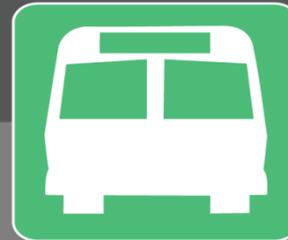


Connecting People and Places within the SR 60 Corridor

City of Clearwater City Council

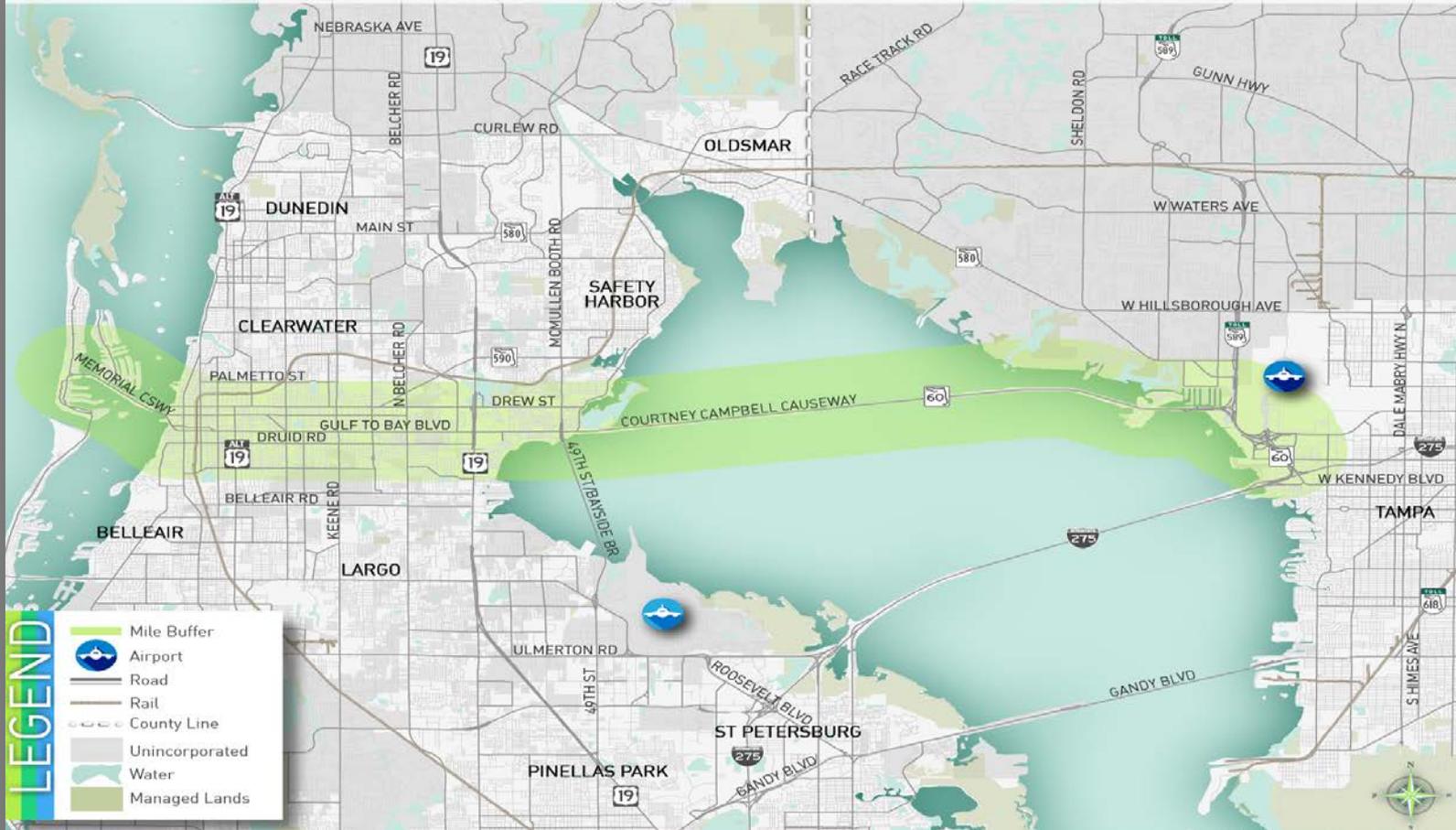
January 29, 2018



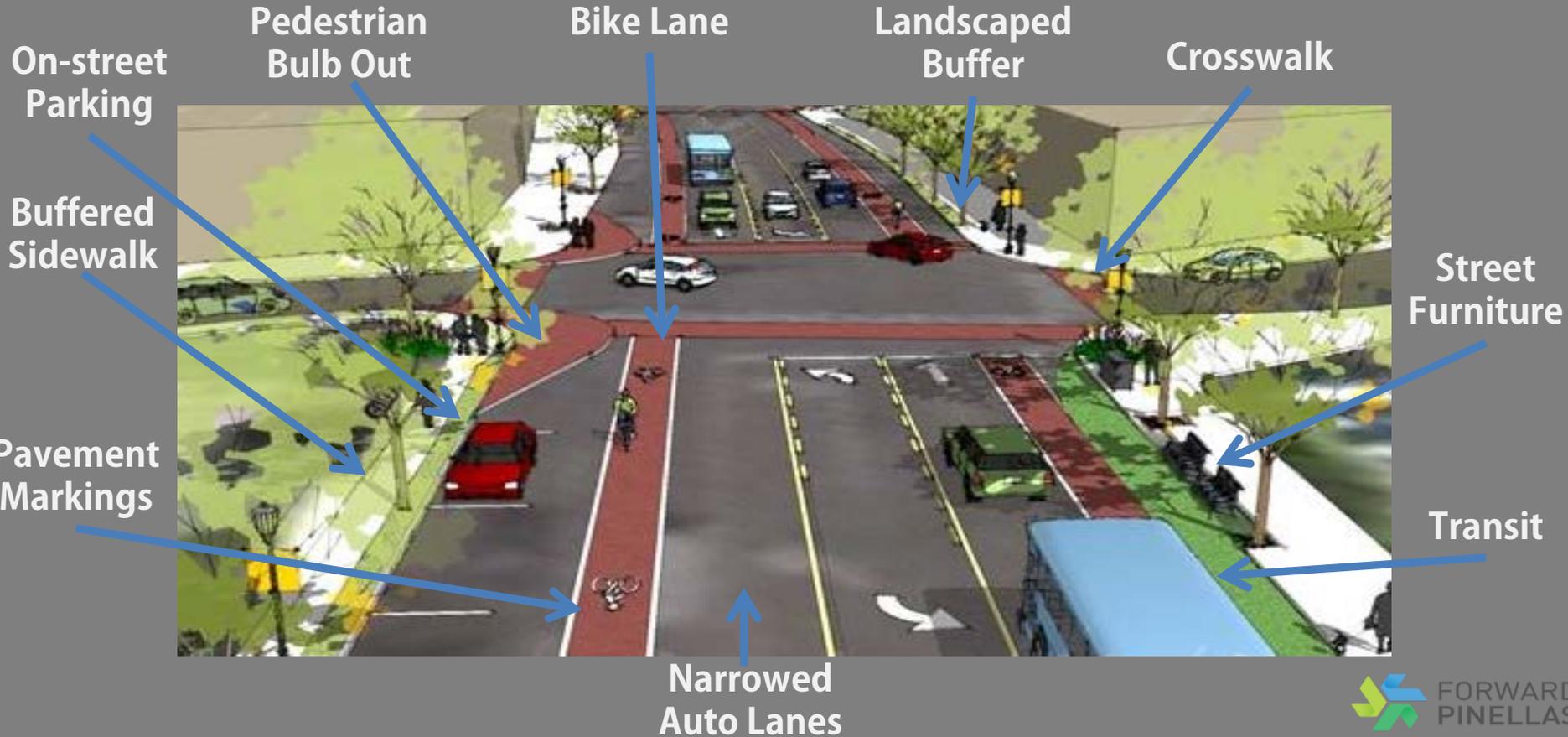
FORWARD
PINELLAS

SR 60 Multimodal Implementation Strategies

Study Area



Complete Streets Strategies



An incomplete street...



...can become a Complete Street.



