AUGUST 2025

DELAWARE VALLEY dvrpc REGIONAL PLANNING COMMISSION

SAFE ROUTES TO SCHOOL

POTTSTOWN

DELAWARE VALLEY
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REGIONAL
PLANNING COMMISSION

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Executive Summary

Background and Scope

The DVRPC Pottstown Area Safe Routes to School study explores the potential for improving active transportation options throughout the Pottstown area, promoting safe connections to local schools. The Montgomery County Planning Commission (MCPC) requested the study on behalf of the Pottstown Metropolitan Regional Planning Commission (PMRPC) to analyze and develop recommendations for safe routes to schools.

Project Goals and Approach

This study seeks to achieve the following goals:

- Identify challenges and barriers to walking and biking to school
- Develop location-specific concept designs to address and overcome the identified obstacles

To achieve these goals, DVRPC consulted with MCPC to identify several interested schools in the Pottstown region, landing on the following list:

- West Pottsgrove Elementary School, *West Pottsgrove Township, Montgomery County*
- Gilbertsville Elementary School, *Douglass Township, Montgomery County*
- Boyertown Area Middle School East, *New Hanover Township, Montgomery County*
- East Coventry Elementary School, *East Coventry Township, Chester County*
- North Coventry Elementary School, *North Coventry Township, Chester County*
- Rupert Elementary School, *Pottstown Borough, Montgomery County*

While some of the selected schools are in the same school district, each operates independently and, therefore, was studied independently. The six schools had varying levels of interest in the Safe Routes to School program and a wide range of existing infrastructure and land use contexts. Some schools and municipalities had numerous previous studies of or plans for walking and biking in the area, while others are being studied for the first time.

DVRPC conducted a geographic analysis of existing pedestrian and bicycle facilities and bicycle networks, the local road network, demographics, surrounding land uses, and crash information. The project team connected with school administrators and parent teacher associations (PTAs) to share an online survey with students and their families to learn about their concerns about commuting to and from school using active transportation.

Report Organization

Each school has its own chapter, which includes a localized analysis of existing conditions and proposed designs.

- Basic school information
- Planning context
- Crash history
- Demographics
- Engagement Feedback

Recommendations

To improve active transportation safety and access to Pottstown area schools, the project team developed conceptual designs and traffic calming recommendations. These improvements include a combination of traffic calming, curb extensions, signage, and pedestrian/bicycle facilities. The project team included rough cost estimates and next steps to guide the municipalities and schools to apply for Safe Routes to School funding to help implement these recommendations.

CHAPTER 1:

Introduction

Safe Routes to Schools (SRTS) is a nationally recognized program focused on increasing students' safety and improving accessibility to alternative transportation options, like walking, biking, and rolling. The Delaware Valley Regional Planning Commission (DVRPC) collaborated with the Montgomery County Planning Commission and the Pottstown Metropolitan Regional Planning Committee (PMRPC) to design safer pedestrian and bicycle routes for several schools in the Pottstown area:

- West Pottsgrove Elementary School, *West Pottsgrove Township, Montgomery County*
- Gilbertsville Elementary School, *Douglass Township, Montgomery County*
- Boyertown Area Middle School East, *New Hanover Township, Montgomery County*
- East Coventry Elementary School, *East Coventry Township, Chester County*
- North Coventry Elementary School, *North Coventry Township, Chester County*
- Rupert Elementary School, *Pottstown Borough, Montgomery County*

The selected schools vary considerably in development context, existing bicycle and pedestrian infrastructure, access patterns, and experience with SRTS programs. Where some schools primarly bus students to and from school, others have large shares of "walkers" or dropoffs. These differences required the project team to examine each school individually, ensuring that the recommendations are relevant and realistic.

What's inside the report?

This report offers recommendations and conceptual designs for improvements to bicycle and pedestrian facilities for students based on concerns identified by school staff, parents, and students. Each chapter focuses on a different school and includes the following details:

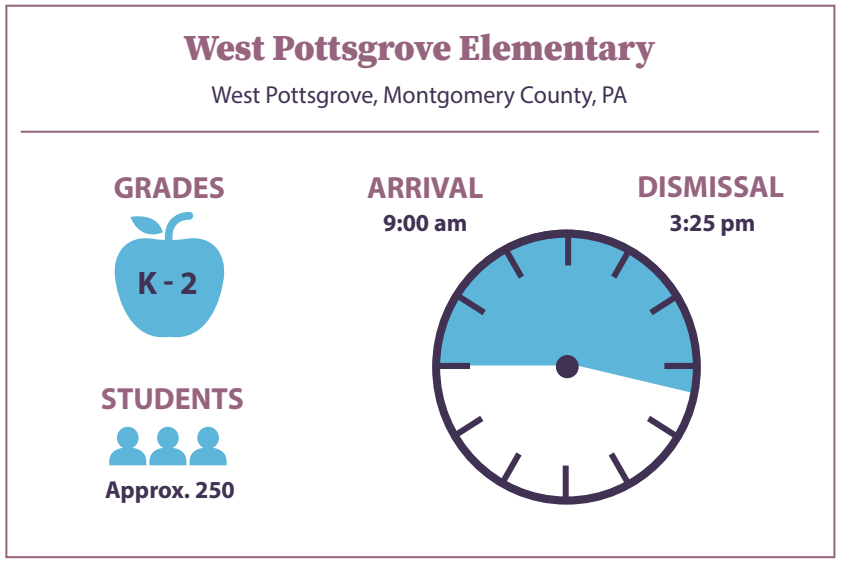
- Planning context
- Crash history
- Demographics
- Engagement
- Proposed improvements
- Cost estimates
- Next Steps

The results of this study are intended to help the school district or municipality to apply for Safe Routes to School funding.

> "Safe Routes to School programs aim to make it safer for students to walk and bike to school and encourage more walking and biking where safety is not a barrier."
>
> *– National Center for Safe Routes to School*

CHAPTER 2:

West Pottsgrove Elementary School



Planning Context

West Pottsgrove Elementary, part of the Pottsgrove School District, is located in a primarily residential area adjacent to the border between Montgomery and Berks counties (Figure 1). Commercial and industrial land uses are nearby to the south, along High Street, and to the east, approaching PA-100. A local airport is located approximately ¾ mile to the north, and the Schuylkill River is approximately 1-mile to the south.

All of the local roads are municipal-owned, while nearby Grosstown Road and High Street are owned by PennDOT (Figure 2). The neighboring residential area is relatively well connected by consistent sidewalks, which can be used by students walking to and from school (Figure 3). The only bicycle facility in the area is the Schuylkill River Trail, which is not well connected to the neighborhood and is unlikely to be used by students traveling to and from school.

Crash History

The project team performed a crash analysis using PennDOT data from 2018 through 2022 to get a sense of the area's crash experience and identify locations with critical safety issues. The analysis revealed 107 reported crashes within a 1-mile radius of West Pottsgrove Elementary School (Figure 4). Of those, two crashes resulted in someone being killed or severely injured (KSI), four involved pedestrians, and none involved bicyclists (out of 107 reported crashes). The majority of crashes occurred along busy corridors, such as High Street and Route 422. However, most of the pedestrian-involved crashes occurred at intersections of local roads.

Demographics

The project team analyzed Indicators of Potential Disadvantage (IPD), which estimates potential disparities across local communities, with a focus on income and the population groups protected by Title VI:

- Youth (under the age of 18)
- Older Adults (age 65 and over)
- Racial Minority
- Ethnic Minority
- Female
- Foreign Born
- Limited English Proficiency
- Disabled
- Low Income (within 200% of the poverty line)

This is achieved by comparing the population of each group in a tract to the nine-county DVRPC region. Based on this analysis, census tracts receive a score ranging from Well Below Average to Well Above Average.

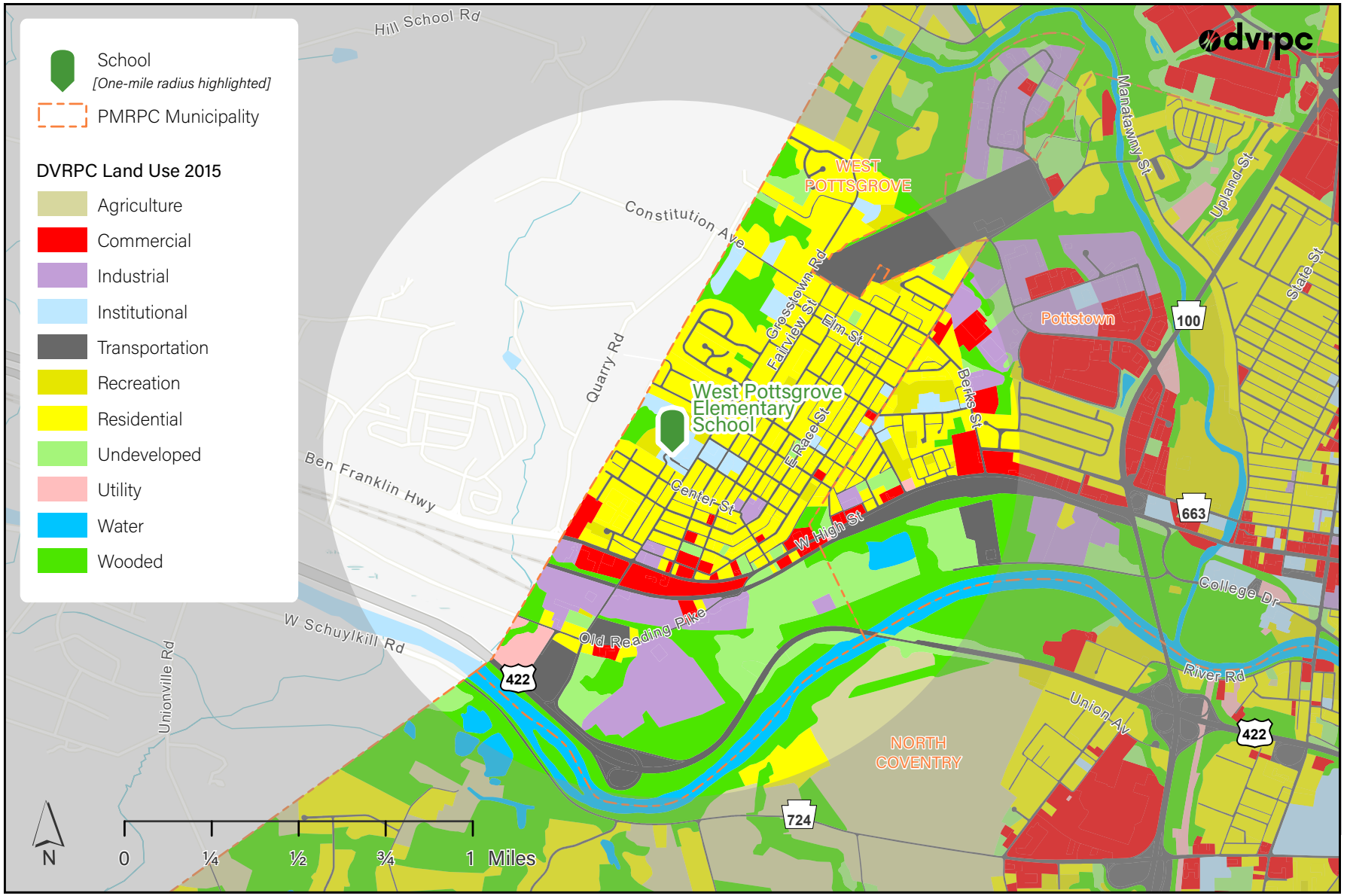
Five census tracts are within a 1-mile radius of West Pottsgrove Elementary School (209000, 209201, 209202, 301401, and 301402). All census tracts score at or Below Average in all indicators of potential disadvantage, with the exception of Disabled and Low Income. Census tract 209000 has a Well Above Average concentration of disabled residents compared to the region. The same tract also has an Above Average proportion of low-income residents. Tract 209201 also has an Above Average proportion of disabled residents. Detailed results of the IPD analysis and a census tract reference map are in Appendix A.

Engagement

In 2023, the project team attempted to conduct an online survey to learn about parents' concerns regarding students walking and biking to West Pottsgrove Elementary School. The survey contained a web map for participants to identify location-specific concerns and generalized questions regarding school transportation habits and issues.

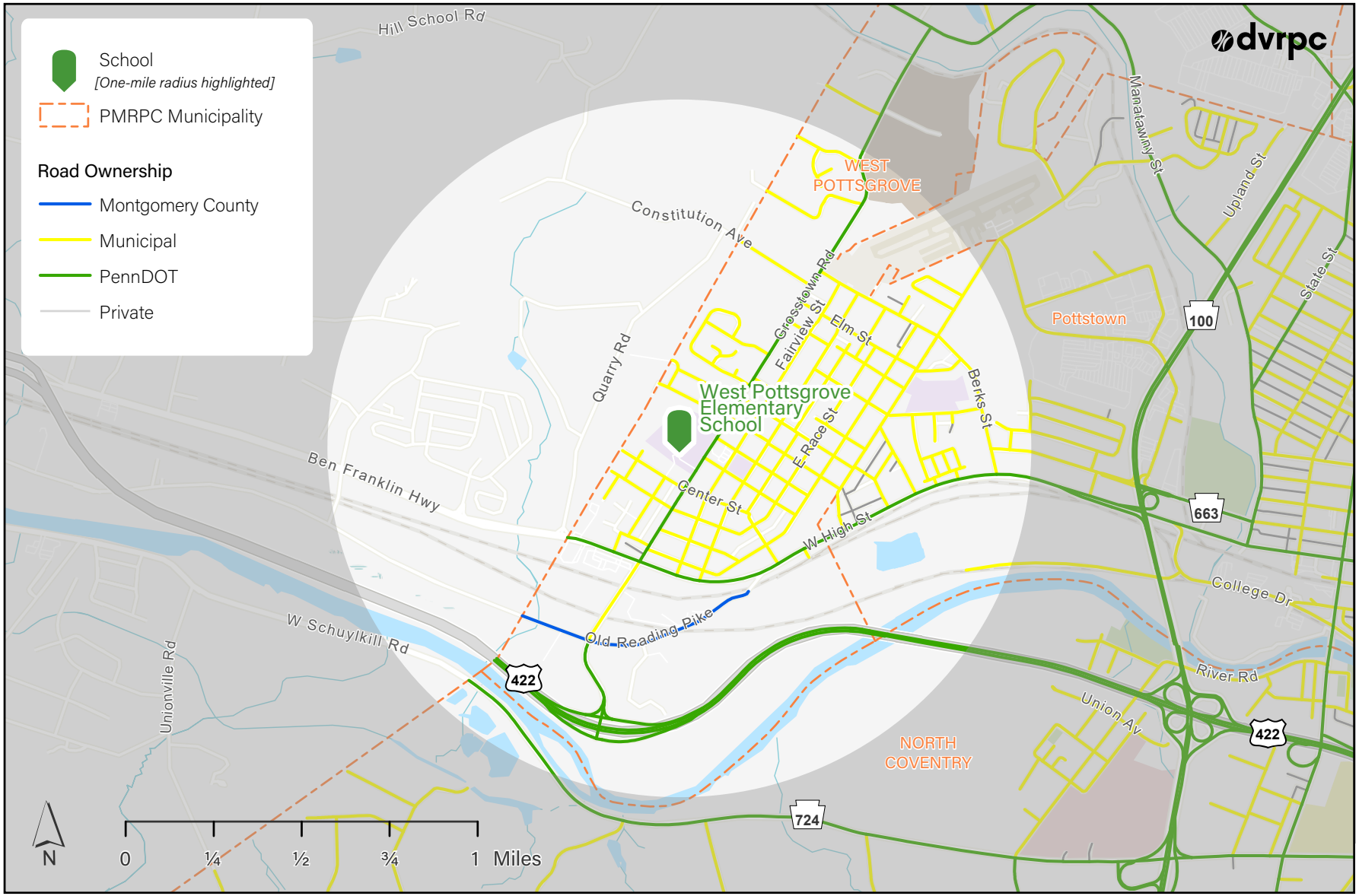
The project team interviewed West Pottsgrove Elementary School's principal to gauge the school's interest, participation level, and potential promotional opportunities. While the municipality was interested in the Safe Routes to School study, the school declined to promote the survey to their students and parents.

Figure 1: Land Use Surrounding West Pottsgrove Elementary School



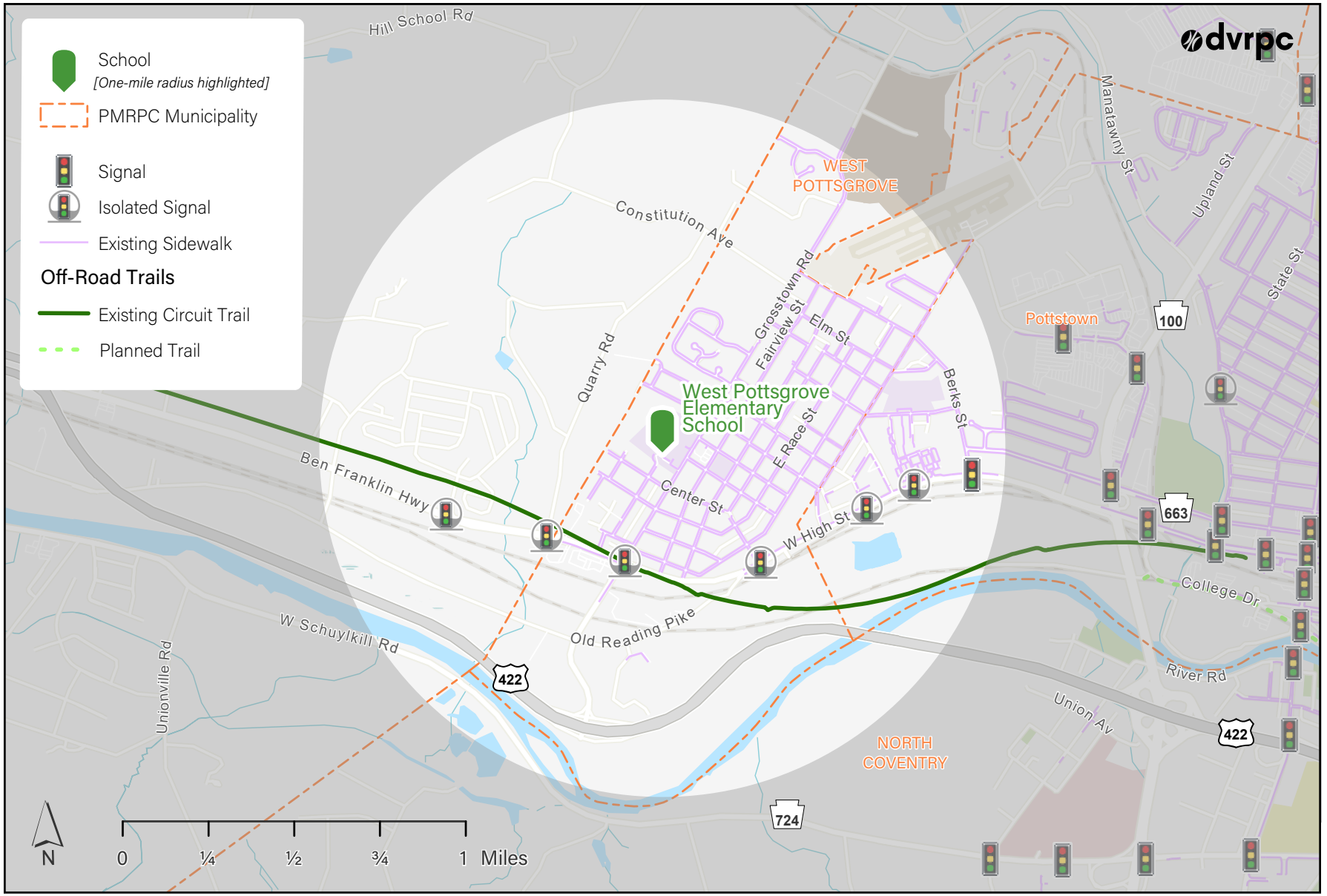
Source: DVRPC, 2024

Figure 2: Road Ownership Surrounding West Pottsgrove Elementary School



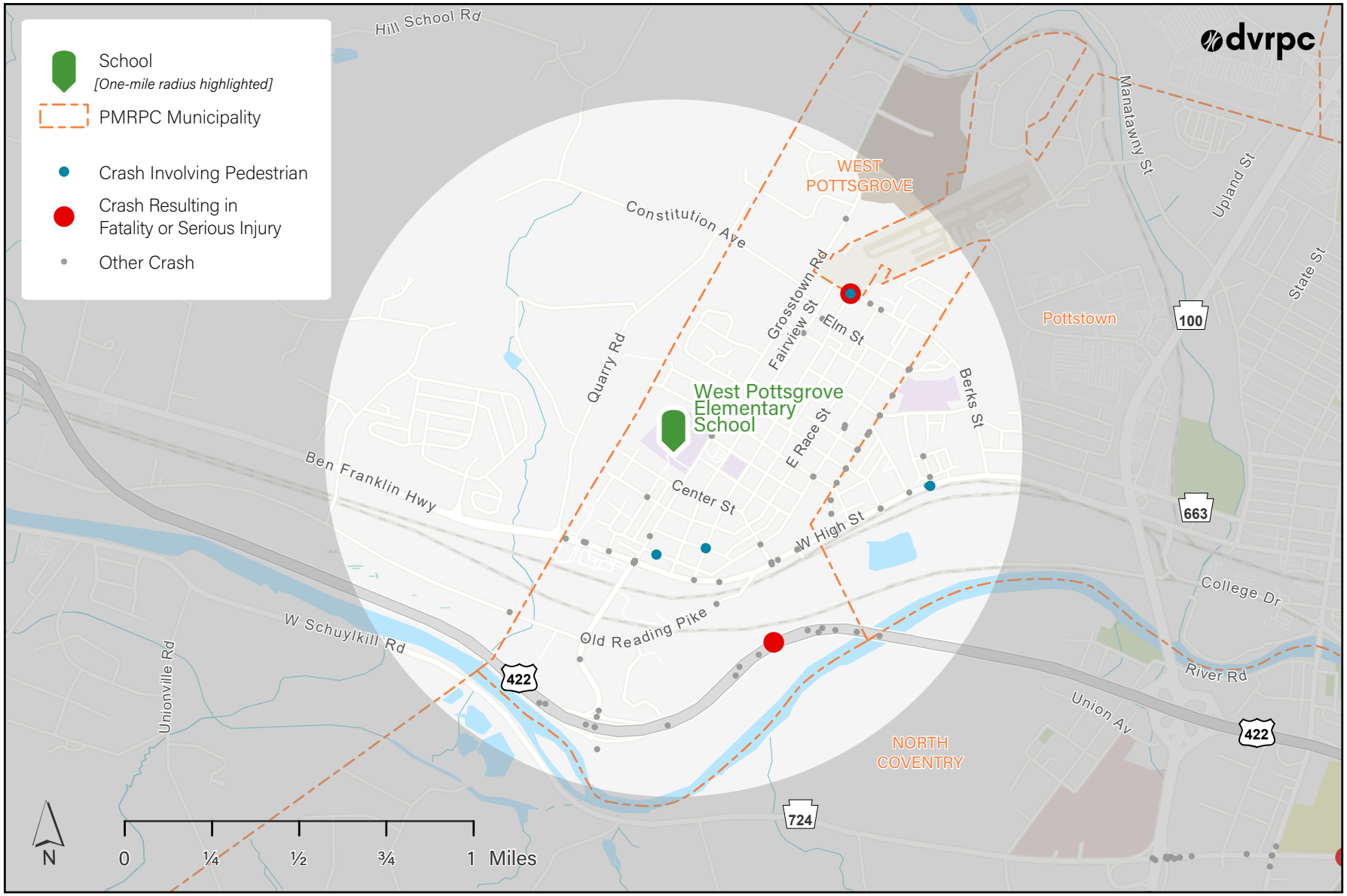
Source: DVRPC, 2024

Figure 3: Existing Pedestrian and Bicycle Facilities near West Pottsgrove Elementary School



Source: DVRPC, 2024

Figure 4: Crash History near West Pottsgrove Elementary School



Source: DVRPC, 2024

Proposed Improvements

In addition to the existing conditions analysis and engagement with the school community, the project team visited the school in Spring 2024 to observe travel patterns and student and parent behaviors at pickup and drop off times. Together, this background research identified the need for the following improvements.

