Sustainable Public Rights Of Way
City of Fort Worth
Bicycle and Pedestrian Trends

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Agenda

- Brief history of Pedestrian and Bicycle Planning
- Implementation Issues
- Master Thoroughfare Plan Update
Pedestrian and Bicycle Plans, Policies, Programs

- Bike Fort Worth plan adoption (2010)
- Bicycle Parking requirements in Zoning Ordinance (2010)
- Safe Passing Ordinance (2011)
- Fort Worth Bike Sharing (2013)
- Walk Fort Worth (2014)
- Fort Worth Bond Program (2014)
- Pedestrian and Bicycle Advisory Commission (2015)
- Complete Streets Policy and Master Thoroughfare Plan Update (anticipated 5/2016)
## Bike: On-Street Implementation

<table>
<thead>
<tr>
<th></th>
<th>2010 lane miles</th>
<th>2016 lane miles*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bike Lanes</td>
<td>9.6</td>
<td>73.5</td>
</tr>
<tr>
<td>Bike Routes</td>
<td>68</td>
<td>73.1</td>
</tr>
</tbody>
</table>

*3/29/16
Bike: Funding Sources

- Federal Grants: 30%
- TxDOT Grants: 30%
- Developer: Arterial Construction: 15%
- City: Arterial Construction: 11%
- Fort Worth South Striping: 10%
- O&M: 4%

2010-2014 On-Street Funding Sources
Next 5 Years: 2014 Bond Program

• $1.26 million for bicycle facilities
• $10 million for sidewalk improvements
• $9 million in Urban Village improvements
• $7 million Transit Oriented Development projects
Designing for Complete Streets

Four Types of Cyclists

By Preparation of Population

- Sharrow: Marked, wide
- Cycle track: Curb separated

Source: Jefferson Parish Bicycle Master Plan

Dan Swenson, NOLA.com | The Times-Picayune
Change in Practice: Protecting Users
Change in Practice: Design Solutions
Master Thoroughfare Plan Update and Complete Streets Policy

• Complete change in philosophy in transportation planning
  – Context Sensitive and Complete Streets based cross-sections
    • Bicycle, Pedestrian, Transit
  – Guidance on retrofits
  – Incorporation of Green Infrastructure concepts

• Proposed Complete Streets Policy addresses non-MTP issues
Component: Street Type

- **Activity Streets**
  Destination streets

- **Commercial/Mixed Use**
  Serve business districts/downtown

- **Neighborhood Connectors**
  Provide access from neighborhoods to services

- **Commercial Connectors**
  Serve retail portions of the City

- **System Links**
  Support longer-distance travel
Component: Cross-Sections

Activity Street

 (~80 cross-sections)
Component: Cross-Sections

<table>
<thead>
<tr>
<th>Activity Street</th>
<th>Neighborhood Connector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target Speed: 15</td>
<td>Target Speed Range: 10-35</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Thoroughfare Cross-Sections*</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Example Cross-Sections</th>
</tr>
</thead>
</table>

| Commerce/Mixed-Use Street | Target Speed: 5 |

<table>
<thead>
<tr>
<th>System Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target Speed Range: 35-45</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Special Residential Sections</th>
</tr>
</thead>
</table>

(~80 cross-sections)
Component: Cross-Sections

Neighborhood Connector

(~80 cross-sections)
Section Selection

Typical Section Selection Process (Simplified)

1. **Street Type**
   - Type: Which of the 5 Street Types?
   - Source: Street Type Map

2. **Lanes**
   - How many lanes per direction?
   - Source: Lanes Map

3. **Transit**
   - What type of special transit facility (if any)?
   - Options: dedicated transit lane, peak-hour transit lane, or transit median
   - Source: the T's Transit Plan

4. **Median**
   - What type of median (if any)?
   - Options: Two-way left-turn lane, narrow median, standard median, wide median, or transit median
   - Based on: traffic volumes, number of lanes, transit median (if any), and other corridor features

5. **Parking**
   - What type of parking (if any)?
   - Options: Parallel or Diagonal
   - Based on: traffic volumes and number of lanes

6. **Bikes**
   - What type of bike facility?
   - Options: Shared lane, conventional bike lane, buffered bike lane, separated bike lane, off-street sidepath
   - Source: Bike Fort Worth Plan, auto traffic volumes, auto traffic speeds, parking type, and other corridor features
# Bicycle Facility Selection Matrix

## Table 1: Bicycle Facility Types Applicable to Fort Worth MTP Street Types

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Target Speed range (mph)</th>
<th>Default Target speed (mph)</th>
<th>Shared Lane</th>
<th>On-Street Bike Lane</th>
<th>Off-Street</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity Street</td>
<td>20-25</td>
<td>20</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Commerce/Mixed-Use Street</td>
<td>20-25</td>
<td>25</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Connector Corridor</td>
<td>30-35</td>
<td>35</td>
<td></td>
<td></td>
<td>•</td>
</tr>
<tr>
<td>Commercial Corridor</td>
<td>30-35</td>
<td>35</td>
<td></td>
<td></td>
<td>•</td>
</tr>
<tr>
<td>System Link</td>
<td>35-45</td>
<td>40</td>
<td></td>
<td></td>
<td>•</td>
</tr>
</tbody>
</table>
MTP Update: On Street Bicycle

- Applies different bike types depending on land use conditions
  - Conventional bike lane
  - Buffered/Protected bike lane
MTP Update: Off Street

• Sidepath
• Curb-level separated bike lane
• Wider sidewalks

SOURCE: NACTO
MTP Update: Green Infrastructure

• Allows application of GI concepts in arterial projects, such as
  – Bioretention, rain gardens, bioswales, tree wells, etc..
  – Parkway application of permeable pavement

• Requires long-term operations and maintenance plan
Looking Ahead

• Development of new intersection and street design standards
• Updating 2010 Bike Plan
• Creation of an Active Transportation Plan
Questions/Comments?