Bicycle and Pedestrian Master Plan UPDATE

Virtual Public Meeting – August 4, 2020
Panelists

Sarasota County

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Planner
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Participation

Type content questions in your questions box at any time.

*If you have a question for a specific panelist, please indicate that in your question!*

Note that this webinar is being recorded and will be made available on the County’s website for viewing and comments following today’s event at [http://ow.ly/bjwg50AFniB](http://ow.ly/bjwg50AFniB)
Announcements

• Today’s presentation will be posted online and will include an opportunity to submit questions, comments, and provide feedback. [http://ow.ly/bjwg50AFniB](http://ow.ly/bjwg50AFniB)

• The Bike/Ped Master Plan Online Survey can be found on the County’s website at: [https://www.scgov.net/residents/community/bicycle-and-pedestrian-master-plan-survey](https://www.scgov.net/residents/community/bicycle-and-pedestrian-master-plan-survey)

• There is a new SCAT Public Input Mobility Survey that we encourage everyone to take: [https://www.scgov.net/government/scat-bus-service/scat-bus-service](https://www.scgov.net/government/scat-bus-service/scat-bus-service)
Project Overview

- Establish Existing Conditions and Changes Since 2013
- Perform New System Analyses
- Establish Steps Towards Implementation

Bicycle and Pedestrian Plan

- Guidance Towards Implementing Policies
- Initial Network Context Classification
  - Recommended Classifications and Design Strategies

Complete Streets Implementation

Vision Zero Policy

- Draft Policy Language
- Vision Zero Program Recommendations
  - Performance Measures and Monitoring Guidance
Bicycle and Pedestrian Master Plan Update

August 2020
Background

Current Version Adopted in 2013

- Outlined a safe, convenient and efficient bicycle and pedestrian system to provide access to major destinations
- Framework for future improvements and action items
- Guide to ensure that improvements are consistent with citizen’s needs
- Identified the need, rationale, opportunities, and programs necessary to provide a stronger bicycle and pedestrian system
Plan Update Process

• Existing Conditions
  • Current Facilities
  • Factors Impacting Walking and Biking
  • Level of Service
  • Crash History Review

• Public Input
  • Workshops
  • Survey

• Recommendations
  • Gap Analysis
  • Prioritization
  • Infrastructure, Program, and Policy Opportunities
Existing Conditions Review

Roadway Factors and Equity Analysis

Age, Minority Population, Household Income, Zero Vehicle Households
Level of Service

Pedestrian LOS

Bicycle LOS

Pedestrian Level of Service
- LOS A
- LOS B
- LOS C
- LOS D
- LOS E
- LOS F
- Park/Environmental Land

Bicycle Level of Service
- LOS A
- LOS B
- LOS C
- LOS D
- LOS E
- LOS F
- Park/Environmental Land
### LTS Criteria for Roadways with Bicycle Facilities

<table>
<thead>
<tr>
<th>LTS</th>
<th>Street Width (lanes per direction)</th>
<th>Bike Lane Width</th>
<th>Speed Limit or Prevailing Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTS 1</td>
<td>1</td>
<td>&gt; 6'</td>
<td>30 mph or less</td>
</tr>
<tr>
<td>LTS 2</td>
<td>2, if directions are separated by a raised median</td>
<td>&lt; 5.5'</td>
<td>NA</td>
</tr>
<tr>
<td>LTS 3</td>
<td>&gt;2, or 2 without a separated median</td>
<td>NA</td>
<td>35 mph</td>
</tr>
<tr>
<td>LTS 4</td>
<td>NA</td>
<td>NA</td>
<td>40 mph or more</td>
</tr>
</tbody>
</table>

**Level of Traffic Stress**
- **LTS 1**
  - Street Width: 1 lane
  - Bike Lane Width: > 6'
  - Speed Limit: 30 mph or less
- **LTS 2**
  - Street Width: 2 lanes
  - Bike Lane Width: < 5.5'
  - Speed Limit: NA (Not Applicable)
- **LTS 3**
  - Street Width: >2 lanes, or 2 lanes without a separated median
  - Bike Lane Width: NA
  - Speed Limit: 35 mph
- **LTS 4**
  - Street Width: NA
  - Bike Lane Width: NA
  - Speed Limit: 40 mph or more
Total Pedestrian and Bicycle Crashes (2013 – 2018)

Total: 1,589
Pedestrian: 620
Bicycle: 969
Pedestrian Severe: 194
Bicycle Severe: 188
Pedestrian Fatal: 48
Bicycle Fatal: 16

