Florence River LINE Station
SUMMARY MEMORANDUM | APRIL 2019

SAFE ROUTES TO TRANSIT OVERVIEW

DVRPC’s Safe Routes to Transit Program is a competitive technical assistance grant program offered to municipalities in Greater Philadelphia that are interested in enhancing pedestrian and bicycle access to transit stations. The goal of this program is to match eligible municipalities with DVRPC staff in order to navigate the often-complex process of designing and funding pedestrian and bicycle improvements around rail stations.

Florence Township was one of three municipalities selected to partner with DVRPC during the inaugural round of this program in fall 2016. In the interim, DVRPC staff has worked with Florence Township officials and local stakeholders to identify and evaluate strategies designed to enhance access to and from the Florence Station of the River LINE. The primary objective of this collaboration is to evaluate the feasibility of the Florence Station to Cedar Lane pedestrian access concept, a new walkway that would link the Florence River LINE Station to employment destinations along Cedar Lane and Railroad Avenue.

PLANNING PROCESS

DVRPC worked with stakeholders to evaluate the Florence Station to Cedar Lane pedestrian walkway concept as well as a variety of related strategies designed to enhance pedestrian and bicycle mobility in the station area. DVRPC facilitated a coordination meeting on May 11, 2017 at the Burlington County Engineer’s Office in Mt. Laurel, NJ. This meeting was attended by representatives from Florence Township, Burlington County, NJ TRANSIT, Bombardier Transportation, Conrail, Cross County Connections, and the NJ Turnpike Authority. This meeting gave a diverse group of stakeholders a chance to provide preliminary feedback on the pedestrian walkway concept and discuss an array of land use and transportation issues throughout the station area. These stakeholders continued to serve as a valuable resource throughout the entire planning process.

DOCUMENT OVERVIEW

Although the pedestrian concept described in this memo has the potential to improve access between the Florence Station and local employment centers, several factors influence its ultimate feasibility, including physical obstacles, property access, and public safety concerns related to the location of the walkway and its proximity to a heavily used passenger and freight rail corridor. This document compiles information on existing conditions, conceptual improvements, and cost estimates that are intended to help Florence Township better evaluate the potential opportunities and challenges associated with implementing this concept. The memorandum concludes by identifying alternative and supplemental strategies that can be used to enhance connectivity within the station area.

ABOUT DVRPC

DVRPC is the federally designated Metropolitan Planning Organization for the bi-state, nine-county Greater Philadelphia Region. DVRPC works with a variety of stakeholders, including municipal, county, and state representatives, to address issues of transportation, land use, environmental protection, and economic development. For more information, see www.dvrpc.org and www.dvrpc.org/SafeRoutesToTransit.
The Florence River LINE Station is located on John Galt Way, approximately 800 feet north of Route 130.

Recent employment growth has contributed to an increase in trespassing activity along the railroad right-of-way.

Recent infrastructure improvements in the station area include the construction of a roundabout at Cedar Lane and Railroad Avenue as well as sidewalks along Cedar Lane.

PROJECT BACKGROUND

Florence Township has seen a significant increase in industrial development in recent years, including warehouse and distribution uses along the U.S. Route 130 corridor. Driven by proximity to major population centers and access to strategic highways, national retailers and distributors have converged on properties in and around the Haines Industrial Center.

The Florence River LINE station is a key transportation asset for employees working in this part of the Township. However, walking or biking between the station and local employment destinations in and around the station area can be difficult or impossible because of the limited street network, lack of pedestrian facilities, and intimidating intersections. These “last mile” connections to properties along Cedar Lane and Railroad Avenue (see Figure 1) are particularly problematic because the NJ Turnpike Extension acts as a barrier that divides the station area and prevents legal nonmotorized access to the destinations north of I-95.

As a result, employment growth along Cedar Lane and Railroad Avenue has contributed to an increase in trespassing along the River LINE right-of-way. Without a viable alternative route, some employees are using the River LINE right-of-way as a cut through to reach Cedar Lane and Railroad Avenue. This trespassing creates dangerous conditions for pedestrians and interferes with the operation of passenger and freight rail.

Developing a safe pedestrian alternative to this trespassing is one of Florence Township’s transportation priorities. Preliminary plans call for a pedestrian facility located along the north side of the railroad that would connect the Florence Station to the intersection of Cedar Lane and Railroad Avenue. The concepts described in this memorandum build on those presented in Florence Township’s unsuccessful 2016 Transportation Alternatives Program (TAP) application. Furthermore, a pedestrian access concept similar to the one discussed in this document was included as a recommendation in DVRPC’s 2018 Freight Movement Around New Jersey Turnpike Interchange 6A study.

