









# DARBY TRANSPORTATION CENTER

ACCESS & DEVELOPMENT OPPORTUNITIES STUDY



**OCTOBER 2016** 



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## **Executive Summary**

The Darby Transportation Center Access & Development Opportunities Study was conducted by the Delaware Valley Regional Planning Commission's (DVRPC's) Office of Smart Growth over a 12month period, in collaboration with the Southeastern Pennsylvania Transportation Authority (SEPTA), the Pennsylvania Department of Transportation (PennDOT), the Delaware County Transportation Management Association (DCTMA), Delaware County Planning Department, and Darby Borough.

The study area surrounds the Darby Transportation Center (DTC) in Darby Borough, and is home to a mix of light-industrial, commercial, and residential properties. SEPTA provides service to the DTC via two trolley lines—which travel to Center City Philadelphia—and three bus lines that connect passengers to locations farther out in Delaware County and beyond.

The goal of this project was to analyze the area surrounding the DTC to learn if transit-oriented development (TOD) is a viable development option. The project team looked at existing conditions, market conditions, circulation and access issues, and developable sites in Darby Borough in order to evaluate TOD readiness and make recommendations for future development. There are seven factors considered necessary for an area to be TOD ready: walkability, density, mix of uses, travel options, public space, housing choice, and community engagement.

A market analysis found that there is opportunity to develop infill housing within a quarter-mile of the station, as well as to rehab existing housing stock in the area. There is a market for new commercial development, both retail establishments (general merchandise stores, food services and drinking places, and full-service restaurants) and Class B and C office space. Due to underutilized land and floodplain concerns that preclude future building in some places, there is room to create public spaces that capitalize on the area's proximity to the Darby Creek and neighborhood trails.

The area was found to be well served by public transportation and a very usable street network; however, there are locations where reconfigurations and/or pedestrian amenities are recommended to upgrade the walking environment and improve the safety of crossings.

Seven potential development sites were identified, all within a quartermile of the station, where the various elements needed for TOD readiness can be created, strengthened, or expanded. Four are suitable for mixed-use development, one for residential development, and two could be used to create public spaces and connect with the area's natural amenities.

While the area was not found to be currently TOD ready, implementation of the recommendations in this report will move the area towards TOD readiness in the future by increasing density, expanding the mix of uses, and better connecting the station area with the surrounding community.

## CHAPTER 1: Introduction

The purpose of this study was to analyze the area surrounding the Darby Transportation Center (DTC), carefully considering the recent renovations to the passenger waiting area, SEPTA's planned Trolley Modernization project, and potential development sites in order to make market-sensitive recommendations to improve the environment and the station's connectivity to the surrounding community with an eventual goal of enabling transit-oriented development (TOD).

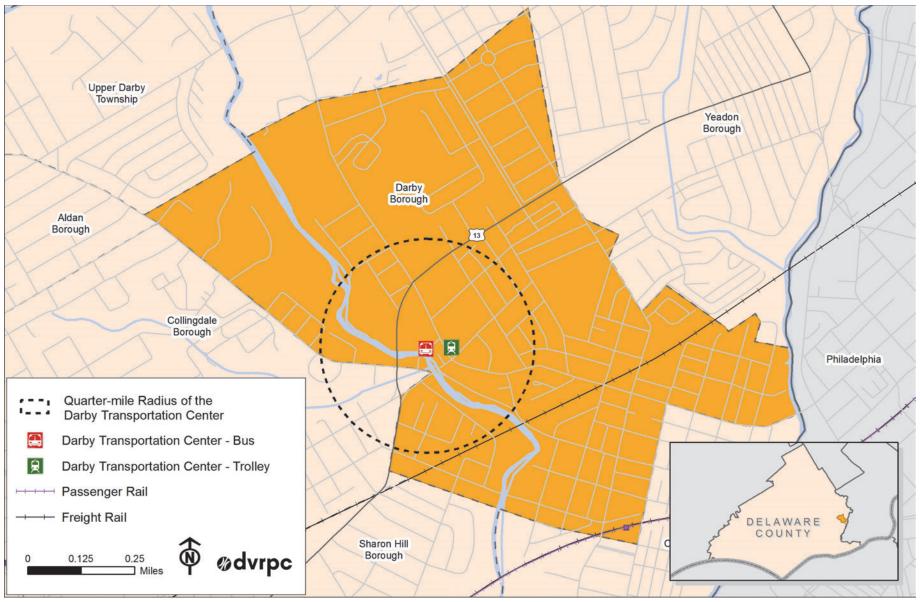
Currently, the DTC—located on Main Street between 9th and 10th streets in Darby Borough—serves approximately 5,000 riders daily through two SEPTA trolley lines that travel between the terminal and Center City Philadelphia and three SEPTA Suburban Division bus lines that connect passengers to locations farther out in Delaware County and beyond. A renovation of the bus terminal—located across Main Street from the trolley terminal—was completed in 2010 using \$2.1 million in federal stimulus funds to create an enclosed and heated waiting area, and add lighting, signage, and landscaping to improve the passenger waiting experience. In addition, a dedicated one-way bus transitway was created to connect Main Street with Macdade Boulevard.

As SEPTA will be upgrading its trolley fleet in the coming years with new, Americans with Disabilities Act (ADA)-accessible, 80-foot long light rail vehicles, this project provides an opportunity to look at how Trolley Modernization will affect the service at the DTC, in particular the feasibility of Route 13 access and full service levels to the transportation center. This project also supports PennDOT's Planning Priorities of "Land Use/Transportation Linkages/Economic Development/Modernization," specifically "(B) to provide input on any training and planning activities targeted to county and local governments, conservation districts and community stakeholders; examples include Smart Growth, Complete Streets, implementation tools, access management, transit oriented development, healthy communities, etc.," and "(E) identify livability and sustainability strategies to tie the quality and location of transportation facilities to broader opportunities such as access to employment opportunities, affordable housing, quality schools, safe streets, economic development, social equity, and environmental conservation."

The primary goal of this project was to analyze the area surrounding the DTC to learn if TOD is a viable option; however, the project team also considered circulation and access in the area, the recent station upgrades, and SEPTA's planned trolley modernization project when making recommendations.

Using an existing conditions analysis and a market analysis, the study team has proposed recommendations for access and development to improve the study area environment and the station's connectivity to the surrounding community. In the short term, the recommended transit-supportive improvements will enhance connections between the station area and the community and increase vitality and activity in the study area. In the long term, they will move the area toward TOD readiness.

#### Figure 1: Study Area Location



Source: DVRPC, 2016.

#### **Study Process**

The Darby Transportation Center Access & Development Opportunities Study was conducted by DVRPC's Office of Smart Growth over a 12-month period, from July 2015 through June 2016. A Steering Committee, comprised of representatives from SEPTA, PennDOT, DCTMA, Delaware County, and Darby Borough assisted throughout the process.

The study team worked to document existing conditions as applicable with the quarter-mile, half-mile, and one-and-a-half-mile radii of the DTC (shown in its regional context in Figure 1): the mix of uses (including retail), zoning requirements, parking environment, circulation, streetscape elements, developable sites, and constraints (floodplain issues, vacancy, grade changes). The quarter-mile radius is the area within a five-minute walk of the station and the area in which certain factors must be present for a place to be considered TOD ready. The half-mile radius is the area within a 10-minute walk of the station, and the one-and-a-half-mile radius is the trade area studied for the market analysis. Different types of information are available at the different geographies, and the project team used a wide variety of sources to get the most complete picture of the area possible.

Proposed changes to the trolley operations and nearby freight rail crossing were considered. Demographic and employment statistics were studied to better understand the current population. A market analysis was conducted to learn about opportunities in the housing, retail, office, and industrial markets. The area's strengths, weaknesses, opportunities, and constraints were detailed. Once the developable sites within a quarter-mile of the station were identified, the Steering Committee used the aforementioned information documented by the project team to analyze the feasibility of each. When the project team and Steering Committee were comfortable with each development site and its proposed activity, the sites were presented to Darby Borough Council. Their feedback was incorporated into the final recommendations.

## CHAPTER 2: Existing Conditions

The project team walked all of the streets within a quarter-mile of the Darby Transportation Center (DTC) to observe its visual character and to understand the context of its land uses and transportation network. This is the area where transit-oriented development (TOD) would be located if it were to be built in the future; therefore, it was important to understand how this area currently functions.

Overall, the quarter-mile station area is visually appealing with a smalltown feel. Main Street is home to a mix of stores with historic storefronts, although it is in need of some refurbishment. Land uses vary greatly, from the traditional Main Street-style shopping area to industrial sites, institutional uses, strip-style shopping, and residential neighborhoods. The Darby Creek meanders throughout the borough, providing scenic views and opportunities to interact with nature. The intimate street network, varied architecture, and natural vistas in close proximity to the DTC contribute to a unique and interesting sense of place.

Current conditions in the quarter-mile radius do not support TOD; however, there are a large number of developable parcels near the station. The way these parcels are developed will move Darby Borough either towards or away from TOD readiness in the future. If the borough wishes to move Darby towards TOD readiness, these development opportunity sites should be used to increase residential density near the station and diversify the mix of uses to create a more positive pedestrian experience.



SEPTA's Route 11 trolley at the DTC



Darby's Main Street shopping area



View of the Darby Creek within the quarter-mile radius of the DTC



Inhospitable pedestrian conditions (faded crosswalks, fast-moving traffic, narrow sidewalks, wide crossing width) at the intersection of Springfield Road and Macdade Boulevard

Within a half-mile radius of the DTC, the mix of uses present is similar to those in the quarter-mile radius, but commercial development is more auto-oriented than pedestrian-oriented and there is greater residential housing density. Importantly, the population of the area in the half-mile radius has increased at more than three times the rate of population growth in the rest of Delaware County since 2010.

Closer to the station, the population is younger, poorer, less educated, and more likely to rent homes than own them; however, employment levels are roughly the same as in the rest of Delaware County and housing is affordable with renters not considered significantly burdened. This area provides working-class families with affordable housing near public transportation, both of which are scarce in Delaware County.

There is good connectivity between the surrounding neighborhood and the station area provided by numerous short, direct walking connections, including some unofficial ones that cross the CSX freight rail line. The sidewalks are mostly in good repair, although there are a few areas where steep slopes could be an issue for residents with mobility issues. The largest barrier to station access is in the street crossings nearby. Heavy, fast-moving vehicular traffic makes those crossings feel unsafe for pedestrians.

In addition to increasing residential density and the mix of pedestrianoriented businesses near the DTC, future development should strengthen connections between the station and the surrounding neighborhoods by mitigating the difficult street crossings adjacent to the station.