Crash History Review
Crash History Review

Total Severe Injury Pedestrian and Bicycle Crashes (2013 – 2018)

Severe Injury Pedestrian & Bicycle Crashes
Crash Clusters
- 1
- 2
- 3
- 4 - 5
- 6 - 8
Crash Density
- High
- Low
Crash History Review

Contributing Factors

Road Type

69.59% Major/Minor Arterial

- Total Crashes
  - Major Arterial: 54.93%
  - Minor Arterial: 14.66%
  - Major Collector: 7.23%
  - Minor Collector: 4.29%
  - Local Road: 18.89%

75.07% Major/Minor Arterial

- Severe Injury Crashes
  - Major Arterial: 61.54%
  - Minor Arterial: 13.53%
  - Major Collector: 5.31%
  - Minor Collector: 3.45%
  - Local Road: 16.18%
Crash History Review

Contributing Factors

Number of Travel Lanes

- **62.29% ≥ 4 Lanes**
- 6 Lanes: 25.35%
- 4 Lanes: 36.94%
- 2 Lanes: 19.33%
- Local Street: 18.37%

Severe Injury Crashes

- **68.96% ≥ 4 Lanes**
- 6 Lanes: 28.91%
- 4 Lanes: 40.05%
- 2 Lanes: 15.38%
- Local Street: 15.65%
Crash History Review

Contributing Factors

Posted Speed

- Total Crashes
  - > 45 MPH: 44.37%
  - 35 - 45 MPH: 31.18%
  - 25 - 35 MPH: 23.75%
  - < 25 MPH: 0.70%

- Severe Injury Crashes
  - > 45 MPH: 51.72%
  - 35 - 45 MPH: 28.65%
  - 25 - 35 MPH: 19.36%
  - < 25 MPH: 0.27%
Crash History Review

Severe Injury Crash Review:

- Bahia Vista St at Beneva Rd
- Bee Ridge Rd at McIntosh Rd
- Bee Ridge Rd at Beneva Rd
- Clark Rd at Beneva Rd
- Indiana Ave at Dearborn St
- Stickney Point Rd at Gateway Ave
- US 41/Tamiami Trail at Blackburn Point Rd
- US 41/Tamiami Trail at Gulf Gate Dr
- US 41/Tamiami Trail at Seminole Dr
- US 41/Tamiami Trail at Shamrock Dr/Blvd
Observed Contributing Behaviors:

• Intersection right turn conflicts; driver failing to yield right-of-way and right turn on red
• Driveway/side street conflicts (right turning vehicles)
• Pedestrians crossing outside of a crosswalk (intersection influence area)
• Pedestrian signal compliance
Public Workshops

December 2019
Public Workshop Takeaways

- Separated Bike Facilities
- Wider Sidewalks
- Better Lighting, Shade, and Wayfinding
- Need to Fill Gaps
- Connections between Neighborhoods and the Legacy Trail and Parks
- Alternative “Low-Stress” Bike Routes
Online Survey

• Purpose:
  • Gather opinions on individual bicycle and pedestrian usage, preferences, safety, facility design, and general comments
• Began November 2019
• ~1,300 Responses to Date
• Will Remain Open Through August

https://www.scgov.net/residents/community/bicycle-and-pedestrian-master-plan-survey
### Initial Survey Results

How would you rate the following as reasons that you do not WALK more frequently?

<table>
<thead>
<tr>
<th>Reason</th>
<th>Major Reason</th>
<th>Minor Reason</th>
<th>Not a Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traffic is too fast and/or heavy</td>
<td>47.30%</td>
<td>24.92%</td>
<td>27.78%</td>
</tr>
<tr>
<td>Sidewalks, paths, or crossings are missing or in poor condition</td>
<td>55.39%</td>
<td>26.12%</td>
<td>18.50%</td>
</tr>
<tr>
<td>Weather is not conducive to walking</td>
<td>14.21%</td>
<td>39.84%</td>
<td>45.95%</td>
</tr>
<tr>
<td>Poor lighting conditions, it is too dark</td>
<td>27.03%</td>
<td>42.64%</td>
<td>30.33%</td>
</tr>
<tr>
<td>Concerned about personal security or safety</td>
<td>28.56%</td>
<td>39.58%</td>
<td>31.86%</td>
</tr>
<tr>
<td>Need to transport other people and/or things</td>
<td>28.94%</td>
<td>30.86%</td>
<td>40.20%</td>
</tr>
<tr>
<td>The places I need to go are beyond a reasonable walking distance</td>
<td>55.98%</td>
<td>26.20%</td>
<td>17.83%</td>
</tr>
<tr>
<td>Other</td>
<td>26.17%</td>
<td>7.81%</td>
<td>66.02%</td>
</tr>
</tbody>
</table>
Please rate the following based on PEDESTRIAN improvement need.