West Pottsgrove Elementary School lacks safe pedestrian crossing facilities around the perimeter of the school, particularly along Jay Street, Center Street, and Grosstown Road. Some students were observed walking between vehicles near the drop-off loop creating additional safety concerns. Figure 10 depicts a visualization of all the recommended improvement areas.

Pedestrian Intersection Improvements

The project team recommends pedestrian crossing improvements on Jay Street, Center Street, and Grosstown Road to increase the safety of pedestrians walking to and from school (Figure 5-9). The proposed improvements include curb extensions, signage, updated crosswalk markings, and new crossings. At Grosstown Road and Monroe Street, the project team suggests implementing perpendicular, ADA-compliant pedestrian ramps, pedestrian warning signage, and updating the crosswalk markings from transverse to continental (Figure 5). The project team recommends implementing a second midblock crossing on Grosstown Road leading to the southern school driveway (Figure 7). A perpendicular pedestrian crossing should also be considered across the school's northmost driveway (Figure 6).

Since the surrounding area has a relatively high concentration of disabled residents, it is critical that ramps are upgraded and new ramps are designed to current standards. Complementarily, the project team recommends shifting the crosswalks away from the corners to facilitate shorter, more direct crossings along Center Street at Jay Street (Figure 8-9). Curb Extensions at Grosstown Road and Center Street also reduce crossing distances, particularly along slightly busier roadways like Grosstown Road.

Figure 5: West Pottsgrove Grosstown Road Proposed Improvements

Figure 6: West Pottsgrove Grosstown Road Proposed Improvements

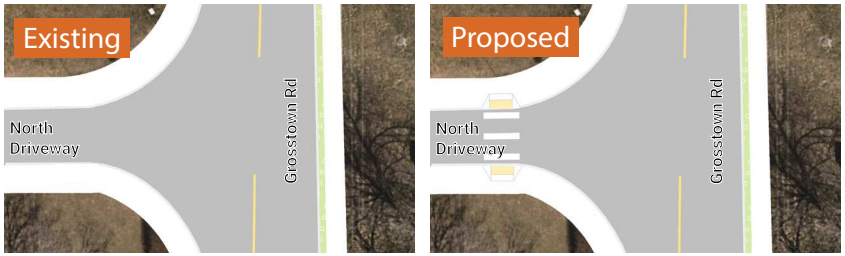


Figure 7: West Pottsgrove Grosstown Road Proposed Improvements

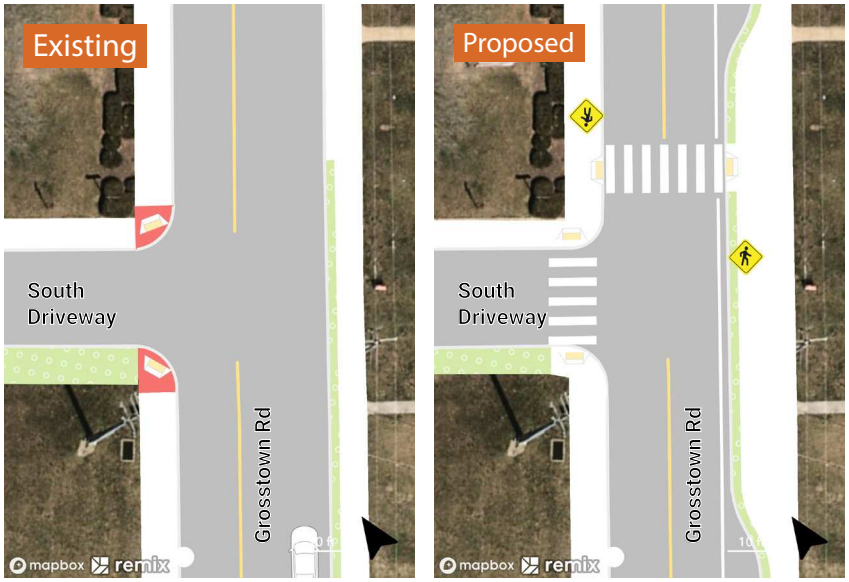


Figure 8: West Pottsgrove Center Street & Jay Street Proposed Improvements

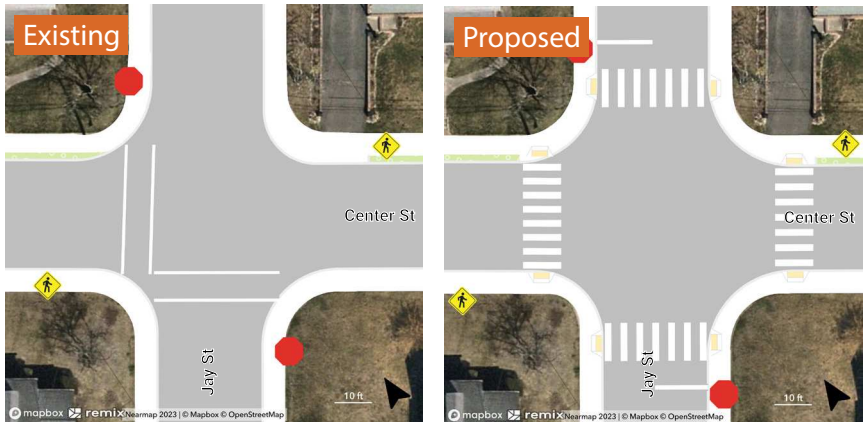


Figure 9: West Pottsgrove Grosstown Road & Center Street Proposed Improvements

Table 1: West Pottsgrove Elementary School Cost Estimates

Item	Notes	Cost per Item	Measurement	Quantity	Total Cost
ADA-Compliant Curb Ramp	Standard dimensions	$10,000	Each	24	$240,000
Curb Extensions (Small)	LF Curb: 50' Sidewalk: 12 sq. yd. Grass: 10 sq. yd. Excavation of existing pavement (y/n): Y	$10,000	Each	4	$40,000
Curb Extensions (Large)	LF Curb: 100' Sidewalk: 100 sq. yd. Grass: 60 sq. yd. Excavation of existing pavement (y/n): Y	$40,000	Each	1	$40,000
Continental Crosswalks	Standard dimensions (per assuming 12 LF) (per length of crossing)	$2,000	Each	12	$24,000
New Stop Bar	Standard width	$150	Each	5	$750
New Signage	Size: conventional (MUTCD) Type: stop, yield, one-way, no parking, school zone, do not enter, pedestrian crossing Post: standard	$350	Each	6	$2,100
Reinstall/relocate existing signage after curb extensions or ADA ramps are installed	N/A	$250	Each	9	$2,250

Finally, parents and students should be encouraged to use the sidewalks provided around the loop instead of cutting through the parking lot during busy drop-off and pick-up times.

Cost Estimates

Based on the recommendations above, the project team developed a rough estimate of overall construction costs to help identify appropriate funding sources. The cost estimates reflected in the table on the previous page identify the type and quantity of each recommended improvement. The team coordinated with DVRPC's Office of Project Implementation to estimate the construction cost of each element. If every recommendation listed above were constructed, this package of improvements would cost approximately $349,000 in 2025 dollars (Table 1). These planning-level cost estimates should only be used to help determine implementation feasibility and funding eligibility. More accurate cost estimates would be possible after engineering design.

Next Steps

The recommendations provided in this section serve as a menu of possible improvements, rooted in best practices and standards, for creating safe pedestrian access to and from West Pottsgrove Elementary School. Multiple state and federal funding sources (e.g., TASA, Multimodal Fund) are available to cover construction costs for transportation safety improvements. However, a number of items are needed to prepare an application for these grant programs.

Stakeholder Coordination: The municipality must coordinate with PennDOT to receive approval for improvements on state-maintained roads. Jay Street, Center Street, and Grosstown Road are locally owned roadways. Grossman Road is state-maintained. The township should coordinate with West Pottsgrove Elementary School for any improvements located on school property.

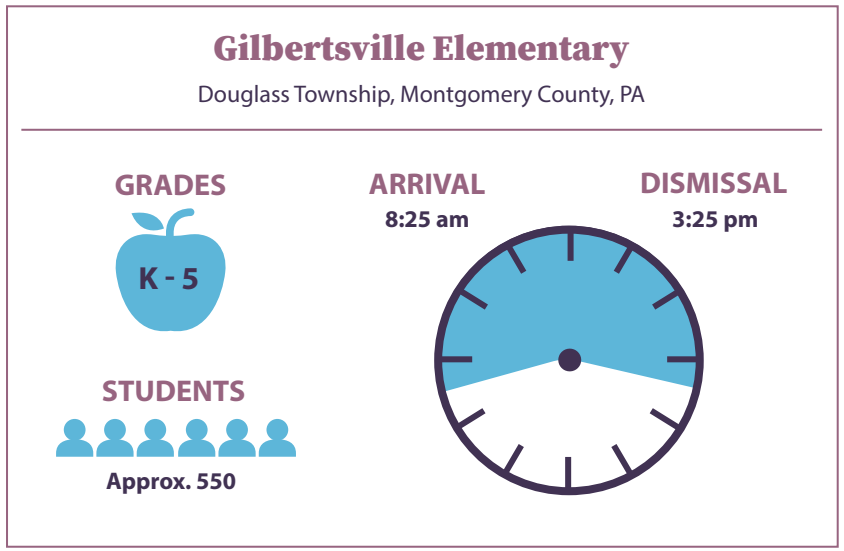
Engineering Design: Engineers will need to develop implementable designs from the proposed recommendations. They will need to consider the impact of intersection improvements on vehicular movements, drainage, and utilities, and come up with a plan to mitigate these impacts where applicable. Engineering designs will inform a more accurate estimate of the project budget and timeline. Typically, design costs around 15-20% of the estimated construction cost. Local entities will need to cover the cost of design before applying for construction funding. DVRPC's Office of Project Implementation is available to answer questions and provide guidance on developing projects to apply for construction funding. For more information, visit DVRPC's Office of Project Implementation's webpage: https://www.dvrpc.org/projectimplementation/pa.

Figure 10: Recommendations for West Pottsgrove Elementary School

Source: DVRPC, 2024

CHAPTER 3:

Gilbertsville Elementary School



Planning Context

Gilbertsville Elementary, part of the Boyertown Area School District, is located in a primarily residential, wooded, and agricultural area (Figure 11). Nearby commercial activity is centered around the adjacent Big Road (PA-73), which is owned by PennDOT (Figure 12).

The neighboring residential area is low-density and does not provide consistent sidewalks for students to travel to or from school (Figure 13). While there are no existing bicycle facilities nearby, the school is near the proposed Minister Creek and Middle Creek trails, as referenced in the Douglass Township Open Space Plan (August 2006).

Crash History

The project team performed a crash analysis using PennDOT data from 2018 through 2022 to get a sense of the area's crash experience and identify locations with critical safety issues. The analysis revealed 108 reported crashes within a 1-mile radius of Gilbertsville Elementary School (Figure 14). Of those, five crashes resulted in someone being killed or severely injured (KSI), two involved pedestrians, and none involved bicyclists (out of 108 reported crashes). There was a high concentration of crashes near the intersection of Congo Road and Big Road, adjacent to the school. Most of the KSI crashes occurred along PA-73.

Demographics

The project team analyzed Indicators of Potential Disadvantage (IPD), which estimates potential disparities across local communities, with a focus on income and the population groups protected by Title VI:

- Youth (under the age of 18)
- Older Adults (age 65 and over)
- Racial Minority
- Ethnic Minority
- Female
- Foreign Born
- Limited English Proficiency
- Disabled
- Low Income (within 200% of the poverty line)

This is achieved by comparing the population of each group in a tract to the nine-county DVRPC region. Based on this analysis, census tracts near each school receive a score ranging from Well Below Average to Well Above Average.

Four census tracts are within a 1-mile radius of Gilbertsville Elementary School (208201, 208203, 208204, and 208304). All census tracts score at or Below Average in all indicators of potential disadvantage, with the exception of Youth and Older Adults. Census tract 208203 has an Above Average concentration of youth residents compared to the region. Census tract 208304 has a Well Above Average concentration of youth residents, and Census tract 208204 has an 'Above Average' concentration of older adult residents. Detailed results of the IPD analysis and a census tract reference map are in Appendix A.

Engagement

In 2023, with support from the school, the project team conducted an online survey to learn about parents' concerns regarding students walking and biking to Gilbertsville Elementary School. The survey contained a web map for participants to identify location-specific concerns and generalized questions regarding school transportation habits and issues.

Survey Promotion

The project team interviewed Gilbertsville's principal to gauge the school's interest, participation level, and potential promotional opportunities. Gilbertsville Elementary School and Douglass Township promoted the survey virtually through their preferred communication channels. The following items were provided to assist with survey promotion:

- Draft promotional email, newsletter, social media, and morning announcements text in English and Spanish
- Social media graphics
- Printable flyer

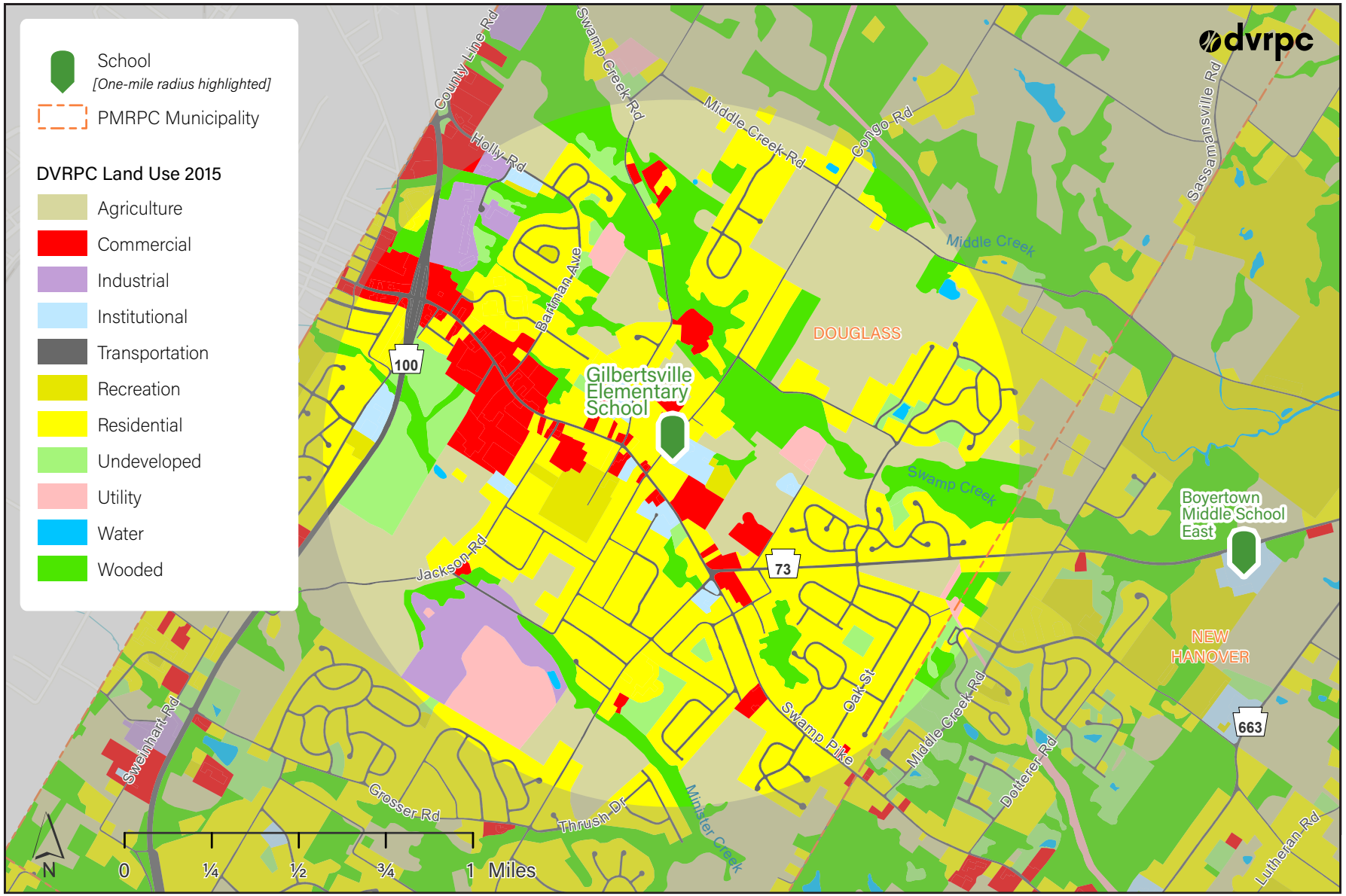
An advertising campaign ran on Facebook for the duration of this effort, targeting residents associated with the 19525 zip code.

Insights

Survey results highlighted that Gilbertsville Elementary School parents would feel comfortable having their children walk or bike to school if:

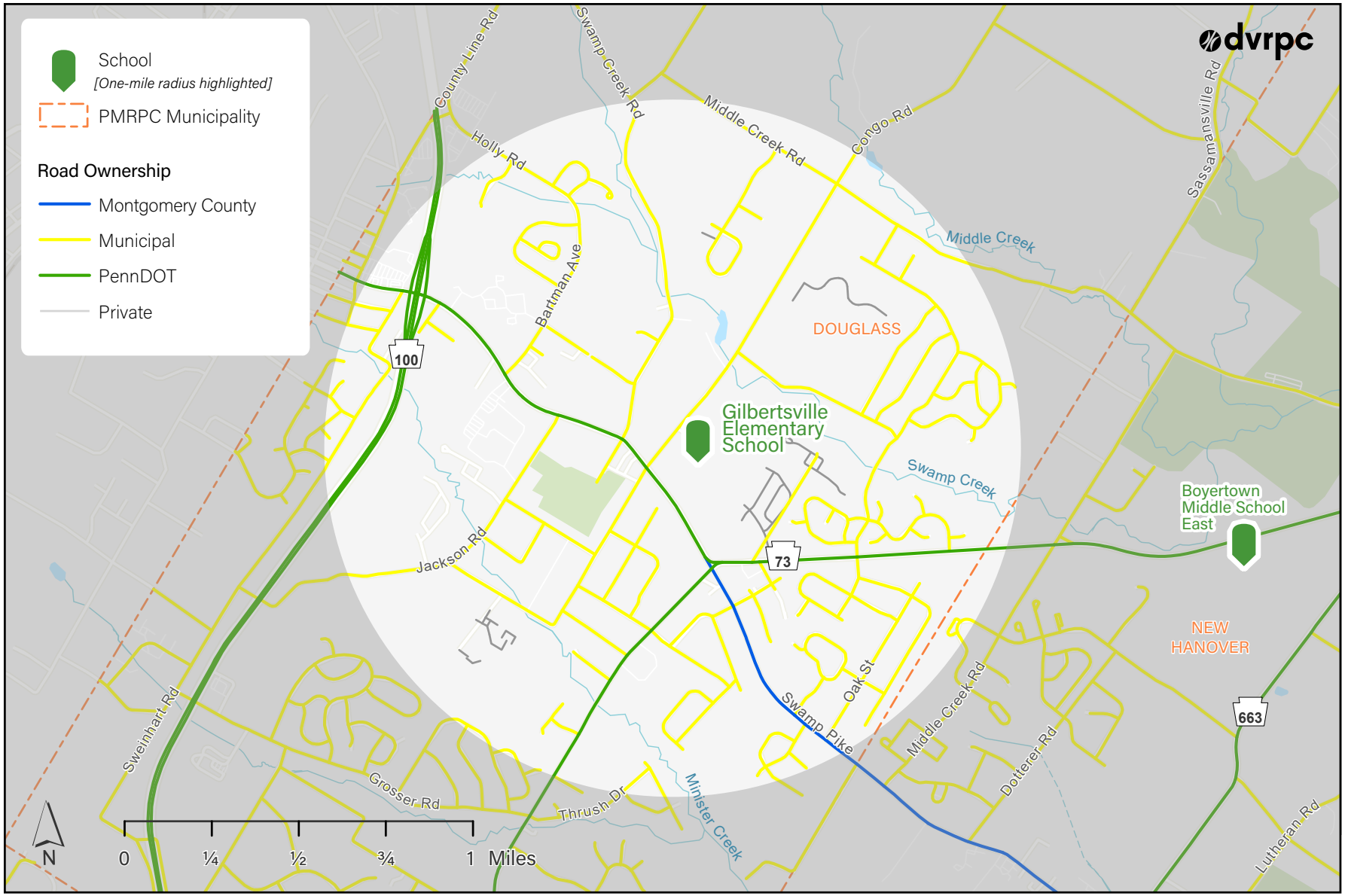
- They lived closer to the school.
- There were less instances of vehicular traffic and speeding along the route.
- There were more sidewalks and side paths.
- Crossing guards were present along the route.
- Intersections and crossings improvements were made safer for pedestrians.
- A potential for a sidepath through the clearing from Marjessa Drive to Gilbertsville Elementary School was implemented.