#### Transportation

TOD seeks to promote new or infill development as a way to maximize the benefit of transit access. In addition to the TOD readiness factors previously mentioned and explained in detail in Chapter 4, successful TOD must have a population willing to use public transit in an area with strong transportation infrastructure, and Darby has both.

In fact, Darby has some of the richest public transportation infrastructure in Greater Philadelphia. Three SEPTA transit modes (bus, trolley, and regional rail) stop in Darby. These routes offer diverse service patterns, meaning that Darby is poised to serve many types of public transit riders.



Passenger boarding area at the DTC

Below, Table 1 compares Census data on commute modes for Darby residents to those for residents of all of Delaware County, and to those for residents of the nine-county Greater Philadelphia region.

#### Table 1: Commute Mode Comparison

	Darby Borough	Delaware County	Greater Philadelphia
Drove alone	52.7%	74.7%	72.5%
Carpooled	3.5%	7.0%	7.9%
Took public transit	33.2%	9.7%	10.1%
Walked	7.2%	3.8%	3.9%
Bicycled	0.0%	0.2%	0.7%
Other	0.8%	0.7%	0.9%
Worked at home	2.5%	3.8%	4.1%

Source: U.S. Census Bureau, 2010–2014 American Community Survey 5-year Estimates.

Darby residents take public transit to work at more than triple the rate of residents of the rest of Delaware County and the region, and walk to work at nearly double that rate. This suggests that Darby starts with a natural demographic advantage for TOD success.



Trolley transit map at the DTC

#### **Public Transit**

The focal point of public transit in Darby Borough is the DTC, located on both sides of the 900 block of Main Street. Trolleys serve the northern side and buses serve the south side. Customers transferring between modes must cross Main Street where there is a crosswalk, but no control such as a stop sign or pedestrian activated light or HAWK beacon. There is not even a roadway center line mounted pedestrian crossing sign. Shown in Figure 2, these facilities host five SEPTA routes:

• **Trolley Route 11**: 13th-Market to the DTC via Woodland Avenue and Main Street;

- **Trolley Route 13**: 13th-Market to Yeadon and the DTC via Chester Avenue;
- **Bus Route 113**: Tri State Mall and the DTC to 69th Street Transportation Center;
- **Bus Route 114**: Penn State and I-95 Industrial Park to the DTC; and
- **Bus Route 115**: Delaware County Community College to Philadelphia International Airport.

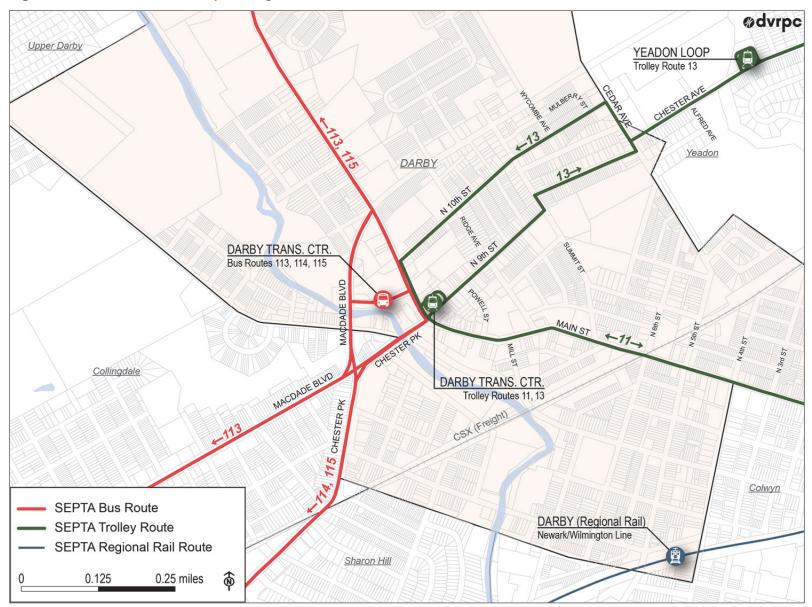
Both trolley routes provide one-seat rides to major employment destinations in University City and Center City Philadelphia via the trolley tunnel, while the three bus routes offer access to large swaths of Delaware County and adjacent areas.

About half a mile southeast of the DTC, on the border of Darby and Colwyn Boroughs, is the Darby Regional Rail station, on SEPTA's Wilmington/Newark line, providing service between northern Delaware and Temple University. Riders from this Fare Zone 2 station can reach University City in 10 minutes, and Suburban Station in 18 minutes.

There is good connectivity between the surrounding neighborhood and the DTC provided by numerous short, direct walking connections, including some unofficial paths that cross the CSX freight rail line. The surrounding sidewalks are mostly in good repair, although steep slopes could be an issue for some residents with mobility issues.

Several factors limit the attractiveness of the DTC: the lack of amenities nearby (places to eat, shop, etc.), the lack of public restrooms in the station, and few places to sit and rest. Future improvements to the DTC should seek to add these to improve the comfort of the transit experience.

Figure 2: Public Transit in Darby Borough



Source: DVRPC, 2016.

#### **Route 13 Service Limitations**

SEPTA provides Route 13 service to the DTC only on a limited basis. Route 13 follows a split, one-way alignment on N. 9th Street (inbound to Philadelphia) and N. 10th Street (outbound to Darby) before meeting at Cedar and Chester Avenues. The majority of Route 13 trips end at Yeadon and do not serve the DTC.

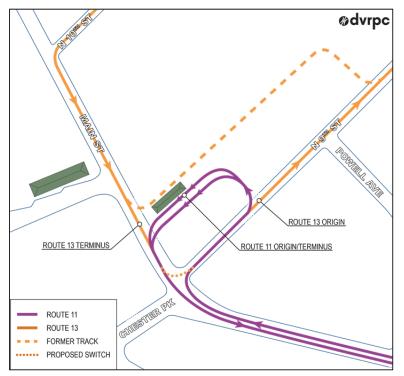


The former track used by trolleys until 1995

Round-trip Route 13 service to the DTC is not feasible due to the lack of a switch and track loop. As a result, Route 13 trips ending at the DTC stop on Main Street, then continue along Main Street (without passengers) to SEPTA's Elmwood Depot facility, where they are taken out of service. Similarly, Route 13 trips beginning at the DTC arrive from the Elmwood Depot (without passengers), then proceed on N. 9th Street towards Philadelphia.

Until 1995, there was a switch and additional track area that made round-trip Route 13 service possible; however, these were removed due to low ridership and operator difficultly in making the turning movement at the switch (see Figure 3). In 2010, SEPTA performed a feasibility study and cost estimate for reestablishing regular Route 13 round-trip service to the DTC and found that a proposed new track switch at the corner of Main and N. 9th streets would be infeasible due to the acuteness of that turn's angle. The 2010 study also estimated the cost to reestablish the track and switch at \$605,000 (in 2010 dollars).





Source: DVRPC, 2016.

#### **Trolley Modernization**

The majority of SEPTA's trolley vehicles (including those serving Routes 11 and 13) date to 1981 and have long outlived their useful lifespans. Over the next five to seven years, SEPTA will replace its entire trolley fleet with modern, accessible vehicles: a program known as Trolley Modernization.

Trolley Modernization is more than a simple one-for-one vehicle replacement. It is an opportunity to transform SEPTA's trolley system—including Routes 11 and 13 through Darby. Not only have industry-standard vehicle technologies changed dramatically since 1981, the ADA (1990) now requires public transportation facilities, both off- and on-street, to be accessible to disabled users. These conditions, among others, mean that Trolley Modernization will dramatically affect station design, streetscape, passenger experience, travel times, and more.



Passengers boarding the Route 11 trolley in 2015

DVRPC is currently engaged in a study to develop conceptual designs for modern trolley stops, the *Modern Trolley Stop Design Guidelines*. That study draws upon best practices from peer transit agencies, SEPTA's infrastructure needs, and industry standards to develop stop designs that facilitate safe, accessible boarding and alighting in a variety of rights-of-way.

In the case of Darby, Yeadon, and Colwyn—Delaware County boroughs within this project's study area with existing trolley routes trolley corridors match a similar pattern: one- or two-way traffic with onstreet parking. The basic stop design for this cross-section is a "standard curb extension" (see Figure 4). This stop design facilitates accessible boarding by bringing the curb line to within six inches of the trolley's doors. Passengers with mobility challenges board or alight from the vehicle with the help of an automated ramp, while other passengers simply step onto the vehicle.

#### Figure 4: Standard Curb Extension Diagram



Source: DVRPC, 2016.

The *Guidelines* identify key trade-offs that will affect the way these stops are implemented. For instance, ADA compliance requires standard curb extensions of 100 linear feet of the parking lane for a boarding platform. While this may reduce the supply of parking by 3 to 5 vehicle spaces, it will also enhance passenger waiting areas, improve pedestrian circulation, and facilitate accessible transit use.

Trolley Modernization is a major, multi-year program, and SEPTA has not fully established how these parking impacts will affect its implementation decisions. For purposes of this study, the project team knows that Trolley Modernization will affect Darby Borough in the following ways, although some details are still undetermined.

- Stop Location and Spacing: The current practice of stopping for passengers at nearly every block will likely not be feasible for modern trolley stops. This is the result of several factors, including constructability of stops, cost, ridership, and the parking impacts mentioned above.
- Service Improvements: Trolley Modernization is expected to bring several improvements for riders of Routes 11 and 13, including vehicle ADA compliance, faster service,<sup>1</sup> and improved vehicle and stop environments. As this plan seeks to exploit Darby's rich transit options to support mixed-use development, Trolley Modernization is welcome leverage.
- Route 13 between Yeadon and Darby: As noted above, SEPTA only provides limited service on Route 13 between Yeadon and Darby. Trolley Modernization could alter this condition in three ways:

- Because modern trolley vehicles will have greater passenger capacity, trip frequency will likely change to ensure efficient passenger loads. At this time, SEPTA does not know enough about its vehicle procurement (i.e., the manufacturer, vehicle capacity, etc.) to determine how its schedules will change after modernization.
- Modern trolleys will have greater length and lower floors than existing vehicles, meaning SEPTA must examine track location, turning radii, switch locations, maintenance facilities, and other operational measurements before it can begin procuring new vehicles. A Clearance Study prepared by a SEPTA consultant provided comprehensive measurements for the existing trolley system and identified locations were existing infrastructure must be updated. It will help SEPTA determine new vehicle parameters against existing, substantially unalterable infrastructure—such as the trolley tunnel—and has prompted an analysis of the smallradius turns on Route 13 between Yeadon and Darby.
- As noted above, SEPTA must balance several factors when siting its modern trolley stops, including each existing stop's ridership. Table 2 shows average daily ridership for the stops on trolley Routes 11 and 13 in Darby Borough. The rightmost column, Station Performance, divides each stop's total ridership (boards and alights in all directions) by the number of daily scheduled trips. This allows comparison between stops regardless of service frequency. Stops with higher station performance scores are higher-ridership stops. The average station performance is 1.61 for all Route 11 surface stops and 1.05 for all Route 13 surface stops.