Public Outreach



- *Developed through Public & Stakeholder Outreach*
 - *Continued agency outreach*
 - *Engaged stakeholders and neighborhood associations*
 - *Hosted public workshops*



*Short Term
Implementation Strategies*



FORWARD
PINELLAS

Existing Conditions - Population

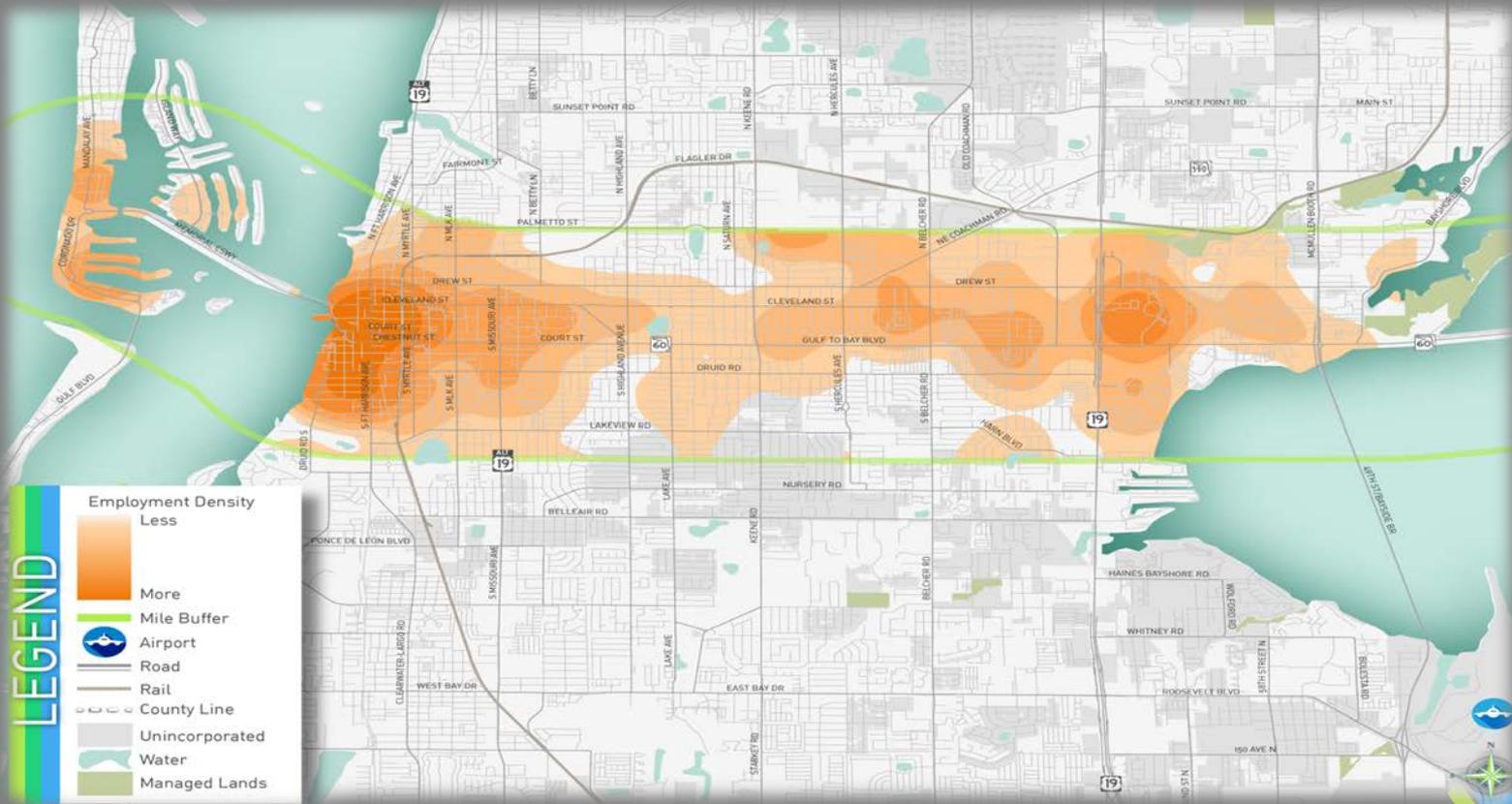


LEGEND

- Population Density
- Less
- More
- Mile Buffer
- Airport
- Road
- Rail
- County Line
- Unincorporated
- Water
- Managed Lands



Existing Conditions - Employment

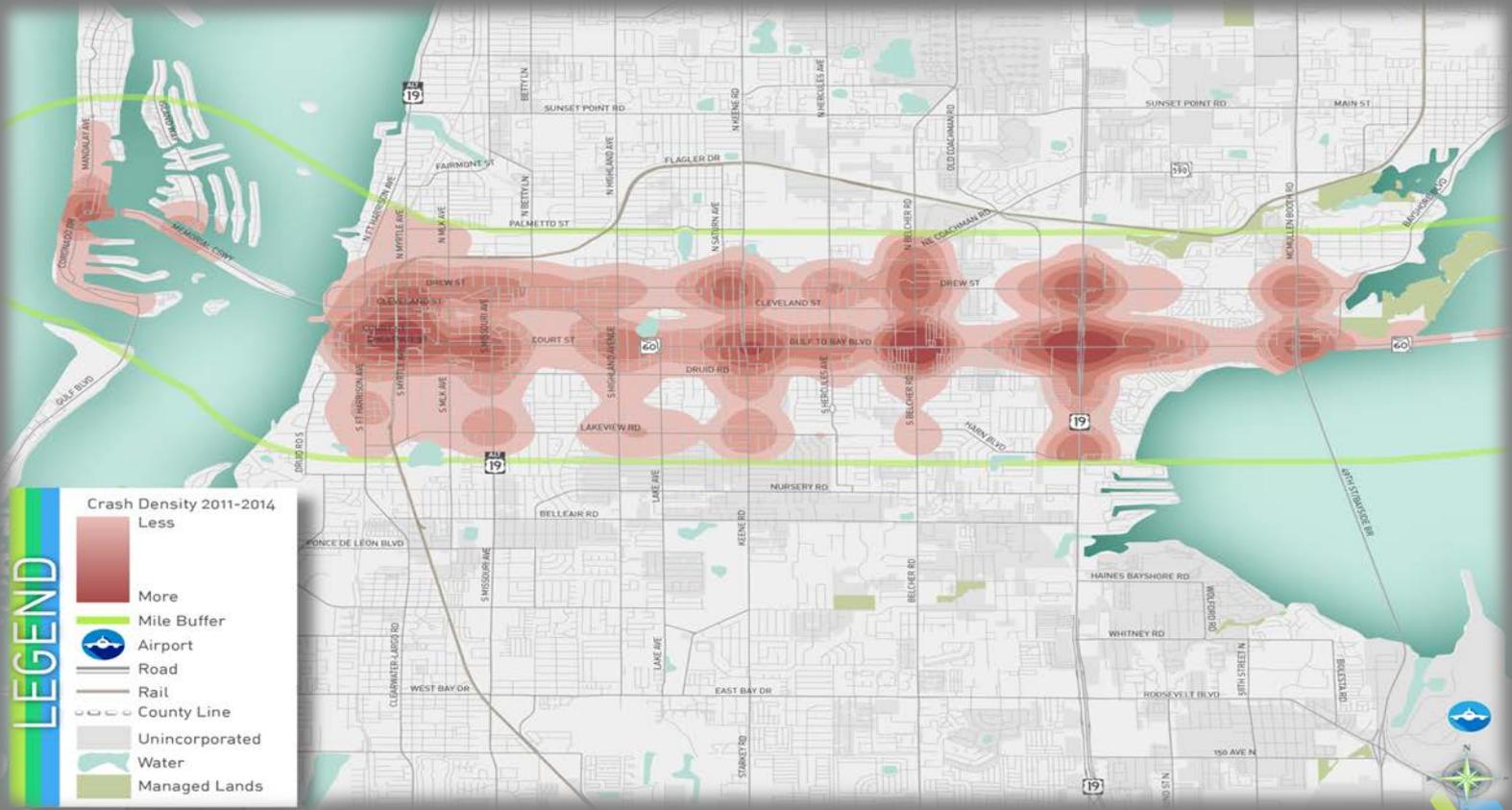


LEGEND

- Employment Density
- Less
- More
- Mile Buffer
- Airport
- Road
- Rail
- County Line
- Unincorporated
- Water
- Managed Lands



