River District Bicycle and Pedestrian Study

May 16, 2017



Agenda

- Study Area and Purpose
- Study Process
- Summary of Existing Conditions
- Study Recommendations
- Next Steps





Study Purpose



- Document existing conditions pertaining to bicycle and pedestrian travel
- Identify recommendations that can help improve bicycle and pedestrian safety and comfort



Study Process

- Review of Prior Plans
- Site Visits
- Traffic Data Research
- Public Meetings
 - Stakeholder
 Roundtable Meetings
 - Public Meetings (x2)





Existing Conditions

Major Considerations



- Sidewalks
- Riverwalk Trails
- Bicycle Pavement Markings
- Crosswalks
- Bicycle Infrastructure
- Traffic Volume and Crash History



Notable Conditions





Riverwalk Trail Connections



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- Multiple connections (Carrington Pavilion, Wilson St, Main Street Plaza) offer the opportunity for the Riverwalk Trail to be a major River District attraction
- Limited wayfinding information available to direct visitors to trails, or trail users to other River District destinations

Crosswalk Markings

Many crosswalks in the River District have limited visibility

- Brick crosswalks without painted borders
- Painted crosswalks with thin lines





Obstacle Intersections



Large intersections that disrupt potentially important pedestrian movements

- North Main St at River St/Riverside Dr
 - Separates River District from North Main St neighborhood
- Main St at Memorial Dr
 - Separates Main St business district from planned Riverfront Park



Bicycle Infrastructure

Limited resources to support bicycle travel as transportation (rather than recreation). Expressed desire for additional:

- Bicycle Racks
- Covered Bicycle Parking
- Bicycle Maintenance Stations





Underutilized Roadways

Multiple 4+ lane corridors with low traffic volumes

- Ridge Street
- Poplar Street
- Memorial Drive





Bicycle and Pedestrian Culture

In the opinion of multiple city residents, Danville has an underdeveloped bicycle and pedestrian culture

- Drivers failing to respond safely to bicycle and pedestrian travelers
- Perception of limited community energy directed to encouraging activities such as bicycling, walking, and running



Recommendations

Recommendation Categories

- Education and Events
- Pavement Markings
- Traffic Signal Equipment
- Bicycle Infrastructure
- Bicycle Routes
- Pedestrian Crossings
- Lighting
- Road Diets





Education and Events

Activities and programs that can support the development of a more robust bicycle and pedestrian culture in Danville

Example: Bicycle Rodeos and Urban Bicycling Workshops

- Education programs that teach children and adults the skills and etiquette necessary for safe bicycle travel
- Enhance both rider safety and confidence





Pavement Markings

Pavement marking modifications or additions that can enhance bicycle and pedestrian safety

Example: Bordered Brick Crosswalks

- Adding painted white borders to brick crosswalks
- Enhances visibility of crosswalks for drivers to increase awareness and improve reaction times





Traffic Signal Equipment

Equipment improvements and additions that can better detect and guide bicyclists and pedestrians through signalized intersections



Example: Pedestrian signal heads at the Main Street and River Street intersection

- Replace the existing signal heads with models that provide a crossing phase countdown
- Enhances pedestrian safety and comfort by allowing them to better judge when to begin or delay crossing movements

Bicycle Infrastructure

Increasing the availability of equipment and infrastructure to support practical (non-recreational) bicycle travel



Example: Bicycle Commuter Stations

- Installation of bicycle parking locations that attend to the needs of bicycle commuters
- Potential amenities to include: covered bicycle racks (to protect bicycles from weather elements) and bicycle maintenance stands (providing tools to perform basic repairs)