<sup>1</sup> DVRPC's *Analysis of Modernization Scenarios for SEPTA Route 34* (Report No. 15005, April 2016) used a microsimulation analysis to test travel time impacts of several Trolley Modernization scenarios, using another trolley route, Route 34, as a test case. The simulation results indicate that several elements of Trolley Modernization, including transit signal priority, multi-door boarding, and stop consolidation, could produce significant travel time savings.

Table 2: Daily Tr	olley Ridership	in Darby	Borough
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		Eastbound Westbound		Total	Scheduled	Station		
Route	Station	Boards	Alights	Boards	Alights	Ridership	Trips (Daily)	Performance
11	Darby Transportation Center	1,563	2	0	965	2,530	238	10.63
11	Main St & Mill St	42	6	N/A	N/A	48	119	0.40
11	Main St & Powell St	N/A	N/A	5	86	91	119	0.76
11	Main St & Summit St	40	13	7	85	145	238	0.61
11	Main St & 6th St	87	48	18	124	277	238	1.16
11	Main St & 5th St	137	43	23	129	332	238	1.39
11	Main St & 4th St	129	45	20	134	328	238	1.38
11	Main St & 3rd St*	118	31	16	130	295	238	1.24
11	Main St & 2nd St*	63	19	10	53	145	238	0.61
11	Main St & Front St*	59	23	11	66	159	238	0.67
13	Darby Transportation Center <sup>†</sup>	49	0	0	5	54	56	0.96
13	9th St & Ridge Av	12	0	N/A	N/A	12	28	0.43
13	9th St & Summit St	14	1	N/A	N/A	15	28	0.54
13	9th St & Summit Av (Mid-Block Stop)	1	0	N/A	N/A	1	28	0.04
13	9th St & Cedar Av	15	2	N/A	N/A	17	28	0.61
13	Chester Av & Alfred Av <sup>‡</sup>	16	1	2	25	44	56	0.79
13	Yeadon Loop <sup>‡</sup>	376	7	7	47	437	274	1.59
13	Chester Av & Cedar Av <sup>‡</sup>	N/A	N/A	1	27	28	28	1.00
13	10th St & Mulberry Av	N/A	N/A	0	5	5	28	0.18
13	10th St & Wycombe Av	N/A	N/A	1	11	12	28	0.43
13	10th St & Summit St	N/A	N/A	1	12	13	28	0.46
13	10th St & Ridge Av	N/A	N/A	0	5	5	28	0.18
13	10th St & Main St	N/A	N/A	1	25	26	28	0.93

Source: SEPTA Automated Passenger Counter (APC) ridership, Fall 2014.

\* Eastbound stop is in Colwyn Borough; westbound stop is in Darby Borough.

<sup>†</sup> Boarding location is on 9th Street.

<sup>‡</sup> Stop is in Yeadon Borough.

Table 2 shows high ridership at the DTC for Route 11, but also that ridership at many of the Route 13 stops between the Yeadon Loop and DTC is among the lowest in SEPTA's trolley system.

#### **Pedestrian Infrastructure**

Strong pedestrian infrastructure and amenities are essential to TOD. A safe, welcoming pedestrian environment helps encourage residents and visitors to choose transit over driving by providing convenient options to access their homes, workplaces, and shopping districts.

As a community that developed largely before the advent of automobiles, Darby has the essential elements of a transit-supportive, pedestrian-friendly place. Connectivity between the DTC and surrounding neighborhoods is generally strong, owing to numerous short, direct walking connections. The Main Street business corridor offers opportunities for diverse commercial development, and the human scale of the street grid in Darby's residential neighborhoods makes walking a viable option over driving. Nearly all streets in Darby Borough have sidewalks on both sides of the street, and while most are in good condition, there are some in need of repair.



Darby's walkable Main Street shopping area



A sidewalk in need of repair within a quarter-mile radius of the DTC



The intersection of Macdade Boulevard and Main Street with crosswalks and signals for pedestrian crossings

#### 6th and Main Grade Crossing

Darby Borough is home to a unique piece of transportation infrastructure: the only known location in the United States where a streetcar in mixed traffic (the Route 11 trolley) crosses a heavy rail right-of-way at grade (shown in Figure 5 and the photo below).



A train crossing at the intersection of 6<sup>th</sup> & Main streets in Darby

In August 2014, DVRPC completed a two-part study on this grade crossing (*Darby Borough Grade Crossing Study Phase 1*, May 2013 Report No. 11012; and *Darby Borough Grade Crossing Phase 2*, August 2014, Report No. 12014). The study recommended short-term improvements geared toward improving safety for all users and improving pedestrian comfort, including new sidewalks, greater signalization, and more crossing gates.





Source: DVRPC, 2016.

#### **Transportation Recommendations**

As noted, Darby has a wealth of transportation options. The following recommendations are intended to help the borough leverage those options for robust, equitable development by strengthening existing transportation infrastructure, and preparing for the future.

#### **Darby Transportation Center (DTC)**

Renovate the trolley loop at the DTC in preparation for Trolley Modernization to ensure full ADA compliance.

Conduct a study of the impacts of Trolley Modernization to the DTC, Route 11, and Route 13. It should examine on-street operations and stop locations within Delaware County and the future utility of the SEPTA-owned, unused loop track parcel behind the DTC.

Provide additional passenger amenities at the DTC trolley and bus terminals, including public restrooms and bicycle parking.

#### **Trolley Modernization**

Develop a trolley station creation strategy, identifying locations for construction of ADA-accessible, on-street stop locations by balancing the following criteria:

- **Constructability**: Preference should be given to stops where the footprint of a modern trolley stop would have access to straight track and be clear of driveways, cross streets, and other obstructions.
- **Ridership**: Preference for modernization should be given to stops with higher ridership, especially as measured by the station performance metric presented in Table 3.
- **Stop Spacing**: Stops to be modernized should be selected in consideration of stop spacing on the entire route. A reasonable stop consolidation scenario would improve service speed

without unduly burdening passengers. To achieve this, SEPTA should rely on its own internal standards for stop spacing, and on the experience of peer transit systems. Further guidance will be offered in DVRPC's forthcoming *Modern Trolley Stop Design Guidelines.* 

• Role in Transit Network: Preference should be given to stops that are vital parts of the transportation network, such as stops that serve as transfer points, and stops near major destinations.

#### **Pedestrian Infrastructure**

Repair gaps in the sidewalk network.

Implement the recommendations of DVRPC's *Darby Borough Grade Crossing Study.* 

#### Land Use

Many different land uses are found within the quarter-mile radius of the DTC, although the proliferation of light industrial properties, surface parking lots, and vacant properties on the land closest to the station contribute to the low overall density in this area. Residential uses are generally located in the ring around the light industrial and commercial uses directly adjacent to the station. Note that the map in Figure 6, Land Uses Near the Darby Transportation Center, categorizes both the light industrial uses and the commercial uses in the station area as "commercial."

The nearby light industrial properties are well maintained and active and provide jobs for area residents; however, they do not adequately offset the impact of the many vacant parcels and surface parking lots that are underutilized. In fact, surface parking accounts for nearly 10 percent of all land within a quarter-mile of the DTC, while vacant land accounts for nearly another 15 percent.

While vacant land presents obvious opportunities to locate future development, current surface parking lots are potential development sites as well. Parking is a necessary element of a vibrant place, but it can easily become visually overwhelming and diminish an area's sense of place. In the study area, most of the surface parking lots are only very lightly used. This study identifies an opportunity for Darby Borough to reconfigure underutilized parking sites so that they function better for the area. Wherever possible, parking should be located in the floodplain—nearly 30 percent of all land within a quarter-mile of the station—to reserve developable land for future buildings.



Residential neighborhood near the DTC



Light industrial property adjacent to the DTC



The DTC (at left) and the adjacent vacant lot



Large, private, surface parking lot

There are two primary retail areas found in the station vicinity: a Main Street with pedestrian-scaled retail spaces and the vehicular-oriented strip-style commercial area along Macdade Boulevard and Chester Pike. The retail spaces on Main Street are scaled appropriately for neighborhood-oriented retail businesses, but many are in need of rehabilitation and some are vacant. In addition, there are limited retail and food options in the station vicinity. Many of the strip-style shopping spaces appear newer, but they are designed to prioritize vehicular traffic rather than pedestrian traffic and, as such, do not contribute positively to either pedestrian safety or the visual realm.

The majority of the residential housing stock in the borough is older over fifty years—and in varying degrees of repair, but most appears to be in average condition. Unfortunately, there is not much housing density within a quarter-mile of the DTC, although there is room for infill residential development and some new higher-density residential development adjacent to the DTC. Residential density does increase significantly in the half-mile station area radius.

It is important to note that there is a large amount of tax-exempt land in the station area, some municipally owned and some owned by churches. Not only do these properties not pay taxes, but some are poorly maintained as well, and most do not contribute positively to the climate around the DTC.

Table 3 below shows the breakdown of land uses in the quarter-mile station area radius, and Figure 6 shows their distribution.

**Table 3:** Land Uses Within a Quarter-Mile of the DarbyTransportation Center

Land Use	Square Feet	Percentage
Residential	2,265,407	48.7%
Commercial	1,222,548	26.3%
Vacant	637,129	13.7%
Parking	433,210	9.3%
Wooded	390,142	8.4%
<b>Community Service</b>	255,437	5.5%
Recreation	85,748	1.8%

Source: DVRPC, 2016.