Figure 11: Land Use Surrounding Gilbertsville Elementary School



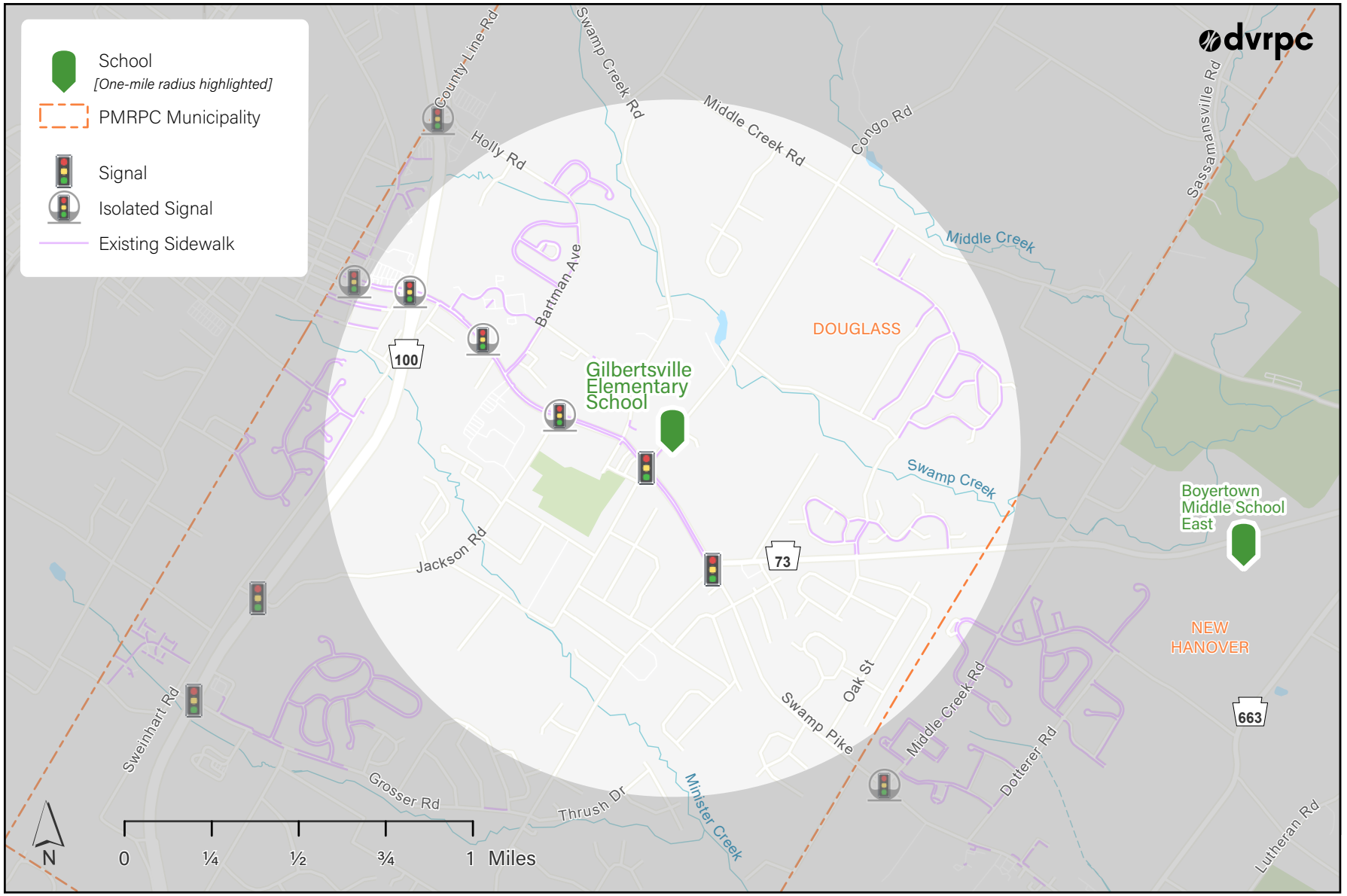
Source: DVRPC, 2024

Figure 12: Road Ownership Surrounding Gilbertsville Elementary School



Source: DVRPC, 2024

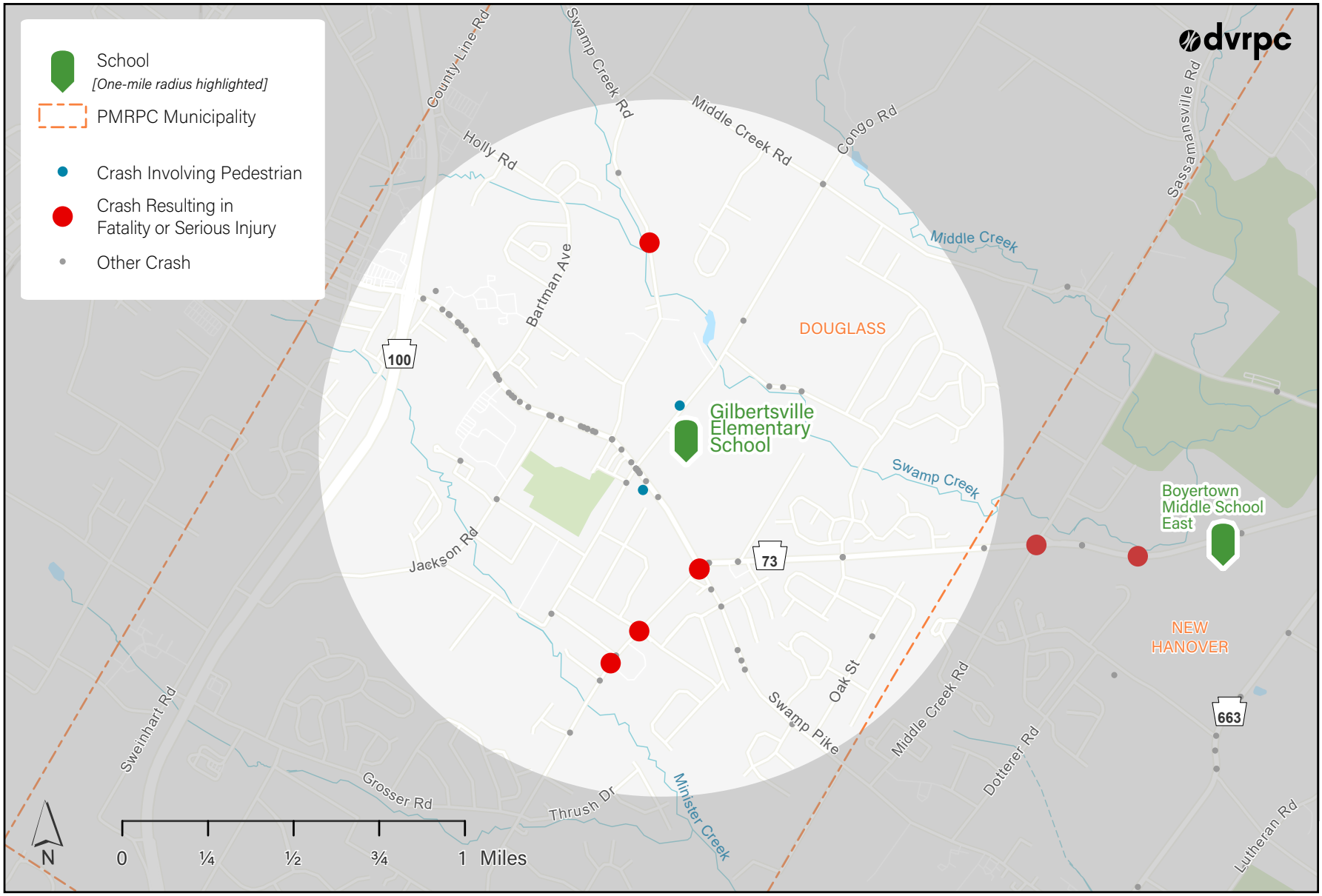
Figure 13: Existing Pedestrian and Bicycle Facilities near Gilbertsville Elementary School



Source: DVRPC, 2024

Note: Isolated signal timing is not coordinated with the timing of other nearby signals.

Figure 14: Crash History near Gilbertsville Elementary School



Source: DVRPC, 2024

Proposed Improvements

In addition to the existing conditions analysis and engagement with the school community, the project team conducted a site visit in Spring 2024 to observe travel patterns and student and parent behaviors at pickup and drop off times. Together, this background research identified the need for the following improvements.

A lack of pedestrian facilities in the nearby area prevents students from walking to Gilbertsville Elementary School. To enhance narrow and disconnected existing facilities, the project team recommends intersection safety improvements on Congo Road, Merkel Road, and Philadelphia Avenue, such as ADA-compliant ramps, curb extensions, and new crosswalk markings. Traffic calming is also recommended on Philadelphia Avenue to enforce reduced vehicular travel speeds. A pedestrian path is recommended along the Douglass Township Municipal Building parking lot to connect pedestrians to Douglass Park. Given the above average proportion of older adults and youth living in the surrounding area, new facilities should be well-marked. Figure 19 depicts a visualization of all the recommended improvement areas.

Connectivity Improvements

Philadelphia Avenue Improvements

The project team recommends conducting a traffic analysis to assess the impacts of removing the left-turning lanes on Philadelphia Avenue at Congo Road in favor of two curb extensions and repainted, realigned crosswalk markings to shorten crossing distances for pedestrians (Figure 15). Increasing the amount of safe and direct crossings will be crucial in improving pedestrian safety and connectivity to Gilbertsville Elementary School.

The project team also recommends ADA-compliant curb ramps on Philadelphia Avenue at Congo Road and Park Lane to further facilitate safe pedestrian travel (Figure 15-16). Pedestrian warning signage and wayfinding signage should be implemented at all improved intersections to increase drivers' awareness of vulnerable road users and assist with pedestrian

Figure 15: Gilbertsville Elementary School Philadelphia Avenue & Congo Road Improvements

Figure 16: Gilbertsville Elementary School Philadelphia Avenue & Park Lane Improvements

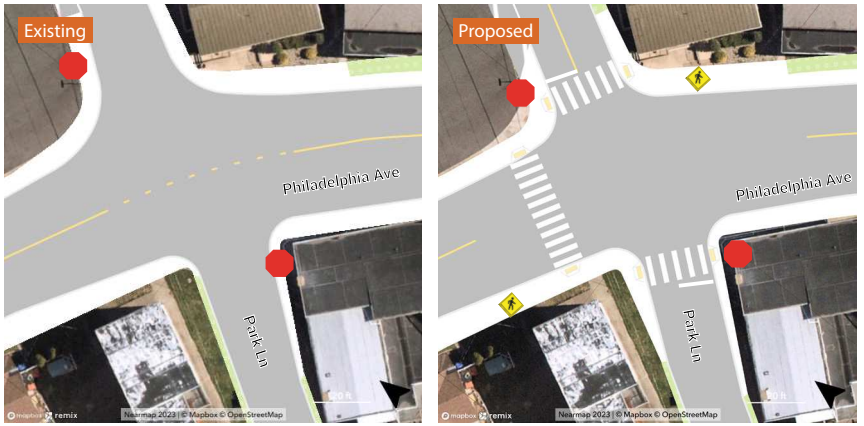
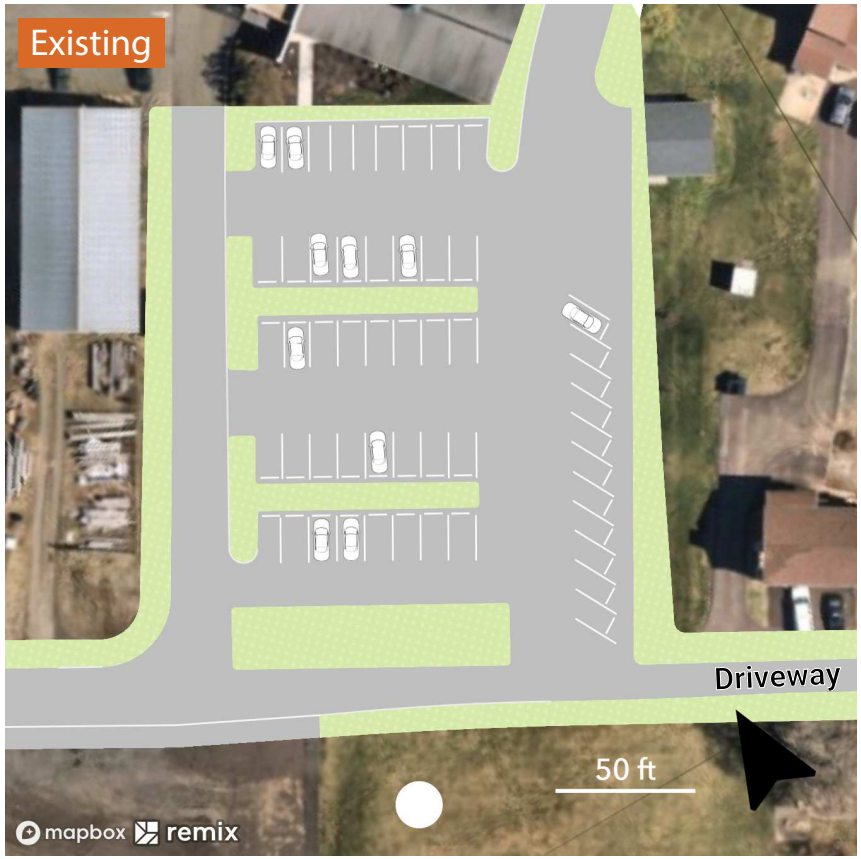
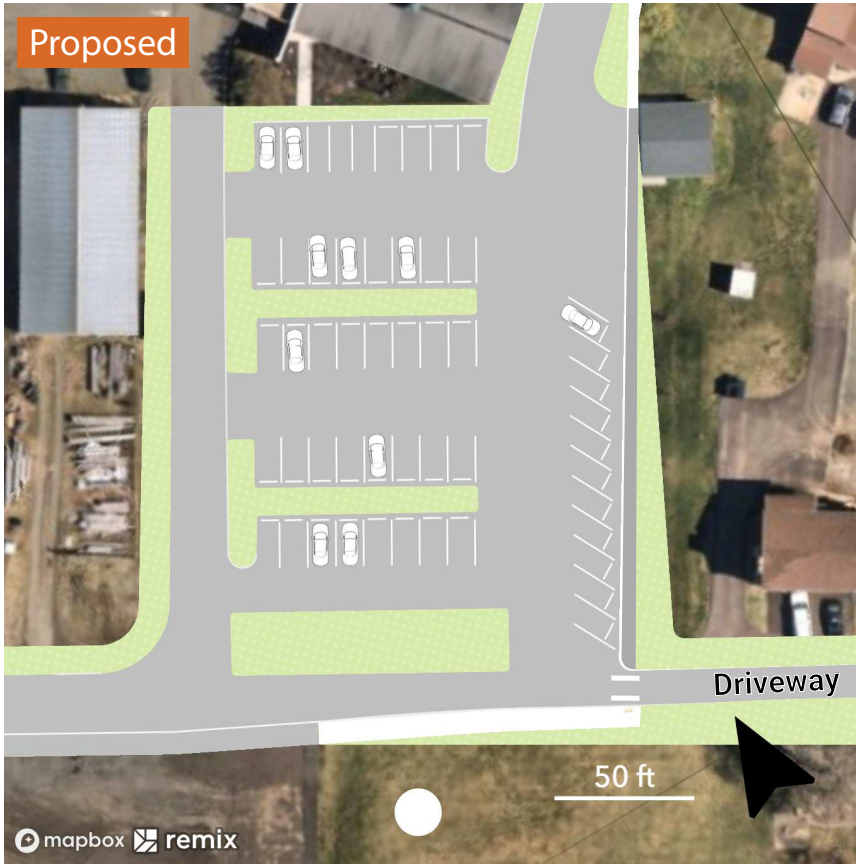


Figure 17: Gilbertsville Elementary School Entrance Improvements

Figure 18: Douglass Park Connection





navigation.

School Entrance Access

Crossing safety for students entering the Gilbertsville Elementary School's northern entrance is partially hindered by conflicting student drop-off traffic along the southern entrance (Figure 17). The project team recommends installing a pedestrian crossing to create a direct connection from the sidewalk along Congo Road to the northern entrance. The southern entrance's turn radii should also be reduced to shorten the crossing distance for students and slow turning speeds without hindering bus traffic.

Douglass Park Access

Observation of the surrounding area identified that there are currently no pedestrian facilities connecting to Douglass Park. The township is currently working towards repurposing the excess space behind existing angled parking in the Douglass Township Municipal parking lot allows for a six-foot wide asphault pedestrian walkway, which can facilitate pedestrian movement from Philadelphia Avenue to Douglass Park. The project team recommends expanding the proposed sidewalk to 8 ft along Douglass Park (Figure 18). A continental crossing with ADA-compliant pedestrian ramps should be included to increase driver awareness of potential pedestrian traffic across the driveway.

Traffic Calming

The project team recommends speed cushions to calm vehicular traffic and to support safe pedestrian crossing along Philadelphia Avenue. Lower travel speeds can facilitate the use of shared lanes, which would help accommodate bicycle travel on the roadway. The proposed curb extensions at Philadelphia Avenue and Congo Road also aim to calm traffic by narrowing the existing roadway causing drivers to reduce travel speeds crossing through and turning at the intersection.

Cost Estimates

Based on the recommendations above, the project team developed a rough estimate of overall construction costs to help identify appropriate funding sources. The cost estimates reflected in the table below identify the type and quantity of each recommended improvement. The team coordinated with DVRPC's Office of Project Implementation to estimate the construction cost of each element. If every recommendation listed above were constructed, this package of improvements would cost approximately $303,000 in 2025 dollars (Table 2). The cost estimate does not include the proposed asphault pedestrian path which is currently in design. These planning-level cost estimates should only be used to help determine implementation feasibility and funding eligibility. More accurate cost estimates would be possible after engineering design.

Next Steps

The recommendations provided in this section serve as a menu of possible improvements, rooted in best practices and standards, for creating safe pedestrian and bicycle access to and from Gilbertsville Elementary School. Multiple state and federal funding sources (e.g., TASA, Multimodal Fund) are available to cover construction costs for transportation safety improvements. However, a number of items are needed to prepare an

Table 2: Gilbertsville Elementary School East Cost Estimates

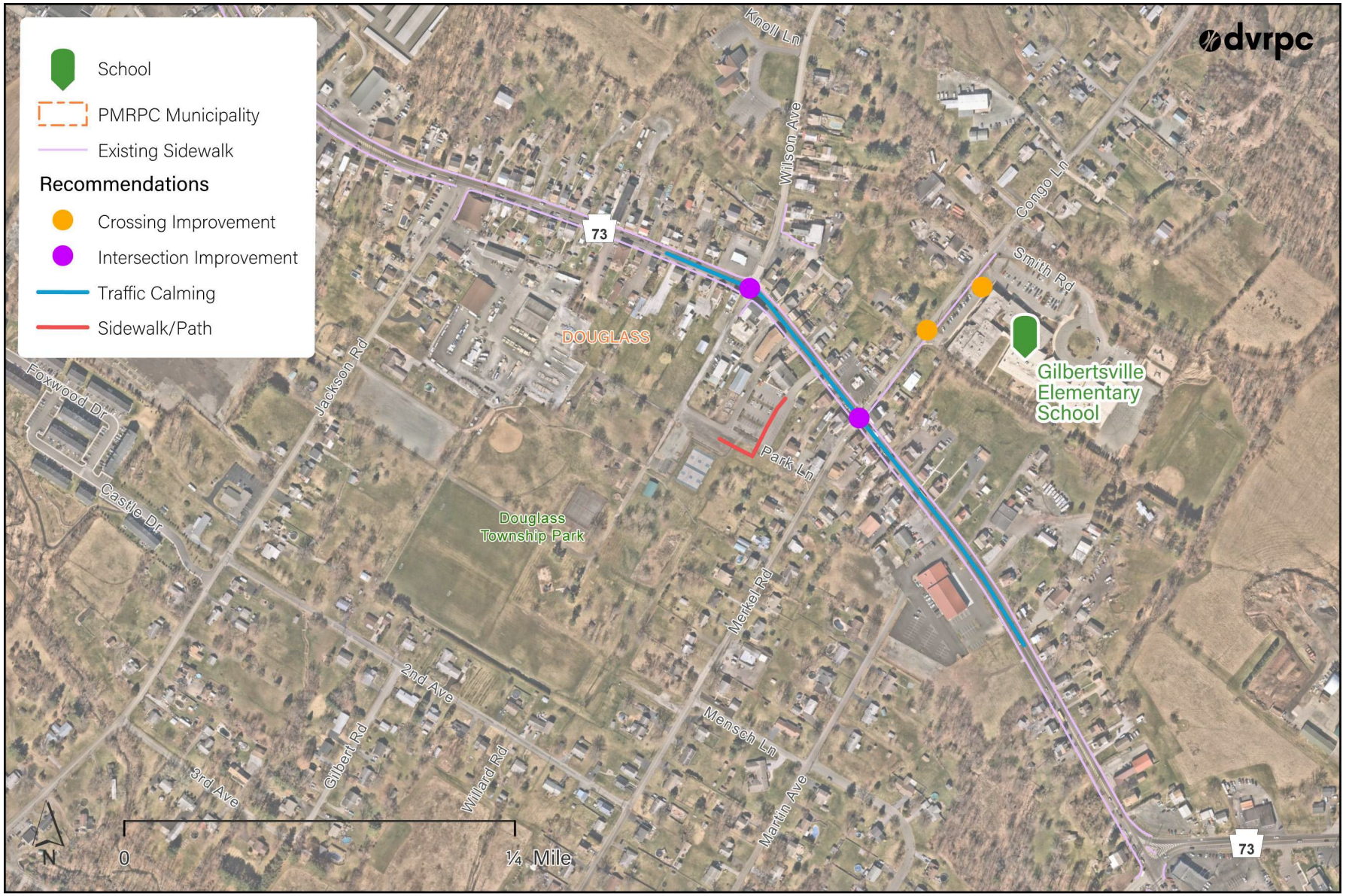
Item	Notes	Cost per Item	Measurement	Quantity	Total Cost
ADA-Compliant Curb Ramp	Standard dimensions	$10,000	Each	20	$200,000
Permanant Speed Cushion	Width: 15' (one-way street, not including parking on either side)	$400	Each	2	$800
Curb Extensions (Small) *or Reduced Curb Radii**	LF Curb: 50' Sidewalk: 12 sq. yd. Grass: 10 sq. yd. Excavation of existing pavement (y/n): Y	$10,000	Each	6	$60,000
Continental Crosswalks	Standard dimensions (per assuming 12 LF) (per length of crossing))	$2,000	Each	10	$20,000
Stop Bar with Eradication	N/A	$200	Each	2	$400
New Stop Bar	Standard width	$150	Each	4	$600
Sidewalks	Length: per LF (Length * .55 = SY) Width: 5'	$275	FT, SY	115, 63	$17,000
New Signage	Size: conventional (MUTCD) Type: stop, yield, one-way, no parking, school zone, do not enter, pedestrian crossing Post: standard	$350	Each	6	$2,100
Reinstall/relocate existing signage after curb extensions or ADA ramps are installed	N/A	$250	Each	8	$2,000

application for these grant programs.

Stakeholder Coordination: While Wilson Avenue and Congo Road are locally owned, the municipality will need to coordinate with PennDOT to receive approval for improvements to Philadelphia Avenue. Douglass Township Municipal parking lot and Douglass Park appear to be owned by the municipality.However, Douglass Township may need to coordinate with the property owners of the adjacent property to the east for approval of the new pedestrian path. Finally, the township should coordinate with Gilbertsville Elementary school for any improvements located on school property.

Engineering Design: Engineers will need to develop implementable designs from the proposed recommendations. They will need to consider the impact of traffic calming and intersection improvements on vehicular movements, potential tree removal, drainage, utilities, and signals, and come up with a plan to mitigate these impacts where applicable. Engineering designs will inform a more accurate estimate of the project budget and timeline. Typically, design costs around 15-20% of the estimated construction cost. Local entities will need to cover the cost of design before applying for construction funding. DVRPC's Office of Project Implementation is available to answer questions and provide guidance on developing projects to apply for construction funding. For more information, visit the Office of Project Implementation's webpage: https://www.dvrpc.org/projectimplementation/pa.

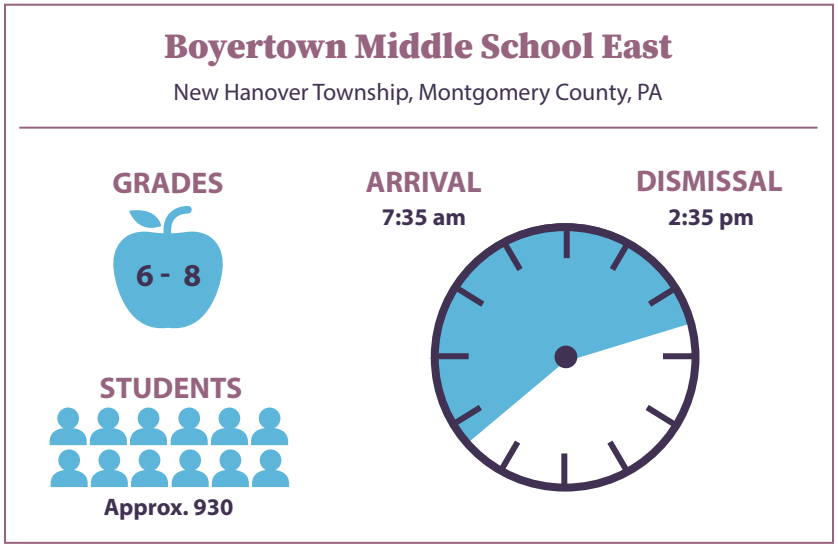
Figure 19: Recommendations for Gilbertsville Elementary School



Source: DVRPC, 2024

CHAPTER 4:

Boyertown Area Middle School East



Planning Context

Boyertown Area Middle School East, part of the Boyertown Area School District, is located along Big Road (PA-73), which is owned by PennDOT (Figure 20). The surrounding area is primarily agricultural, recreational, and wooded, with some low-density residential areas near, but not directly adjacent to, the school (Figure 21). There is a small cluster of commercial land uses near the intersection of Big Road (PA-73) and N. Charlotte Street (PA-663).

There are currently very few pedestrian and bicycle facilities near Boyertown Area Middle School East (Figure 22). The New Hanover Comprehensive Plan 2040 (April 2021) states that New Hanover Township is interested in providing "sidewalks and other connected pedestrian/multi-use pathways within a half mile around public schools and parks." Recognizing the limited connectivity between residential areas and public schools, the Township notes the potential benefit of adding sidewalks along Big Road. Since Big Road is also identified as a priority bicycle route in Bike MontCo, the Bicycle Plan for Montgomery County, a wide off-road path or side path could enable safer connections for both pedestrians and bicyclists.

The Wassmer Trail Plan and the New Hannover Township Bicycle and Pedestrian Trails Map Master Plan (October 2015) show the potential alignments for additional nearby off-road facilities that could help "link residential areas to parks and open space areas and along major roadways."

