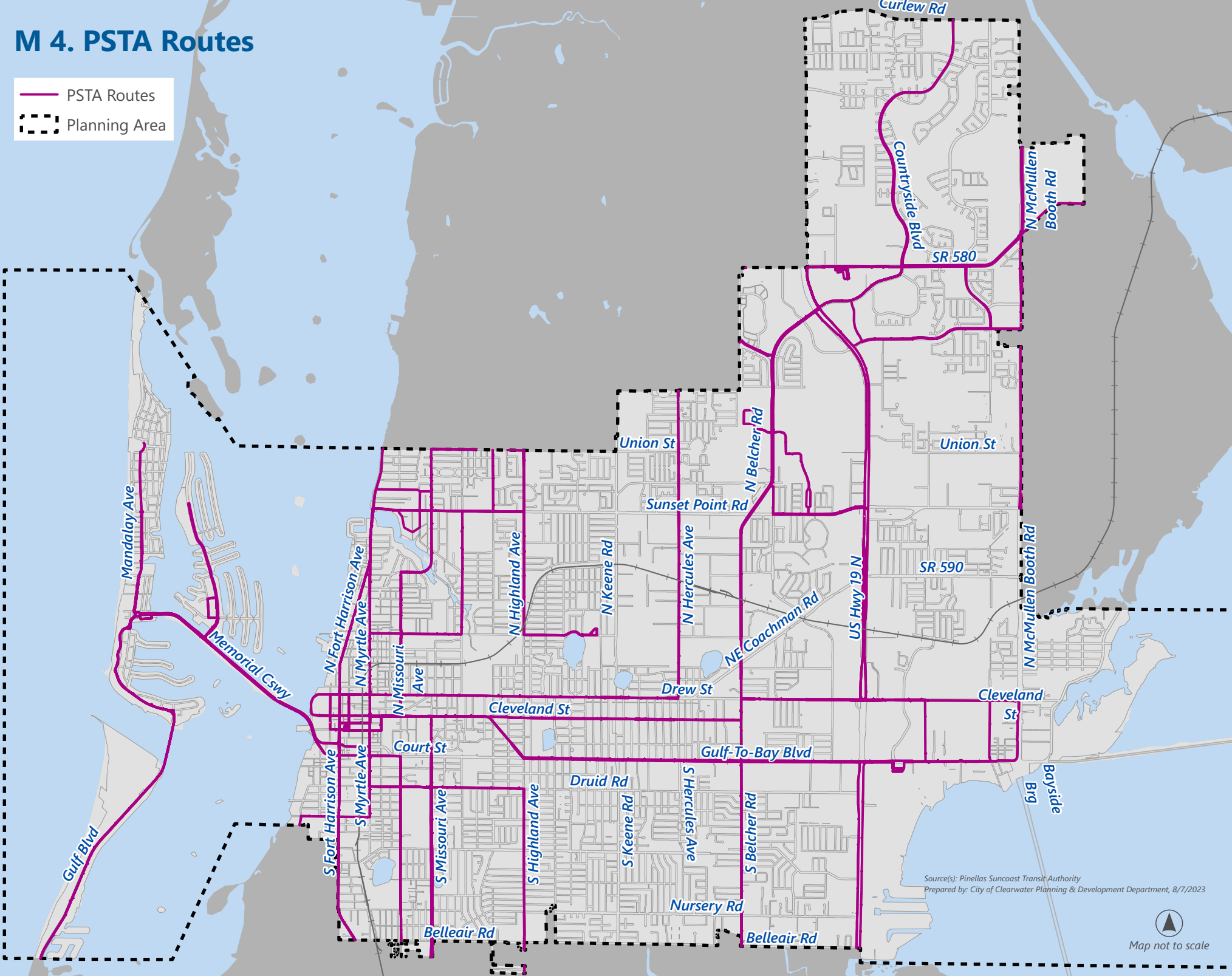
Source(s): City of Clearwater Public Works Department, Traffic Division
Prepared by: City of Clearwater Planning & Development Department, 8/7/2023



Map not to scale

M 4. PSTA Routes

-  PSTA Routes
-  Planning Area



Source(s): Pinellas Suncoast Transit Authority
Prepared by: City of Clearwater Planning & Development Department, 8/7/2023