Existing Conditions - Crashes

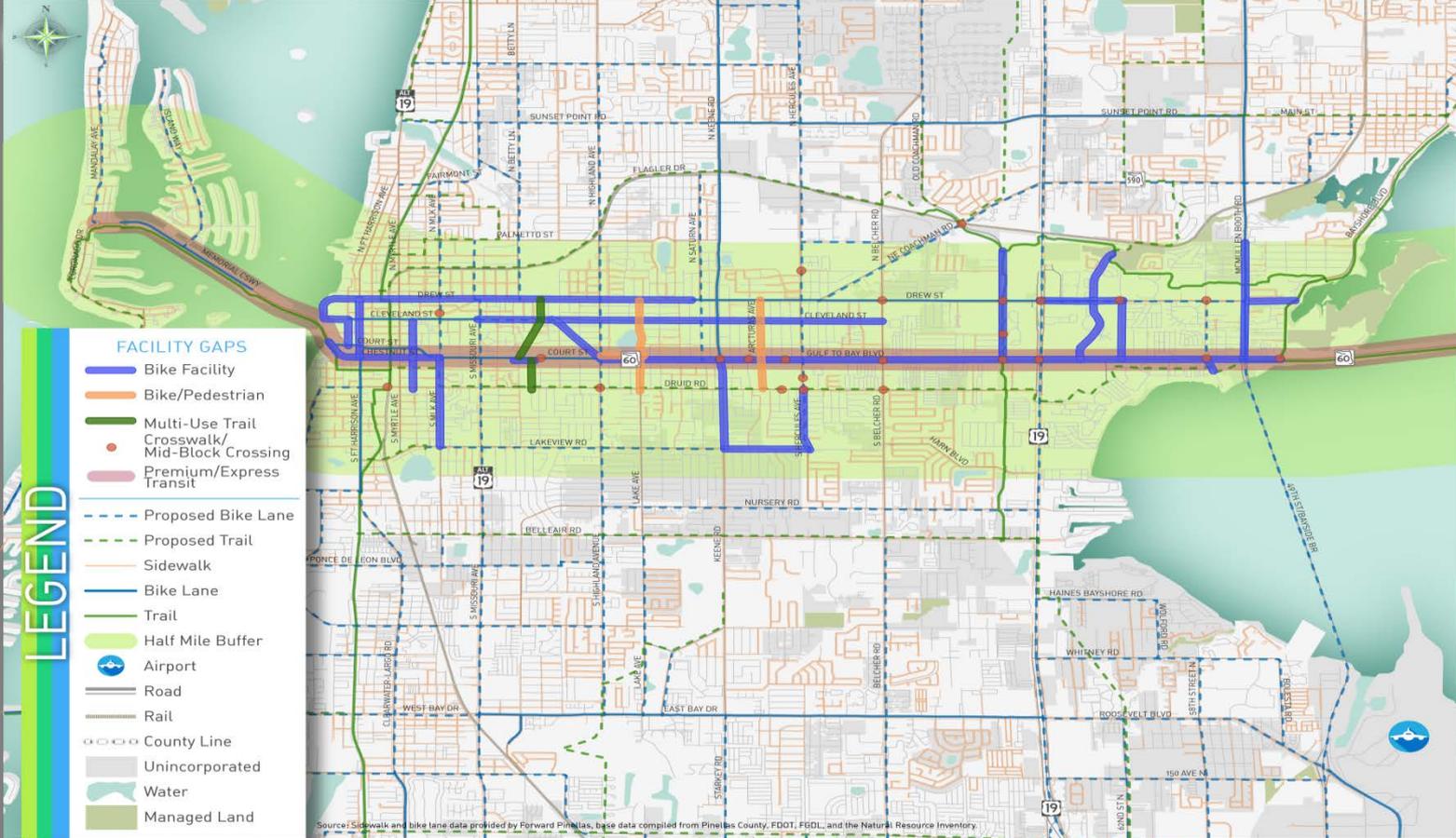


LEGEND

- Crash Density 2011-2014
- Less
- More
- Mile Buffer
- Airport
- Road
- Rail
- County Line
- Unincorporated
- Water
- Managed Lands



Gap Analysis

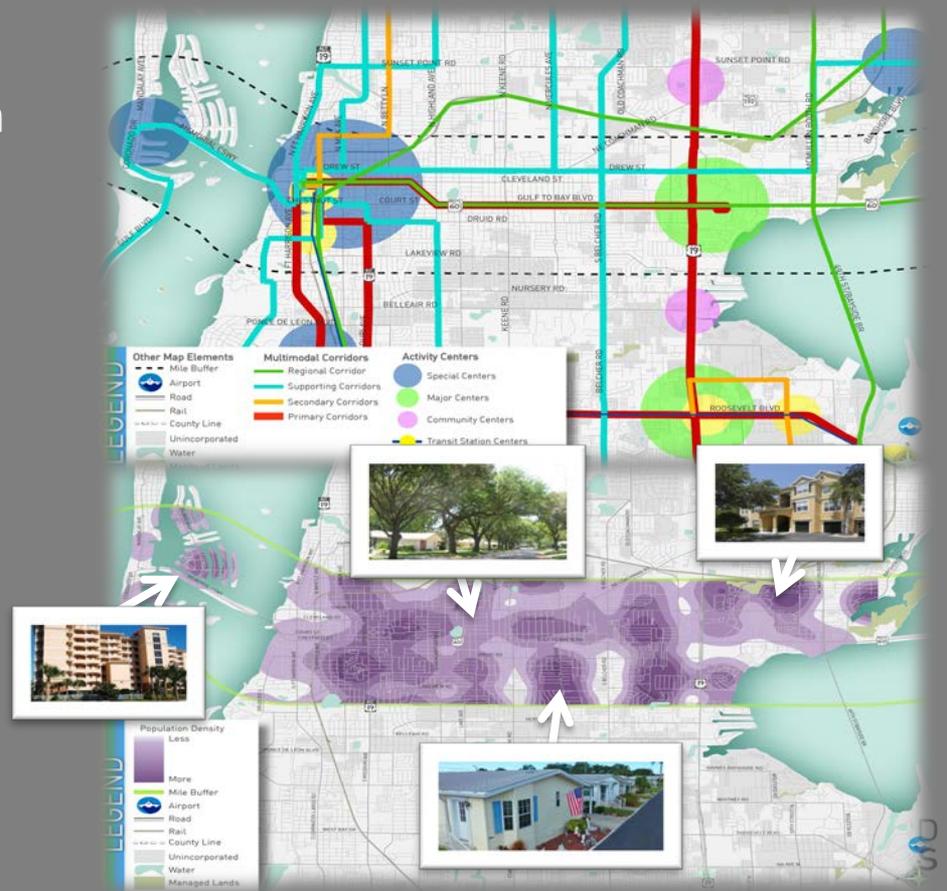


Source: Sidewalk and bike lane data provided by Forward Pinellas, base data compiled from Pinellas County, FDOT, FGIID, and the Natural Resource Inventory.