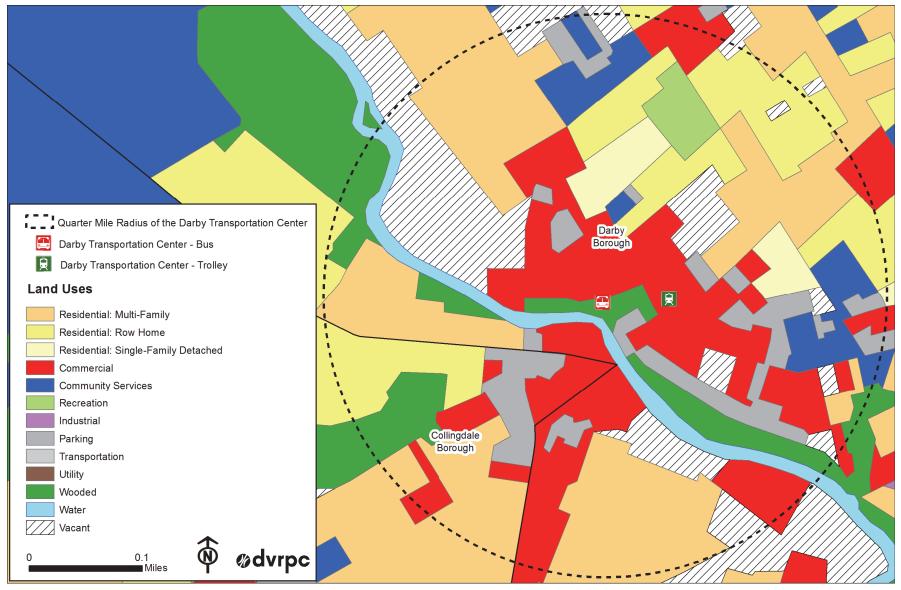


Figure 6: Land Uses Near the Darby Transportation Center

Source: DVRPC, 2010.

### Darby Creek

The Darby Creek meanders through the study area adjacent to the station, providing visual interest and opportunities to connect with nature. As part of the implementation of the Greenway Plan for the Darby Creek Watershed (2010), Delaware County will be constructing a new trail along the Darby Creek beginning in Upper Darby that eventually travels through the center of the study area adjacent to the DTC before ending at Pine Street in Darby Borough.

As listed by the Greenway Plan, greenways benefit the surrounding community by:

- helping residents feel more connected to nature;
- promoting conservation of the natural environment;
- protecting natural resources;
- conserving cultural and historic resources;
- preserving or creating alternative transportation;
- providing educational opportunities; and
- contributing to an enhanced quality of life.

Any public space created in the future, outdoor events, and/or natural programming should connect people with this new greenway.



The Darby Creek



A trail adjacent to the Darby Creek

#### Floodplain and Watershed

In the quarter-mile station area radius, 30 percent of all land is in the floodplain of the Darby Creek. Twenty-five percent (1,714,183 square feet) is in the 100-year floodplain, meaning that each year there is a one percent chance of flooding, while five percent (329,583 square feet) is in the 500-year floodplain, meaning that each year there is a 0.2 percent chance of flooding. As global warming continues, the amount of land affected by flooding will increase. Extreme precipitation events that lead to localized and regional flooding are difficult to project with accuracy, but climate models show that the frequency of extreme precipitation events is likely to increase throughout the century by as much as 25 percent or more. This prediction is in keeping with the observed trend towards more extreme precipitation events in the last three decades in the northeast.

Vegetated floodplain lands serve an important function in minimizing flooding impacts by storing, slowing, and filtering the runoff of precipitation. Stormwater runoff can lead to flooding, and also washes oils, chemicals, nutrients, heavy metals, and debris into streams from impervious surfaces and developed areas such as streets and parking lots. Vegetated floodplains can lessen the impact of flooding and prevent contaminated runoff from entering Darby Creek. Floodplains will take on increased importance as severe precipitation events become more common in the region.

Due to flooding concerns, Darby should discourage building development on parcels in the floodplain. Parcels that are currently undeveloped should remain preserved and, where feasible, converted to outdoor public space or used for parking. Green infrastructure improvements should be added to parcels that are currently developed and to impervious surfaces such as parking lots. Since the study area has hardly any public space, the floodplain condition, while normally limiting, is an opportunity here.

The entire study area is within the Darby-Cobbs Creek Watershed, which is geographically small, but home to over half a million people. It is imperative that future development not impede ongoing efforts to clean up and preserve this watershed.

Figure 7 shows the extent of the floodplain around the DTC and the location of the future Darby Creek Trail.

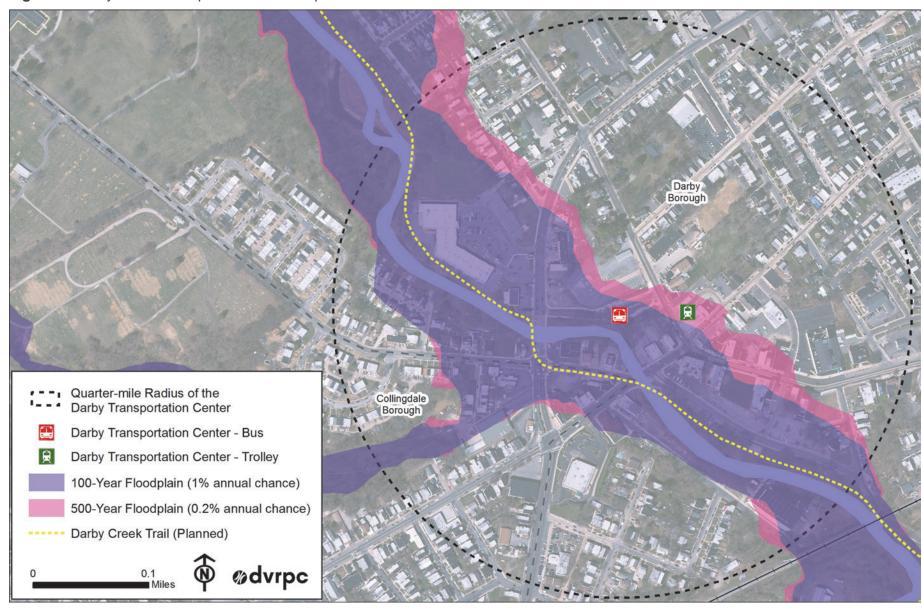


Figure 7: Darby Creek Floodplain and Trail Map

Source: DVRPC, 2016.

#### Zoning

Eight of Darby Borough's nine zoning districts and its TOD Overlay are located within a quarter-mile radius of the DTC. Figure 8 shows the borough's zoning map.

#### Transit-Oriented Development Overlay District (TOD) The TOD district:

Promote[s] well-integrated residential, commercial and other development close to regional public transit stations and terminals, support[s] public transit by locating higher density, mixed-use development adjacent or near to transit stops, reduce[s] automobile dependency and roadway congestion by combining trips and locating destinations within walking or biking distance, and provide[s] an alternative to conventional development by emphasizing pedestrian-oriented mixed use development.

This district overlays several other zoning districts within a threeeighths-mile radius of the DTC, including the Central Business District (CBD), Highway/Commercial (HC) District, Industrial (IND) District, and Business/Institutional (BI) District. All proposed TOD, regardless of underlying district, must comply with provisions of the TOD district and be reviewed by Darby Borough's Planning Commission and the Delaware County Planning Department.

The TOD district allows the following residential uses, non-residential uses, and mixed uses by right:

- mid-rise apartment buildings with a maximum of four stories that cover between 65 percent and 95 percent of the lot;
- transportation facilities and related infrastructure, retail stores, personal services, food establishments, banks, serviceoriented offices, museums and cultural institutions, and day

care centers, in which all buildings must be between two and four stories and cover between 60 percent and 85 percent of the lot; and

 one or more residential or non-residential permitted use(s) in the same two- or three-story building, with a maximum of four stories, covering between 70 percent and 100 percent of the lot. In all cases, non-residential uses must be located on the ground floor, while residential uses must be located on upper floors.

Lodging (e.g., hotels, bed and breakfasts, etc.) is allowed as a conditional use.

The TOD district includes development and design standards that are intended to maintain an active, interesting, and aesthetically pleasing streetscape. Many of these standards are pedestrian-friendly, such as façade requirements for clear windows along the ground floor, main entrances facing the street, sidewalks, parking and walkway lighting, and street trees.

To mitigate the disruption in activity caused by required parking in the TOD district, it is recommended that parking be located in the rear of buildings when possible, that it not dominate the development's design, that it be pedestrian-oriented and, in some cases, landscaped. The TOD district also requires at-scale bicycle parking facilities that are secure and located in a well-lit area.

#### Residential Districts (R-2, R-3, R-4)

There are three residential districts in the quarter-mile radius of the DTC: R-2, R-3, and R-4. All of these districts promote medium- to high-density dwelling units that are typically two stories by right. The R-4 district is the only district to allow three-story apartment buildings.

R-2 is the least dense of the three residential districts, allowing twostory single-family and semi-detached dwellings by right. This district allows 4,500 square-foot lots with 35 percent maximum building coverage for single-family homes and 3,000 square-foot lots with 40 percent maximum building coverage for semi-detached dwellings.

Some conversion of existing dwellings to three-unit dwellings (1,000 square-foot minimum per unit), home offices, family day cares, religious uses, and educational uses are allowed by special exception. One parking space is required for each single-family unit, and two off-street parking spaces are required for all semi-detached units. Additional parking is required for all uses permitted by special exception.

The R-3 district allows all uses permitted by right in the R-2 district, as well as two-story single-family attached (townhome) dwellings by right. For the single-family semi-attached dwellings, this district allows 2,500 square-foot lots with 40 percent maximum building coverage. For the single-family attached dwellings, 1,600 square-foot lots are permitted with 50 percent maximum building coverage. The same uses as in the R-2 district are allowed here by special exception also.

The R-4 district allows all uses permitted by right in the R-2 and R-3 districts except for single-family dwellings, and it is the only residential district to allow apartment buildings. For the single-family semi-attached dwellings, this district allows 2,500 square-foot lots with 45 percent maximum building coverage. For the single-family attached dwellings, 1,400 square-foot lots are permitted with 55 percent maximum building coverage. For apartment buildings, three-story buildings are permitted on 1,500 square-foot lots with 45 percent maximum building coverage. This district allows all uses permitted by special exception in the R-2 and R-3 districts except for educational institutions.

#### **Central Business District (CBD)**

The CBD primarily promotes compact, pedestrian-oriented retail and service uses, as well as secondary uses such as offices and apartment buildings. It prohibits uses considered to be inappropriate and/or misaligned with pedestrian-scaled development and TOD, such as industrial, manufacturing, wholesale and storage facilities, in addition to businesses thought to result in significant nuisance issues such as noise or odor.

Retail stores (e.g., hardware, pharmacy), food stores (e.g., grocery, bakery), personal services (e.g., barbers, nail salons), eating or drinking establishments (e.g., restaurants, takeout, bars), banks, general services (e.g., watch/jewelry repair), and lodging establishments are all permitted by right in the CBD. Mixed use development (e.g., offices or apartments on the second or third story above ground-level retail and commercial uses) is permitted by right. Also permitted by right are transportation and public utility infrastructure, municipally owned surface parking lots, and parks or outdoor recreation facilities. All non-residential uses in the CBD allow 2,000 square-foot lots with a maximum of three stories.