<table>
<thead>
<tr>
<th>Area</th>
<th>Substantial Improvements Needed</th>
<th>Some Improvements Needed</th>
<th>No Improvements Needed</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neighborhood Streets</td>
<td>21.05%</td>
<td>60.96%</td>
<td>15.16%</td>
<td>2.84%</td>
</tr>
<tr>
<td>Major Street Corridors</td>
<td>48.03%</td>
<td>45.50%</td>
<td>3.07%</td>
<td>3.40%</td>
</tr>
<tr>
<td>Near or Within Parks, Recreation Centers, and Other Recreation Facilities</td>
<td>20.89%</td>
<td>54.44%</td>
<td>18.00%</td>
<td>6.67%</td>
</tr>
<tr>
<td>Near Schools</td>
<td>20.41%</td>
<td>41.95%</td>
<td>11.56%</td>
<td>26.08%</td>
</tr>
<tr>
<td>Near Shopping/Retail Centers</td>
<td>26.67%</td>
<td>48.77%</td>
<td>12.72%</td>
<td>11.83%</td>
</tr>
<tr>
<td>Near Tourist Destinations</td>
<td>24.55%</td>
<td>51.00%</td>
<td>13.06%</td>
<td>11.38%</td>
</tr>
<tr>
<td>Near Service Providers (e.g., Hospitals/Clinics)</td>
<td>18.34%</td>
<td>49.27%</td>
<td>16.54%</td>
<td>15.86%</td>
</tr>
<tr>
<td>Near Bus Stops</td>
<td>21.68%</td>
<td>40.95%</td>
<td>12.34%</td>
<td>25.03%</td>
</tr>
<tr>
<td>Other</td>
<td>13.42%</td>
<td>11.07%</td>
<td>3.69%</td>
<td>71.81%</td>
</tr>
</tbody>
</table>
Initial Survey Results

How would you rate the following as reasons that you do not BICYCLE more frequently?

<table>
<thead>
<tr>
<th>Reason</th>
<th>Major Reason</th>
<th>Minor Reason</th>
<th>Not a Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traffic is too fast and/or heavy</td>
<td>61.21%</td>
<td>21.06%</td>
<td>17.73%</td>
</tr>
<tr>
<td>Lack of and/or poor conditions of bicycle facilities (i.e., bike lane, paths, wide shoulders)</td>
<td>66.09%</td>
<td>20.39%</td>
<td>13.51%</td>
</tr>
<tr>
<td>Weather is not conducive to biking</td>
<td>15.95%</td>
<td>35.09%</td>
<td>48.96%</td>
</tr>
<tr>
<td>Poor lighting conditions, it is too dark</td>
<td>25.06%</td>
<td>36.91%</td>
<td>38.02%</td>
</tr>
<tr>
<td>Concerned about personal security or safety</td>
<td>34.11%</td>
<td>34.23%</td>
<td>31.66%</td>
</tr>
<tr>
<td>Lack of adequate or secure bicycle parking</td>
<td>16.46%</td>
<td>41.65%</td>
<td>41.89%</td>
</tr>
<tr>
<td>Lack of amenities (e.g., showers, lockers, etc.) at my destination</td>
<td>7.64%</td>
<td>19.85%</td>
<td>72.50%</td>
</tr>
<tr>
<td>Need to transport other people and/or things</td>
<td>18.85%</td>
<td>27.29%</td>
<td>53.86%</td>
</tr>
<tr>
<td>The places I need to go are beyond a reasonable biking distance</td>
<td>25.68%</td>
<td>30.84%</td>
<td>43.49%</td>
</tr>
<tr>
<td>I do not have a bicycle</td>
<td>2.75%</td>
<td>1.96%</td>
<td>95.29%</td>
</tr>
<tr>
<td>Other</td>
<td>18.18%</td>
<td>4.55%</td>
<td>77.27%</td>
</tr>
</tbody>
</table>
## Initial Survey Results

Please rate the following based on BICYCLE improvement need.