Evaluation Criteria

Mobility

1. Existing population within ½ mile
2. Future population within ½ mile
3. Existing transit dependent population densities within ½ mile
4. Future transit dependent population densities within ½ mile
5. Provides or improves connection to activity centers
6. Provides or improves a connection within a corridor of critical importance

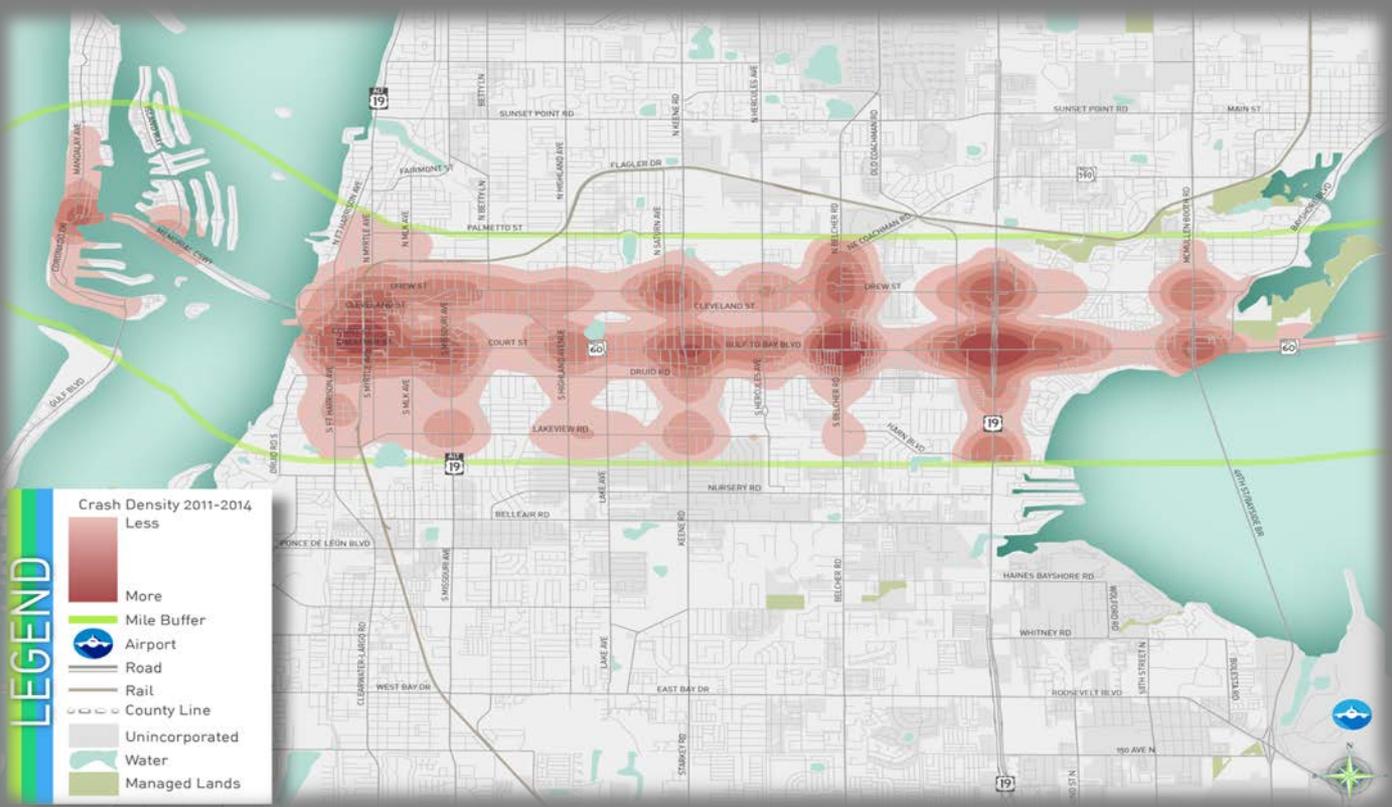


Evaluation Criteria

Safety



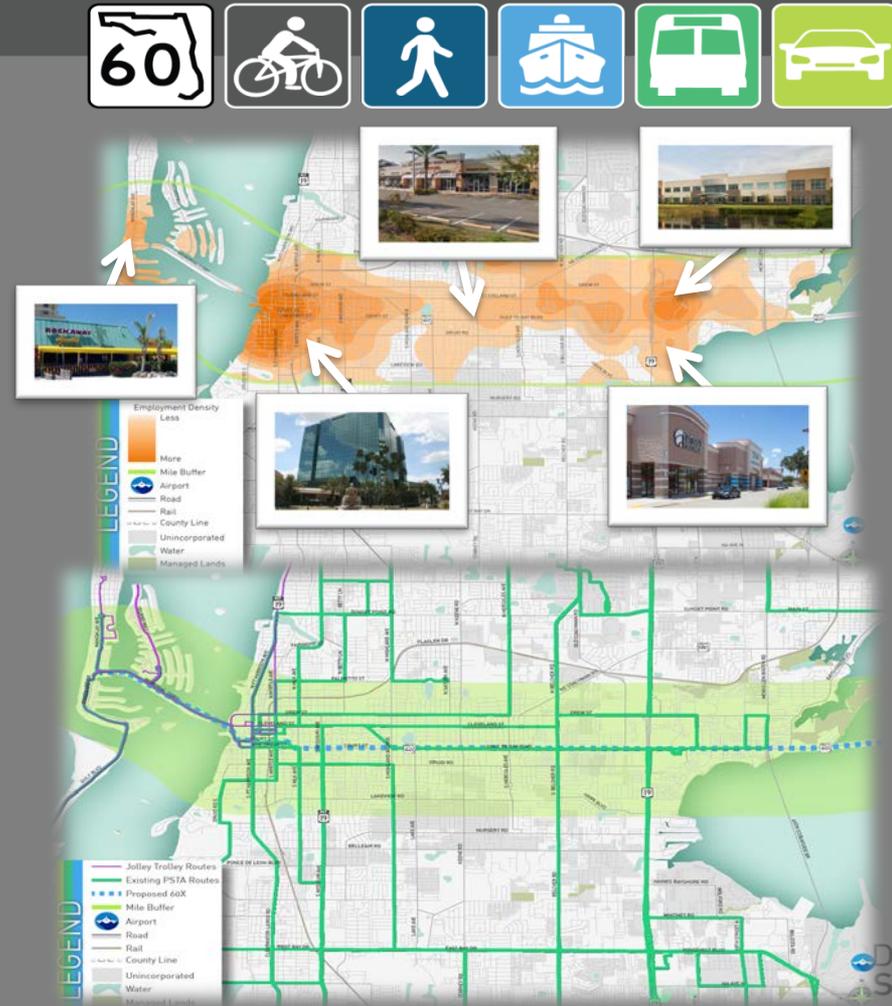
1. Fills a gap at a high crash location
2. Provides best practice safety measure. (Roadway Classification)



Evaluation Criteria

Land Use and Economics

1. Existing employment densities within ½ mile
2. Future employment densities within ½ mile
3. Makes a first or last mile connection to transit
4. Presence of K-12, Colleges/ Universities, and Vocational/Technical Institutions within ¼ mile
5. Number of Local, State, and/or Federal Parks within ½ mile
6. Hotel/Motel Unit density within ½ mile of proposed project