More information on the station area’s transportation context is presented on pages 3 and 4.
TRANSPORTATION CONTEXT

NJ TRANSIT River LINE

The Florence Station is one of 21 stations on NJ TRANSIT's River LINE, a diesel light rail system that connects the cities of Camden and Trenton, New Jersey (see Figure 2). The rail line opened in 2004 and carried over 2.7 million passengers in FY17. End-to-end travel times for the 34-mile route are scheduled for 65 to 68 minutes depending on the day and time of travel. Service is offered from just before 6 a.m. to approximately 9:30 p.m. Saturday service begins before 6 a.m. and concludes between midnight and 1 a.m. on Sunday morning.

Fifteen-minute headways are scheduled during morning and afternoon peaks hours, with service offered every 30 minutes during off-peak hours and on weekends. Adult one-way tickets cost $1.50 regardless of the distance traveled.

The River LINE operates over a Conrail freight line. A shared use arrangement separates passenger train activity from nightly freight operations over the same tracks.
**Bus and Shuttle Service**

The **NJ TRANSIT Route 409** bus travels through the western portion of the Florence Station area. Providing service between Trenton and Philadelphia, the Route 409 travels on Route 130, Dulty’s Lane, and River Road.

The Florence Station is directly served by the **BurLink B5 Route** (Florence Rail Station - Haines Industrial Center). BurLink is a fixed route weekday bus system that serves residents, employees, and visitors of Burlington County. The BurLink system is provided by the Burlington County Board of Chosen Freeholders and operated by Stout’s Transportation Services. Funding is provided by NJ TRANSIT and the County of Burlington.

The B5 bus provides weekday service between the hours of 5:45 a.m. to 8:00 a.m. and 3:25 p.m. to 6:15 p.m. In addition to serving destinations within the Haines Industrial Center, the B5 Route runs along Railroad Avenue between Cedar Lane and Delaware Avenue and offers limited service to properties on Cedar Lane north of Railroad Avenue.

Recent development has fueled demand for **private shuttle service** as well. In addition to the routes listed above, there is a network of marked and unmarked private shuttles that provide service between the Florence Station and local employers, including Amazon Florence.

**Recent and Proposed Infrastructure Improvements**

Two recently constructed and one proposed infrastructure project are also identified on Figure 1.

The **Cedar Lane Roundabout** (A) was completed in 2018 at the intersection of Railroad Avenue and Cedar Lane. This roundabout was designed to better direct the flow of traffic and improve safety for motorists and pedestrians.

Pedestrian mobility in this area was also enhanced by new **Cedar Lane sidewalks** (B) between the new roundabout and Morris Court.

Florence Township and Burlington County continue to investigate the feasibility of a new **connector road** (C) between John Galt Way and Cedar Lane. Various alignments have been discussed, and this connector road could be combined with a realignment of Cedar Lane between Route 130 and the roundabout. While the inclusion of sidewalks along a connector road could create a new long-term east-west pedestrian connection in the station area, it does not address the more immediate connectivity issues between the Florence Station and Cedar Lane.
The Florence Station to Cedar Lane pedestrian access concept was developed by Florence Township in conjunction with Maser Consulting. The concept (illustrated in Figure 3) calls for an 8-foot wide path that stretches 3,200 feet from the north parking area of the Florence Station to a roundabout at the intersection of Railroad Avenue and Cedar Lane. The pathway generally runs along the southern lot line of a series of properties owned by NJ TRANSIT, the Haines Center Florence, Conrail, and the NJ Turnpike Authority that abut the Bordentown Secondary Line right-of-way. The separation between the railroad tracks and the conceptual walkway varies from 10 to 60 feet, depending on the location.

The first 340 feet of the conceptual walkway would be built on Block 158, Lot 9 at a distance of approximately 50 feet from the northernmost tracks. The pathway would continue approximately 1,300 feet through Block 158, Lot 8, including across a portion of the Bustleton Creek, at a distance between 50 and 60 feet from the northernmost tracks.

At this point, the pathway would need to cross the Turnpike Industrial Freight Track before traveling approximately 500 feet along Block 158, Lot 10.02 at a distance of 35 feet from the northernmost track. The final stretch of the walkway travels under the Cedar Lane overpass and the NJ Turnpike PA Extension at a distance of approximately 10 feet from the northernmost tracks before reaching the Cedar Lane/Railroad Avenue roundabout.