<table>
<thead>
<tr>
<th>Location</th>
<th>Substantial Improvements Needed</th>
<th>Some Improvements Needed</th>
<th>No Improvements Needed</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neighborhood Streets</td>
<td>23.23%</td>
<td>53.91%</td>
<td>20.62%</td>
<td>2.24%</td>
</tr>
<tr>
<td>Collector Street Corridors</td>
<td>42.38%</td>
<td>49.04%</td>
<td>3.97%</td>
<td>4.61%</td>
</tr>
<tr>
<td>Major Street Corridors</td>
<td>70.00%</td>
<td>25.19%</td>
<td>1.98%</td>
<td>2.84%</td>
</tr>
<tr>
<td>Near or Within Parks, Recreation Centers, and Other Recreation Facilities</td>
<td>25.90%</td>
<td>54.30%</td>
<td>12.70%</td>
<td>7.10%</td>
</tr>
<tr>
<td>Near Schools</td>
<td>24.75%</td>
<td>38.20%</td>
<td>8.76%</td>
<td>28.30%</td>
</tr>
<tr>
<td>Near Shopping/Retail Centers</td>
<td>33.79%</td>
<td>43.34%</td>
<td>6.78%</td>
<td>16.08%</td>
</tr>
<tr>
<td>Near Tourist Destinations</td>
<td>33.83%</td>
<td>42.48%</td>
<td>9.40%</td>
<td>14.29%</td>
</tr>
<tr>
<td>Near Service Providers (e.g., Hospitals/Clinics)</td>
<td>26.08%</td>
<td>41.52%</td>
<td>10.25%</td>
<td>22.15%</td>
</tr>
<tr>
<td>Near Bus Stops</td>
<td>22.22%</td>
<td>36.43%</td>
<td>10.98%</td>
<td>30.36%</td>
</tr>
<tr>
<td>Other</td>
<td>16.26%</td>
<td>8.94%</td>
<td>2.85%</td>
<td>71.95%</td>
</tr>
</tbody>
</table>
Recommendation Process

Identify System Gaps

Prioritize and Address Gaps

Develop Lower-Stress Facility Options

Enhance & Upgrade Existing Facilities as Opportunities are Presented
Gap Analysis

Network Gap Analysis:
• Identify gaps in the existing bicycle and pedestrian network.
• Evaluate opportunities to address gaps and enhance connections.
Gap Evaluation Network

Evaluation Network:
Bicycle Network Gaps
Pedestrian Network Gaps:

Sidewalk Gaps
- Park/Environmental Land
- Municipalities
- No Sidewalk Facility
- Sidewalk One Side Only (County Roads)
Pedestrian & Bicycle Gaps

Pedestrian and Bicycle Network Gaps:

Roadways with both Pedestrian and Bicycle Gaps
- Park/Environmental Land
- Municipalities
- Pedestrian and Bicycle Gaps
Prioritization Process

**Prioritization Factors:**
A. Traffic Characteristics  
B. Safety  
C. System Connectivity  
D. Regional Trail Connectivity  
E. Urban Services Boundary  
F. Equity  
G. Community Connectivity  
H. Safe Routes to School  
I. Public Input  
J. Right-of-Way and Infrastructure Impacts  
K. Identified Need
## Prioritization Factors & Criteria

<table>
<thead>
<tr>
<th>Index</th>
<th>Factors</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Traffic Characteristics</td>
<td>High-Volume (15,000+ ADT) and High-Speed (40+ mph) Street</td>
</tr>
<tr>
<td></td>
<td></td>
<td>High-Volume or High-Speed Street</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lower-Volume (&lt;15,000 ADT) and Lower Speed (&lt;40 mph) Street</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Local/Residential Street</td>
</tr>
<tr>
<td>B</td>
<td>Safety</td>
<td>Addressed documented crash issue</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Safety best practice - High-volume/speed street</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Safety best practice - general</td>
</tr>
<tr>
<td>C</td>
<td>System Connectivity</td>
<td>Pedestrian</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No sidewalks or substantially incomplete</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Contiguous sidewalk on one side only</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Trail/multiuse paths</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Complete sidewalk on both sides of the street</td>
</tr>
<tr>
<td></td>
<td>Bicycle</td>
<td>No bicycle facilities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Un-marked shoulder</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Standard bicycle lanes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Trail/multiuse paths</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Separated bicycle lanes</td>
</tr>
</tbody>
</table>
## Prioritization Factors & Criteria