Implementation Plan

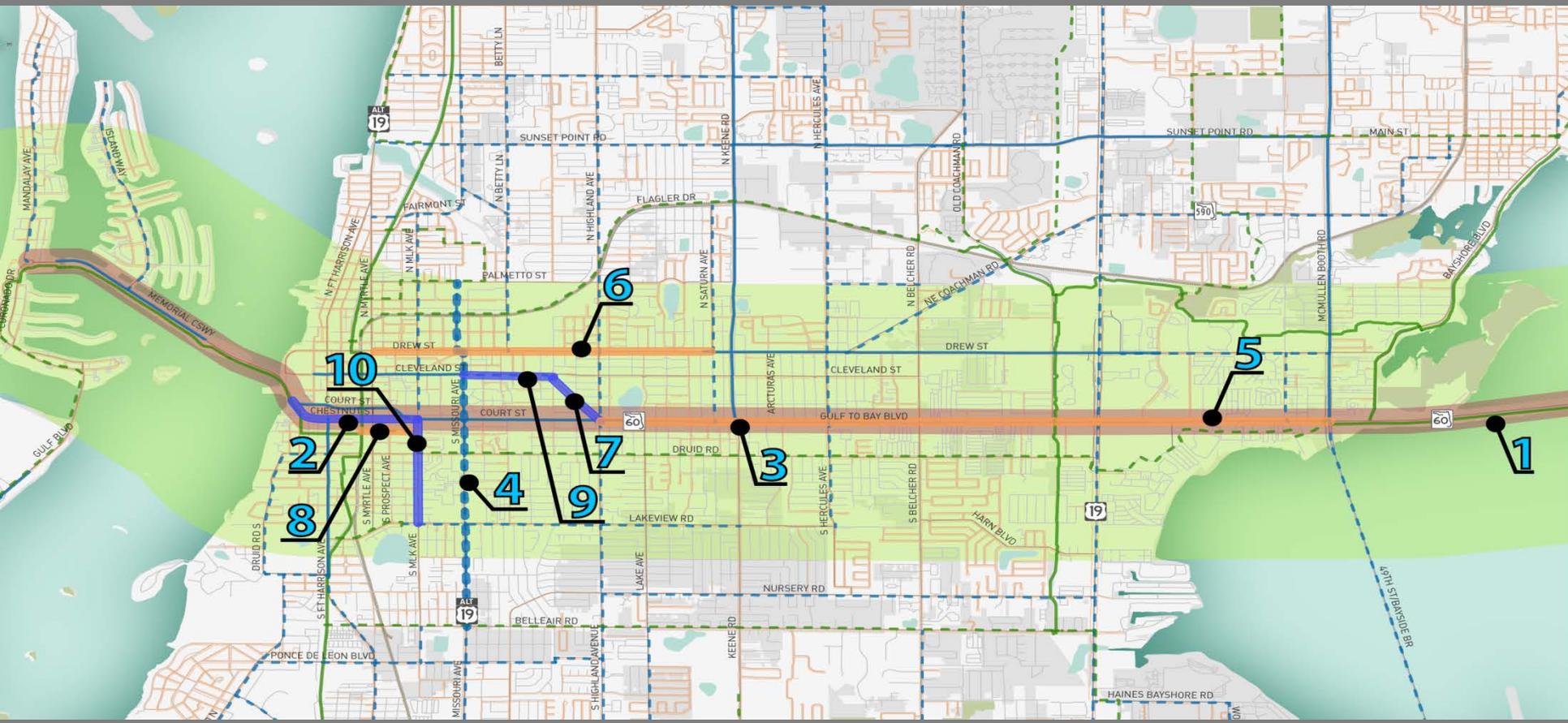
Priority Network Gap Projects



Facility	From	To	Network Gap
1a. Beach to TIA Express	TIA	Clearwater Beach	Premium Express Transit
1b. Memorial Causeway Busway for trolleys and the planned TIA to Beach Express	Court Street	Clearwater Beach Transit Center	Premium Express Transit
2. SR 60/Chestnut Street	Court Street	Martin Luther King Jr. Avenue	Bicycle Accommodations
3. SR 60/Gulf to Bay Boulevard	US 19	Highland Avenue	Multi-use Accommodations
4. Missouri Avenue	Belleair Road	Drew Street	Bicycle Accommodations
5. SR 60/Gulf to Bay Boulevard	McMullen Booth Road	US Highway 19	Multi-use Accommodations
6. Drew Street	North Myrtle Avenue	Saturn Avenue	Multi-use Accommodations
7. SR 60/Gulf to Bay Boulevard	Court Street	Cleveland Street	Bicycle Accommodations
8. Clearwater Beach Connector Trail	Pinellas Trail	Martin Luther King Jr. Avenue	Multi-use Accommodations
9. Cleveland Street	Gulf to Bay Boulevard	Missouri Avenue	Bicycle Accommodations
10. Martin Luther King Jr. Ave.	Chestnut Street	Lakeview Road	Bicycle Accommodations

Implementation Plan

Priority Network Gap Projects



Implementation Plan

Most Important Crosswalk Needs



Intersections

Drew Street at US 19

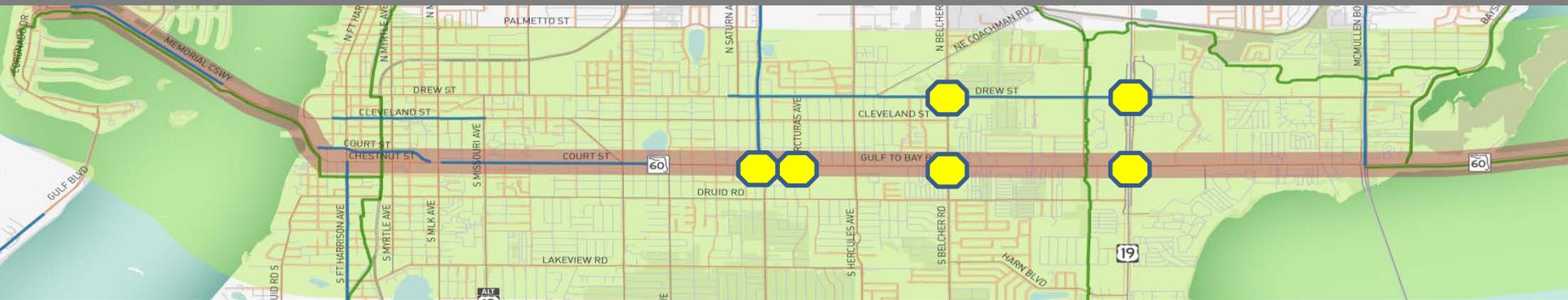
Gulf to Bay Boulevard at S. Belcher Road

Gulf to Bay Boulevard at S. Keene Road

Gulf to Bay Boulevard at US 19

Gulf to Bay Boulevard at S. Arcturus Avenue

Drew Street at Belcher Road



Additional Considerations



- *Pinellas Trail at Drew Street*
 - *Trail Crossing*
- *Duke Energy Trail at Spectrum Field*
 - *Driveway Conflicts*
- *Bike Route Designation & Signage*
 - *Drew St., Keene Rd., Cleveland St.*
 - *Causeway to Pinellas Trail*
- *Clearwater High School*
 - *Safe Crossings*