Crash History

The project team performed a crash analysis using PennDOT data from 2018 through 2022 to get a sense of the area's crash experience and identify locations with critical safety issues. The analysis revealed 65 reported crashes within a 1-mile radius of Boyertown Area Middle School East (Figure 23). Of those, seven crashes resulted in someone being killed or severely injured (KSI), one involved a pedestrian, and none involved bicyclists. Most of the severe crashes occurred along Big Road (PA-73), which is is the main access road to the school, with a high concentration near the intersections with N. Charlotte Street (PA-663) and Ludwig Road.

Demographics

The project team analyzed Indicators of Potential Disadvantage (IPD), which estimates potential disparities across local communities, with a focus on income and the population groups protected by Title VI:

- Youth (under the age of 18)
- Older Adults (age 65 and over)
- Racial Minority
- Ethnic Minority
- Female
- Foreign Born
- Limited English Proficiency
- Disabled
- Low Income (within 200% of the poverty line)

This is achieved by comparing the population of each group in a tract to the nine-county DVRPC region. Based on this analysis, census tracts receive a score ranging from Well Below Average to Well Above Average.

Five census tracts are within a 1-mile radius of Boyertown Area Middle School East (208201, 208203, 208301, 208303, and 208304). All census tracts score at or below Average in all indicators of potential disadvantage, with the exception of Youth and Older Adults. When compared to the region, census tract 208203 has an Above Average concentration of youth residents, and tract 208304 has a Well Above Average concentration of youth residents. Census tract 208301 has a Well Above Average concentration of older adults. Detailed results of the IPD analysis and a census tract reference map are in Appendix A.

Engagement

In 2023, with support from the school, the project team conducted an online survey to learn about parents' concerns regarding students walking and biking to Boyertown Area Middle School East. The survey contained a web map for participants to identify location-specific concerns and generalized questions regarding school transportation habits and issues.

Survey Promotion

The project team interviewed Boyertown Area Middle School East's principal to gauge the school's interest, participation level, and potential promotional opportunities. Boyertown Area Middle School East and New Hanover Township were asked to promote the survey virtually through their preferred communication channels. Boyertown Area Middle School East promoted the survey through two school newsletters and distributed flyers at parent teacher conferences. The 6-minute survey was live from mid-November to early December. The following items were provided to assist with survey promotion:

- Draft promotional email, newsletter, social media, and morning announcements text
- Social media graphics
- 100 printed flyers

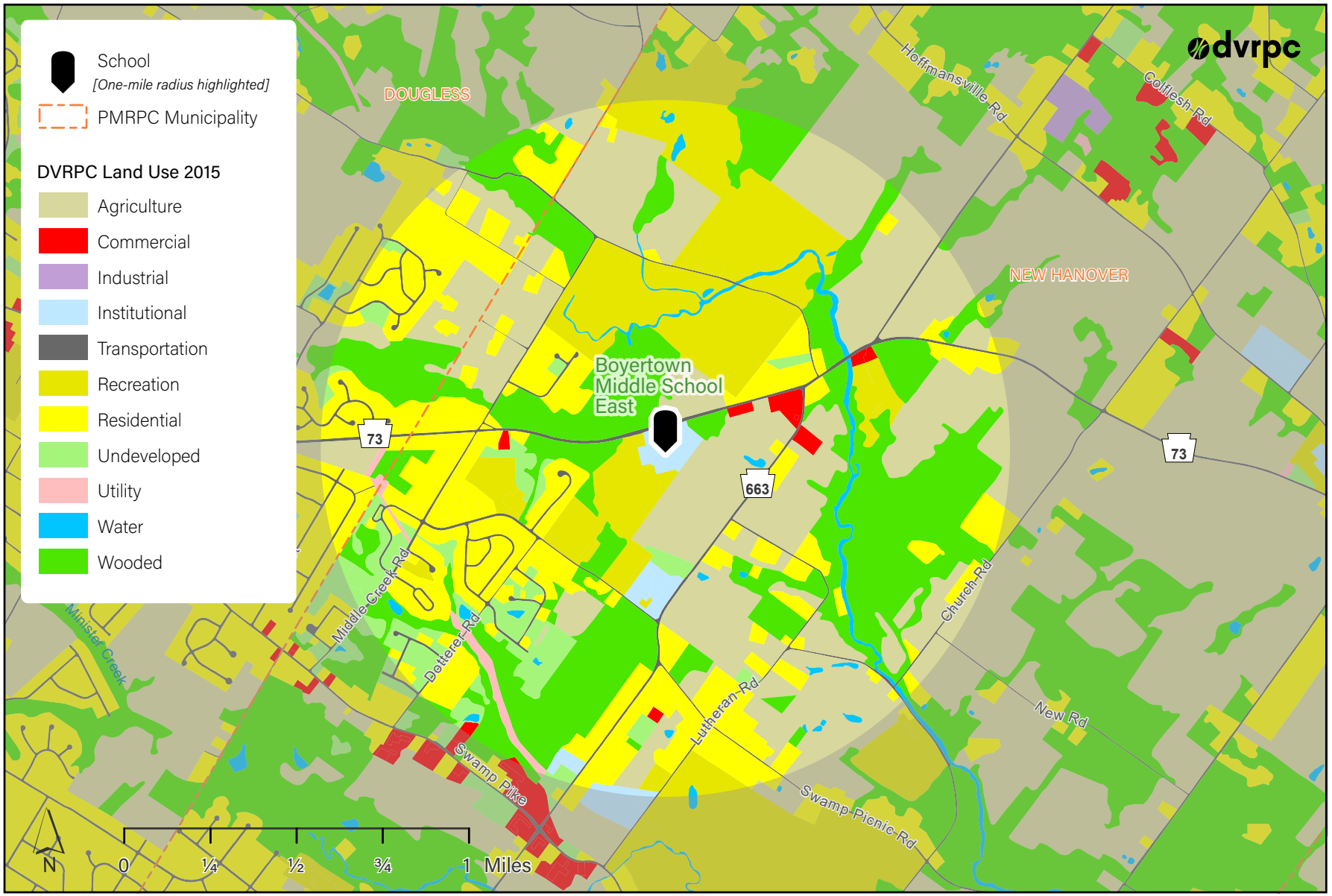
An advertising campaign ran on Facebook for the duration of this effort, targeting residents associated with the 19525 zip code.

Insights

Survey results highlighted that Boyertown Area Middle School East parents would feel comfortable having their children walk or bike to school if:

- They lived closer to the school.
- There was less vehicular traffic, speeding, and reckless driving along the route.
- There were more sidewalks and side paths.
- Crossing guards were present along the route.
- There was improved personal safety.
- Intersections and crossings were made safer.
- There was formalized sidepath through the athletic field behind the school to Dotterer Road.

Figure 20: Land Use Surrounding Boyertown Area Middle School East

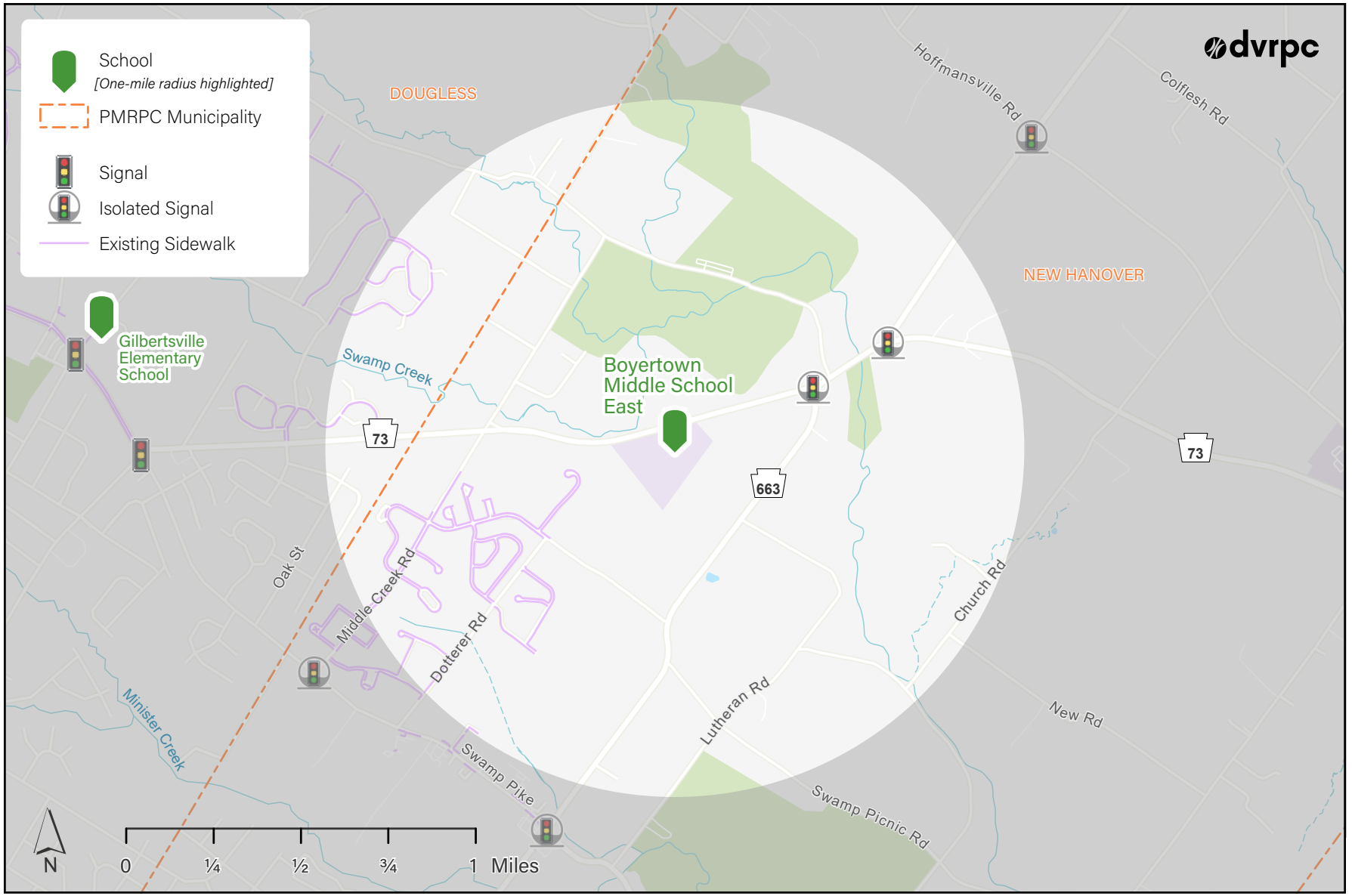


Source: DVRPC, 2024

Figure 21: Road Ownership Surrounding Boyertown Area Middle School East

Source: DVRPC, 2024

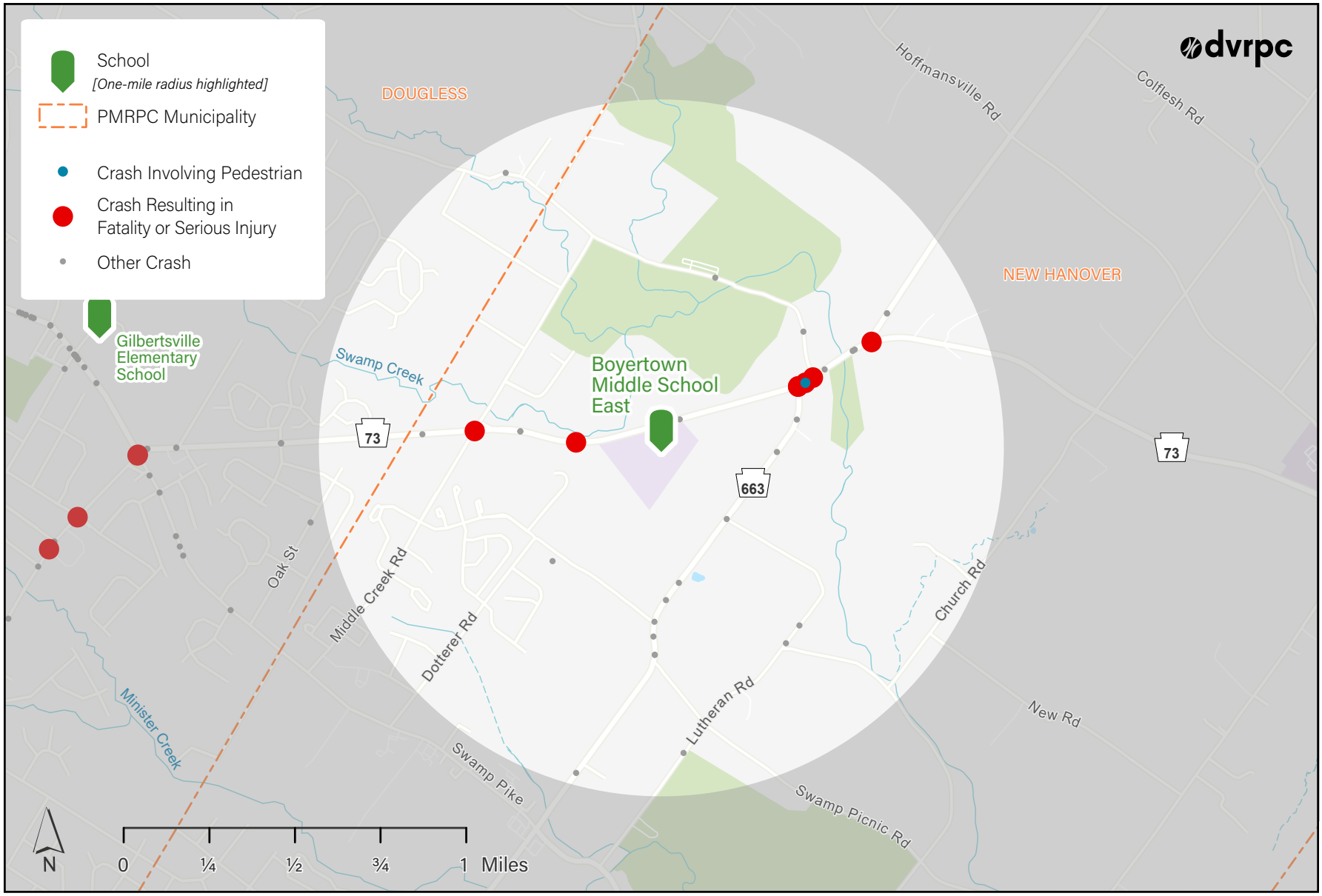
Figure 22: Existing Pedestrian and Bicycle Facilities near Boyertown Area Middle School East



Source: DVRPC, 2024

Note: Isolated signal timing is not coordinated with the timing of other nearby signals.

Figure 23: Crash History near Boyertown Area Middle School East



Source: DVRPC, 2024

Proposed Improvements

The existing conditions analysis and engagement with the school community was supplemented by field work. The project team visited the school in Spring 2024 to observe travel patterns and student and parent behaviors at pickup and drop off times. Together, this background research identified the need for the following improvements. Figure 28 depicts a map of all the recommended improvement areas.

Pedestrian Paths & Intersection Improvements

Upon analysis of the study area, the project team identified that it is difficult for students to access Boyertown Area Middle School East by walking or biking because of its proximity to a high-speed roadway to the north and lack of facilities connecting to neighborhoods south of the school. An 8-foot-wide trail along Chalet Road currently provides the closest connection to the school from nearby neighborhood crosswalks. A multi-use path connecting Boyertown Area Middle School East to the existing multi-use path on Chalet Road will increase student access to the school (see Figure 24 and *Next Steps* on page 34 for more context on maintenance). The project team also recommends increasing bicycle and pedestrian access to the school through the intersection improvements along Chalet Road at Dotterer Road, Sandpiper Court, and Middle Creek Road. All new and updated crossings should be restriped as continental crossings.

Currently, there is no north–south crosswalk at Chalet Road; the study recommends implementing a 10-foot-wide raised crosswalk between Wrenfield Lane and Dotterer Road (Figure 25). Corner radii reductions to 15 feet at Wrenfield Lane and Dotterer Road can further support safe crossing for students by reducing vehicle turning speeds. The east–west crosswalk, curb ramp, and stop bar at Wrenfield Lane should be pushed back to allow for shortened, more direct crossings.

Sandpiper Court has two existing speed cushions just prior to each crossing. The crosswalks and curb ramps crossing Chalet Road should be moved onto the speed cushions to create a raised crossing, which will slow down vehicular traffic and increase driver awareness of crossing pedestrians (Figure 26). In addition to reducing all corner radii to 15 ft, the project team recommends realigning the crosswalks, curb ramps, and stop bar at each approach to create shorter, more direct crossings.

At the intersection of Chalet Road and Middle Creek Road, there are currently only two crosswalks, guiding pedestrians across Middle Creek

Figure 24: Boyertown Area Middle School East Proposed Multi-Use Path

Figure 25: Boyertown Area Middle School East Dotterer Road Improvements

Figure 26: Boyertown Area Middle School East Garnet Drive Improvements

Figure 27: Boyertown Area Middle School East Middle Creek Road Improvements

Road. To increase pedestrian access, two north–south crossings are recommended across Chalet Road (Figure 26-27). The turning radii are too large for neighborhood roadway traffic and promote fast turning speeds. The large corner radii also create excessively long crosswalks, which increases the amount of time pedestrians are in conflict with vehicles. The surrounding area has an above-average proportion of youth and older adults who may walk slower than average. To improve safety for pedestrians, the project team recommends reducing the turning radii to 15 feet, installing curb extensions, and realigning the crosswalks, curb ramps, and stop bars at each approach to create shorter, more direct crossings.

Traffic Calming

The project team recommends a speed cushion to calm vehicular traffic and to support safe pedestrian crossing and shared lanes on Chalet Road between Dotterer Road and the Middle Creek Athletic Fields. Permanent speed cushions should be placed strategically to prevent vehicles from maneuvering around them while also allowing bicycles to travel through them.

Cost Estimates

Based on the recommendations above, the project team developed a rough estimate of overall construction cost to help identify appropriate funding sources. The team identified the type of recommended improvements and the number of each type needed. Then they coordinated with DVRPC's Office of Project Implementation to estimate the construction cost of each element. The breakdown is provided in the table below. If every recommendation listed above were constructed, this package of

improvements would cost approximately $1,171,000 in 2025 dollars (Table 3). This estimate does not include the cost of tree removal. These planning-level cost estimates should only be used to help determine implementation feasibility and funding eligibility. More accurate cost estimates would be possible after engineering design.

Table 3: Boyertown Area Middle School East Cost Estimates

Item	Notes	Cost per Item	Measurement	Quantity	Total Cost
ADA-Compliant Curb Ramp	Standard dimensions	$10,000	Each	20	$200,000
Permanant Speed Cushion	Width: 15' (one-way street, not including parking on either side)	$400	Each	2	$800
Curb Extensions (Small) *or Reduced Curb Radii**	LF Curb: 50' Sidewalk: 12 sq. yd. Grass: 10 sq. yd. Excavation of existing pavement (y/n): Y	$10,000	Each	10	$100,000
Curb Extensions (Medium)	LF Curb: 75' Sidewalk: 50 sq. yd. Grass: 20 sq. yd Excavation of existing pavement (y/n): Y	$20,000	Each	1	$20,000
Curb Extensions (Large)	LF Curb: 100' Sidewalk: 100 sq. yd. Grass: 60 sq. yd Excavation of existing pavement (y/n): Y	$40,000	Each	1	$40,000
Continental Crosswalks	Standard dimensions (per assuming 12 LF) (per length of crossing)	$2,000	Each	10	$20,000
Stop Bar with Eradication	N/A	$200	Each	6	$1,200
New Stop Bar	Standard dimensions	$150	Each	8	$1,200
Trails	Width: 10'	$1.5 million	Mile	0.5	$780,000
New Signage	Size: conventional (MUTCD) Type: stop, yield, one-way, no parking, school zone, do not enter, pedestrian crossing Post: standard	$350	Each	6	$2,100
Reinstall/relocate existing signage after curb extensions or ADA ramps are installed	N/A	$250	Each	22	$5,500

Next Steps

The recommendations provided in this section serve as a menu of possible improvements, rooted in best practices and standards, for creating safe pedestrian and bicycle access to and from Boyertown Area Middle School East. Multiple state and federal funding sources (e.g., TASA, Multimodal Fund) are available to cover construction costs for transportation safety improvements. However, a number of things are needed to prepare an application for these grant programs.

Stakeholder Coordination: Chalet Road, Dotterer Road, and Middle Creek Road are locally owned. Wrenfield Lane and Sandpiper Court are privately owned roadways owned by the Windlestrae Master Planned Community Association. Any improvements must be reviewed by the Windlestrae Master Planned Community Association. Windlestrae Master Planned Community Association would need to approve any relevant project proposal and be a partner in their advancement. The municipality will need to coordinate with Boyertown Middle School East on the construction and maintenance of any new facilities on its property. At the time of this writing, the school does not have the capacity to take on additional maintenance responsibilities. Therefore, the trail should be considered a long term goal for implementation. Additionally, the municipality should ensure that the school is comfortable with any new facilities, including a new multi-use path, from a public safety perspective.

Engineering Design: Engineers will need to develop implementable designs from the proposed recommendations. They will need to consider the impact of traffic calming and intersection improvements on vehicular movements, lighting, snow, drainage, utilities, and signals, and devise a plan to mitigate these impacts where applicable. Engineering designs will inform a more accurate estimate of the project budget and timeline. Typically, design costs around 15-20% of the estimated construction cost. Local entities will need to cover the design cost before applying for construction funding. DVRPC's Office of Project Implementation is available to answer questions and provide guidance on developing projects to apply for construction funding.

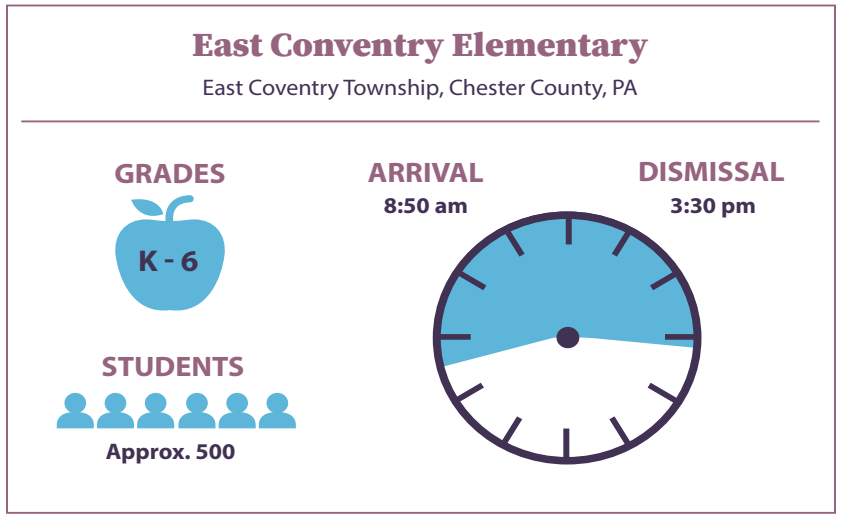
For more information, visit the Office of Project Implementation's webpage: https://www.dvrpc.org/projectimplementation/pa.

Figure 28: Recommendations for Boyertown Area Middle School East

Source: DVRPC, 2024

CHAPTER 5:

East Coventry Elementary School



Planning Context

East Coventry Elementary, part of the Owen J. Roberts School District, is located among low-density residential subdivisions and agricultural areas (Figure 29). There are some wooded areas to the south, and the Schuylkill River is about 1 mile to the north. The school is situated at the intersection of E. Cedarville Road and Sanatoga Road, both owned by PennDOT (Figure 30). PennDOT also owns New Schuylkill Road to the north. Only a few of the nearby subdivisions have sidewalks, in addition to the small segment of sidewalks along a portion of Sanatoga Road adjacent to the school (Figure 31). The existing residential sidewalks are not well connected to the school.

In its 2017 Parks, Recreation, and Open Space Plan, East Coventry Township recognizes the need to connect schools to its neighbors "so children can walk or bike to school, and parents can walk to events at the school. Residents of all ages will also have access to the recreation facilities, including trails, during the off-school hours." During the plan's development, "residents expressed general support for the creation of trails," and the plan emphasizes that connections to parks and schools should be established first.