Bicycle Routes

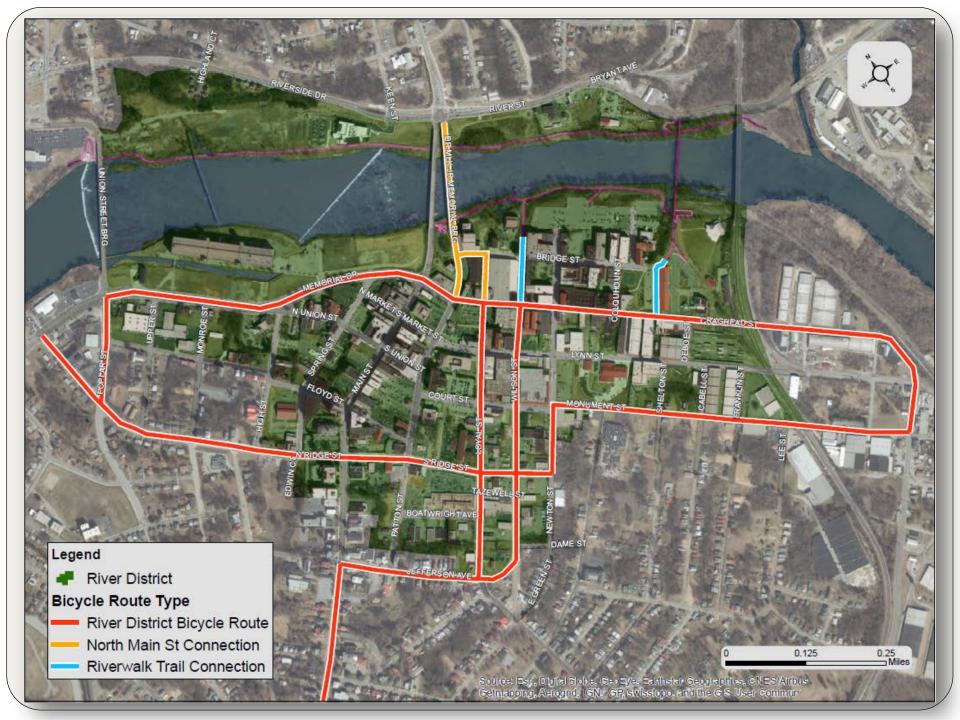
Identifying safe and continuous routes for bicycle travel in the River District, as well as providing wayfinding information to major destinations.



Example: (Proposed routes on following slide)

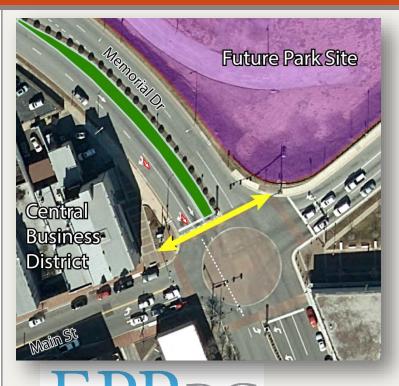
Includes connection routes to Riverwalk
 Trails and North Main Street





Pedestrian Crossings

Enhancements of street corridors to shorten pedestrian crossing distances, increase pedestrian visibility, and to provide median refuge areas in lengthy crossings.



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Example: Median widening at Main Street and Memorial Drive

- Increases the width of the median on Memorial Drive by eliminating one thru-lane (replaced by changing the right lane from rightturn-only to right/thru)
- Enhances connection between
 Main Street Business District and proposed Riverfront Park

Lighting

Improving street lighting in order to increase visibility and safety at night.





Example: Industrial Warehouse District

- Address lighting concerns along streets surrounding industrial warehouses (Wilson St, Newton St, Monument St, etc)
- Supports small business in the area, and improves connection between the River District and the adjacent neighborhood

Road Diets

Replacing underutilized travel lanes with street elements such as center turn lanes and bicycle lanes





Recommended Corridors:

Poplar Street, Ridge Street, Memorial Drive

- Given a 2% annual growth of traffic, all of the streets are projected to have traffic volumes well below 20,000 vehicles per day in 2040 (typical road diet standard)
- Changes do not entail elimination of pavement. If traffic volumes increase more rapidly than expected (especially on Memorial Drive), the street can return to the existing configuration simply by remarking lanes.

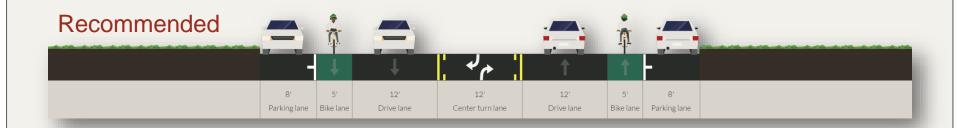


Example: Ridge Street

2015 Average Daily Traffic (ADT): 2,800 vehicles

2040 Projected ADT: 4,600 vehicles





Next Steps

Next Steps

- Finalize study report, including suggested changes
- Use as guiding document to identify priorities and project opportunities



Questions?