The CBD also includes a set of "Special Development Regulations" intended to protect the integrity of the architecture and promote a pedestrian-friendly streetscape through requiring the maintenance of building façades, as well as signage and landscaping that is harmonious with the surrounding properties.

#### **Business/Institutional District (BI)**

The BI district promotes non-nuisance businesses, light industry, and institutional services that benefit the borough and the region, such as medical, technological, or educational uses.

Warehouses, distribution, non-nuisance-generating light industry (industries in which emission of odor, dust, fumes, smoke, gas, vibration, light, and/or noise does not extend beyond the limits of the property where it is located), laboratories, data centers, printing, laundry, rental storage, medical/dental offices, private vocational/business/trade schools, and public/private institutions of higher education are permitted in the BI district. The uses can take place on land or in buildings 75,000 square feet or greater. Buildings are allowed to reach five stories in height with 60 percent lot coverage.

The BI district also allows as conditional uses apartment buildings (included mixed-use), first-floor retail and commercial establishments, and day care centers. Private outdoor recreational uses and public utilities are permitted by special exception in the BI district.

#### Industrial District (IND)

The IND district allows for manufacturing, light industrial processing, storage, and automotive establishments.

Warehouses, distribution facilities, labs, printing, industrial process, and other light- or medium-duty industrial uses are permitted in the IND district. The uses can take place on land or in buildings 75,000 square feet or greater. Buildings are allowed to reach three stories in height with 70 percent lot coverage. Screening, landscaping, and lighting must be provided for uses sited adjacent to residential uses to minimize impact of the site. Parking must be no closer than six feet from the right-of-way line of a public street.

#### **Highway Commercial District (HC)**

The HC district allows for a "wide range of highway-oriented retail, service, and automobile-relate business activities" by right such as shopping centers, drive-thru restaurants, religious institutions, movie theaters, etc. These uses attract local and regional customers who typically access by automobile. All uses in the district allow for 5,000 square-foot lots with a maximum of three stories, with the exception of shopping centers, which allow for two acres with forty-foot maximum heights.

#### Land Use/Zoning Recommendations

Darby Borough's zoning code, while up to date and generally progressive, should be lightly revised to steer future development towards TOD readiness. Below is a list of the changes that should be made in each zoning district, along with the reason for the change.

#### TOD Overlay District and Central Business District (CBD)

Abolish parking minimums; instead, set parking maximums.

Eliminate surface parking lots—other than the public municipal lot—as permitted uses. Together with abolishing parking minimums, this can begin to combat the excessive amounts of underutilized surface parking.

Set a build-to line instead of a required front setback in order to maintain a consistent street frontage.

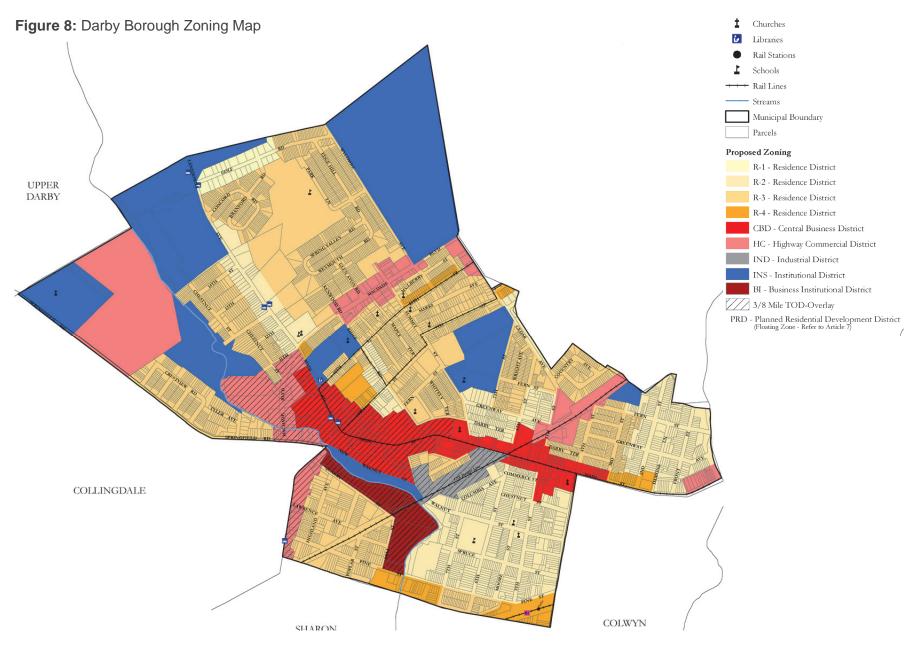
#### Residential Districts (R-2, R-3, and R-4)

Allow semi-attached and attached dwellings to reach three stories by right. This will help to increase residential density without changing the area's character.

Eliminate off-street parking requirements for development of new residential units. The presence of the DTC reduces the need for parking, and there is ample space on the street for parking if needed.

#### **Business/Institutional District (BI)**

Allow public parks and outdoor recreation facilities by right. Much of the land in this district is located in the floodplain and therefore not recommended for future development, although it could be put into productive use as public space.



Source: Delaware County Planning Department, 2010.

## CHAPTER 3: Market Analysis

Using demographic information about residents and businesses, population forecasts, and commercial real estate and market segmentation databases, the study team examined the area's retail, office, industrial, and residential market potential. Data was collected and analyzed for the areas within a quarter-mile radius, a half-mile radius, and the one-and-a-half-mile radius of the Darby Transportation Center (DTC), and compared with Delaware County as a whole. This analysis allowed the project team to identify potential development sites and recommendations for future growth.

#### **Demographic Characteristics**

The project team used several data sources and geographies. When available, parcel data was examined at the quarter-mile, half-mile, and one-and-a-half-mile radii and compared with Delaware County as a whole. Esri Business Analyst provided information on household demographics, income, age, and race, in addition to specific market segments using Tapestry Segmentation to classify neighborhoods based on their socioeconomic and demographic compositions. Esri Business Analyst used data from the 2010 Census Summary File 1 to forecast its 2015 data.

Another important source of information used was the American Community Survey (ACS). In instances where data was not available for the quarter- and half-mile radii, the team compared the Census block groups in the one-and-a-half-mile radius with Delaware County as a whole. However, because many of the block groups near the periphery of the mile-and-a-half radius also extend past it, this method yields a larger area than when individual parcel data is used.

In general, the study area demographics differ substantially from the rest of Delaware County. It has a higher rate of younger, poorer

population who rent—rather than own—their homes. Population growth in the station area was significantly greater than in the rest of the county between 2010 and 2015. These differences are shown below in Table 4.

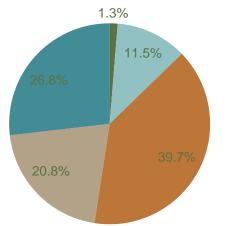
#### Table 4: 2015 Household Demographics

	1/4 Mile Radius	1/2 Mile Radius	1.5 Mile Radius	Delaware County
2015 Population	1,887	11,566	68,369	562,652
Percent Change 2010-2015	2.6%	3.1%	1.2%	0.7%
Average Household Size	2.84	2.97	2.69	2.57
Median Age	29.5	30.8	34.5	39.3
Household Units	659	3,749	25,016	210,397
Owner-Occupied	268	1,894	14,612	143,367
Renter-Occupied	391	1,855	10,404	67,030
Median Household Income	\$26,304	\$37,644	\$42,103	\$65,947
Average Household Income	\$35,143	\$47,083	\$54,768	\$92,628
Per Capita Income	\$11,860	\$15,761	\$20,116	\$34,888
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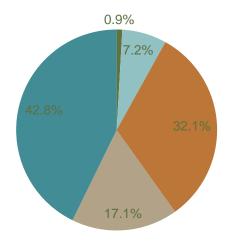
Sources: U.S. Census Bureau, Census 2010 Summary File 1; Esri forecasts for 2015.

As shown in Figure 9, residents living in the Census block groups completely or partially within the one-and-a-half-mile radius of the DTC had lower educational attainment than the entirety of Delaware County; however, employment levels were virtually the same, with approximately 65 percent of the population aged 16 years and over in the labor force (U.S. Census Bureau, 2010–2014 ACS, 5-year Estimates, B15003 and B23025). Though Darby has a lower percentage of the population not currently in the labor force than Delaware County as a whole—23.8 percent versus 16.5 percent, respectively—those who are not in the labor force are more likely to be unemployed (as opposed to those who are retired, in school, taking care of family, etc.) than those in the rest of the county. **Figure 9:** Educational Attainment in the 1.5 Mile Station Area Radius and Delaware County

#### 1.5 Mile Station Area Radius



**Delaware County** 



- No Schooling Completed
- Students in Preschool - 12th Grade
- High School Diploma, GED, or Alternative Credential
- Some College, No Degree
- College, Professional, or Doctorate Degree

Students in Preschool - 12th Grade

High School Diploma,

GED, or Alternative

Some College, No

College, Professional,

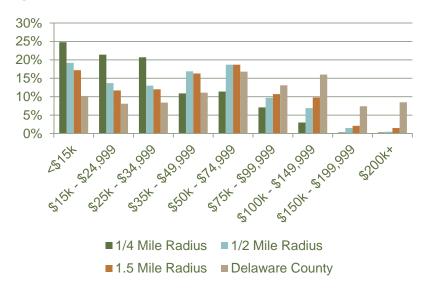
or Doctorate Degree

Credential

Degree

No Schooling Completed As might be expected, given the disparity in educational attainment between those in the study area and Delaware County as a whole, household income was also lower. In fact, as the geographies studied closed around the station area, the percentage of low-income households got higher, as shown in Figure 10 below.

#### Figure 10: 2015 Household Income Distribution



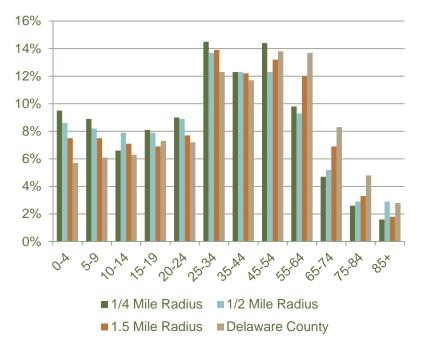
Sources: U.S. Census Bureau, Census 2010 Summary File 1; Esri forecasts for 2015.