*Long Term
Implementation Strategies*

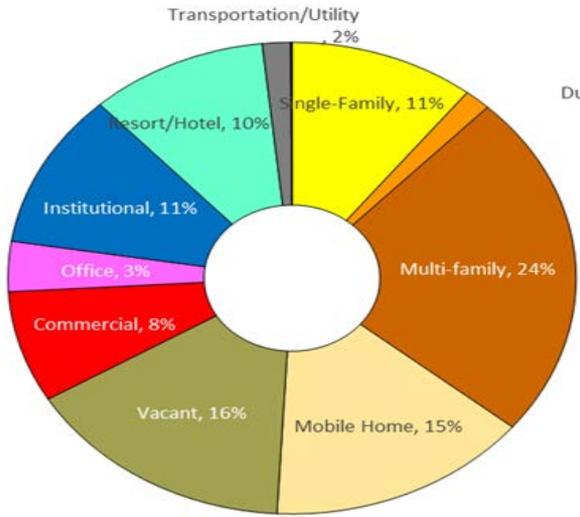


FORWARD
PINELLAS

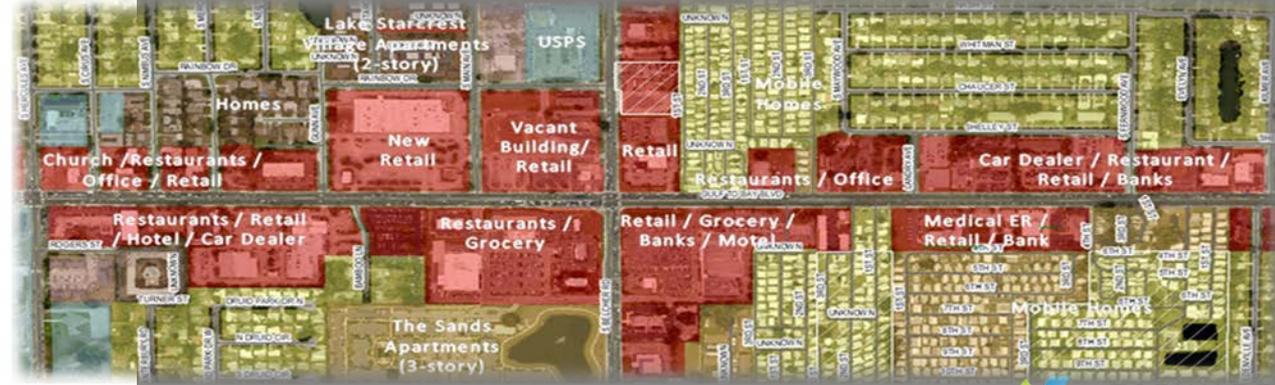
SR 60 - Land Use Character



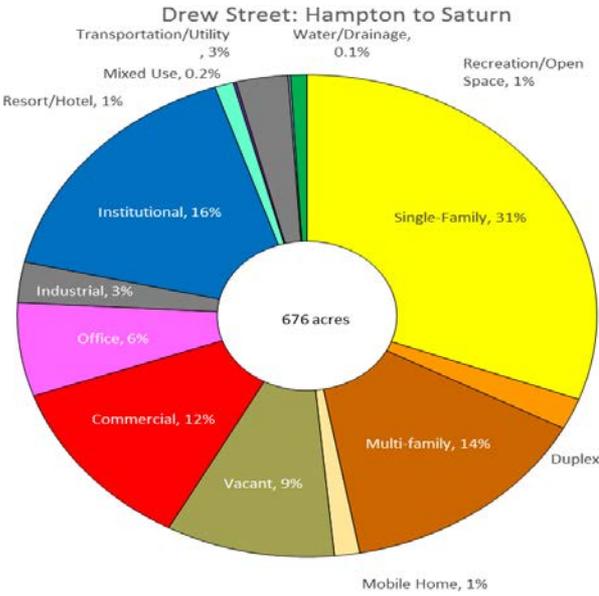
SR 60: Causeway to Hampton Rd



Duplex-Fourplex, 2%



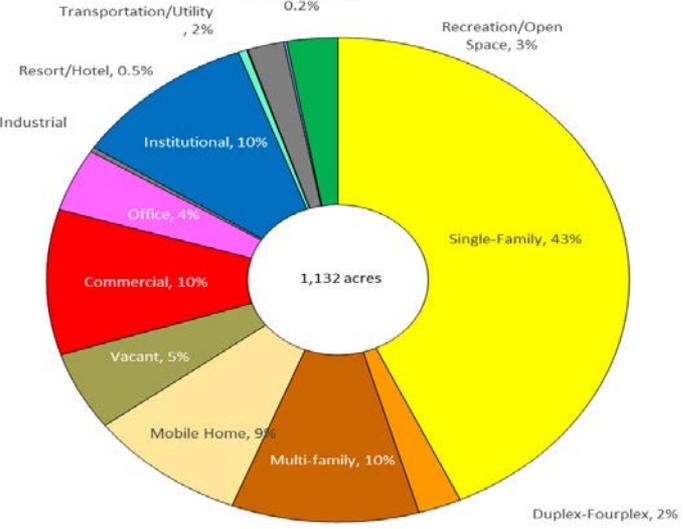
Drew Street - Land Use Character



Druid Road - Land Use Character



Druid Road: US 19 to Orange Ave



Implementation Plan

Complete Streets



SR 60



Drew Street



Druid Road



Cleveland Street



Park Place Boulevard



SR 60 - Long Term Vision



SR 60 from Courtney Campbell Causeway to Hampton Road

Existing Conditions



Complete Streets Enhancements



SR 60 - Long Term Vision



SR 60 from Hampton Road to Lake Drive

Existing Conditions

Multimodal

Bike Facilities: None
 Sidewalks: 5 feet, both sides
 Separated from Street: 4 feet
 Transit: Present, few shelters
 Routes: 19, 60, 200x

Road

Type: Major Arterial
 Number of Lanes: 6
 Avg. Lane Width: 10.3 feet
 Right-of-Way: 100 feet
 Curb-to-Curb: 80 feet

Travel

Avg. Cars per Day: 49,500
 Trucks: 3.7%
 Posted Speed: 45 mph
 Level of Service: C

Land Use

Commercial:	26%
Single Family:	23%
Mobile Home:	11%
Multi-Family:	10%
Office:	9%



Complete Streets Enhancements

Crosswalk Strategies

Enhanced crosswalks
 Pedestrian refuge islands
 Grade separated crossing at Duke Energy Trail

Other Strategies

Sidewalk furniture
 Bike route signage
 Transit shelters and express service

Stormwater Management

Bioswales and rain gardens
 More decorative vegetation



SR 60 - Long Term Vision



SR 60 from Lake Drive to Martin Luther King Jr Avenue

Existing Conditions

Multimodal

Bike Facilities: Sharrows, some bike lanes

Sidewalks: 5 feet, both sides
Separated from Street: 9 feet

Transit: No service
Routes: NA

Road

Type: Major Arterial

Number of Lanes: 4
Avg. Lane Width: 11.2 feet

Right-of-Way: 100 feet
Curb-to-Curb: 66 feet

Travel

Avg. Cars per Day: 38,500
Trucks: 3.4%

Posted Speed: 35 mph

Level of Service: F

Land Use

Single Family:	25%
Institutional:	17%
Multi-Family:	14%
Office:	10%



Complete Streets Enhancements

Crosswalk Strategies

Enhanced crosswalks
Pedestrian refuge islands
Pavement markings

Other Strategies

Sidewalk furniture
Bike route signage
Transit shelters and express service
Queue jump

Stormwater Management

Bioswales and rain gardens
More decorative vegetation



SR 60 - Long Term Vision



SR 60 from Martin Luther King Jr Avenue to Pierce Street (WB)

Existing Conditions

Multimodal

Bike Facilities: None
 Sidewalks: 5-8 feet, both sides
 Separated from Street: 10-14 feet
 Transit: Present, few shelters
 Routes: 60, 73

Road

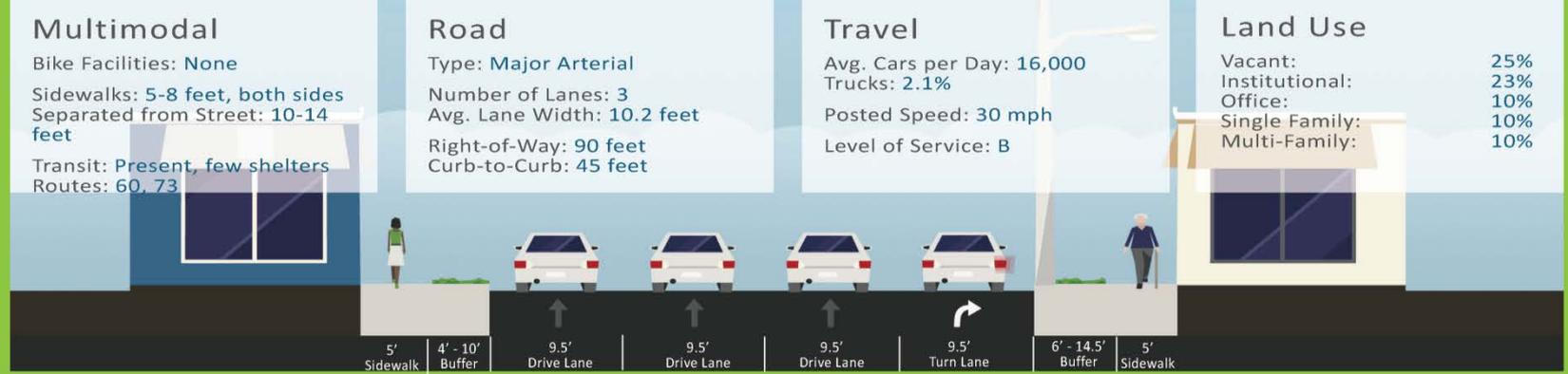
Type: Major Arterial
 Number of Lanes: 3
 Avg. Lane Width: 10.2 feet
 Right-of-Way: 90 feet
 Curb-to-Curb: 45 feet

Travel

Avg. Cars per Day: 16,000
 Trucks: 2.1%
 Posted Speed: 30 mph
 Level of Service: B

Land Use

Vacant:	25%
Institutional:	23%
Office:	10%
Single Family:	10%
Multi-Family:	10%



Complete Streets Enhancements

Crosswalk Strategies

Enhanced crosswalks
 Pedestrian refuge islands
 Pavement markings

Other Strategies

Sidewalk furniture
 Bike route signage
 Transit shelters
 Queue jump

Stormwater Management

Bioswales and rain gardens
 More decorative vegetation



SR 60 - Long Term Vision



SR 60 Memorial Causeway

Existing Conditions

Multimodal

Bike Facilities: Bike lanes & path
 Sidewalks: 8-16 ft, both sides
 Separated from Street: 8-45 ft
 Transit: Present
 Routes: Suncoast Beach Trolley & Jolly Trolley

Road

Type: Major Arterial
 Number of Lanes: 4
 Avg. Lane Width: 10.5 feet
 Right-of-Way: 160 feet
 Curb-to-Curb: 75 feet

Travel

Avg. Cars per Day: 36,500
 Trucks: 3.1%
 Posted Speed: 45 mph
 Level of Service: C

Land Use

Water/Drainage:	58%
Office:	11%
Marina:	10%
Vacant:	6%



Complete Streets Enhancements

Crosswalk Strategies

Enhanced crosswalks
 Midblock crossings
 Pedestrian refuge islands
 Pavement markings