Crash History

The project team performed a crash analysis using PennDOT data from 2018 through 2022 to get a sense of the area's crash experience and identify locations with critical safety issues. The analysis revealed 36 reported crashes within a 1-mile radius of East Coventry Elementary School (Figure 32). Of those, one crash resulted in someone being killed or severely injured (KSI). This severe crash occurred very close to the school, on Old Schuylkill Road. None of the 36 reported crashes involved a pedestrian, and none involved bicyclists.

Demographics

The project team analyzed Indicators of Potential Disadvantage (IPD), which estimates potential disparities across local communities, with a focus on income and the population groups protected by Title VI:

- Youth (under the age of 18)
- Older Adults (age 65 and over)
- Racial Minority
- Ethnic Minority
- Female
- Foreign Born
- Limited English Proficiency
- Disabled
- Low income (within 200% of the poverty line)

This is achieved by comparing the population of each group in a tract to the nine-county DVRPC region. Based on this analysis, census tracts receive a score ranging from Well Below Average to Well Above Average.

Two census tracts are within a 1-mile radius of East Coventry Elementary School (208704 and 301300). Both census tracts score at or below Average in all indicators of potential disadvantage, with the exception of Youth and Low Income. Census tract 208704 has a Well Above Average concentration of youth residents compared to the region. The same tract has an Above Average concentration of low-income residents. Detailed results of the IPD analysis and a census tract reference map are in Appendix A.

Engagement

In 2023, with support from the school, the project team conducted an online survey to learn about parents' concerns regarding students walking and biking to East Coventry Elementary School. The survey contained a web map for participants to identify location-specific concerns and generalized questions regarding school transportation habits and issues.

Survey Promotion

The project team interviewed East Coventry Elementary School's principal to gauge the school's interest, participation level, and potential promotional opportunities. East Coventry Elementary School and East Coventry Township were asked to promote the survey virtually through their preferred communication channels. East Coventry Elementary School distributed the survey to a parent email list and invited the project team to present the project to their Parent-Teacher Organization (PTO). The survey was live from mid-November to early December. The following items were provided to assist with survey promotion:

- Draft promotional email, newsletter, social media, and morning announcements text
- Social media graphics
- Printable Flyer

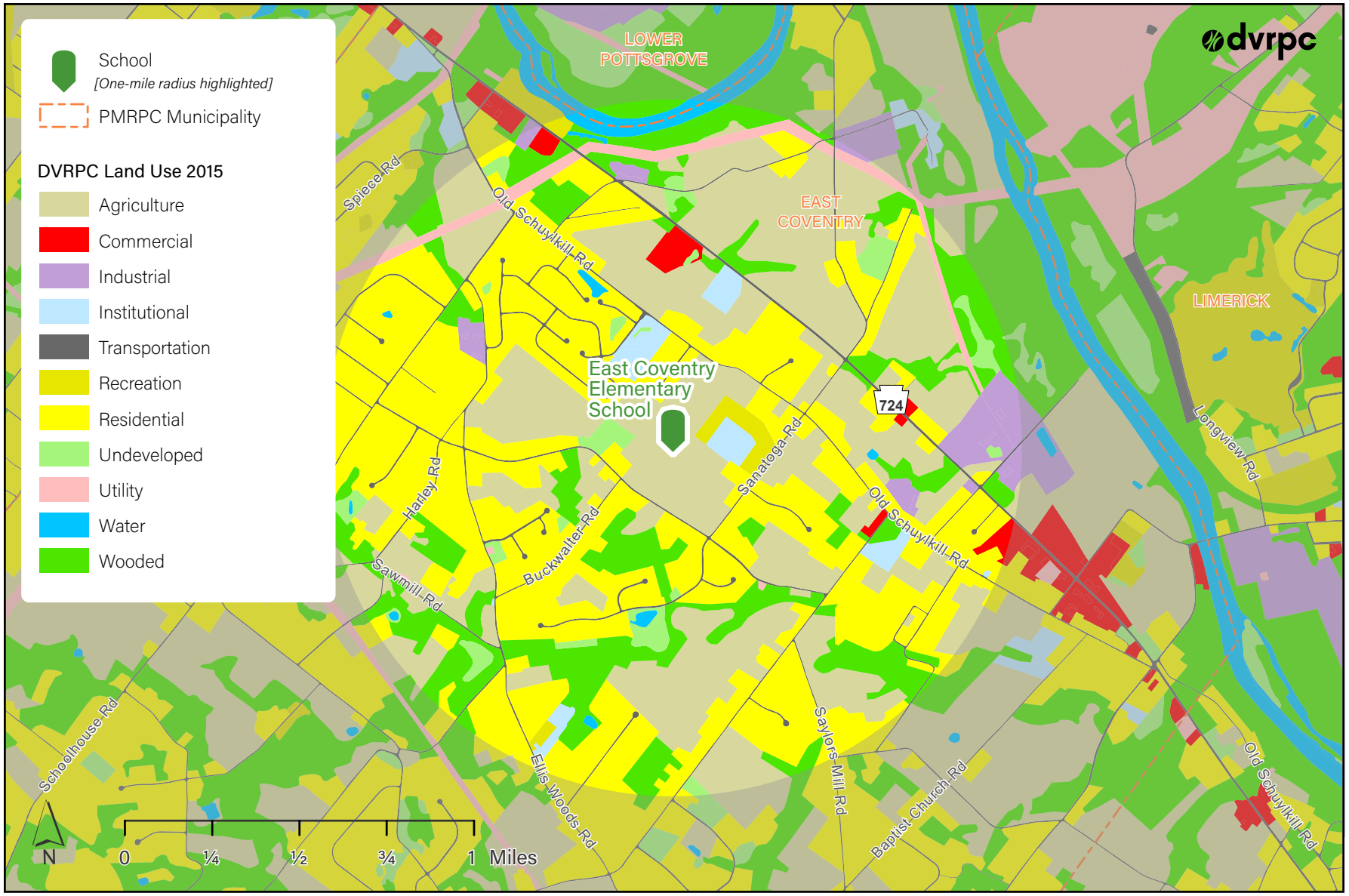
An advertising campaign ran on Facebook for the duration of this effort, targeting residents associated with the 19465 zip code.

Insights

Conversations at the PTO meeting highlighted:

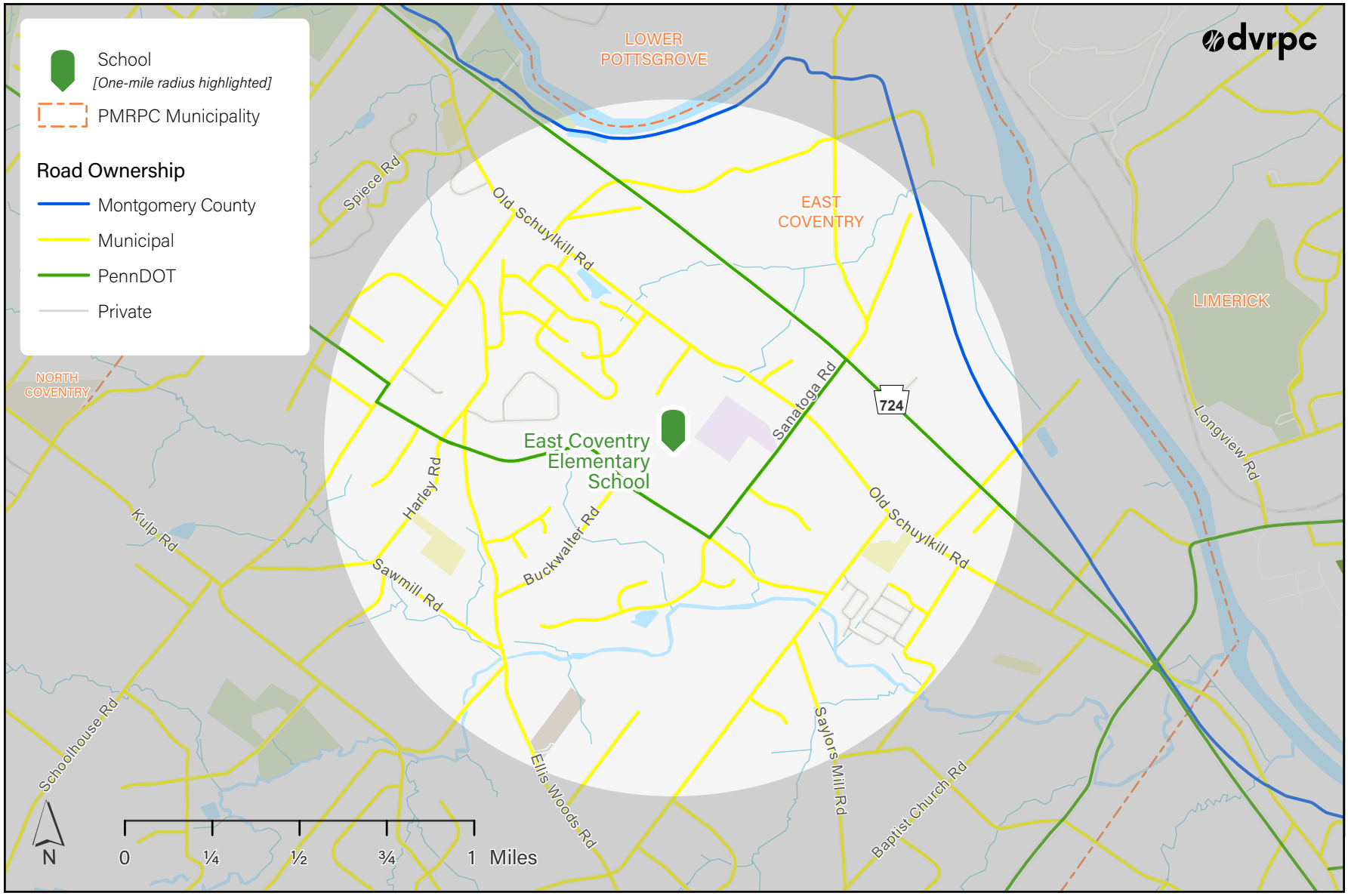
- An interest in pedestrian scale lighting
- Concerns about kids walking through the Coventry Glen neighborhood when there is no landscaping; suggested a hedge between the school and Coventry Glen
- Interest in additional crosswalks in the Heritage neighborhood

Figure 29: Land Use Surrounding East Coventry Elementary School



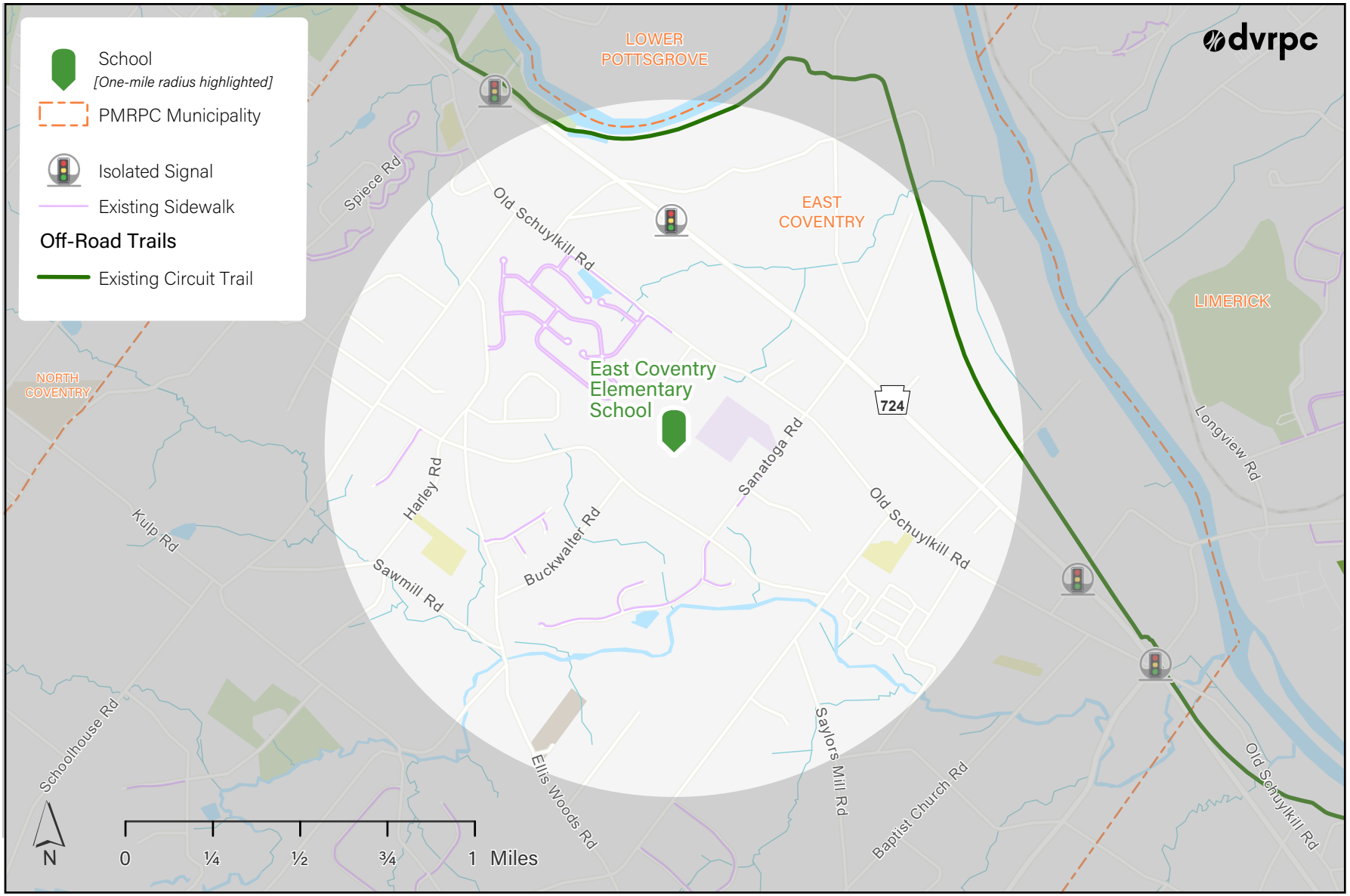
Source: DVRPC, 2024

Figure 30: Road Ownership Surrounding East Coventry Elementary School



Source: DVRPC, 2024

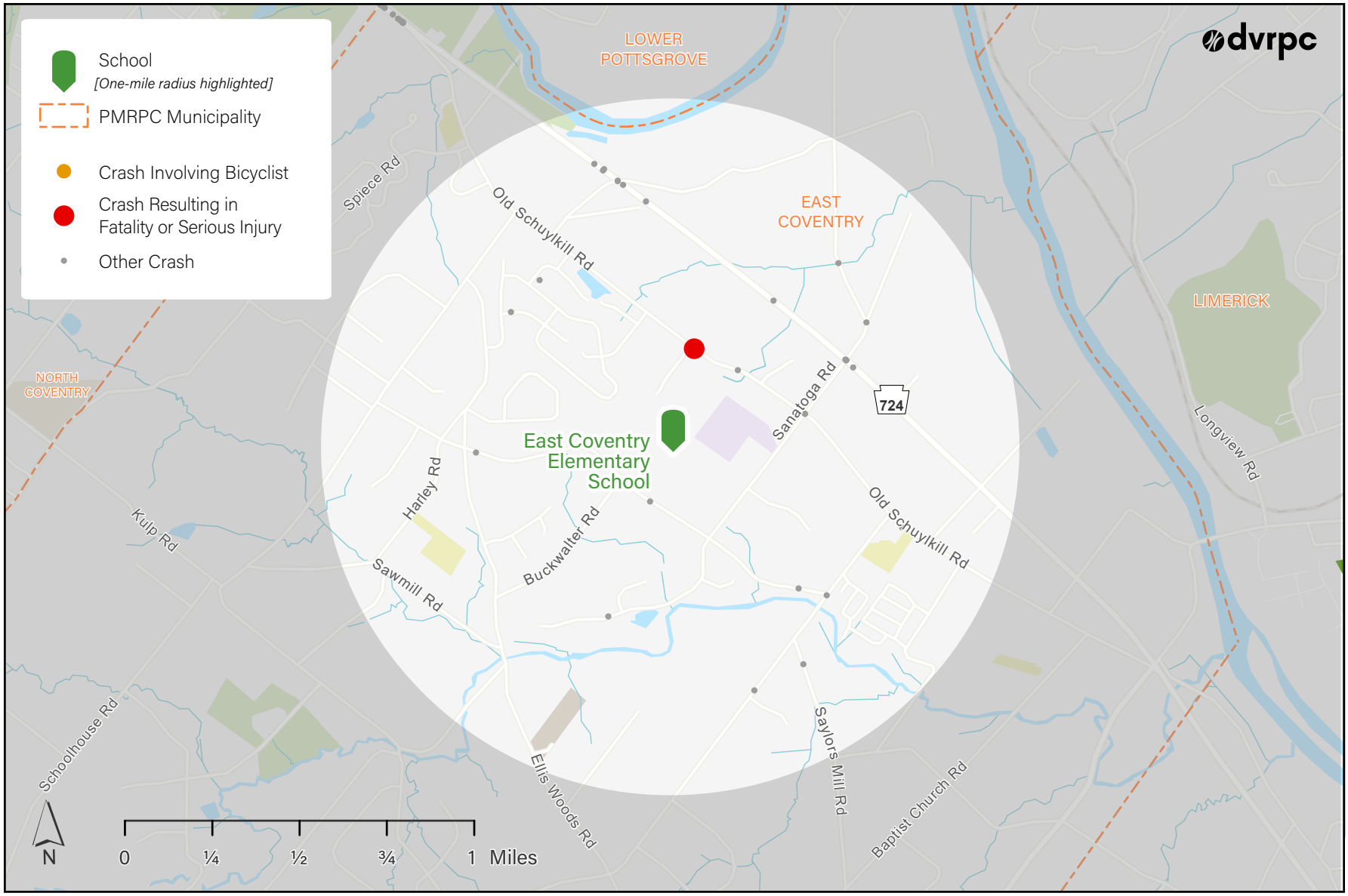
Figure 31: Existing Pedestrian and Bicycle Facilities near East Coventry Elementary School



Source: DVRPC, 2024

Note: Isolated signal timing is not coordinated with the timing of other nearby signals.

Figure 32: Crash History near East Coventry Elementary School



Source: DVRPC, 2024

Proposed Improvements

The existing conditions analysis and engagement with the school community was supplemented by field work. The project team visited the school in Spring 2024 to observe travel patterns and student and parent behaviors at pickup and drop off times. Together, this background research identified the need for the following improvements:

There are several informal pedestrian trails connecting nearby residents to East Coventry Elementary School. The project team recommends completing the pedestrian network by formalizing existing trails, creating new trails, and expanding the sidewalk network. To further improve pedestrian and bicycle safety, the project team recommends expanding the existing pedestrian network and improving the intersection at the entrance of the school's driveway. Figure 38 depicts a visualization of all the recommended improvement areas.

Pedestrian Path

The proposed recommendations hinge on a series of existing and proposed trails connecting residents from nearby residences to the school. The first series of paths connects to residential development east of the school offering connections to Savanna Drive and Pheasant Lane. However, portions of these trails are unpaved and do not intersect directly with the roadway. The project team recommends completing the paths to the existing developments Northwest of the school and the new residential development along Painters Way (Figure 33). The municipality should consider the installation of a cut-through path along Cedarville Road to the school, southwest of the district building, to create a more direct walking/biking path, shortening the walk for the above average youth population living in the surrounding area, who may walk slower than average (Figure 33).

Lastly, residents may benefit from completing the existing sidewalk network along Sanatoga Road from East Cedarville Road to the southern driveway of the district building (Figure 34). New sidewalks should be six feet wide and ADA-compliant crosswalks should be installed at intersections with other roadways. Currently, the sidewalk along Cedarville Road stops at a private

Figure 33: East Coventry Elementary School Proposed Trails (Blue)

Figure 34: East Coventry Elementary Schools Trail Extension

Figure 35: East Coventry Elementary Crosswalk Improvements

Figure 36: East Coventry Elementary Driveway Improvements

Figure 37: East Coventry Elementary Meadow Lane Improvements

residence; the municipality should consider extending the sidewalk to Sanatoga Road and providing a crosswalk connection to the newly extended sidewalk. Safe pedestrian travel can be further supported by installing new pedestrian crossing warning signage.

Intersection Improvements

To improve pedestrian travel to and from East Coventry Elementary School, the project team recommends implementing a crosswalk and corresponding ADA-compliant ramps near the driveway of the old elementary school building, the new municipal building, and Sanatoga Road (Figure 35). In the future, the municipality may wish to consider adding a sidewalk along the driveway to connect residents to the building. The team also suggests lowering speed limits along Sanatoga Road and East Cedarville Road.

Cost Estimates

Based on the recommendations above, the project team developed an estimate of overall construction costs to help identify appropriate funding sources. The cost estimates reflected in the table below identify the type and quantity of each recommended improvement. The team coordinated with DVRPC's Office of Project Implementation to estimate the construction cost of each element. If every recommendation listed above were constructed, this package of improvements would cost approximately $1,146,000 in 2025 dollars (Table 4). These planning-level cost estimates should only be used to help determine implementation feasibility and funding eligibility. More accurate cost estimates would be possible after engineering design.

Next Steps

The recommendations in this section serve as a menu of possible improvements rooted in best practices and standards for creating safe pedestrian access to and from East Coventry Elementary School. Multiple state and federal funding sources (e.g., TASA, Multimodal Fund) are available to cover construction costs for transportation safety improvements. However, a number of items are needed to prepare an application for these grant programs.

Stakeholder Coordination: The municipality will need to coordinate with PennDOT to receive approval for improvements on state-maintained roads. Sanatoga Road and East Cedarville Road are state-maintained. Meadow Lane and Pheasant Lane are likely locally owned. The township should coordinate with East Coventry Elementary School and private residents to implement the proposed pedestrian paths. The municipality will need to coordinate with private property owners where designs that do not overlap with public property.

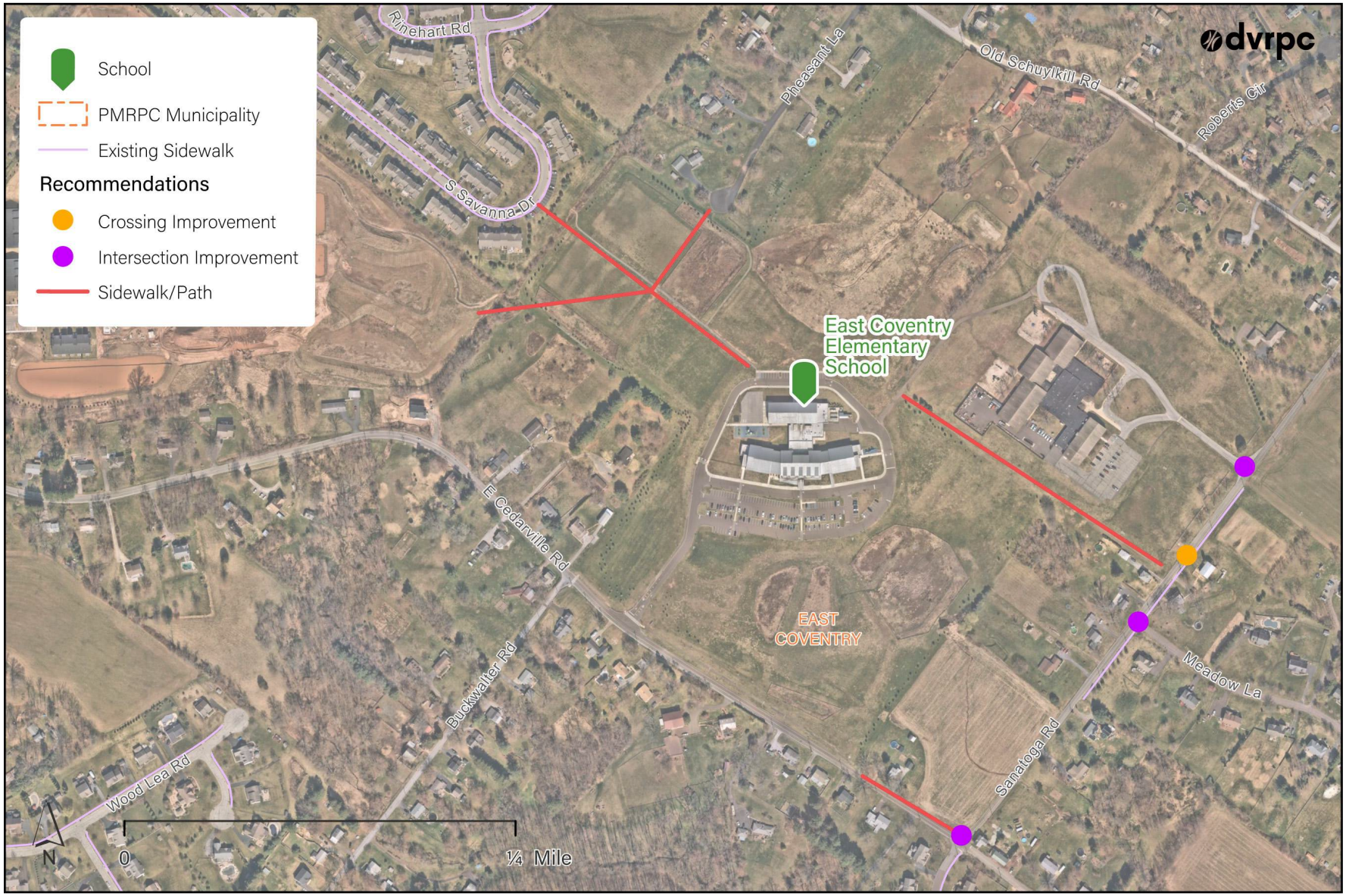
Engineering Design: Engineers will need to develop implementable designs from the proposed recommendations. They will need to consider the impact of traffic calming and intersection improvements on vehicular movements, tree removal, lighting, snow, drainage, utilities, and signals, and devise a plan to mitigate these impacts where applicable. Engineering designs will inform a more accurate estimate of the project budget and timeline. Typically, design costs around 15-20% of the estimated construction cost. Local entities will need to cover the design cost before applying for construction funding.