However, it must be noted that while household income is lower in the study area, the proportion of household income spent on housing is 31.2 percent—of which 23.9 percent goes towards shelter—on the low end of "burdened." A household is considered housing-cost burdened by the U.S. Census Bureau if 30 percent or more of its income is spent on housing costs. A full 46 percent of renters nationwide pay 30 percent or more of their income on housing costs (Schwartz and Wilson, *Who Can Afford To Live in a Home?: A Look at Data from the 2006 American Community Survey*, U.S. Census Bureau, 2007).

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Figure 11 shows the age distribution for those living in the geographies studied. Younger residents live closer to the station.

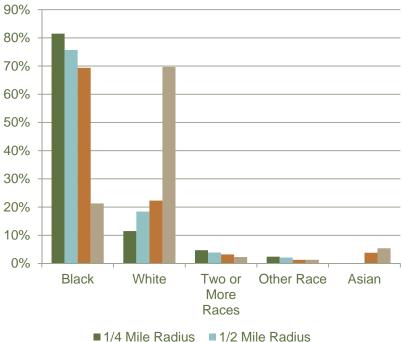
# Figure 11: 2015 Age Distribution



Sources: U.S. Census Bureau, Census 2010 Summary File 1; Esri forecasts for 2015.

While black people make up over 80 percent of the residents in the quarter-mile radius around the station, they account for only 21.3 percent of Delaware County residents. Conversely, white people constitute 69.7 percent of Delaware County, but only 11.5 percent of those in the geography closest to the station. This is shown in Figure 12.





■ 1.5 Mile Radius ■ Delaware County

Sources: U.S. Census Bureau, Census 2010 Summary File 1; Esri forecasts for 2015.

# Indicators of Potential Disadvantage (IPD)

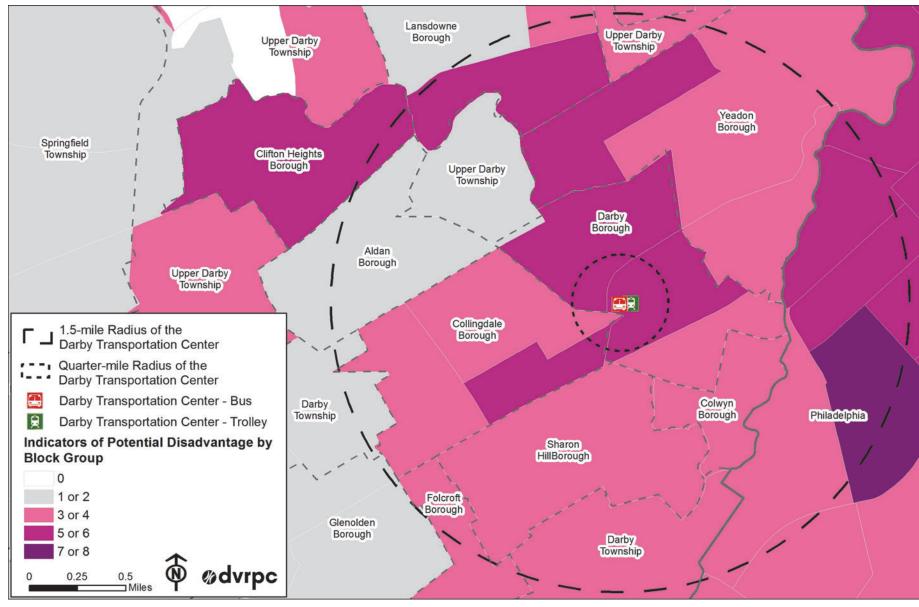
While it is apparent that existing conditions in the station area are not as favorable as those in the rest of Delaware County, the project team performed an environmental justice analysis to further assess the economic burden of those existing conditions by looking at the impacts of disparate funding and disparate services on defined minority and low-income groups. DVRPC has developed a method of technical analysis that identifies IPD that assists with this process.

The IPD method is a people- and place-based approach that locates selected population groups in the region and determines how the regional transportation system and local programs, policies, and investments impact these groups. In addition to minority and low-income populations, the IPD analysis includes carless households, persons with physical disabilities, female heads of household with children, elderly over age 75, Hispanic persons, and those with Limited English Proficiency.

The IPD information for Delaware County is derived from the ACS 2008–2012 5-year Estimates dataset from the Census. Using this data, population groups are identified and located at the Census tract level. Data is gathered at the regional level, combining populations

from each of the nine counties, for either individuals or households, depending on the indicator. From there, the total number of persons in each demographic group is divided by the appropriate universe (either population or households) for the nine-county region, providing a regional average for that population group. Any Census tract that meets or exceeds the regional average level, or threshold for that population group, is considered an environmental justice sensitive tract for that group. The number of sensitive groups that exceed the regional threshold in each Census tract is referred to as its IPD.

Of Delaware County's 144 Census tracts, 85 (59 percent) have two or fewer IPD; only 23 (5.8 percent) have between five or more IPD. As seen in Figure 13, about 80 percent of the tracts within the one-and-ahalf-mile DTC radius have three or more IPD, while all of the census tracts within a quarter-mile of the DTC have between three and six IPD. This indicates that special consideration should be given to the specific planning-related issues or challenges faced by people living in this area.





Source: DVRPC, 2016.

# **Tapestry Segmentation**

Another way to get a comprehensive picture of those living in an area is to use Tapestry Segmentation, a system developed by Esri that divides residential areas in the United States into 65 distinct segments based on socioeconomic characteristics. This specialized dataset is used to analyze markets, evaluate competitors, and identify market opportunities.

As shown in Table 5 below, within the one-and-a-half-mile radius around the DTC, two segments predominate: Family Foundations and City Commons.

**Table 5:** Esri Tapestry Segmentation: All Segments in the 1.5Mile Station Area Radius

Segment Name	Segment #	Percentage
Family Foundations	56	22.8%
City Commons	55	13.5%
Parks and Rec	18	11.6%
City Strivers	51	11.5%
Fresh Ambitions	63	6.9%
<b>Rustbelt Traditions</b>	19	5.3%
Modest Income Homes	59	4.9%
Old and Newcomers	38	4.5%
Front Porches	37	4.4%
American Dreamers	29	4.2%
Young and Restless	52	3.8%
Social Security Set	45	1.8%
Hardscrabble Road	39	1.7%
Traditional Living	57	1.6%
Pleasantville	7	1.4%
City Lights	33	0.2%

Source: Esri, 2016.

These two segments are defined as follows by Esri:

Family Foundations residents are a mix of married couples, single parents, grandparents, and children, young and adult. Household size is slightly higher than the U.S. average at 2.7 persons. Neighborhoods are found in principal cities of major metropolitan areas throughout the South and West. Two-thirds are homeowners living in single-family houses built before 1970. Nearly three-fourths of all households have one or two vehicles at their disposal; average commute time is slightly higher. More than half have either attended college or obtained a degree; one-third have only finished high school. The unemployment rate is high at 15 percent; labor force participation rate is slightly lower at 60 percent as workers begin to retire. Over one-third of households currently receive Social Security benefits; more than a quarter draw income from retirement accounts. Family and faith are the cornerstones of life in these communities. Older children, still living at home, working toward financial independence, are common within these households. Neighborhoods are stable: little household growth has occurred for more than a decade. Many residents work in the health care industry or public administration across all levels of government. Style is important to these consumers, who spend on clothing for themselves and their children, as well as on smartphones.

City Commons are found in large metropolitan cities, where most residents rent apartments in midrise buildings. Single parents, primarily female, and singles, head these young households. Household size is slightly higher than the U.S. average at 2.66 persons. Neighborhoods are older, built before 1960, with high vacancy rates. Typical of the city, many households own either one vehicle or none, and use public transportation or taxis. Although some have college degrees, nearly one in three have not graduated from high school. Unemployment is very high at 24 percent; labor force participation is low at 54 percent. Most households receive income from wages or salaries, but nearly one in four receive contributions from Social Security and public assistance. However, that has not dampened their aspiration to strive for the best for themselves and their children. Consumers endeavor to keep up with the latest fashion trends. Most families prefer the convenience of fast-food restaurants to cooking at home.

The third largest segment in the one-and-a-half-mile station area radius—Parks and Rec—is the most predominant segment in all of Delaware County, followed by Pleasantville (see Table 6).

**Table 6:** Esri Tapestry Segmentation: Top 20 Segments inDelaware County

Segment Name	Segment #	Percent
Parks and Rec	18	16.9%
Pleasantville	7	13.0%
Golden Years	41	6.7%
Savvy Suburbanites	4	5.7%
Top Tier	1	5.4%
Urban Chic	6	4.3%
Front Porches	37	4.3%
City Lights	33	3.8%
Family Foundations	56	3.7%
City Commons	55	3.3%
Exurbanites	5	3.1%
Modest Income Homes	59	2.8%
<b>Rustbelt Traditions</b>	19	2.4%
Professional Pride	2	2.2%
City Strivers	51	2.2%
<b>Comfortable Empty Nesters</b>	16	2.0%
Emerald City	34	1.9%
American Dreamers	29	1.9%
Set To Impress	54	1.5%
Old and Newcomers	38	1.4%

Source: Esri, 2016.

The two most predominant segments in Delaware County are defined as follows by Esri:

Parks and Rec households by type mirror the U.S. distribution; married couples, more without children, dominate. Average household size is slightly lower than the U.S. average at 2.49 persons, but this market is also a bit older. Homes are primarily owner occupied, single-family residences built prior to 1970; townhomes and duplexes are scattered through the neighborhoods. Both median home value and average rent are close to the national level. Neighborhoods are well established, as are the amenities and programs that supported their now independent children through school and college. The appeal of these kid-friendly neighborhoods is now attracting a new generation of young couples. More than half of the population is college educated. Older residents draw Social Security and retirement income. The workforce is diverse: professionals in health care, retail trade, and education, or skilled workers in manufacturing and construction. This is a financially shrewd market; consumers are careful to research their big-ticket purchases. When planning trips, they search for discounted airline fares and hotels and choose to vacation within the United States. These practical residents tend to use their cellphones for calls and texting only.

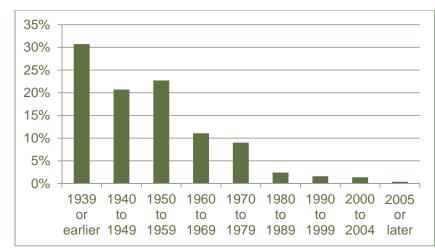
Prosperous domesticity best describes the settled denizens of Pleasantville, located on the suburban periphery of large metropolitan areas, primarily in Middle Atlantic or Pacific states. Families own older, single-family homes—two-thirds built before 1970, close to half from 1950 to 1969—and maintain their standard of living with dual incomes. They have one of the lowest percentages of vacant housing units at 4.7 percent. These consumers have higher incomes and home values and much higher net worth. Median household income denotes affluence, with income primarily from salaries, but also from investments or Social Security and retirement income. Not costconscious, these consumers willing to spend more for quality and brands they like. Households are composed of older married-couple families, more without children under 18, but many with children over 18 years. Households have one or two vehicles and a longer travel time to work. Sixty-four percent are college educated, 34 percent with a bachelor's degree or higher. There is low unemployment at 7.8 percent and higher labor force participation at 67 percent. Many professionals are in finance, information/technology, or management. They prefer fashion that is classic and timeless as opposed to trendy. They use all types of media equally (newspapers, magazines, radio, Internet, TV).