Property Access and Physical Planning Considerations

Constructing the Florence Station to Cedar Lane pathway will require access agreements with the four property owners through which the walkway would pass. In preparation for their 2016 TAP application, Florence Township reached a preliminary agreement with the Whitesell Construction Company, an agent of the Haines Center–Florence, L.L.C., to dedicate an easement through this property for the purposes of a future walkway. This preliminary agreement is subject to a variety of conditions related to the sidewalk design, construction, maintenance, and liability.

Similar access agreements will need to be negotiated with NJ TRANSIT, Conrail, and the New Jersey Turnpike Authority. As passenger and freight rail operators on this corridor, NJ TRANSIT and Conrail would need to consider the potential safety and operational implications of any new pedestrian infrastructure. Some of these considerations are addressed in the Active Rail Concerns section below.

North of Conrail’s property (Block 158, Lot 10.2), the trail would need to pass under elevated portions of Cedar Lane and the NJ Turnpike Extension on property owned by the NJ Turnpike Authority. Space limitations for the proposed trail are most acute in this area. Here, Cedar Lane is separated from the railroad bed by approximately 20 feet, and space available for a trail is further constrained by the presence of bridge supports for elevated portions of Cedar Lane and the NJ Turnpike.

In addition to negotiating the required access agreements, the feasibility and cost of this multi-use trail would be influenced by the infrastructure required to traverse physical obstacles such Bustleton Creek and the Turnpike Industrial Freight Track (see Figure 3). For example, the trail may need to incorporate a bridge or culvert in order to cross the Bustleton Creek which runs through a portion of Block 158 Lot 8. Similarly, the trail will need to cross the Turnpike Industrial Freight Track which runs along the edge of Block 158 Lot 10.2. The New Jersey Department of Transportation’s (NJDOT’s) Railroad and Engineering and Safety Unit is responsible for reviewing changes and improvements to public rail crossings. Accordingly, a new at-grade crossing of this track would require approval from the NJDOT Diagnostic Team.

Public Safety and Liability

The Florence Station to Cedar Lane walkway concept is a lengthy facility that has been proposed for a secluded portion of the township, away from buildings and existing streets. The relative isolation of the proposed walkway has caused stakeholders to raise a variety of issues related to public safety and liability. What features can help promote public safety and discourage criminal activity on the trail? Would the
The Florence Station to Cedar Lane Pedestrian Access Concept illustrated below calls for an 8-foot wide path that stretches 3,200 feet from the north parking area of the Florence Station to a roundabout at the intersection of Railroad Avenue and Cedar Lane. The pathway is generally aligned along the southern lot line of a series of properties owned by NJ TRANSIT, the Haines Center Florence, Conrail, and the NJ Turnpike Authority that abut the Bordentown Secondary Right-of-Way. The separation between the railroad tracks and the conceptual walkway varies from 10 to 60 feet depending on the location. Any trail designs would need to be coordinated with property owners and incorporate measures that promote public safety and ensure adequate separation from active rail lines. The location of the 100-year floodplain is generally aligned along the southern lot line of a series of properties owned by NJ TRANSIT, the Haines Center Florence, Conrail, and the NJ Turnpike Authority.

**Design Considerations**

A bridge or culvert will be required for the trail to cross Bustleton Creek. New sidewalks and crosswalks will be needed at the Cedar Lane roundabout to connect trail users to Cedar Lane.

**Property Ownership**

- Block 158, Lot 9: New Jersey Transit
- Block 158, Lot 8: Haines Center Florence LLC
- Block 158, Lot 10.2: Conrail
- A block 158, Lot 10.2: NJ Turnpike Authority

*Florence Riverline Station Conceptual sidewalk alignment with 5-Ft. contour lines

100-year floodplain

1. Cedar Lane Roundabout
2. Conceptual Sidewalk
3. 5-Ft. contour lines

Figure 3: Florence Station to Cedar Lane Pedestrian Access Concept
Township and/or private land owners be liable in the event of an injury?

Lighting has always been viewed as essential to the safety and functionality of the pathway, and the installation of security cameras and emergency call boxes have been discussed as an additional safety measure. Safety and security concerns might be further assuaged by altering the design of the trail as needed to enable police and/or emergency response vehicles to travel along the trail.

All fifty states have enacted recreational uses statues that protect landowners from liability for injuries to recreational users of their property. However, it is unclear if walking and/or biking to and from transit would qualify as the type of recreational use typically covered by these statutes. Additional consultation with municipal law experts will be needed to identify and address any potential legal issues related to this trail concept.