DVRPC's Office of Project Implementation is available to answer questions and provide guidance on developing projects to apply for construction funding. For more information, visit DVRPC's Office of Project Implementation's webpage: https://www.dvrpc.org/projectimplementation/pa.

Table 4: East Cost Coventry Elementary School Estimates

Item	Notes	Cost per Item	Measurement	Quantity	Total Cost
ADA-Compliant Curb Ramp	Standard dimensions	$10,000	Each	10	$100,000
Curb Extensions (Small) *or Reduced Curb Radii**	LF Curb: 50' Sidewalk: 12 sq. yd. Grass: 10 sq. yd. Excavation of existing pavement (y/n): Y	$10,000	Each	1	$10,000
Continental Crosswalks	Standard dimensions (per assuming 12 LF; per length of crossing)	$2,000	Each	5	$10,000
Stop Bar with Eradication	N/A	$200	Each	2	$400
New Stop Bar	Standard dimensions	$150	Each	4	$600
Sidewalks	Length: per LF (Length * .55 = SY) Width: 5'	$275	LF, SY	1105, 608	$167,000
Trails	Width: 10'	$1.5 Million	Mile	0.57	$855,000
New Signage	Size: conventional (MUTCD) Type: stop, yield, one-way, no parking, school zone, do not enter, pedestrian crossing Post: standard	$350	Each	3	$1,050
Reinstall/relocate existing signage after curb extensions or ADA ramps are installed	N/A	$250	Each	9	$2,250

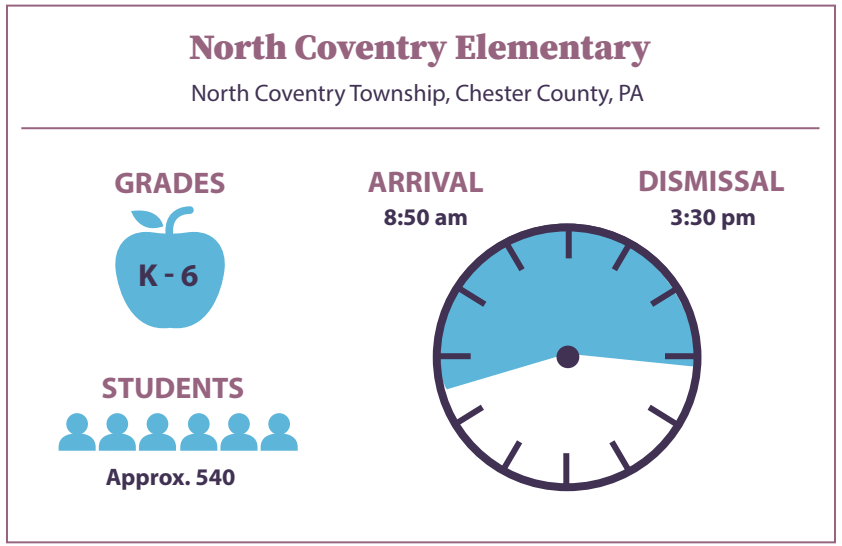
Figure 38: Recommendations for East Coventary Elementary School



Source: DVRPC, 2024

CHAPTER 6:

North Coventry Elementary School



Planning Context

North Coventry Elementary School, part of the Owen J. Roberts School District, is located in a primarily residential, agricultural, and wooded area (Figure 39). There is some commercial activity to the northwest and to the south, along PA-100 (Pottstown Pike). The road network surrounding the school is relatively sparse. Some of the roads are municipal or privately owned, while others, notably PA-100, S. Hanover Street, and E. Cedarville Road, are owned by PennDOT (Figure 40).

There are very few existing sidewalks in the area and none connecting residents to the school (Figure 41). Hanover Meadows Park, just west of the school, has a paved walking trail that could become part of a larger, more connected network. South of the school, in Bickel Run Park, the proposed Coventry Trail, highlighted in DVRPC's 2018 study, *A Circle of Progress*, could connect to parks and some nearby residential areas (Figure 43).

Crash History

The project team performed a crash analysis using PennDOT data from 2018 through 2022 to get a sense of the area's crash experience and identify locations with critical safety issues. The analysis revealed 132 reported crashes within a 1-mile radius of North Coventry Elementary School (Figure 42). Of those, seven crashes resulted in someone being killed or severely injured (KSI), three involved a pedestrian, and one involved a bicyclist. While PA-100, a major limited-access road, saw the highest concentration of crashes overall, three of the KSI crashes occcurred on smaller roads adjacent to the school.

Demographics

The project team analyzed Indicators of Potential Disadvantage (IPD), which estimates potential disparities across local communities, with a focus on income and the population groups protected by Title VI:

- Youth (under the age of 18)
- Older Adults (age 65 and over)
- Racial Minority
- Ethnic Minority
- Female
- Foreign Born
- Limited English Proficiency
- Disabled
- Low Income (within 200% of the poverty line)

This is achieved by comparing the population of each group in a tract to the nine-county DVRPC region. Based on this analysis, census tracts near each school receive a score ranging from Well Below Average to Well Above Average.

Three census tracts are within a 1-mile radius of North Coventry Elementary School (301300, 301401, and 301402). All census tracts score at or Below Average in all indicators of potential disadvantage. Detailed results of the IPD analysis and a census tract reference map are in Appendix A.

Engagement

In 2023, with support from the school, the project team conducted an online survey to learn about parents' concerns regarding students walking and biking to North Coventry Elementary School. The survey contained a web map for participants to identify location-specific concerns and generalized questions regarding school transportation habits and issues.

Survey Promotion

The project team interviewed North Coventry Elementary School's principal to gauge the school's interest, participation level, and potential promotional opportunities. North Coventry Elementary School and North Coventry Township were asked to promote the survey virtually through their preferred communication channels. North Coventry Elementary School distributed the survey to a parent email list and invited the project team to present the project to their Parent–Teacher Organization (PTO). The 6-minute survey was live from mid-November to early December. The following items were provided to assist with survey promotion:

- Draft promotional email, newsletter, social media, and morning announcements text in English and Spanish
- Social media graphics
- Printable Flyers

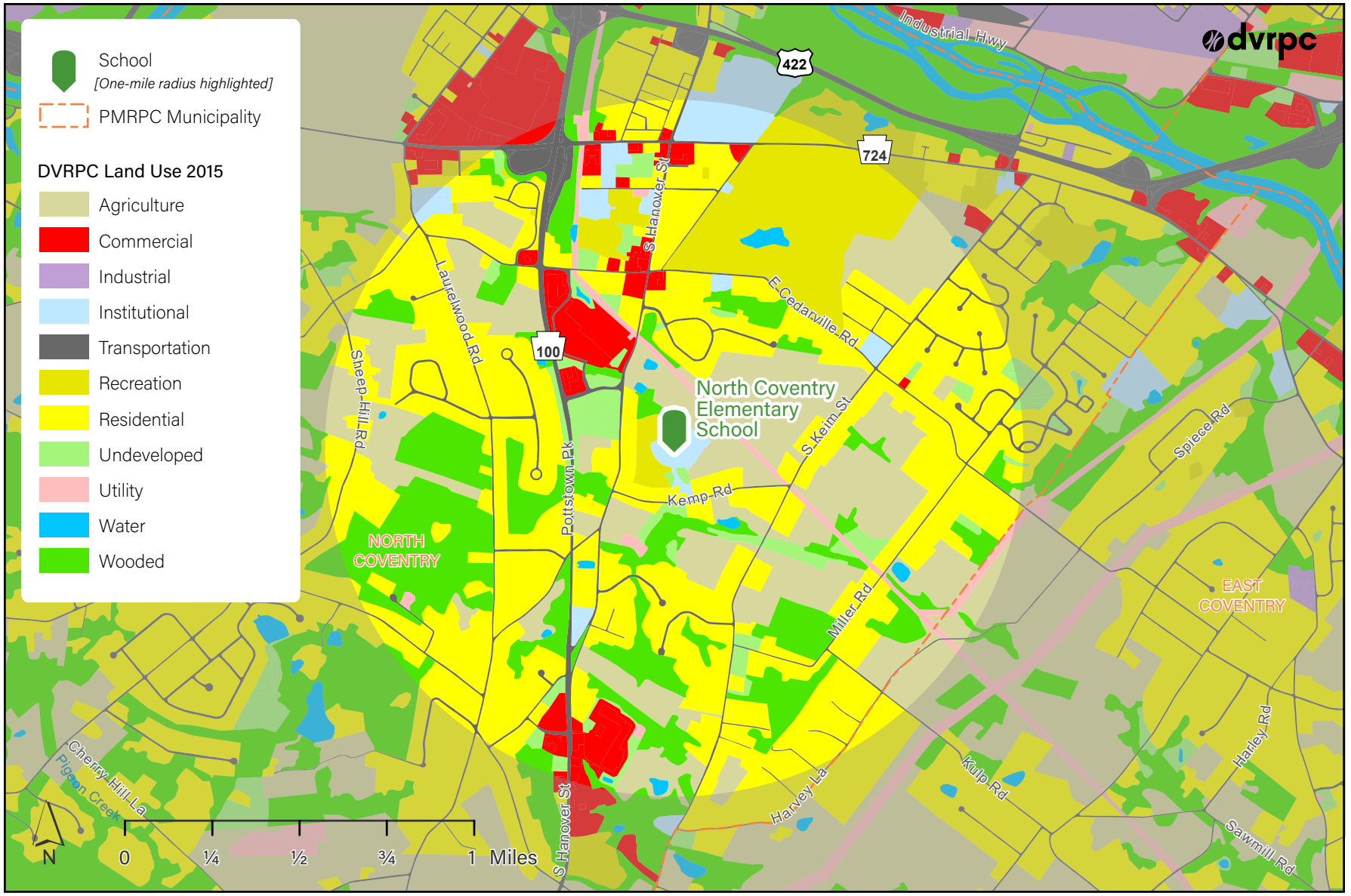
An advertising campaign ran on Facebook for the duration of this effort, targeting residents associated with the 19465 zip code.

Insights

Survey results highlighted that North Coventry Elementary School parents would feel comfortable having their children walk or bike to school if:

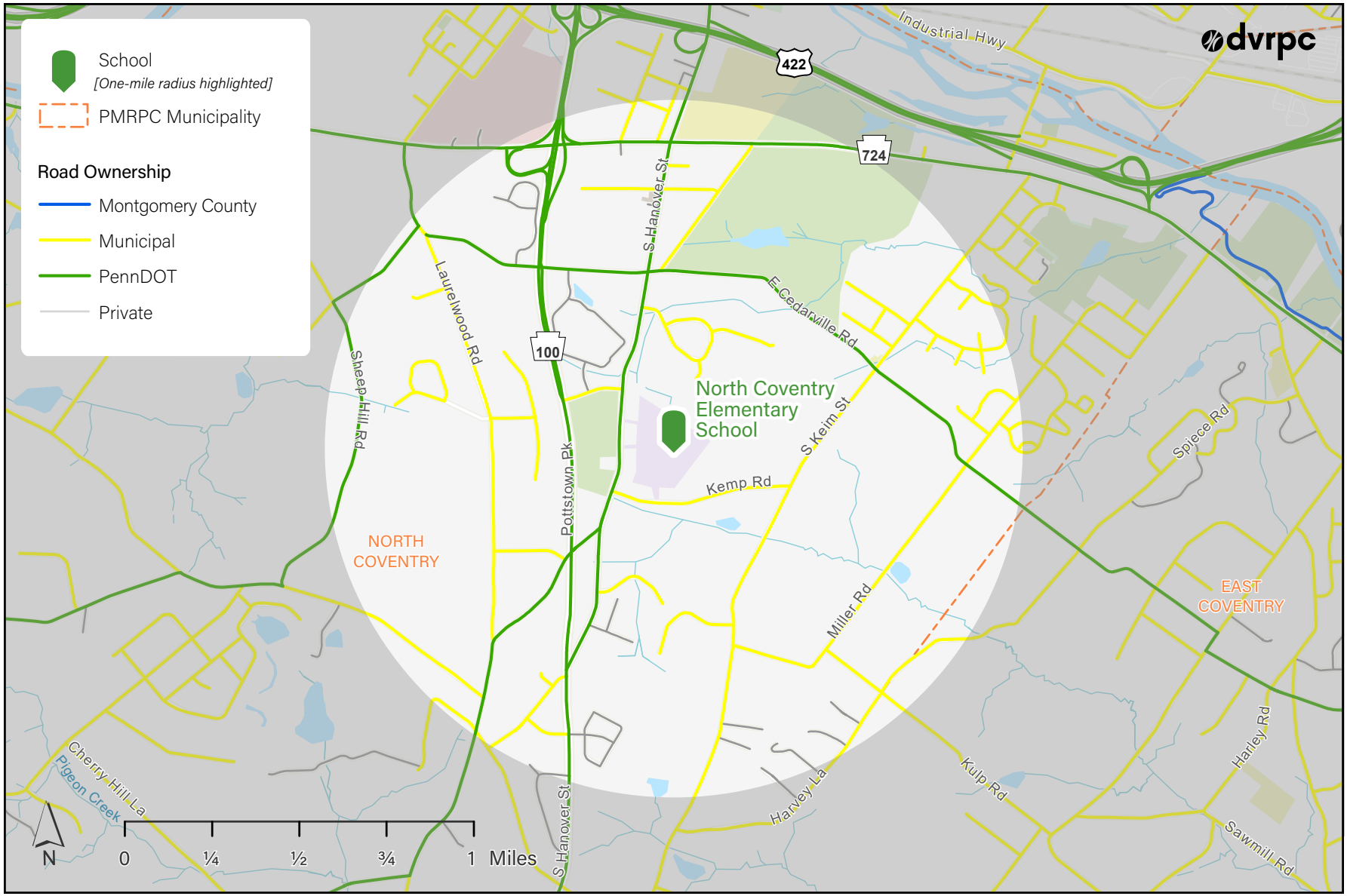
- They lived closer to the school.
- The commute time was shorter.
- There was less vehicular traffic or speeding along the route.
- There were more sidewalks and side paths.
- Crossing guards were present along the route.
- There were adults students could walk with.
- Intersections and crossings were made safer.
- There is minimal walking or biking infrastructure located near the school and on surrounding neighborhood roads. One comment recommended a sidewalk or side path along Hanover Street and Keim Street.

Figure 39: Land Use Surrounding North Coventry Elementary School



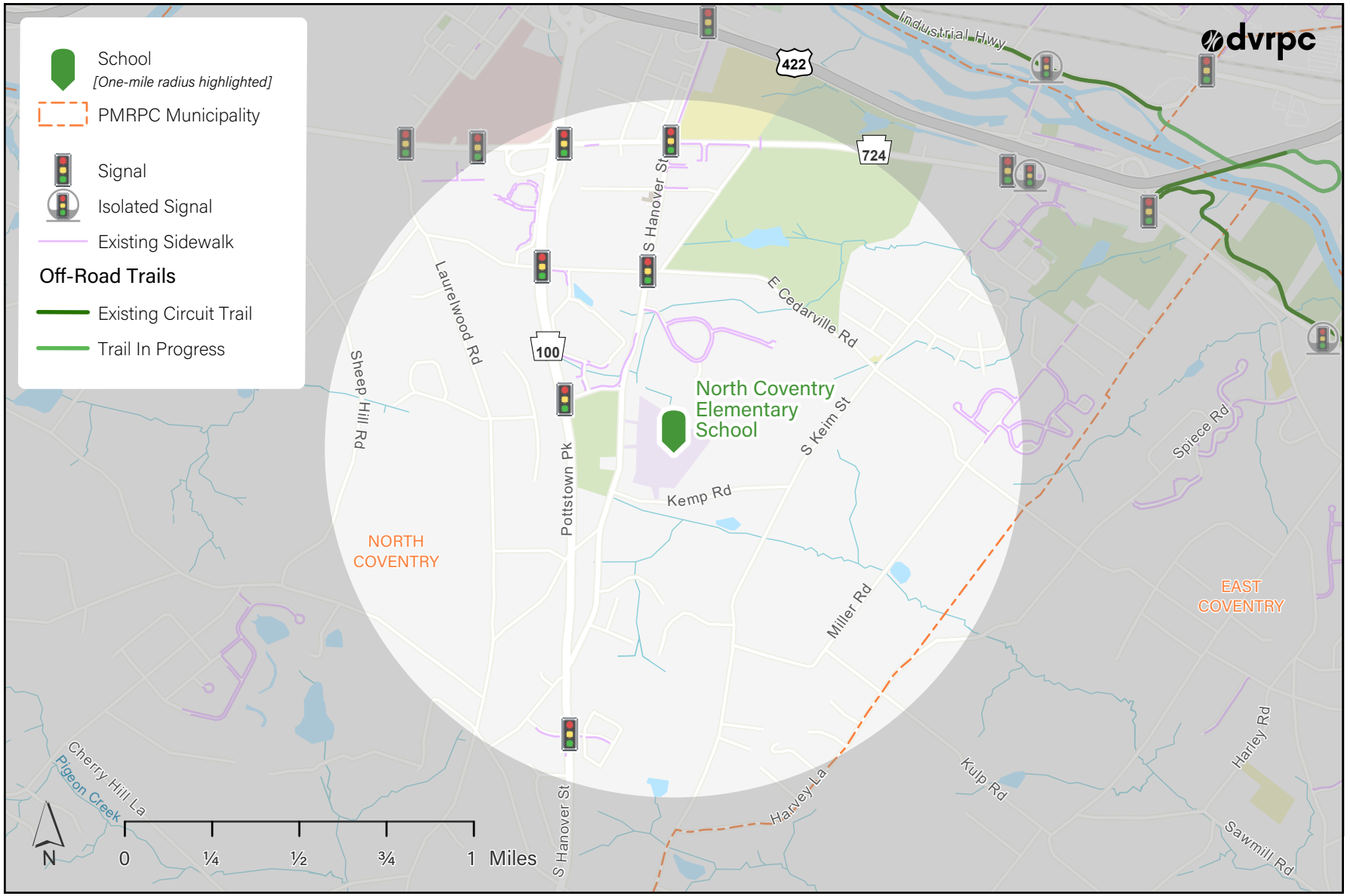
Source: DVRPC, 2024

Figure 40: Road Ownership Surrounding North Coventry Elementary School



Source: DVRPC, 2024

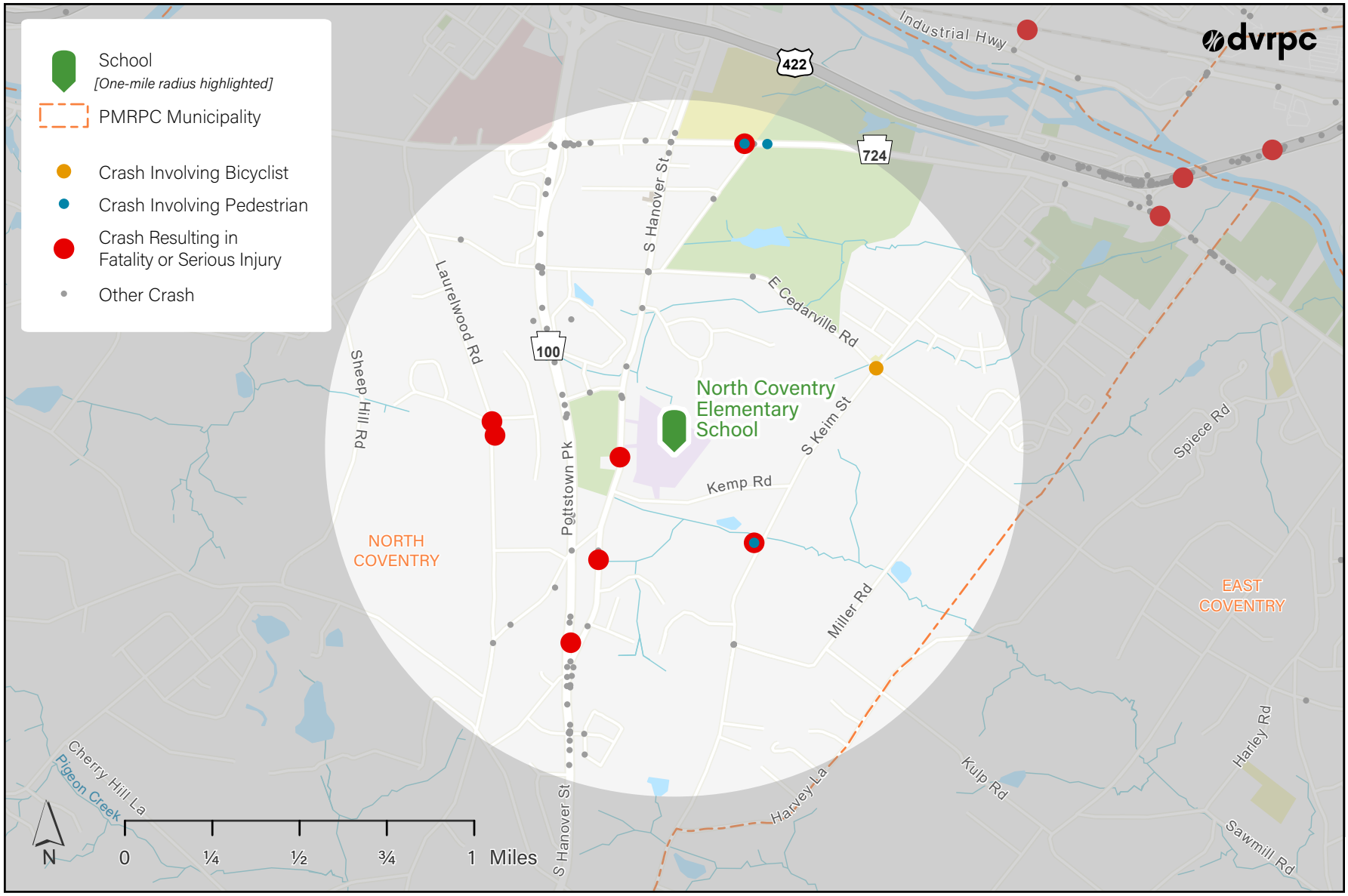
Figure 41: Existing Pedestrian and Bicycle Infrastructure near North Coventry Elementary School



