

CONCLUSIONS

In conclusion, the Three Rivers Heritage Trail Connector is feasible in the communities between McKees Rocks and Coraopolis. The recommended projects for pedestrians and bicycling routes will provide improved access for all citizens, and promote safety and wayfinding for trail users. These improvements will lead to an increase in cycling activity and create a focus on the promotion of pedestrian and bicycle connections, pedestrian oriented developments and walkable communities.

In addition to implementing the proposed projects, and to help move this project forward, we recommend each community plans, promotes, and implements the following:

- Complete Streets Policy
- Traffic Calming Measures in business districts and residential roads
- Trail Town Master Plan
- Bicycle Friendly Community Status

We recommend each town council adopt a **Complete Streets Policy** directing new and reconstructed roadway projects to be designed for safe and accessible travel for pedestrians, bicycles and automobiles, www.completestreets.org.

In general, all communities in this corridor should consider new and reconstructed roadway projects as an opportunity to improve the transportation system for all modes: people who walk, people who bicycle and people who drive a car—*many times the same person does all three in the community in which they live.*

General Roadway Improvements for

Local, State and County Road Resurfacing & Reconstruction Projects

Please consider the following when repairing, repaving or reconstructing roadways along the Three Rivers Heritage Trail Connector Route (the following will provide for improved walking and cycling access):

1. When resurfacing roadways or reconstructing roadways- repave the surface from the outside edge of the shoulder to the outside edge of the opposite shoulder (Resurface 'out-to out'). This will provide a consistent cross slope for the roadway and the shoulder; and provide an accessible bicycling & walking lane.
2. Restripe roadways to 11' lanes. Implementing a 'road diet' along the cycling/walking route will help to cull speeds to the posted limits (25 or 35 mph) and provide for wider shoulders for pedestrians and cyclists.
3. Sign the route and mark the pavement as a bike route- as described in the report.
4. Repair existing sidewalks.
5. Extend sidewalks to connect from intersections, along at least one side of the road, to community facilities.
6. Upgrade intersection sidewalks, curb ramps, and crossings to meet current ADA standards for accessible routes.





Furthermore, **traffic calming measures** are recommended to help manage automobile speeds to the posted limits. Most of the route corridor is posted at 25 mph and only West Carson Street is posted above, at 35 mph. We recommend traffic calming measures be implemented at business districts and residential roadways:

1. Pedestrian bump-outs at some crossings – decreases walking distance across roadway and protects parallel parked cars
2. Pedestrian safety islands – offers people who walk a refuge at multiple lane crossings
3. Highly visible pedestrian crossings and intersections
4. Road Diets – delineate the travel lanes at 11' wide; mark the road edge and center line; increase shoulder widths for cycling
5. Install pavement markings at parallel parking spaces – helps to delineate the road edge
6. Traffic speed tables at pedestrian crossings (must consider snow removal and drainage)



Images show a raised pedestrian crossing, bump-outs at crossing & delineated bike lane through intersection

The communities located along this connector route have an opportunity to become successful **trail towns** by implementing cycling and walking projects, educating motorists and trail users about the laws of the road and bicycling safety, educating businesses to provide ‘what trail users want’, and promoting rides and walking events. Each community should investigate becoming a trail town (Mackin, www.mackinengineering.com) and becoming a **bicycle friendly community** through the League of American Bicyclists, www.bikeleague.org.

“Trail Towns also add value and benefit to the entire City: Trail Towns are places with a high quality of life, where people want to live, work, and visit. Community redevelopment is focused on street corridors and community spaces: outdoor eateries, sidewalk cafes, town centers, and gardens spaces. Trail town projects add value and improve the safety, and the aesthetic to the streets.” Mackin-McCollom Trail Town Master Plan Reports

Most important to the success of this project are improvements to the West Carson Street route (between the Station Square driveway and Stanhope Street in McKees Rocks). Completion of a successful route between Pittsburgh and its west end neighborhoods will require a separated and protected pedestrian & cycle track for most people to safely and comfortably use the system. **This project is critical to Pittsburgh’s future as the ‘keystone’ for cycling between our nation’s capital and our western states.**



Planning must continue to fund and construct a protected and separated ped-bike track between the City of Pittsburgh and McKees Rocks. This work will require significant funding to recreate the roadway template or for acquisition and reconstruction of future abandoned/railroad property, including structures to reach those properties.