In general, the literature on these topics suggests that although recreational use statutes and easement agreements may provide landowners with legal protections, they do not prevent lawsuits. In order to reduce exposure to lawsuits, landowners and municipal entities can hold liability insurance, adhere to trail design and maintenance standards, post appropriate signs (such as No Trespassing), and plan for emergencies. Where a trail is owned or operated by a public entity, the trail liability insurance may be included in the public entity’s overall insurance policy.

The Pennsylvania Land Trust Association has published Model Trail Easement Agreements that may be useful to Florence Township and stakeholders as they investigate this concept. For more information, please visit: https://conservationtools.org/library_items/324.

Active Railway Concerns

The pedestrian access concept described in this memo is being discussed because of its potential ability to provide a safe alternative to trespassing on the tracks. Despite this goal, the prospect of formalizing pedestrian access along this heavily-used rail corridor raises substantial safety and operational concerns for NJ TRANSIT and Conrail. As part of this study, NJ TRANSIT has shared jurisdictional guidance and a preliminary list of design requirements that would need to be incorporated into a project like this. These conditions and requirements can be used to give Florence Township a sense of the features and level of coordination that would be needed to advance this concept.

Based on this guidance, any pedestrian facility in this location would need to include safety features and elements, such as adequate lighting and fencing along the length of the walkway, ‘No Tresspassing’ signs, and cameras that are compatible with NJ TRANSIT’s security system. To date, Conrail has not provided guidance on how such a walkway could potentially be designed adjacent to its service.

Preliminary Project Costs

DVRPC Safe Routes to Transit staff worked with Florence Township representatives and DVRPC Project Implementation staff to refine cost estimates for this project that were originally generated during the TAP application process. The cost of constructing this trail using bituminous materials is estimated at roughly $475,000. Cost estimates for the project increase by roughly $100,000 if concrete were to be used instead of bituminous construction materials. More details on these estimates can be found in the Appendix.

These estimates include materials and construction-related activities, such as mobilization and inspection. However, they do not include costs for ongoing maintenance, security camera installation, or specialized infrastructure required to traverse the Bustleton Creek or the Turnpike Industrial Freight Track. Maintenance considerations include surface repair, snow removal, and mowing. A recent Rails-to-Trails Conservancy report suggests that the maintenance of an asphalt surface trail averages approximately $2,000 to $5,000 per year per mile based on a survey of 200 organizations.
NEXT STEPS

Addressing the actions and concerns identified in this memo will require additional planning, coordination, and engineering. In order to continue refining the Florence Station to Cedar Lane pedestrian concept, Florence Township can consider taking the following steps:

1. Contact the real estate departments of NJ TRANSIT, Conrail, and the NJ Turnpike Authority to begin more formal discussions related to access and design review.
2. Engage NJDOT’s Railroad Engineering and Safety Unit to begin the process of conducting a Diagnostic Team Review of the overall project and the conceptual crossing of the Turnpike Industrial Freight Track.
3. Review potential funding sources to determine the applicability of various grant programs. More information on potential funding sources can be found below.

Potential Funding Sources

DVRPC maintains an online Municipal Funding Resource database at www.dvrpc.org/asp/MCDResource. This database is intended to assist local governments, community groups, and non-profit organizations in identifying federal, state, regional, county, and private sources of funding for locally-initiated planning and development projects. Two of the most relevant potential funding sources for pedestrian and bicycle projects in New Jersey include the New Jersey Transportation Alternatives Program and the Congestion Mitigation and Air Quality Improvement Program (CMAQ).

The Transportation Alternatives Set-Aside Program (TASA) are Federal highway and transit funds under the Surface Transportation program (STP) for community based "non-traditional" projects designed to strengthen aspects of the nation's intermodal system. The TA Set-Aside Program continues to provide funds to build pedestrian and bicycle facilities, improve access to public transportation, create safe routes to school, preserve historic transportation structures, provide environmental mitigation, and create trail projects that serve a transportation purpose while promoting safety and mobility. The solicitation round for the 2018 TA Set-Aside round closed on August 23, 2018. More information about this program is available at www.dvrpc.org/tap/nj. NJDOT has also published a TA Set-Aside Program Handbook that can be accessed at www.dvrpc.org/tap/nj/pdf/2358_2018TASet-AsideHandbook5-15-18.pdf.

DVRPC’s CMAQ Program seeks to fund transportation projects that will improve air quality and reduce traffic congestion in the DVRPC Region. CMAQ eligible projects will demonstrably reduce air pollution emissions and help the DVRPC region meet the federal health based air quality standards. Examples of eligible CMAQ projects include pedestrian and bicycle projects, transit improvement programs, congestion reduction and traffic flow improvements, and funding of transportation demand management programs, among others. More information about this program is available at www.dvrpc.org/cmaq.