<table>
<thead>
<tr>
<th>Index</th>
<th>Factors</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>Regional Trail Connectivity</td>
<td>Provides direct connection to an existing or planned multi-use trail</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Support and enhances connections in the vicinity of an existing or planned multi-use trail</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Is not located near an existing or planned multi-use trail</td>
</tr>
<tr>
<td>E</td>
<td>Urban Services Boundary</td>
<td>Located within the USB</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Located outside of the USB</td>
</tr>
<tr>
<td>F</td>
<td>Equity</td>
<td>Located within or adjacent to High or Very High Transportation Equity Area</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Located within or adjacent to a Medium Transportation Equity Area</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Located within a Low Transportation Equity Area</td>
</tr>
<tr>
<td>G</td>
<td>Community Connectivity</td>
<td>Improves direct connectivity to transit and/or community features</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Improves connectivity near transit and/or community features or key destinations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Improves connectivity away from transit and/or community features or key destinations</td>
</tr>
<tr>
<td>H</td>
<td>Safe Routes to School</td>
<td>Improves direct connectivity to Schools</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Improves connectivity near Schools</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Improves connectivity away from Schools</td>
</tr>
<tr>
<td>Index</td>
<td>Factors</td>
<td>Criteria</td>
</tr>
<tr>
<td>-------</td>
<td>---------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>I</td>
<td>Public Input</td>
<td>Minor levels of community input and additional stakeholder coordination may be needed to advance the project</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Moderate levels of community outreach and stakeholder coordination is anticipated</td>
</tr>
<tr>
<td></td>
<td></td>
<td>More significant community outreach and stakeholder coordination is anticipated to address such issues as access management, design preference, infrastructure impact mitigation, etc.)</td>
</tr>
<tr>
<td>J</td>
<td>Right-of-Way and Infrastructure Impacts</td>
<td>Sufficient right-of-way and no identified infrastructure impacts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Minor right-of-way or infrastructure conflicts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Considerable right-of-way and/or infrastructure conflicts (but not considered a &quot;fatal flaw&quot;) or will be constructed as development occurs.</td>
</tr>
<tr>
<td>K</td>
<td>Identified Need</td>
<td>Identified improvement in previously completed plan/study (e.g., Sarasota County Trails Master Plan and Sarasota/Manatee Active Transportation Plan).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not identified in previously completed plan/study, but need has been identified through public input/request.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not identified in previously completed plan/study and not identified by public input/request.</td>
</tr>
</tbody>
</table>
Initial Prioritization Results

Initial Pedestrian Network Gap Prioritization

Pedestrian Gaps Prioritization
- Park/Environmental Land
- Municipalities
- Tier 1
- Tier 2
- Tier 3
Initial Prioritization Results

Initial Bicycle Network Gap Prioritization
Developing Bike & Ped Facilities

**Guiding Principles:**
1. Create Complete Streets
2. Streets Should be Safe Above All Else
3. Streets Should be Comfortable (Design for Families)
4. Prioritize Improvements Based on Data and Need
Pedestrian Improvements

Sidewalks

• Considerations:
  • Context and Function of the Roadway
  • Roadway Speed Limit
  • Bicycle Facility Need

Alternative Pedestrian-Way Opportunities

• Low-Volume-Speed Streets
• Limited Right-of-Way
Bicycle Improvements

**Approach:**
- Build a Connected and Cohesive Network
- Safety and Comfort are Essential Factors
- Focus on Major Roads and Connections to Trails and Destinations First
- Enhance Existing Connections when Opportunities Exist
## Types of Bicycle Facilities

**Shared Lanes**

Bicyclists ride in mixed traffic. To improve operations in shared lanes, shared lane markings (sharrows) and signs can be added to inform motorist that people riding bikes may be present.

**Bicycle Boulevards**

Low-stress bikeways primarily located on low-volume, low-speed local/residential streets. Treatments include shared lane markings, wayfinding, traffic calming, and volume management.

**Bike Lanes and Buffered Lanes**

Conventional and buffered bike lanes designate an exclusive space for bicyclists to operate one-way on the roadway through the use of pavement markings and signs.

**Separated Bike Lanes**

Bike lanes that are physically separated from adjacent travel lanes with a vertical element, such as a curb, flex post, or on-street parking. Can either be one-way or two-way.

**Sidepaths and Shared Use Path**

Sidepaths, wide sidewalks, and shared use paths located within the roadway right-of-way support both bicycle and pedestrian use.
Bicycle Improvements

FHWA Bikeway Selection Guide

• Focus on Safety, but emphasizes the importance of comfort
  • Goal is to encourage more people to choose to bike (increase the number of short trips made by biking or walking to 30% by 2025)

• Bikeway type selection primarily depends on traffic volume and operating speed of the roadway
2020 FDOT Design Manual (FDM) Guidance:

• (Standard) Bicycle lanes can be used on curbed roadways with a design speed ≤ 45 mph. However, it is best practice to consider other types of facilities for design speeds greater than 30 mph.