Note that within the quarter-mile station area radius the largest segment is overwhelmingly Hardscrabble Road (64.3 percent) and that within the half-mile radius the City Commons and City Strivers segments predominate with 27.5 percent and 23.4 percent, respectively.

#### Housing Market

Within the one-and-a-half-mile radius of the DTC there are 25,016 housing units of which 58 percent (14,612) were owner occupied in 2015; in Delaware County, the owner occupancy rate was 68 percent: 143,367 out of 210,397 housing units (U.S. Census Bureau, Census 2010 Summary File 1; Esri forecasts for 2015). Approximately 17 percent, or 4,372 units, in the census block groups completely or partially within the one-and-a-half-mile radius are vacant and represent 12.2 percent of all vacant housing in Delaware County (U.S. Census Bureau, 2010–2014 ACS, 5-year Estimates, B25004).

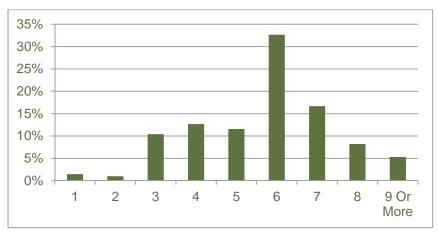
Although the housing stock is relatively old—most was built before 1960 (see Figure 14)—the housing units are not overly small. The average house has six rooms (see Figure 15), which is slightly above the national median of 5.5 rooms per household (U.S. Census Bureau, 2014 ACS 1-year Estimates, CP04).





Source: U.S. Census Bureau, 2010–2014 American Community Survey, 5year Estimates, B25034.

**Figure 15:** Number of Rooms in Housing Units in 1.5 Mile Station Area Radius



Source: U.S. Census Bureau, 2010–2014 American Community Survey, 5year Estimates, B25017.



Semi-detached homes near the DTC



Semi-detached and single-family homes near the DTC



Attached rowhouses near the DTC



Housing in need of rehabilitation

During the third quarter of 2015 (the most recent available through the National Association of Realtors), the median home value for the Philadelphia-Camden-Wilmington Metropolitan Sales Area was \$234,700. Although median home values in Delaware County are lower than in the region at large, home values in the station area are significantly lower than in both Delaware County and the region. Figure 16 below shows the distribution of owneroccupied home values within the one-and-a-half-mile radius of the DTC and Delaware County as a whole.

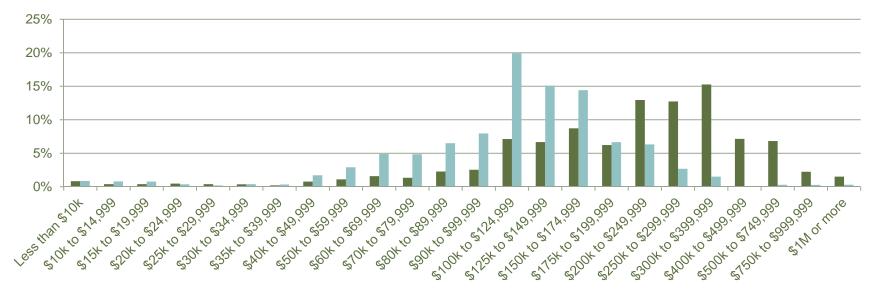


Figure 16: Home Values in Delaware County and the 1.5 Mile Station Area Radius

Delaware County 1.5 Mile Radius

Source: U.S. Census Bureau, 2010–2014 American Community Survey, 5-year Estimates, B25075.

A total of 179 houses were sold in calendar year 2015 in the 19023 zip-code, where the DTC is located. The average median sales price in the station ZIP code was \$42,050, a stark contrast with the average median sales price in Delaware County of \$195,625. Furthermore, these homes received a slightly lower percentage of their asking price (87.5 percent) when compared to Delaware County (92.2 percent). On average, homes for sale in the station area also spent more time on the market (109 days) than in Delaware County as a whole (91 days) (TREND MLS, Marketwatch Report, Quarters 1–4 from 2015).

The housing market is an opportunity for investment near the DTC. As workforce housing becomes scarcer in the region, this area has a ready supply, well served by public transportation. There is potential to add housing density through infill development and rehabilitation of existing dwelling units.

# **Business Climate Overview**

Overall, the business mix near the DTC is similar across the three geographies examined, as shown below in Table 7. In all three, the largest sector is Other Services, which encompasses services not included in other categories like auto repair.

	1/4 M	ile Radius	1/2 Mi	1/2 Mile Radius		1.5 Mile Radius	
	#	%	#	%	#	%	LQ
Mining	0	0.0%	0	0.0%	1	0.1%	0.8
Construction	15	8.6%	24	6.8%	185	9.8%	1.0
Manufacturing	4	2.3%	8	2.3%	60	3.2%	1.1
Wholesale Trade	6	3.4%	12	3.4%	95	5.0%	1.3
Retail Trade	28	16.0%	54	15.3%	262	13.9%	1.0
Transportation & Warehousing	3	1.7%	4	1.1%	53	2.8%	1.5
Information	5	2.9%	6	1.7%	29	1.5%	0.9
Finance & Insurance	15	8.6%	26	7.4%	96	5.1%	0.7
Real Estate, Rental & Leasing	5	2.9%	12	3.4%	83	4.4%	0.9
Professional, Scientific & Tech Services	12	6.9%	20	5.7%	101	5.4%	0.6
Management of Companies & Enterprises	0	0.0%	0	0.0%	1	0.1%	0.5
Administrative & Support & Waste Management & Remediation Services	5	2.9%	11	3.1%	84	4.5%	0.9
Educational Services	4	2.3%	11	3.1%	48	2.6%	0.9
Health Care & Social Assistance	19	10.9%	54	15.3%	182	9.7%	1.1
Arts, Entertainment & Recreation	2	1.1%	3	0.9%	25	1.3%	0.8
Accommodation & Food Services	10	5.7%	21	6.0%	122	6.5%	1.0
Other Services (except Public Administration)	30	17.1%	65	18.5%	342	18.2%	1.4
Public Administration	4	2.3%	8	2.3%	45	2.4%	0.9
Unclassified Establishments	8	4.6%	13	3.7%	68	3.6%	1.2

## Table 7: Business Sector Distribution

Source: Esri and Infogroup, 2015.

To look at how the business mix in the station area compares with the rest of Delaware County, the location quotient (LQ) for each sector was calculated.<sup>2</sup> An LQ score of 1.0 indicates that the given sector is in proportion with the rest of Delaware County. An LQ of more than 1.0 indicates that the given sector is relatively more common than in the rest of the county. An LQ score of less than 1.0 indicates that the given sector is relatively less common. The last column of Table 7 shows the LQ scores for the business sectors in the one-and-a-half-mile radius of DTC.

While businesses in the Other Services sector are more common in the study area than in the rest of Delaware County, the Retail Trade sector is in proportion. The most over-represented business sector in the study area is Transportation & Warehousing and the most underrepresented sector is Management of Companies & Enterprises.

#### **Retail Market**

There are three general categories of retail businesses: Neighborhood Goods & Services (NG&S), Food & Beverage (F&B), and General Apparel, Furniture, Other (GAFO). NG&S includes businesses such as convenience stores, drugstores, florists, bakeries, delis, dry cleaners, tailors, hair salons, nail salons, and similar businesses that draw their customers predominantly from a quarter-mile radius. F&B includes sit-down restaurants, take-out establishments, cafes, bars, coffee shops, sandwich shops, ice cream, shops, and similar establishments that draw their primary customers from a half-mile radius. Finally, GAFO includes stores selling clothing, furniture, jewelry, books, gifts, pet supplies, home décor, sporting goods, and other items for which people would be willing to travel a mile or more. Table 8 shows a breakdown of the businesses within a quarter-mile, half-mile, and one-and-a-half-mile radii of the DTC by NG&S, F&B, and GAFO.

**Table 8:** Retail Businesses Near the Darby Transportation

 Center

	<sup>1</sup> ⁄ <sub>4</sub> Mile Radius	½ Mile Radius	1.5 Mile Radius
General Merchandise Stores (NG&S)	10	20	71
Food Stores (NG&S)	8	23	100
Eating & Drinking Places (F&B)	19	42	239
Home Improvement Stores (GAFO)	0	0	40
Auto Dealers/Gas Stations (GAFO)	7	15	91
Apparel & Accessory Stores (GAFO)	12	19	80
Furniture & Home Furnishing Stores (GAFO)	0	4	17
Miscellaneous Retail	2	5	35

Source: Esri and Infogroup, 2015.

Of the 1,438,416 square feet of retail space in the one-and-a-half-mile radius of the DTC, there is only a 2 percent vacancy rate. This compares very favorably to Delaware County overall, in which there is a retail vacancy rate of 4.4 percent (CoStar Group, www.costar.com, 1/21/2016).

There are 15 small shopping centers within the one-and-a-half-mile radius of the DTC. Of these, 10 are strip-center types while the other 5 are neighborhood-center types: slightly larger than strip centers, but still convenience oriented; typical anchor tenants are grocery stores. Altogether these shopping centers have 432,485 Gross Leasing Area (GLA), of which only 12,510 (2.9 percent) is vacant. The largest shopping center—the Sharon Hill Shopping Center—has just over 100,000 square feet GLA and is anchored by a Dollar General store. The Yeadon Shopping center has 80,000 square feet GLA. The remaining shopping centers have GLAs ranging from 3,000 to 40,000 square feet (CoStar Group, www.costar.com, 1/21/2016).

<sup>&</sup>lt;sup>2</sup> Location Quotient (LQ): <u>1.5 Mile Radius Sector ÷ 1.5 Mile Radius Total Businesses</u> Delaware County Sector ÷ Delaware County Total Businesses

Of all the shopping centers near the DTC, there is just one in the quarter-mile station area radius—Darby Town Center—and one additional in the half-mile radius—Parkview Court Shopping Center. The Darby Town Center contains 38,000 square feet GLA and is anchored by a Save-A-Lot store. It is fully leased. The Parkview Court Shopping Center contains 30,000 square feet GLA and is 95.8 percent leased. It does not have space for an anchor tenant (CoStar Group, www.costar.com, 1/21/2016).