Source: DVRPC, 2024

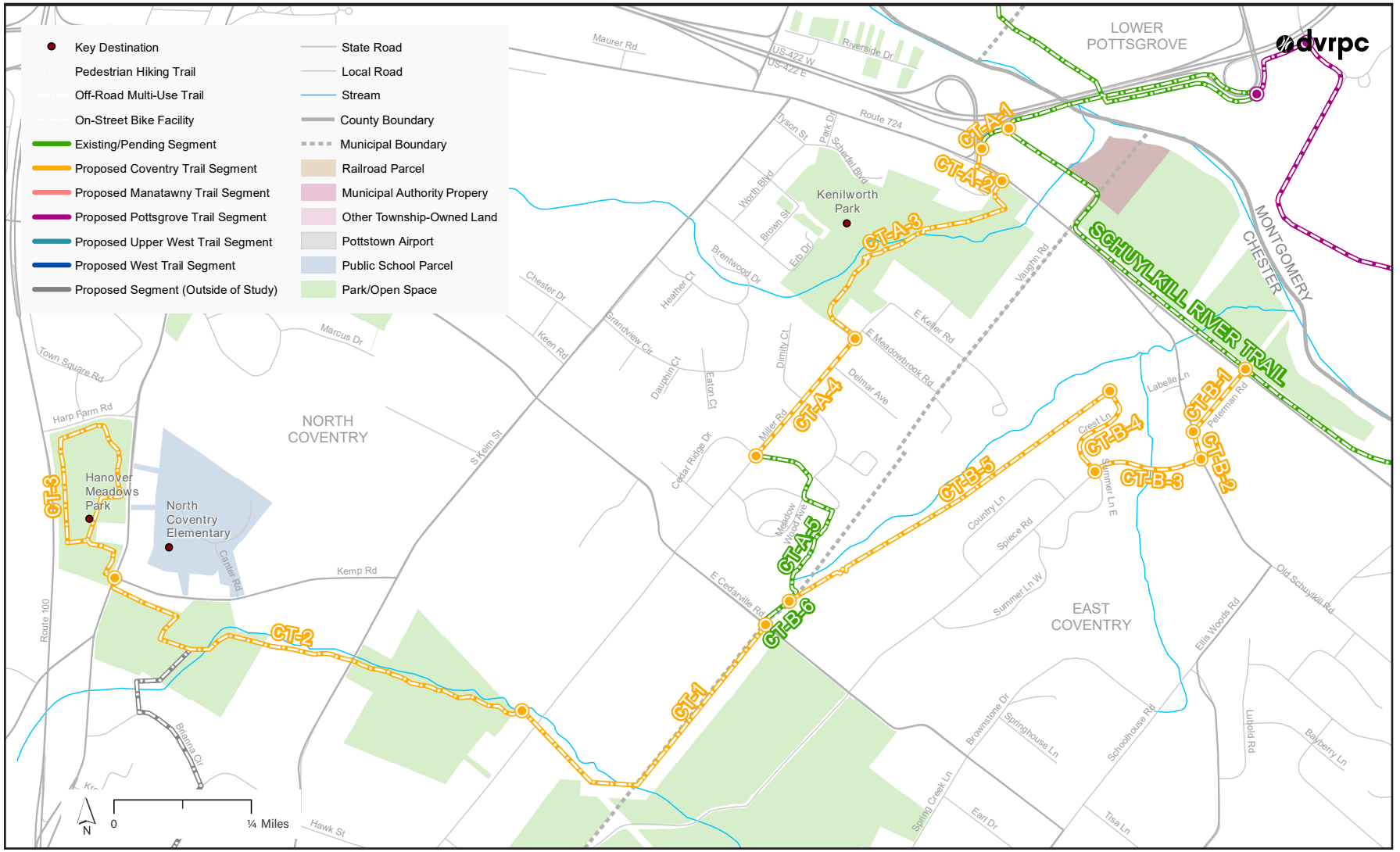
* Isolated signal timing is not coordinated with the timing of other nearby signals.

Figure 42: Crash History near North Coventry Elementary School



Source: DVRPC, 2024

Figure 43: Proposed Coventry Trail from *A Circle Of Progress* (2018)



Source: DVRPC, PennDOT, Chester County, 2018

Proposed Improvements

The existing conditions analysis and engagement with the school community was supplemented by field work. The project team visited the school in Spring 2024 to observe travel patterns and student and parent behaviors at pickup and drop off times. Together, this background research identified the need for the following improvements.

A lack of bicycle and pedestrian facilities along Kemp Road prevents students from walking and biking to North Coventry Elementary School. Municipal plans to connect local open space through the development of the proposed Coventry Trail may lead to increased demand for safe access to the nearby North Coventry Elementary. A pedestrian path, shared lane, and traffic calming along Kemp Road is recommended to facilitate safe connections to adjacent residents and the proposed Coventry Trail. Ensuring low vehicle travel speeds with speed cushions can help improve crossing safety and can improve safety for bicycle users. Figure 46 depicts a map of all the recommended improvement areas.

Pedestrian Paths & Intersection Improvements

Analysis of the study area revealed that there are currently no pedestrian and bicycle facilities connecting North Coventry Elementary School to the surrounding neighborhoods. The project team recommends a pedestrian sidepath along Kemp Road and adjacent to the North Coventry Elementary School driveway (Figures 44-45). A five- to six-foot pedestrian path is recommended on the northern side of Kemp Road between the North Coventry Elementary School driveway and Keim Street. The path is proposed to cross Kemp Road at the school driveway and expand to 10 feet, terminating at a potential access point to the proposed Coventry Trail. The parcel directly south of this potential access point is owned by natural gas and electric provider UGI Corporation. Further discussions between the municipality, the provider, and adjacent homeowners would need to be held to negotiate a potential trail access point and pedestrian path on Kemp Road.

A 7- to 8-foot separated path is recommended along the North Coventry

Figure 44: Proposed N. Coventry School Connection

Figure 45: Proposed Trail Connection

Elementary School driveway. The northern portion is proposed along a school-owned lawn and the southern portion reallocates space from the 20-foot one-way lane entering the driveway (Figure 32). Right-turning bus movement will be maintained. A pedestrian crossing across the school parking lot entrance further supports safe student crossing. Engineering design will be needed to determine the exact placement of the sidepath, which may result in the removal of some street trees.

The project team also recommends upgrading crosswalks from transverse to continental to improve visibility and installing ADA-compliant curb ramps with tactile warning strips. Per PennDOT standards, ramps should not be combined on a given corner, angling users towards the middle of the intersection. Instead, one ramp should be provided for each crossing direction.

The project team recommends speed cushions to calm vehicular traffic and to support safe pedestrian crossing and potential shared lanes along Kemp Road. Pedestrian warning signage is also recommended at the proposed crossings.

Table 5: North Cost Coventry Elementary School Estimates

Item	Notes	Cost per Item	Measurement	Quantity	Total Cost
ADA-Compliant Curb Ramp	N/A	$10,000	Each	10	$100,000
Permanant Speed Cushion	Width: 15' (one way street, not including parking on either side)	$400	Each	4	$1,600
Curb Extension (Small) *or Reduced Curb Radii**	LF Curb: 50' Sidewalk: 12 sq. yd. Grass: 10 sq. yd. Excavation of existing pavement (y/n): Y	$10,000	Each	2	$20,000
Curb Extension (Large)	LF Curb: 100' Sidewalk: 100 sq. yd. Grass: 60 sq. yd Excavation of existing pavement (y/n): Y	$40,000	Each	1	$40,000
Continental Crosswalks	Standard dimensions (per assuming 12 LF; per length of crossing)	$2,000	Each	5	$10,000
New stop bar	Standard dimensions	$150	Each	1	$150
Sidewalks	Length: per LF (Length * .55 = SY) Width: 5'	$275	FT, SY	1670, 918	$253,000
Trails	Width: 10'	$1.5 Million	Mile	0.2	$300,000
New Signage	Size: conventional (MUTCD) Type: stop, yield, one-way, no parking, school zone, do not enter, pedestrian crossing Post: standard	$350	Each	6	$2,100
Reinstall/relocate existing signage after curb extensions or ADA ramps are installed	N/A	$250	Each	2	$500
Shared Lanes/Sharrow Signs	N/A	$500	Each	8	$4,000

Cost Estimates

Based on the recommendations above, the project team developed a rough estimate of overall construction costs to help identify appropriate funding sources. The cost estimates reflected in the table below identify the type and quantity of each recommended improvement. The team coordinated with DVRPC's Office of Project Implementation to estimate the construction cost of each element. If every recommendation listed above were constructed, this package of improvements would cost approximately $731,000 in 2025 dollars (Table 5). This estimate does not include the cost of potential tree removal. These planning-level cost estimates should only be used to help determine implementation feasibility and funding eligibility. More accurate cost estimates would be possible after engineering design.

Next Steps

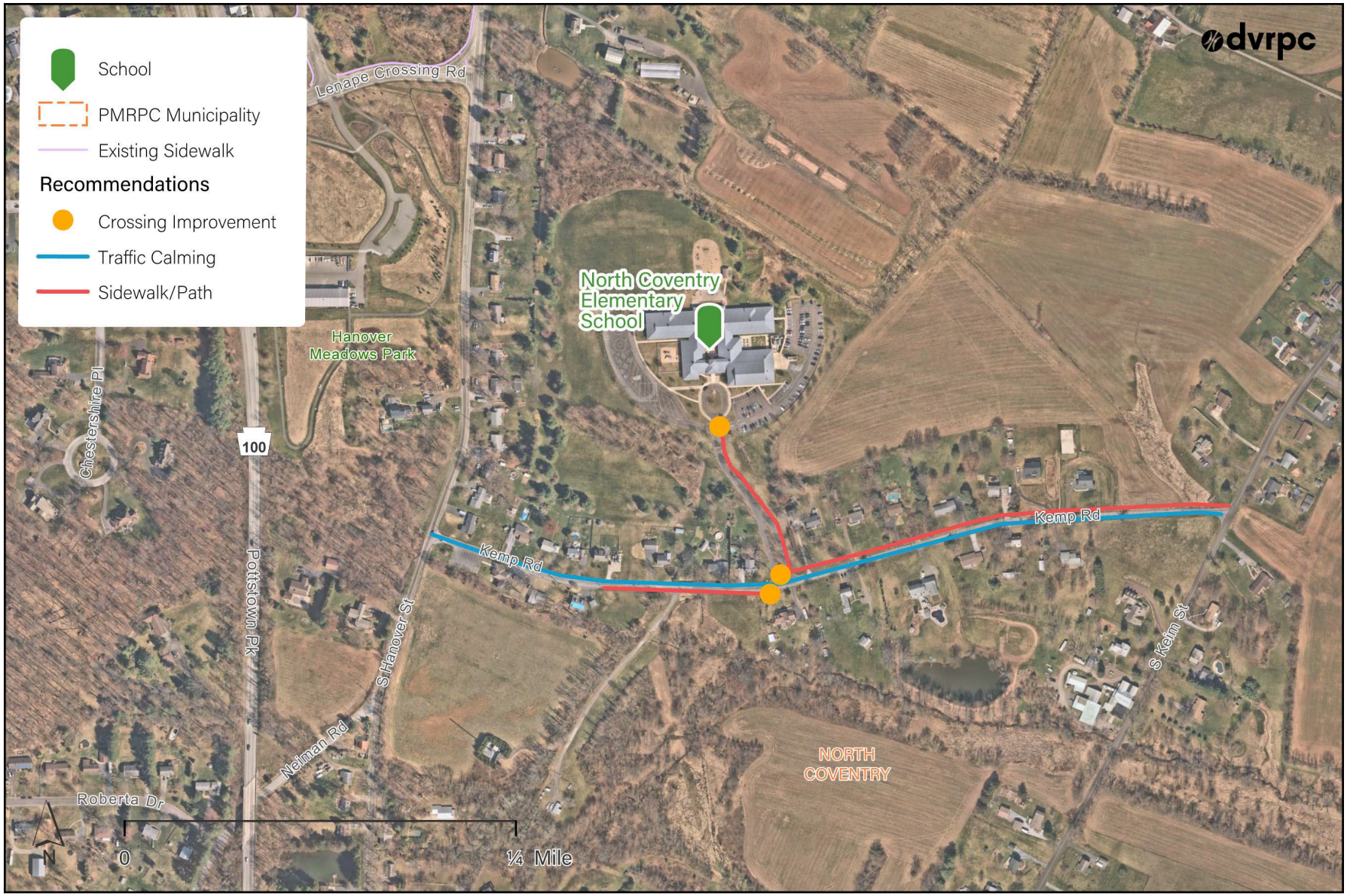
The recommendations provided in this section serve as a menu of possible improvements, rooted in best practices and standards, for creating safe pedestrian and bicycle access to and from North Coventry Elementary School. Multiple state and federal funding sources (e.g., TASA, Multimodal Fund) are available to cover construction costs for transportation safety improvements. However, a number of things are needed to prepare an application for these grant programs.

Stakeholder Coordination: Kemp Road is locally owned. However, the properties adjacent to Kemp Road are privately-owned commercial and residential parcels. Further discussions between the municipality, the UGI Corporation, and adjacent homeowners would need to be held to negotiate a potential trail access point and pedestrian path along Kemp Road.

Engineering Design: Engineers will need to develop implementable designs from the proposed recommendations. They will need to consider the impact of traffic calming and intersection improvements on vehicular movements, potential tree removal , drainage, utilities, and signals, and come up with a plan to mitigate these impacts where applicable. Engineering designs will inform a more accurate estimate of the project budget and timeline.

Typically, design costs around 15-20% of the estimated construction cost. Local entities will need to cover the cost of design before applying for construction funding. DVRPC's Office of Project Implementation is available to answer questions and provide guidance on developing projects to apply for construction funding. For more information, visit the Office of Project Implementation's webpage: https://www.dvrpc.org/projectimplementation/pa.

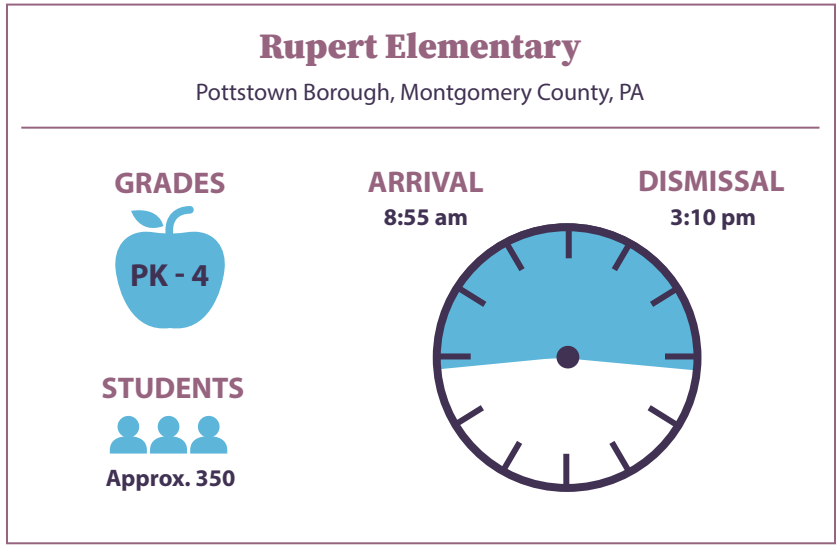
Figure 46: Recommendations for North Coventary Elementary School



Source: DVRPC, 2024

CHAPTER 7:

Rupert Elementary School



Planning Context

Rupert Elementary School, part of the Pottstown School District, is located in a high-density residential neighborhood south of the commercial area along High Street in downtown Pottstown (Figure 47). Industrial and utility land uses are located to the south before reaching wooded areas and the Schuylkill River. Most of the nearby roads are municipal or privately owned, with the exception of High Street and Armand Hammer Boulevard, which are owned by PennDOT (Figure 48). There is a well-connected sidewalk network throughout the adjacent residential neighborhood, and there are on-road bicycle facilities along a portion of High Street (Figure 49). The Schuylkill River Trail is approximately ¾ mile to the south and is not connected to the sidewalk network, so it is unlikely that students use the trail to commute to and from school.

There have been a number of Safe Routes to School studies conducted for Rupert Elementary in the past. The most recent study was done in 2013, and synthesized with other work by Montgomery County in 2020. Improvements informed by previous studies have had positive impacts on the neighborhood, and MCPC highlights the following recommendations around Rupert Elementary:

1. Reinvigorate the walking school bus
2. Begin targeted sidewalk improvements
3. Pursue crossing guard continuing education
4. Investigate a realignment of Rosedale Drive

Crash History

The project team performed a crash analysis using PennDOT data from 2018 through 2022 to get a sense of the area's crash experience and identify locations with critical safety issues. The analysis revealed 483 reported crashes within a 1-mile radius of Rupert Elementary School (Figure 50). Of those, 20 crashes resulted in someone being killed or severely injured (KSI), 15 involved pedestrians, and three involved bicyclists. The majority of crashes, severe and otherwise, occurred along busy corridors near the school, including High Street and Armand Hammer Boulevard. However, some crashes also occurred at the intersections of local roads surrounding the school .

Demographics

The project team analyzed Indicators of Potential Disadvantage (IPD), which estimates potential disparities across local communities, with a focus on income and the population groups protected by Title VI:

- Youth (under the age of 18)
- Older Adults (age 65 and over)

- Racial Minority
- Ethnic Minority
- Female
- Foreign Born
- Limited English Proficiency
- Disabled
- Low Income (within 200% of the poverty line)

This is achieved by comparing the population of each group in a tract to the nine-county DVRPC region. Based on this analysis, census tracts receive a score ranging from Well Below Average to Well Above Average.'

Seven census tracts are within a 1-mile radius of Rupert Elementary School (208702, 208704, 208802, 208903, 208906, 301300, and 301401). All census tracts score at or Below Average in all indicators of potential disadvantage, with the exception of Youth, Female, Disabled, and Low Income. Census tract 208903 has an Above Average concentration of female residents, a Well Above Average concentration of disabled residents, and an Above Average concentration of low-income residents compared to the region. Tracts 208704 and 208802 also have an Above Average concentration of low-income residents. Detailed results of the IPD analysis and a census tract reference map are appended.

Engagement

In 2023, with support from the school, the project team conducted an online survey to learn about parents' concerns regarding students walking and biking to Rupert Elementary School. The survey contained a web map for participants to identify location-specific concerns and generalized questions regarding school transportation habits and issues.

Survey Promotion

The project team interviewed Rupert Elementary School's principal to gauge the school's interest, participation level, and potential promotional opportunities. Rupert Elementary School and Pottstown Borough were asked to promote the survey virtually through their preferred communication channels. Rupert Elementary School distributed the survey to a parent email list and distributed promotional flyers to all students. The survey was live from mid-November to early December in 2023. The following items were provided to assist with survey promotion:

- Draft promotional email, newsletter, social media, and morning announcements text in English and Spanish,
- Social media graphics, and
- 400 printed flyers

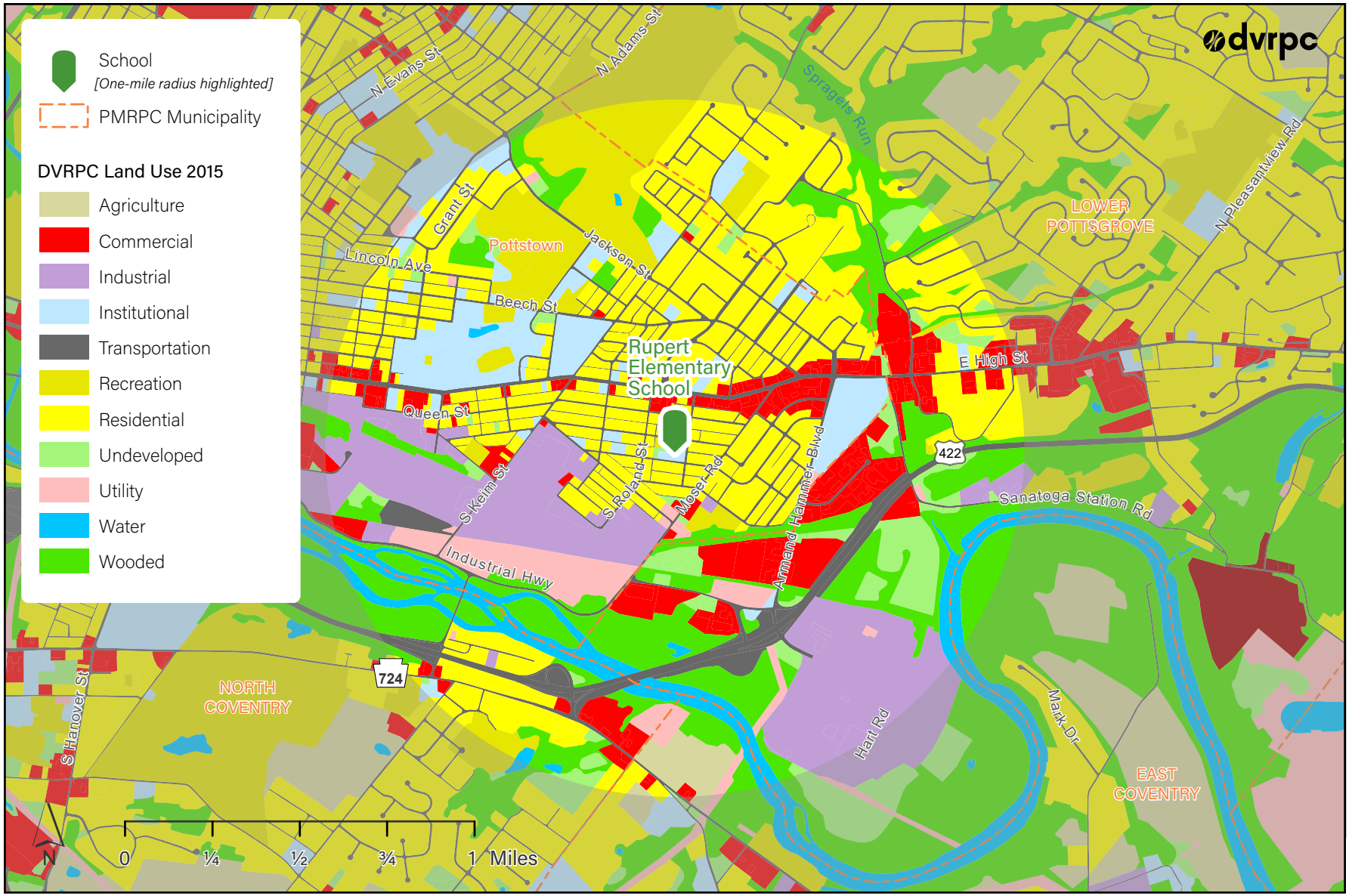
An advertising campaign ran on Facebook for the duration of this effort, targeting residents associated with the 19464 zip code.