Future plans to continue efforts to add a cycle/walking track along SR 51 or to acquire land are critical to the success of this important cycling and walking connector route.

We recommend this project first be implemented in the communities of McKees Rocks, Stowe, Neville and Coraopolis, followed by continued campaigning and planning for a separated and protected cycling & walking track along West Carson Street.

Short Term Infrastructure Recommendations:

1. Sidewalk repairs, pedestrian crossing improvements, road diet, and installation of bicycle lanes/shared lane markings in McKees Rocks, the 'Bottoms' and Stowe Township
2. Sidewalk repairs, road diet, and installation of bicycle lanes/shared lane markings along Island Avenue in Stowe toward the Fleming Park Bridge; and along Neville Road and Grand Ave. on Neville Island.
3. Sidewalk repairs, pedestrian crossing improvements, road diet, and bicycle lanes/bicycle shared lane markings along SR 51 (Fourth and Fifth Streets) in Coraopolis

Long Term Infrastructure Recommendation:

1. Separated and protected cycle and walking track along State Route 51, West Carson Street, from Station Square in Pittsburgh to McKees Rocks

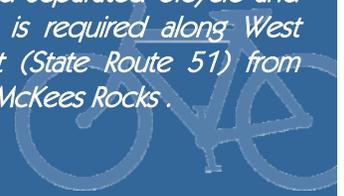
A connected, and safe walking and cycling route will increase opportunities for all citizens regardless of physical ability, cycling experience, age, or income; this is truly low cost infrastructure, and a sustainable transportation project that the people of Pittsburgh can and will use.

A separated cycle track throughout the entire alignment would best suit all cyclists, but the space required makes this plan not feasible. Therefore, to construct the on-road bicycle system, we recommend that **buffered bike lanes** first be tried. Buffered bike lanes will provide a higher level of service for most on-road cyclists. They include a designated and separated lane for cyclists and create a division between motorist and users. A buffered bike lane will require between 6' (4' lane w/o curb, 2' buffer) and 8' (5' lane w/curb, 3' buffer) for a single lane direction of cycling traffic. A road diet and shoulder widening may be needed to gain the required space.

The second choice is a **bike lane without the buffer**; this will require between 4' and 6' of width.

The third choice is to improve the road shoulder and mark the road as a '**route**'. This will allow cyclist to share the road and have a shoulder space to move into during heavy traffic. A wide shoulder will provide separation for cyclist choosing to use the shoulder. Use of shoulders will require continued maintenance to keep them clear of debris and cinders. The sharrow system (**Shared Lane Marking– SLM**) is the third choice alternative if no shoulder exists. This will provide experienced cyclists wayfinding and alert motorists of bicycle users in the roadway.

To truly increase the safety and the level of service for most users a protected and separated bicycle and walking track is required along West Carson Street (State Route 51) from Pittsburgh to McKees Rocks.





All recommended improvements are to comply with the American Association of State Highway and Transportation Officials (AASHTO), the Manual of Uniform Traffic Control Devices (MUTCD), and the Americans with Disabilities Act (ADA) regulations.



*Buffered Bike Lane
(with delineators)*



Bike Lane



SLM

The Next Steps:

- Promote and host bicycling events in your town
 - Dove-tail cycling tours with existing events (festivals, carnivals & fundraisers)
 - Coordinate with Bike Pittsburgh, SPC, the Ohio River Trail Council, the Montour Trail, Friends of the Riverfront, and local cycling enthusiasts to help lead, promote cycling and walking, and educate the public about motor safety and cycling operations.
- Begin fund raising and implementation of the walking and cycling projects
- Appoint responsible trail associations, 'Friends of...' organizations, and municipal public work departments to implement and maintain designated routes
- Plan, permit and construct bike routes, lanes, and SLM's along the designated route. Coordinate with roadway owners (local, county and state) for implementation and maintenance

The Mackin Team would like to thank all of the volunteers, agencies and public officials who provided ideas, guidance and leadership to this feasibility study.

We would welcome future opportunities to work with all of the local municipalities in the implementation of the walking and cycling projects. We look forward to the successful construction of the Three Rivers Heritage Trail Connector and all it has to offer the surrounding communities and the City of Pittsburgh.

*Sincerely,
Robert W. Genter, RLA, ASLA
Director- Land Development Services
Mackin Engineering Company
Phone: 412.788.0472
rwg@mackinengineering.com*