• A shared use path may be substituted for a bicycle lane when the roadway design speed is ≥ 35 mph and the following conditions are met:
  • Context Classification C1, C2, or C3
  • Separation can be maintained through intersections, and
  • Conflict points are minimal and mitigated
• Separated Bicycle Lanes – bicycle lanes that are adjacent to and *physically* separated from the vehicular travel lane.

• Types of Separation – Express lane markers, raised medians, on-street parking, and rigid barriers based on roadway design speed:
  • ≤ 35 mph – Express lane markers, raised medians, rigid barriers, or on-street parking
  • 40-45 mph – Raised medians or rigid barriers
Roadway Speed is a Key Factor in Identifying Appropriate Bicycle and Pedestrian Infrastructure
Intersection Features

Improving Walking and Biking at Intersections:
• Crosswalks
• Lighting
• Pedestrian Signals (automatic recall)
• RTOR and Permissive LT Restrictions
• Curve Radius and Curb Extensions
• Bicycle Boxes
• Protected Intersections
Support Facilities

Enhancements Beyond Basic Infrastructure:

• Shade and Landscaping
• Lighting (pedestrian scale)
• Wayfinding
• Seating (benches)
• Bicycle Parking
• Transit Facilities
Program Enhancements

- Expand Ride & Stride
- Safe Routes to Schools
- Continue Online Bike Map
- Ad & Public Service Announcements
- Public Safety Education and Enforcement
- Adopt-a-Route Programs
- Open Street Event
- Expanded Safety Program (e.g., Vision Zero)

Policy Enhancements

- Implement Complete Streets Policies
  - Incorporate Context and Flexible Design Options
Wrapping Up the Plan

- Synthesize Input from Today and from Online Viewing
- Integrate Online Survey Results
- Finalize the Prioritization and Opportunities Sections of the Plan (Incorporating Input)
- Present Draft to Stakeholders and Committees (Early Fall)
- Present to County Commission (Late Fall)
Complete Streets

Implementation Strategies
What are Complete Streets?

- Effort to integrate people and place into the planning, design, engineering, operating, and maintenance of the transportation system.
- Communities must allow all people regardless of age, ability, income, or any other demographic to safely, comfortably, and conveniently access homes, employment, schools, health facilities, shops, and other destinations by their mode of choice.
2040 Comprehensive Plan Objectives and Policies

• **Transportation Objective 1.4 – Complete Streets:** The Multi-Modal Transportation System shall enable County residents the opportunity to live and travel utilizing an integrated, inter-modal transportation system based on complete streets design principles and the latest technology innovations and trends including sharing of vehicles and bicycles and where applicable transport via water.

• **Transportation Policy 1.4.3:** Establish and implement Complete Streets strategies in order to accommodate users (bicyclists, motorists, and pedestrians) of all ages and abilities, improve public health and safety, active mobility and environmental quality by creating and maintaining a multimodal network for all roadways. Complete Street strategies shall apply, at a minimum, to all new construction and reconstruction of collector and arterial roadways.
Approach to Complete Streets

• Flexible approach that allows transportation planners, designers, engineers, and operators to focus on providing a safe transportation system for all users that connects people to the places they need and want to go.

• The elements of roadway design depend on the form and scale of land use, the function of the roadway within the greater transportation network, and availability of right-of-way – sensitive to community character, livability, and quality of life.
Flexible Design

Flexible Design Guidance

Context Classification + Functional Classification = Flexible Design Guidance
Flexible Design Guidance

Context Classification

Not Applicable in Sarasota County
Context Classification

Flexible Design Guidance

Context Classification

Context Classification

<table>
<thead>
<tr>
<th>Context Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1 - Natural</td>
</tr>
<tr>
<td>C2 - Rural</td>
</tr>
<tr>
<td>C3C - Suburban Commercial</td>
</tr>
<tr>
<td>C3R - Suburban Residential</td>
</tr>
<tr>
<td>C4 - Urban General</td>
</tr>
<tr>
<td>C5 - Urban Center</td>
</tr>
<tr>
<td>Park/Environmental Land</td>
</tr>
</tbody>
</table>
Functional Classification

Flexible Design Guidance

- Freeway
- Major Arterial
- Minor Arterial
- Major Collector
- Minor Collector
- Significant Local Roads
- Local Roads
- Park/Environmental Land
- Municipalities
# Flexibility in Design