Insights

Survey results highlighted that Rupert Elementary School parents would feel comfortable having their children walk or bike to school if:

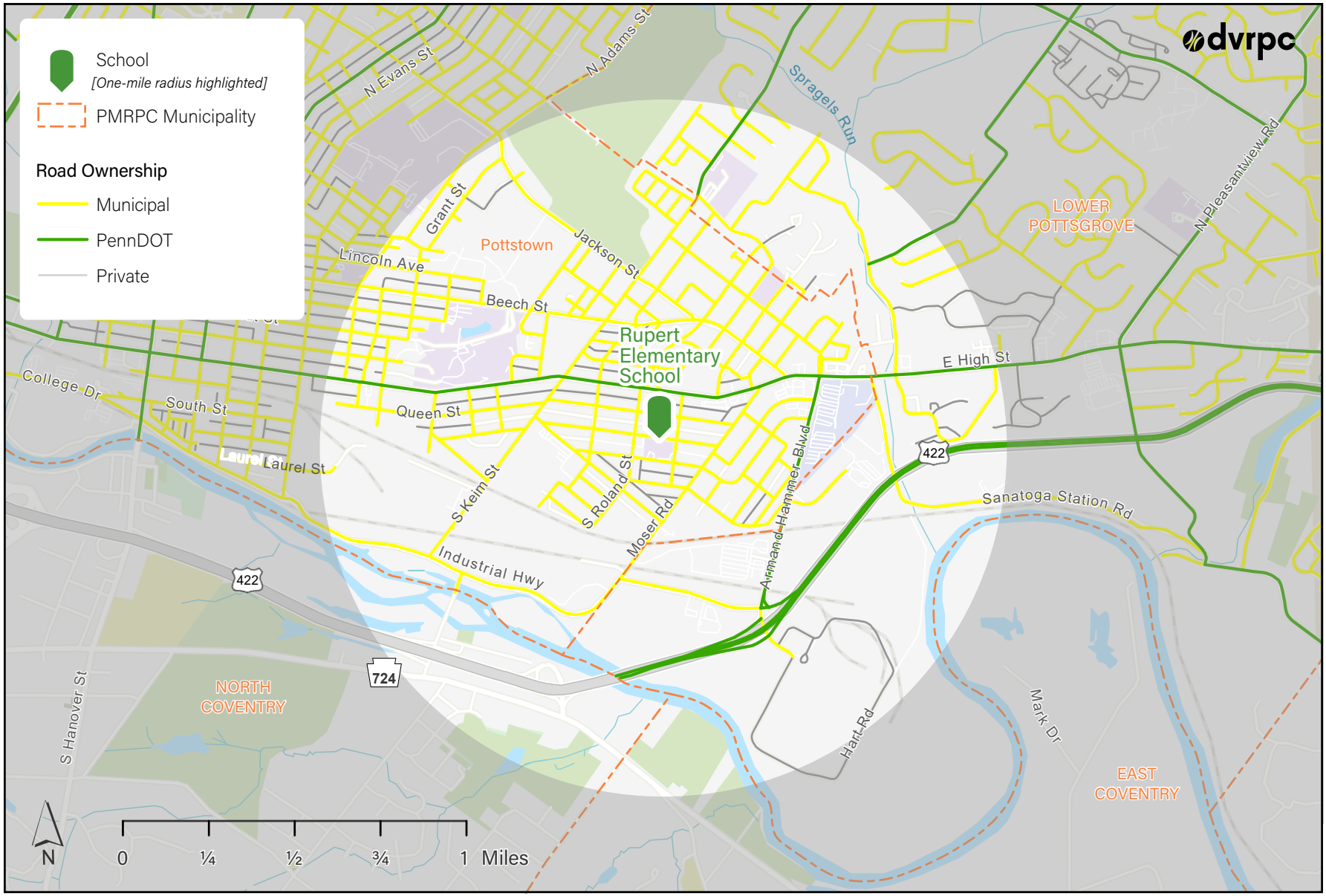
- They lived closer to the school.
- There was less vehicular traffic and speeding along the route.
- Crossing guards were present along the route.
- There are improvements to personal safety.
- Intersections and crossings were made safer.

Figure 47: Land Use Surrounding Rupert Elementary School



Source: DVRPC, 2024

Figure 48: Road Ownership Surrounding Rupert Elementary School



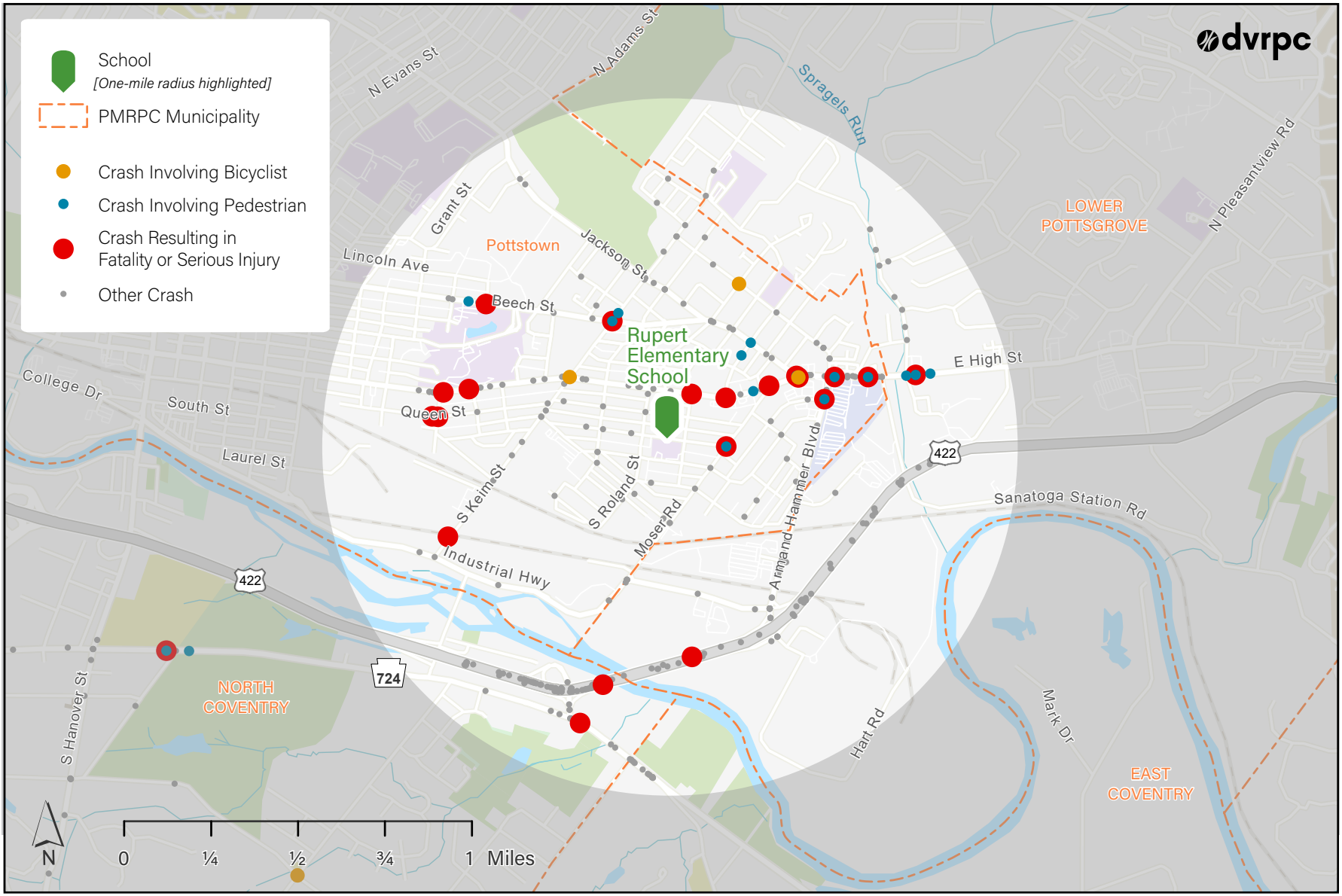
Source: DVRPC, 2024

Figure 49: Existing Pedestrian and Bicycle Facilities near Rupert Elementary School

Source: DVRPC, 2024

Note: Isolated signal timing is not coordinated with the timing of other nearby signals.

Figure 50: Crash History near Rupert Elementary School



Source: DVRPC, 2024

Proposed Improvements

The existing conditions analysis and engagement with the school community was supplemented by field work. The project team visited the school in Spring 2024 to observe travel patterns and student/parent behaviors at pickup and drop off times. Together, this background research identified the need for the following improvements:

Low-speed, low-volume neighborhood roads with a well-connected pedestrian network primarily surround Rupert Elementary School. Crashes along the local roads surrounding the school, as well as vulnerable users crashes at S. Keim Street & High Street and South Street & Moser Road in the last five years suggest the potential to improve safety at intersections near the school. The surrounding area is home to an above average proportion of youth and low-income residents who are more likely to walk, increasing the likelihood that they are vulnerable roadway users. Vulnerable user safety can be enhanced by reducing crossing distances, lowering travel speeds, and increasing the visibility of pedestrians and bicyclists. Figure 56 shows the recommended improvement areas.

Traffic Calming

School community members identified a desire for additional traffic calming measures to support reduced travel speeds near the school and to slow turning vehicles. The project team recommends installing permanent speed cushions along Cherry Street, South Street, Roland Street, and Mt Vernon Street to slow vehicles traveling adjacent to the school. Small temporary speed bumps are in place along some of these streets, but do not extend across the entire road, reducing their effectiveness. Permanent speed cushions should be placed strategically to prevent vehicles from maneuvering around them, while also allowing for bicyclists to travel through them.

Intersection Improvements

Site visits revealed opportunities to narrow pedestrian crossings, reduce turning radii, and upgrade curb ramps and crosswalks to close gaps in accessibility surrounding the school. The project team recommends installing curb extensions at intersections adjacent to the school property to shorten crossings, reducing the time and distance pedestrians are in conflict with vehicles. Curb extensions will also tighten the radius for turning vehicles, slowing turning movements through these intersections. Turning radii will need to be designed strategically to achieve the desired slowing effect while still allowing larger vehicles to make the turn. While the area surrounding the school is primarily residential, some of the larger roads, including S. Keim Street and Moser Road, connect to industrial and utility areas closer to the Schuylkill River (Figures 51-52 & Figures 54-55). Maintaining the necessary access for trucks and other large vehicles is critical along those roads, but could be limited on some of the residential

Figure 51: Rupert Elementary School South Street Improvements

Figure 52: Rupert Elementary School Cherry Street Improvements

roads directly adjacent to the school.

The project team also recommends upgrading crosswalks from transverse to continental to improve visibility and installing ADA-compliant curb ramps with tactile warning strips. Since the surrounding area is home to an above average proportion of disabled residents, it is critical that ramps are designed according to current standards. Per PennDOT standards, ramps should not be combined on a given corner, angling users towards the middle of the intersection. Instead, one ramp should be provided for each crossing direction. Building curb extensions, adding ramps, and moving some crossing locations could impact some existing utility poles, which should be considered during engineering design.

The project team suggests implementing these improvements at the following intersections (Figures 51-54):

- South Street & South Mt. Vernon Street
- South Mt. Vernon Street & Cherry Street
- South Roland Street & Cherry Street
- South Roland Street & South Street
- South Street & Moser Road, *the site of a severe pedestrian-involved crash within the past 5 years*
- Cherry Street & Moser Road

The offset intersection of Queen Street and South Keim Street can lead to confusion for pedestrians and allow drivers to make turns at high speeds. The project team recommends squaring the corners at Queen Street and South Kiem Street to slow turning vehicles (Figure 55). This will also substantially reduce pedestrian crossing distances and make it clear where pedestrians should cross. ADA-compliant curb ramps are needed at these new crossings to ensure accessibility. At Kiem Street and High Street, the project team recommends religning the crosswalks and pedestrian rampes to shorten crossing distrances for pedestrians (Figure 54).

Figure 53: Sample Cherry Street Improvements

Figure 54: Rupert Elementary School High Street Improvements

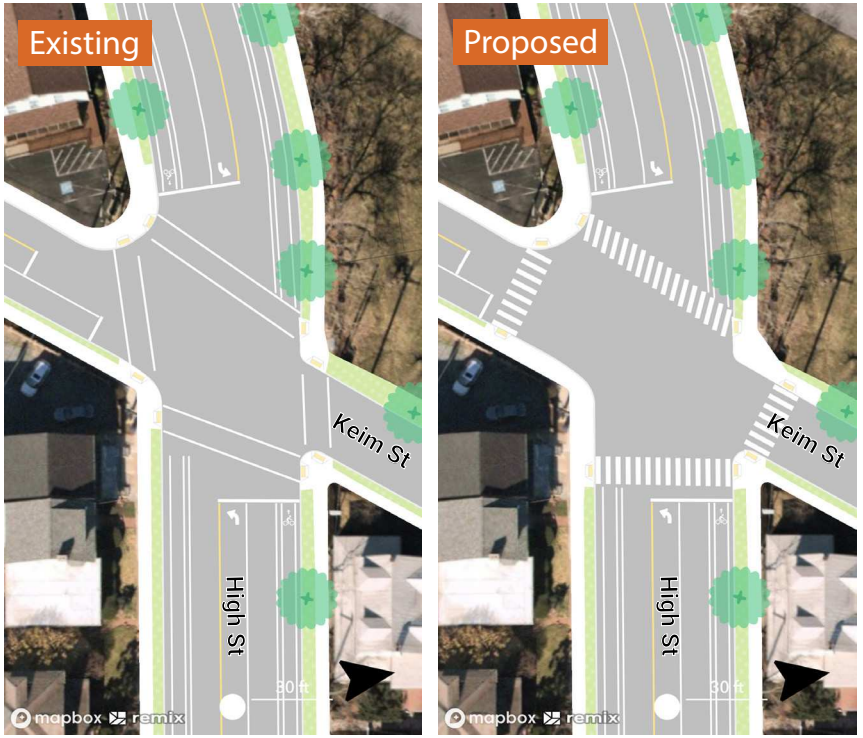


Figure 55: Rupert Elementary School Keim Street Improvements

Cost Estimates

Based on the recommendations above, the project team developed a rough estimate of overall construction cost to help identify appropriate funding sources. The team identified the type of recommended improvements and the number of each type needed. Then they coordinated with DVRPC's Office of Project Implementation to estimate the construction cost of each element. The breakdown is provided in the table below. If every recommendation listed above were constructed, this package of improvements would cost approximately $1,152,000 in 2025 dollars. These planning-level cost estimates should only be used to help determine implementation feasibility and funding eligibility. More accurate cost estimates would be possible after engineering design.

Next Steps

The recommendations provided in this section serve as a menu of possible improvements, rooted in best practices and standards, for creating safe pedestrian and bicycle access to and from Rupert Elementary School. Multiple state and federal funding sources (e.g., TASA, Multimodal Fund) are available to cover construction costs for transportation safety improvements. However, a number of things are needed to prepare an application for these grant programs.

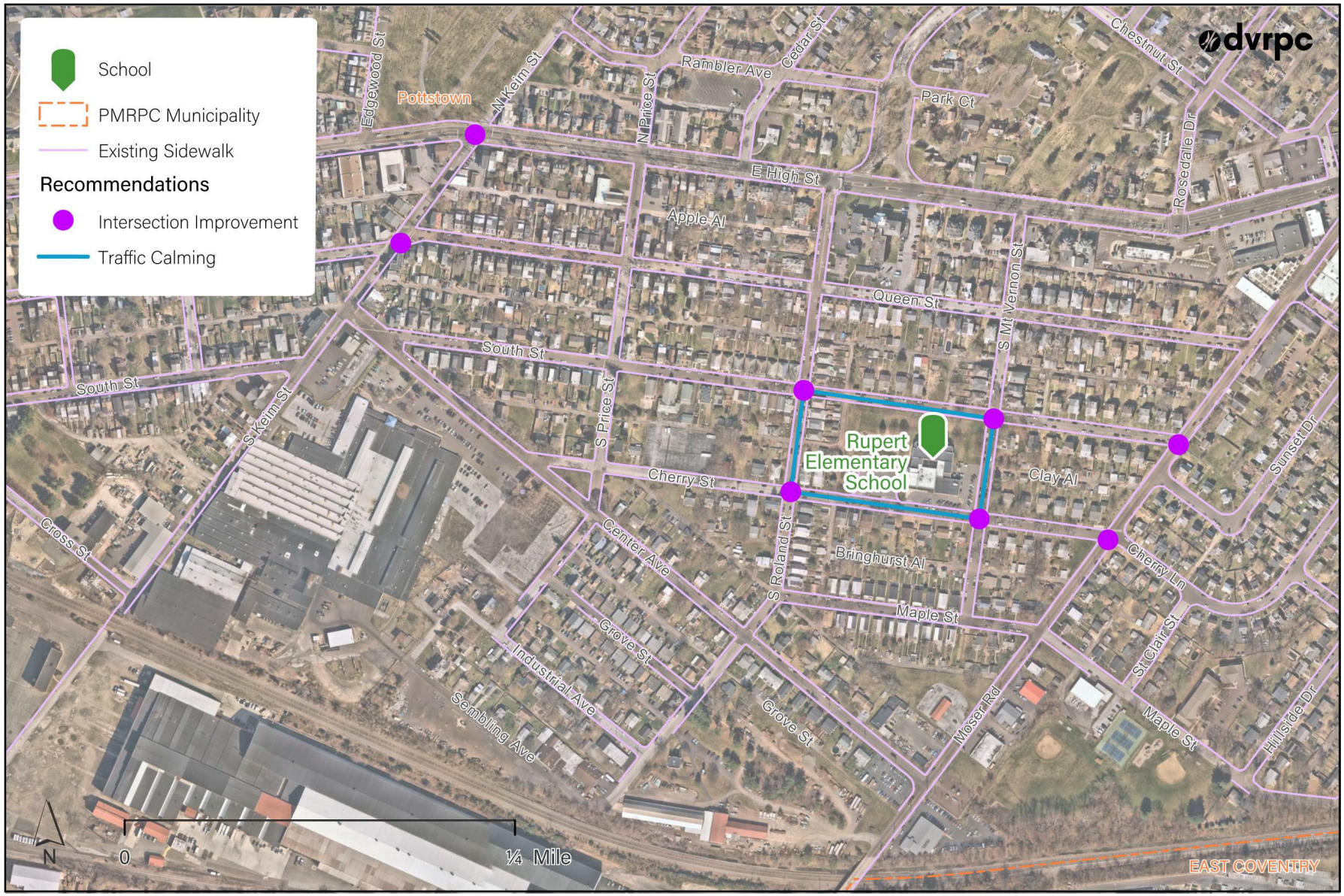
Table 6: Rupert Elementary School Cost Estimates

Item	Notes	Cost per Item	Measurement	Quantity	Total Cost
ADA-Compliant Curb Ramp	N/A	$10,000	Each	56	$560,000
Permanant Speed Cushion	Width: 15' (one way street, not including parking on either side)	$400	Each	4	$1,600
Curb Extension (Small)	LF Curb: 100' Sidewalk: 100 sq. yd. Grass: 60 sq. yd Excavation of existing pavement (y/n): Y	$10,000	Each	43	$430,000
Curb Extension (Large)	LF Curb: 100' Sidewalk: 100 sq. yd. Grass: 60 sq. yd Excavation of existing pavement (y/n): Y	$40,000	Each	2	$80,000
Continental Crosswalks	Standard dimensions (per assuming 12 LF) (per length of crossing)	$2,000	Each	29	$58,000
Stop Bar with Eradication	N/A	$200	Each	13	$2,600
New Stop Bar	Standard dimensions	$150	Each	16	$2,400
New Signage	Size: conventional (MUTCD) Type: stop, yield, one-way, no parking, school zone, do not enter, pedestrian crossing Post: standard	$350	Each	4	$1,400
Reinstall/relocate existing signage after curb extensions or ADA ramps are installed	N/A	$250	Each	62	$15,500

Stakeholder Coordination: The majority of roads surrounding Rupert Elementary School are locally owned. However, some nearby roads where recommendations are proposed, including High Street, are owned by PennDOT. Local entities should coordinate with PennDOT on design and approval for any changes along these roads, and ensure that they meet PennDOT design and safety standards. Depending on roadway ownership and right-of-way boundaries, local entities should work together to determine who will be responsible for maintaining certain elements of the proposed improvements, if constructed.

Engineering Design: Engineers will be needed to take these recommendations from concept plans to implementable designs. They will need to consider the impact of traffic calming and intersection improvements on vehicular movements, drainage, utilities, and signals, and come up with a plan to mitigate these impacts where applicable. Engineering designs will inform a more accurate estimate of the project budget and timeline. Typically, design costs around 15-20% of the estimated construction cost. Local entities will need to cover the cost of design before applying for construction funding. DVRPC's Office of Project Implementation is available to answer questions and provide guidance on developing projects to apply for construction funding. For more information, visit DVRPC's Office of Project Implementation's webpage: https://www.dvrpc.org/projectimplementation/pa.

Figure 56: Recommendations for Rupert Elementary School



Source: DVRPC, 2024

Appendix

A: Indicators of Potential Disadvantage Analysis

APPENDIX A:

Indicators of Potential Disadvantage Analysis

Table 7: Indicators of Potential Disadvantage (IPD) within 1-mile radius of each school

School	Tract Number	Youth	Older Adult	Racial Minority	Ethnic Minority	Female	Foreign Born	Limited English Proficiency	Disabled	Low Income
West Pottsgrove Elementary	209000	Average	Average	Average	Below Average	Average	Well Below Avg.	Below Average	Well Above Avg	Above Average
	209201	Average	Below Average	Below Average	Average	Average	Below Average	Below Average	Above Average	Average
	209202	Below Average	Average	Below Average	Average	Average	Below Average	Below Average	Average	Average
	301401	Average	Average	Below Average	Average	Average	Below Average	Below Average	Average	Average
	301402	Average	Average	Below Average	Average	Average	Below Average	Below Average	Below Average	Below Average
Gilbertsville Elementary	208201	Below Average	Average	Below Average	Below Average	Below Average	Below Average	Below Average	Average	Below Average
	208203	Above Average	Below Average	Below Average	Below Average	Average	Below Average	Below Average	Below Average	Below Average
	208204	Average	Above Average	Below Average	Below Average	Average	Below Average	Below Average	Below Average	Below Average
	208304	Well Above Avg.	Below Average	Below Average	Average	Below Average	Below Average	Below Average	Below Average	Below Average
Boyertown Area Middle School East	208201	Below Average	Average	Below Average	Below Average	Below Average	Below Average	Below Average	Average	Below Average
	208203	Above Average	Below Average	Below Average	Below Average	Average	Below Average	Below Average	Below Average	Below Average
	208301	Average	Well Above Avg	Below Average	Below Average	Below Average	Below Average	Well Below Avg.	Average	Below Average
	208303	Average	Average	Below Average	Average	Below Average	Below Average	Below Average	Below Average	Below Average
	208304	Well Above Avg	Below Average	Below Average	Average	Below Average	Below Average	Below Average	Below Average	Below Average
East Coventry Elementary	208704	Well Above Avg	Below Average	Average	Average	Average	Average	Average	Below Average	Above Average
	301300	Average	Average	Below Average	Below Average	Below Average	Below Average	Below Average	Average	Below Average
North Coventry Elementary	301300	Average	Average	Below Average	Below Average	Below Average	Below Average	Below Average	Average	Below Average
	301401	Average	Average	Below Average	Average	Average	Below Average	Below Average	Average	Average
	301402	Average	Average	Below Average	Average	Average	Below Average	Below Average	Below Average	Below Average
Rupert Elementary	208702	Average	Average	Below Average	Below Average	Below Average	Below Average	Below Average	Average	Below Average
	208704	Well Above Avg	Below Average	Average	Average	Average	Average	Average	Below Average	Above Average
	208802	Average	Below Average	Average	Average	Below Average	Average	Average	Average	Above Average
	208903	Average	Average	Average	Average	Above Average	Below Average	Well Below Avg.	Well Above Avg	Above Average
	208906	Average	Below Average	Average	Average	Average	Below Average	Below Average	Average	Average
	301300	Average	Average	Below Average	Below Average	Below Average	Below Average	Below Average	Average	Below Average
	301401	Average	Average	Below Average	Average	Average	Below Average	Below Average	Average	Average

Source: DVRPC, 2024

Pottstown Area Safe Routes to School

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Key Words:
Safety, pedestrian, bicycle; connectivity; schools

Abstract:
The Delaware Valley Regional Planning Commission (DVRPC) studied bicycle and pedestrian improvements around five Pottstown-area schools on behalf of Pottstown Metropolitan Regional Planning Committee (PMRPC): West Pottsgrove Elementary School, Gilbertsville Elementary School, Boyertown Area Middle School East, East Coventry Elementary School, North Coventry Elementary School, Rupert Elementary School, and Pottstown Borough. The plan identifies interventions to help increase students safety and accessibility walking and biking to school.

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DVRPC's vision for the Greater Philadelphia Region is a prosperous, innovative, equitable, resilient, and sustainable region that increases mobility choices by investing in a safe and modern transportation system; that protects and preserves our natural resources while creating healthy communities; and that fosters greater opportunities for all.

DVRPC's mission is to achieve this vision by convening the widest array of partners to inform and facilitate data-driven decision-making. We are engaged across the region, and strive to be leaders and innovators, exploring new ideas and creating best practices.

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