Other Strategies

Sidewalk furniture
 Bike route signage
 Dedicated bus lane, express service, and shelters

Stormwater Management

Bioswales and rain gardens
 More decorative vegetation



Drew Street - Long Term Vision



Drew Street from Bayshore Boulevard to Hampton Road

Existing Conditions

Multimodal

Bike Facilities: None
 Sidewalks: 5-8 feet, both sides
 Separated from Street: 0-5 feet
 Transit: Present, few shelters
 Routes: 60, 200x

Road

Type: Minor Arterial
 Number of Lanes: 4
 Avg. Lane Width: 13 feet
 Right-of-Way: 100 feet
 Curb-to-Curb: 69 feet

Travel

Avg. Cars per Day: 24,800
 Trucks: 3.3%
 Posted Speed: 45 mph
 Level of Service: D

Land Use

Institutional:	42%
Single Family:	15%
Mobile Home:	13%
Multi-Family:	13%
Recreation/Open Space:	11%



Complete Streets Enhancements

Crosswalk Strategies

Enhanced crosswalks
 Midblock crossings
 Pedestrian refuge islands

Other Strategies

Sidewalk furniture
 Bike route signage
 Pavement markings
 Lighting

Stormwater Management

Bioswales and rain gardens
 More decorative vegetation



Drew Street - Long Term Vision



Drew Street from Hampton Road to Saturn Avenue

Existing Conditions

Multimodal

- Bike Facilities: Bike lanes
- Sidewalks: 5 feet, both sides
- Separated from Street: 7-8 feet
- Transit: Present, few shelters
- Routes: 19, 60, 67, 76, 200x

Road

- Type: Minor Arterial
- Number of Lanes: 4
- Avg. Lane Width: 11.5 feet
- Right-of-Way: 95 feet
- Curb-to-Curb: 71 feet

Travel

- Avg. Cars per Day: 33,000
- Trucks: 3.8%
- Posted Speed: 45 mph
- Level of Service: F

Land Use

- Single Family: 31%
- Institutional: 16%
- Multi-Family: 14%
- Commercial: 12%
- Vacant: 9%



Complete Streets Enhancements

Crosswalk Strategies

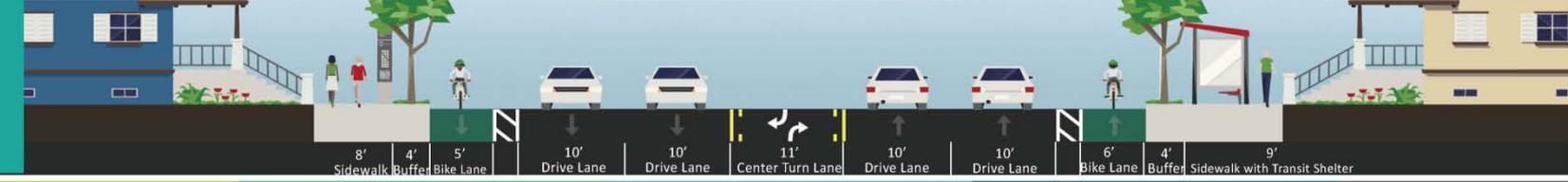
- Enhanced crosswalks
- Midblock crossings (near schools)
- Pedestrian refuge islands

Other Strategies

- Sidewalk furniture
- Bike route signage
- Library kiosk (St Pete College)
- Pavement markings

Stormwater Management

- Bioswales and rain gardens
- More decorative vegetation



Drew Street - Long Term Vision



Drew Street from Saturn Avenue to Myrtle Avenue

Existing Conditions

Multimodal

Bike Facilities: None
 Sidewalks: 5 feet, both sides
 Separated from Street: 7.5-8.5 feet
 Transit: Present, few shelters
 Routes: 67

Road

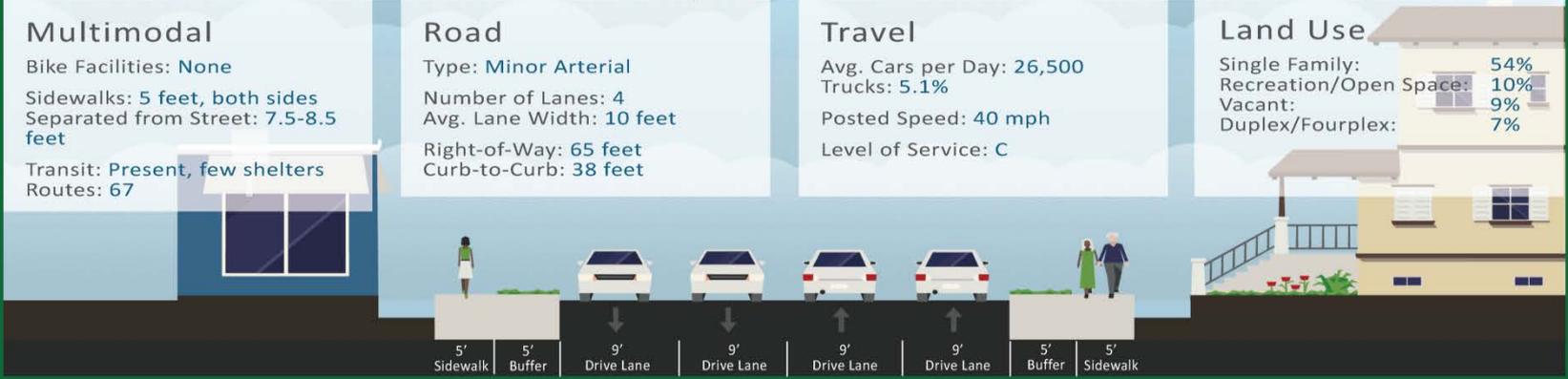
Type: Minor Arterial
 Number of Lanes: 4
 Avg. Lane Width: 10 feet
 Right-of-Way: 65 feet
 Curb-to-Curb: 38 feet

Travel

Avg. Cars per Day: 26,500
 Trucks: 5.1%
 Posted Speed: 40 mph
 Level of Service: C

Land Use

Single Family: 54%
 Recreation/Open Space: 10%
 Vacant: 9%
 Duplex/Fourplex: 7%



Complete Streets Enhancements - Road Diet Option

Crosswalk Strategies

Enhanced crosswalks
 Midblock crossings
 Pedestrian refuge islands

Other Strategies

Sidewalk furniture
 Bike route signage
 Pavement markings
 Transit shelters

Stormwater Management

Bioswales and rain gardens
 More decorative vegetation



Drew Street - Long Term Vision



Drew Street from Saturn Avenue to Myrtle Avenue

Existing Conditions

Multimodal

Bike Facilities: None
 Sidewalks: 5 feet, both sides
 Separated from Street: 7.5-8.5 feet
 Transit: Present, few shelters
 Routes: 67

Road

Type: Minor Arterial
 Number of Lanes: 4
 Avg. Lane Width: 10 feet
 Right-of-Way: 65 feet
 Curb-to-Curb: 38 feet

Travel

Avg. Cars per Day: 26,500
 Trucks: 5.1%
 Posted Speed: 40 mph
 Level of Service: C

Land Use

Single Family: 54%
 Recreation/Open Space: 10%
 Vacant: 9%
 Duplex/Fourplex: 7%



Complete Streets Enhancements

Crosswalk Strategies

Enhanced crosswalks
 Midblock crossings
 Pedestrian refuge islands

Other Strategies

Sidewalk furniture
 Enhanced lighting
 Pavement markings
 Transit shelters

Stormwater Management

Bioswales and rain gardens
 More decorative vegetation



Drew Street - Long Term Vision



Drew Street from Myrtle Avenue to North Osceola Avenue

Existing Conditions

Multimodal

Bike Facilities: None
 Sidewalks: 9 feet, both sides
 Separated from Street: Minimal
 Transit: Present, few shelters
 Routes: 67, Jolley Trolley