## Flexible Design Guidance:

<table>
<thead>
<tr>
<th>Context Classification</th>
<th>Major Arterials</th>
<th>Minor Arterials</th>
<th>Major Collectors</th>
<th>Minor Collectors</th>
<th>Significant Local Roads</th>
<th>Local Roads</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>C3R – Suburban Residential</strong></td>
<td>Design Speed</td>
<td>35-55 mph</td>
<td>35-55 mph</td>
<td>30-45 mph</td>
<td>30-40 mph</td>
<td>20-35 mph</td>
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<tr>
<td>Sidewalk Facilities</td>
<td>6-10 ft</td>
<td>6-8 ft</td>
<td>6-8 ft</td>
<td>5-8 ft</td>
<td>5-8 ft</td>
<td>5-6 ft</td>
</tr>
<tr>
<td>Bicycle Facilities*</td>
<td>Separated Facility, Buffered Lane, or Parallel Facility</td>
<td>Separated Facility, Buffered Lane, or Parallel Facility</td>
<td>Separated Facility, Buffered Lane, Standard (5 ft) Lane, or Parallel Facility</td>
<td>Separated Facility, Buffered Lane, Standard (5 ft) Lane, or Parallel Facility</td>
<td>Buffered Lane or Standard (5 ft) Lane</td>
<td>Shared Street or Neighborhood Greenway</td>
</tr>
<tr>
<td>Travel Lanes**</td>
<td>10-12 ft</td>
<td>10-12 ft</td>
<td>10-11 ft</td>
<td>10-11 ft</td>
<td>10-11 ft</td>
<td>10-11 ft</td>
</tr>
<tr>
<td><strong>C3C – Suburban Commercial</strong></td>
<td>Design Speed</td>
<td>35-55 mph**</td>
<td>35-36 mph**</td>
<td>30-40 mph</td>
<td>30-40 mph</td>
<td>20-35 mph</td>
</tr>
<tr>
<td>Sidewalk Facilities</td>
<td>6-10 ft</td>
<td>6-10 ft</td>
<td>6-8 ft</td>
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<td>10-11 ft</td>
<td>10-11 ft</td>
</tr>
</tbody>
</table>

*The posted/travel speed of the roadway should be a primary determinate when identifying the preferred bicycle facility; shared use paths should also be considered when separated bike lanes are indicated.

**Width depends on SIS facility designation, heavy truck volumes, and transit needs.

***Bus stops and pull-outs should be considered along transit routes; especially along high ridership routes.
Flexible Design Guidance:

Urban General (C4) – Major Collector

<table>
<thead>
<tr>
<th>Typical Section</th>
<th>Sidewalk</th>
<th>Bicycle Facility</th>
<th>Travel Lane</th>
<th>Travel Lane</th>
<th>Half of Center Median</th>
<th>Total Rights-of-Way</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6'</td>
<td>7'</td>
<td>10'</td>
<td>10'</td>
<td>10'</td>
<td>88'</td>
</tr>
</tbody>
</table>

Suburban Commercial (C3R) – Major Arterial

<table>
<thead>
<tr>
<th>Typical Section</th>
<th>Shared Use Path</th>
<th>Buffer</th>
<th>Travel Lane</th>
<th>Travel Lane</th>
<th>Travel Lane</th>
<th>Half of Center Median</th>
<th>Total Right-of-Way</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10'</td>
<td>5'</td>
<td>11'</td>
<td>11'</td>
<td>11'</td>
<td>7</td>
<td>110'</td>
</tr>
</tbody>
</table>
Implementation

✓ Process Enhancement
✓ Program Enhancement
✓ Performance Measures and Evaluation
Process Enhancements

- Process Enhancement
- Administrative Changes
- Comprehensive Plan Changes
- Unified Development Code Changes
- Project Delivery Changes
- Funding Sources and Strategies
Program Enhancements

- Program Enhancement
  - Education and Outreach Support
  - Ride and Stride Program
  - Engagement
Performance Measures