This CMAQ Program is not a grant program. The sponsor does not receive grant funds to start the project; rather, the sponsor is reimbursed for costs incurred after receiving funding authorization for the project and a notice to proceed. Costs incurred prior to project selection and notice to proceed will not be reimbursed. All awarded projects must authorize federal CMAQ funds by the deadline stated in their award letters. Due to the complexity of managing CMAQ construction projects, DVRPC typically requires a minimum project request of $250,000 for construction projects. There is also a soft maximum cap of $4 million for a single application.
SUPPORTING STRATEGIES

In addition to their feedback on the Florence Station to Cedar Lane pedestrian concept, stakeholders identified a series of other strategies designed to support greater overall mobility in the station area. The following strategies represent a range of shorter- and longer-term actions that can complement and/or provide an alternative to the walkway discussed here.

BurLINK Shuttle

The BurLINK B5 shuttle (See Figure 4) already plays an important role in helping River LINE riders overcome critical first/last mile barriers that exist between the station and Railroad Avenue and Cedar Lane destinations. Shuttle service will likely remain a critical piece of the local transportation network even if a new trail were to be constructed.

In recent years, Cross County Connection has made recommendations regarding potential modifications to the BurLINK B1 and B2 routes. Based on recent development trends and growing demand for private shuttles in the Florence Station Area, it may be time for a comprehensive reassessment of the B5 route and schedule. In order to maximize the effectiveness of any operational changes, input from local employers about their transportation needs should be gathered and coordinated with any potential service revisions being considered by NJ TRANSIT. A collaborative planning process may lead to the creation of an updated unified shuttle route that can enhance transportation efficiencies and better serve local employee. In addition to routing and scheduling, this planning process could explore longer term issues related to fare structures, route and shuttle branding, and funding sustainability.

Education and Outreach

Educational outreach related to safe practices around railroad tracks and trespass prevention should also continue to play an important role in the Florence station area. The NJ TRANSIT Office of System Safety, NJ TRANSIT Police Department, and New Jersey Operation Lifesaver have promoted railroad safety and trespass prevention strategies in and around the Florence Station since before the River LINE began operating.

Figure 4: B5 BurLINK Florence Rail Station to Haines Industrial Center Route

To view an interactive map of the route, visit driveless.com
For example, New Jersey Operation Lifesaver safety blitzes have been held at the Florence Station to alert customers to the dangers of trespassing and many Florence Township schools receive NJ TRANSIT Safety Education Program presentations on rail safety on an annual basis. Past outreach to nearby businesses has resulted in the distribution of railroad safety education materials and safety presentations.

Ongoing education to local employers remains a priority due to the influx of new employees, round the clock operations, and potential language barriers. Station area stakeholders should continue to look for opportunities to present educational materials at the station and encourage local employers to incorporate rail safety topics into employee trainings and orientation materials.

New Cedar Lane Station

During the course of this study, the prospect of a new River LINE station near the Cedar Lane roundabout was suggested as a potential alternative to a new walkway. A new station would likely eliminate the need for a walkway and lessen the overall distance that employees would need to travel to reach their final destinations by over one-half mile.

NJ TRANSIT has the estimated the cost of a new River LINE station at Cedar Lane to be approximately $5 million. This estimate is based on the cost of the most recently constructed station with current cost escalations and delivery by a third party. The estimate excludes property acquisition and other associated hard and soft costs such as traffic control measures and safety-related requirements. NJ TRANSIT does not have any funding allocated for such a project. Analysis of the impacts that a new station would have on River LINE scheduling, ridership, and operations was not conducted as part of this study.

The idea of a new station that better serves Cedar Lane and Railroad Avenue employment destinations remains an attractive concept that will require additional study and coordination. In order for this concept to advance, Florence Township may need to explore creative funding options and partnership opportunities with local employers and property owners.
### TRAIL CONSTRUCTION

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**Materials and Construction Subtotal**: $460,420

**10% contingency**: $46,042

- **Construction Mobilization** (estimated as 2% of construction cost): $9,208
- **Construction Inspection** (estimated as 10% of construction cost): $46,042
- **Traffic Control Measures** (estimated as 3% of construction cost): $13,813

**Total**: $575,525

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1. These cost estimates do not include any specialized infrastructure required in order to cross the Bustleton Creek or the Turnpike Industrial Freight Track.

2. Using bituminous construction materials rather than concrete could reduce this cost by roughly $100,000.