Road

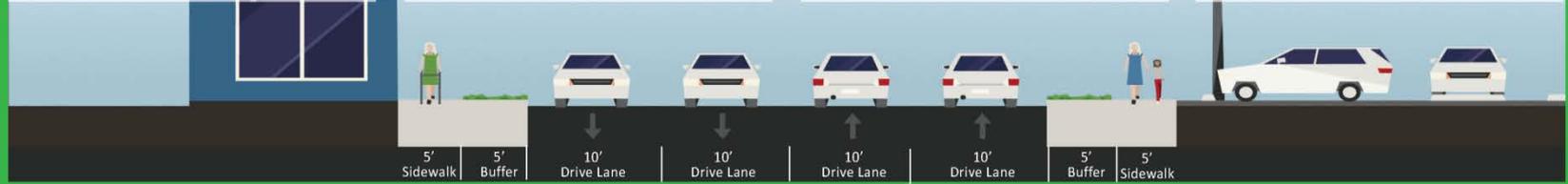
Type: Minor Arterial
 Number of Lanes: 4
 Avg. Lane Width: 10 feet
 Right-of-Way: 60 feet
 Curb-to-Curb: 37 feet

Travel

Avg. Cars per Day: 10,500
 Trucks: 3.5%
 Posted Speed: 30 mph
 Level of Service: C

Land Use

Vacant:	27%
Institutional:	25%
Commercial:	11%
Office:	10%
Industrial:	8%



Complete Streets Enhancements

Crosswalk Strategies

Curb extensions
 Enhanced crosswalks

Other Strategies

Pinellas Trail signage
 Enhanced lighting
 Pavement markings
 Bike route signage

Stormwater Management

More decorative vegetation



Druid Road - Long Term Vision



Druid Road from US 19 to Orange Avenue

Existing Conditions

Multimodal

Bike Facilities: None
 Sidewalks: 4 feet, inconsistent
 Separated from Street: Varies
 Transit: Present, few shelters
 Routes: 18, 73

Road

Type: Collector
 Number of Lanes: 2
 Avg. Lane Width: 12 feet
 Right-of-Way: 60 feet
 Curb-to-Curb: 25 feet

Travel

Avg. Cars per Day: 7,100
 Trucks: 3.8%
 Posted Speed: 30 mph
 Level of Service: C

Land Use

Single Family:	43%
Institutional:	10%
Commercial:	10%
Multi-Family:	10%
Mobile Home:	9%



Complete Streets Enhancements

Crosswalk Strategies

Enhanced crosswalks near CHS
 Midblock crossings

Other Strategies

Trail and bike route signage
 Lighting

Stormwater Management

More decorative vegetation
 Bioswales



Transit

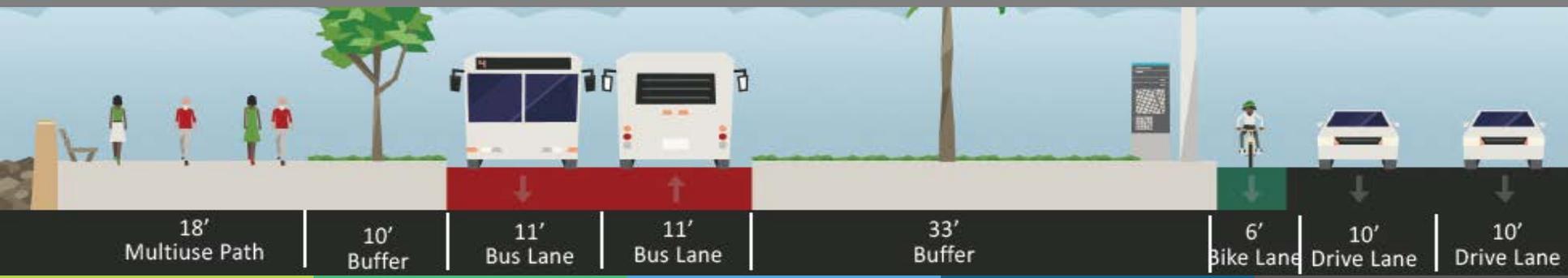


FORWARD
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Beach to TIA Express



Name	Description	Stop Locations	Park-N-Ride	2016 Annual Weekday Ridership	2040 Annual Weekday Ridership
Alternative 1	Express Bus Service	TIA, Clearwater Mall, Downtown Clearwater, & Clearwater Beach	N/A	115,700	125,580
Alternative 2	Express Bus Service	TIA, Clearwater Mall , Downtown Clearwater, & Clearwater Beach	Clearwater Mall	134,680	146,120
Alternative 3	Express Bus Service	TIA, N. Rocky Point Drive, Clearwater Mall, Belcher Road, Downtown Clearwater, & Clearwater Beach	Clearwater Mall	216,320	233,740
Alternative 4	Express Bus (Fixed Guideway: Downtown Clearwater to Clearwater Beach)	TIA, N. Rocky Point Drive, Clearwater Mall, Belcher Road, Downtown Clearwater, & Clearwater Beach	Clearwater Mall	264,680	286,000



Beach to TIA Express



Best Performing Alternative

Name	Span of Service	Frequency	Total Travel Time (Peak)	Total Travel Time (Off-Peak)	Annual Operational Cost
Alternative 4	7 Days a Week 5am to Midnight	Every 30 minutes	52 Minutes	47 Minutes	\$2.8 Million



Memorial Causeway - Beach to TPA Express

Today



Memorial Causeway - Beach to TPA Express

A vision for the future



First Mile, Last Mile Solutions



Potential bike share locations



Autonomous vehicle connecting downtown to beach



Existing pedestrian network



Electric vehicle valet



Existing transit network

Project Costs

Short Term - Top 10 Projects



Facility	From	To	Network Gap	Capital Cost
1a. Beach to TIA Express	TIA	Clearwater Beach	Premium Express Transit	\$3.4 – 4.9 Million
1b. Memorial Causeway Busway	Court Street	Clearwater Beach Transit Center	Premium Express Transit	\$8.1 Million
SR 60/Chestnut Street	Court Street	Martin Luther King Jr. Avenue	Bicycle Accommodations	\$0.54 Million
SR 60/Gulf to Bay Boulevard	US 19	Highland Avenue	Multi-use Accommodations	\$0.72 Million
Missouri Avenue	Belleair Road	Drew Street	Bicycle Accommodations	\$18.0 Million
SR 60/Gulf to Bay Boulevard	McMullen Booth Road	US Highway 19	Multi-use Accommodations	\$1.9 Million
Drew Street	North Myrtle Avenue	Saturn Avenue	Multi-use Accommodations	\$3.45 Million
SR 60/Gulf to Bay Boulevard	Court Street	Cleveland Street	Bicycle Accommodations	\$2.8 Million
Clearwater Beach Connector Trail	Pinellas Trail	Martin Luther King Jr. Avenue	Multi-use Accommodations	\$0.3 Million
Cleveland Street	Gulf to Bay Boulevard	Missouri Avenue	Bicycle Accommodations	\$3.7 Million
Martin Luther King Jr. Avenue	Chestnut Street	Lakeview Road	Bicycle Accommodations	\$4.6 Million

Project Costs

Long Term - Corridor Vision

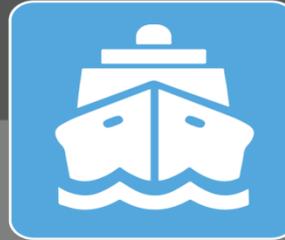
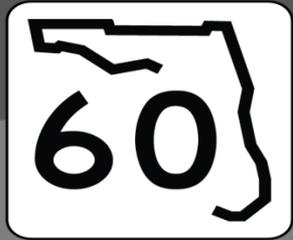


Facility	From	To	Cost
SR 60	Courtney Campbell Causeway	Hampton Road	\$4.52 Million
SR 60	Hampton Road	Lake Drive	\$1.38 Million
SR 60	Lake Drive	Martin Luther King Jr. Avenue	\$4.30 Million
SR 60	Martin Luther King Jr. Avenue	Pierce Street	\$1.80 Million
SR 60	Pierce Street	Clearwater Beach	\$8.10 Million
Drew Street	McMullen Booth Road	Hampton Road	\$0.83 Million
Drew Street	Hampton Road	Saturn Avenue	\$4.40 Million
Drew Street	Saturn Avenue	Myrtle Avenue	\$4.90 - \$10.50 Million
Drew Street	Myrtle Avenue	N. Osceola Avenue	\$0.16 Million
Druid Road	US 19	Orange Avenue	\$23.4 Million

Questions?



Connecting People and Places within the SR 60 Corridor



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