- Mileage of new bicycle infrastructure (bicycle lanes, trails, neighborhood greenways, etc.)
- Linear feet of new pedestrian infrastructure (sidewalks, trails, etc.)
- Number of new accessible pedestrian curb ramps installed
- Type and number of pedestrian/bicycle friendly signage and landscaping improvements, including street trees, street furniture, and lighting
- Percentage of transit stops accessible via sidewalks and bicycle facilities
- Transit passenger trips (annual ridership)
- Pedestrian and bicycle counts, including high need/use areas
- Pedestrian and bicycle connectivity to activity/employment centers and key destinations
- Share of regional households within half-mile of transit
- Share of regional employment with half-mile of transit
- Total number of children walking or bicycling to schools
- Percentage of bus stops with transit amenities (benches, shelters, bicycle racks, etc.)
- Miles of narrowed travel lanes or repurposed travel lanes
- Vehicular trip lengths
- Vehicle miles traveled per capita
- Rate of crashes, injuries, and fatalities
- Economic benefits of Complete Streets projects
Vision Zero
Policy and Strategies
What is Vision Zero?

A data-driven approach to eliminate all traffic-related deaths and serious injuries. Starts with the belief that everyone has the right to move safely and that system designers and decision-makers have the responsibility to ensure a safe transportation system.

HEADLINE: WOMAN KILLED IN CAR ACCIDENT IN SARASOTA SHORTLY AFTER START OF THE NEW YEAR
Why Vision Zero?

From 2015 to 2019:

• 2,500+ Fatal and Serious Injury Crashes
• 275 Death
• 3,313 Injuries

4th Most Dangerous Metro Area for Pedestrians in the U.S.

HEADLINE: THREE KILLED IN 7-VEHICLE PILEUP IN SARASOTA

Source: Bradenton Herald
Fundamental Principles

➢ Traffic deaths and severe injuries are acknowledged to be preventable, there are no “accidents”
➢ Human life and health are prioritized within all aspects of transportation systems
➢ Acknowledgement that human error is inevitable, and transportation systems should be forgiving
➢ Safety work should focus on system-level changes above influencing individual behavior
➢ Speed is recognized and prioritized as the fundamental factor in crash severity
### Change in Approach

A shift from the traditional safety approach:

<table>
<thead>
<tr>
<th>Traditional Approach</th>
<th>Vision Zero</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traffic deaths are <strong>INEVITABLE</strong></td>
<td>Traffic deaths are <strong>PREVENTABLE</strong></td>
</tr>
<tr>
<td><strong>PERFECT</strong> human behavior</td>
<td>Integrate <strong>HUMAN FAILING</strong> in approach</td>
</tr>
<tr>
<td>Prevent <strong>COLLISIONS</strong></td>
<td>Prevent <strong>FATAL AND SEVERE CRASHES</strong></td>
</tr>
<tr>
<td><strong>INDIVIDUAL</strong> responsibility</td>
<td><strong>SYSTEMS</strong> approach</td>
</tr>
<tr>
<td>Saving lives is <strong>EXPENSIVE</strong></td>
<td>Saving lives is <strong>NOT EXPENSIVE</strong></td>
</tr>
</tbody>
</table>
Learning From Others

Miami-Dade County

Hillsborough County

Montgomery County, MD

City of Ft Lauderdale

City of Austin, TX
A strong policy commitment to Vision Zero establishes and formalizes the effort towards ending the needless death and injury on the County’s roadways.
Policy Adoption

Options for Initiating Vision Zero

• Integration into the Comprehensive Plan

• Commission Resolution

• Standalone Policy Statement
## Implementing Strategies

<table>
<thead>
<tr>
<th>Political Commitment</th>
<th>Multi-Disciplinary Leadership</th>
<th>Action Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity</td>
<td>Cooperation and Collaboration</td>
<td>Systems-Based Approach</td>
</tr>
<tr>
<td>Data-Driven</td>
<td>Community Engagement</td>
<td>Transparency</td>
</tr>
</tbody>
</table>
Actionable Steps

- Establish a Vision Zero Task Force
- Develop a Vision Zero Action Plan
- Prioritize Roadway Design
- Focus on Speed Management
- Utilize Impactful Education Strategies
- Ensure Equitable Enforcement
- Evaluate Progress

Source: heraldtribune.com
• Collect and Integrate Public Input
  • Today’s Comments and Submitted Online Comments
  • Online Survey Responses
• Finalize Development of the Bike/Ped Plan Opportunities
• Finalize the Bike/Ped Plan, Complete Streets, and Vision Zero Documents and present to Stakeholders, Committees, and the County Commission this Fall
Asking Questions

Type content questions in your questions box at any time.

*If you have a question for a specific panelist, please indicate that in your question!*

Note that this webinar is being recorded and will be made available on the County’s website for viewing and comments following today’s event ([www.scgov.net](http://www.scgov.net))
Panelists

Sarasota County

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