To ascertain how well the current supply of retail businesses meets demand in an area, Esri's Retail MarketPlace Database provides a Leakage/ Surplus Factor by industry.

- Leakage (indicated by a positive factor) in an area represents a condition where demand exceeds supply. In other words, retailers outside the market area are fulfilling the demand for retail products; therefore, demand is "leaking" out of the trade area. The greater the leakage factor is, the bigger the opportunity is for investment in that industry.
- Surplus (indicated by a negative factor) in an area represents a condition where supply exceeds the area's demand. Retailers are attracting shoppers that reside outside the trade area. The "surplus" is in market supply.

The overall Leakage/Surplus Factors in the study area differ in the three geographies studied around the DTC, as shown below in Table 9.

4.500	Industry Cummony	Demand	Cumply	Retail Gap	Leakage/Surplus Factor
Area	Industry Summary	Demand	Supply	(Annual Unmet Demand)	(Retail Opportunity)
1/4 Mile Radius	Total Retail Trade	\$11,610,801	\$28,989,810	-\$17,379,009	-42.8
	Total Food & Drink	\$1,185,218	\$4,276,477	-\$3,091,259	-56.6
1/2 Mile Radius	Total Retail Trade	\$86,016,639	\$77,703,270	\$8,313,369	5.1
	Total Food & Drink	\$9,098,456	\$6,362,598	\$2,735,858	17.7
1.5 Mile Radius	Total Retail Trade	\$663,971,467	\$340,931,141	\$323,040,326	32.1
	Total Food & Drink	\$70,058,300	\$40,392,560	\$29,665,740	26.9

#### Table 9: Retail Leakage/Surplus Factor Analysis

Source: Esri and Infogroup, 2015.

The analysis shows that the area within a quarter-mile of the DTC does not currently have unmet retail demand; however, that is not unusual since those businesses have additional sales generated by the traffic at the station. There is retail opportunity within the half-mile and one-and-a-half-mile radii, in both the Retail Trade and the Food & Drink sectors.

However, just because a retail opportunity exists in an area does not mean it can or should necessarily be met in that area. In addition to opportunity, there must be available space that aligns with industry need. Furthermore, not all industry sectors are appropriate in all areas. For example, three industry sectors—Building Materials, Garden Equipment & Supply Stores, Building Material & Supplies Dealers, Lawn & Garden Equipment & Supply Stores—are currently completely unmet in the half-mile radius of the station. However, a store like Home Depot would be highly unlikely to locate here because the total dollar amount of the unmet need simply is not great enough (\$6,805,954 in unmet need versus annual sales per Home Depot store of around \$30 million or more; source: Wikinvest, 2015). In addition, the building stock and/or available land do not support the space needs of a Home Depot (about 105,000 square feet of indoor space plus 23,000 square feet of outdoor space; source: Wikinvest, 2015). Finally, locating a big box retailer within the 10-minute walk radius of a transportation center would detract from the walkability and density of the area.

The most appropriate industries for the area within the half-mile radius of the station are those that are transit supportive—usually those in the NG&S or F&B categories. These businesses cater to convenience goods and service needs of residents, employees, and transit stop users and promote street-level activity. Below and on the next page, Table 10 shows all of the opportunities for retail investment by industry group. Table 11 then identifies only the transit-supportive industry groups (in the NG&S and F&B categories) within a half-mile of the DTC.

	1/2 Mile Radius			1.5 Mile Radius				
Industry Group	Demand	Supply	<b>Retail Gap</b> (Annual Unmet Demand)	Leakage/Surplus Factor (Retail Opportunity)	Demand	Supply	<b>Retail Gap</b> (Annual Unmet Demand)	Leakage/Surplus Factor (Retail Opportunity)
Motor Vehicle & Parts Dealers	\$18,404,419	\$8,399,898	\$10,004,521	37.3	\$145,682,396	\$68,206,892	\$77,475,504	36.2
Automobile Dealers	\$15,733,018	\$6,348,854	\$9,384,164	42.5	\$123,772,255	\$56,412,708	\$67,359,547	37.4
Other Motor Vehicle Dealers	\$1,510,828	\$0	\$1,510,828	100.0	\$12,814,443	\$846,742	\$11,967,701	87.6
Furniture & Home Furnishings Stores	\$2,532,306	\$456,009	\$2,076,297	69.5	\$19,780,499	\$4,932,367	\$14,848,132	60.1
Furniture Stores	\$1,610,755	\$456,009	\$1,154,746	55.9	\$12,450,608	\$1,972,386	\$10,478,222	72.6
Home Furnishings Stores	\$921,551	\$0	\$921,551	100.0	\$7,329,890	\$2,959,981	\$4,369,909	42.5
Electronics & Appliance Stores	\$4,563,703	\$1,649,362	\$2,914,341	46.9	\$35,497,071	\$8,649,510	\$26,847,561	60.8
Building Materials, Garden Equipment & Supply Stores	\$3,402,977	\$0	\$3,402,977	100.0	\$28,529,787	\$18,172,378	\$10,357,409	22.2
Building Material & Supplies Dealers	\$2,978,576	\$0	\$2,978,576	100.0	\$24,989,652	\$18,014,160	\$6,975,492	16.2
Lawn & Garden Equipment & Supply Stores	\$424,401	\$0	\$424,401	100.0	\$3,540,136	\$158,218	\$3,381,918	91.4
Food & Beverage Stores	-	-	-	-	\$136,847,215	\$107,327,426	\$29,519,789	12.1
Grocery Stores	-	-	-	-	\$116,778,523	\$102,370,487	\$14,408,036	6.6

Table 10: Retail Investment Opportunities by Industry Group

Specialty Food Stores	-	-	-	-	\$8,359,770	\$3,558,147	\$4,801,623	40.3
Beer, Wine & Liquor Stores	\$1,492,909	\$447,097	\$1,045,812	53.9	\$11,708,921	\$1,398,792	\$10,310,129	78.7
Gasoline Stations	-	-	-	-	\$45,817,104	\$30,474,771	\$15,342,333	20.1
Clothing & Clothing Accessories Stores	\$4,566,857	\$4,457,253	\$109,604	1.2	\$34,306,339	\$10,132,106	\$24,174,233	54.4
Clothing Stores	\$3,345,624	\$1,795,775	\$1,549,849	30.1	\$25,081,187	\$5,389,711	\$19,691,476	64.6
Shoe Stores	-	-	-	-	\$5,297,744	\$4,021,852	\$1,275,892	13.7
Jewelry, Luggage & Leather Goods Stores	\$490,086	\$0	\$490,086	100.0	\$3,927,409	\$720,543	\$3,206,866	69.0
Sporting Goods, Hobby, Book & Music Stores	\$2,570,723	\$233,796	\$2,336,927	83.3	\$20,097,517	\$1,917,136	\$18,180,381	82.6
Sporting Goods/Hobby/Musical Instrument Stores	\$2,015,676	\$233,796	\$1,781,880	79.2	\$15,910,995	\$1,708,975	\$14,202,020	80.6
Book, Periodical & Music Stores	\$555,047	\$0	\$555,047	100.0	\$4,186,522	\$208,161	\$3,978,361	90.5
General Merchandise Stores	\$14,808,114	\$6,936,226	\$7,871,888	36.2	\$112,535,744	\$13,971,370	\$98,564,374	77.9
Department Stores Excluding Leased Departments	\$11,466,229	\$3,463,682	\$8,002,547	53.6	\$87,239,592	\$4,424,126	\$82,815,466	90.3
Other General Merchandise Stores	-	-	-	-	\$25,296,152	\$9,547,243	\$15,748,909	45.2
Miscellaneous Store Retailers	\$4,147,432	\$1,000,517	\$3,146,915	61.1	\$31,976,692	\$10,218,815	\$21,757,877	51.6
Florists	\$166,854	\$137,887	\$28,967	9.5	\$1,421,030	\$580,580	\$840,450	42.0
Office Supplies, Stationery & Gift Stores	\$806,112	\$0	\$806,112	100.0	\$6,334,990	\$3,195,509	\$3,139,481	32.9
Used Merchandise Stores	-	-	-	-	\$2,401,992	\$1,505,641	\$896,351	22.9
Other Miscellaneous Store Retailers	\$2,862,045	\$267,412	\$2,594,633	82.9	\$21,818,680	\$4,937,084	\$16,881,596	63.1
Non-store Retailers	\$2,920,509	\$1,467,160	\$1,453,349	33.1	\$22,648,418	\$6,893,560	\$15,754,858	53.3
Electronic Shopping & Mail- Order Houses	\$2,315,680	\$912,728	\$1,402,952	43.5	\$18,028,707	\$5,463,382	\$12,565,325	53.5
Vending Machine Operators	\$95,607	\$0	\$95,607	100.0	\$716,334	\$106,968	\$609,366	74.0
Direct Selling Establishments	-	-	-	-	\$3,903,376	\$1,323,210	\$2,580,166	49.4
Food Services & Drinking Places	\$9,098,456	\$6,362,598	\$2,735,858	17.7	\$70,058,300	\$40,392,560	\$29,665,740	26.9
Full-Service Restaurants	\$4,822,450	\$2,568,495	\$2,253,955	30.5	\$37,130,636	\$22,695,123	\$14,435,513	24.1
Limited-Service Eating Places	\$3,616,419	\$3,308,759	\$307,660	4.4	\$27,806,197	\$12,062,963	\$15,743,234	39.5
Special Food Services	\$190,173	\$0	\$190,173	100.0	-	-	-	-
Drinking Places—Alcoholic Beverages	-	-	-	-	\$3,662,862	\$2,898,128	\$764,734	11.7

Source: Esri and Infogroup, 2015.

	1/2 Mile Radius						
Industry Group	Demand	Sumply	Retail Gap	Leakage/Surplus Factor			
	Demand Supply		(Annual Unmet Demand)	(Retail Opportunity)			
Beer, Wine & Liquor Stores	\$1,492,909	\$447,097	\$1,045,812	53.9			
General Merchandise Stores	\$14,808,114	\$6,936,226	\$7,871,888	36.2			
Florists	\$166,854	\$137,887	\$28,967	9.5			
Food Services & Drinking Places	\$9,098,456	\$6,362,598	\$2,735,858	17.7			
Full-Service Restaurants	\$4,822,450	\$2,568,495	\$2,253,955	30.5			
Limited-Service Eating Places	\$3,616,419	\$3,308,759	\$307,660	4.4			
Special Food Services	\$190,173	\$0	\$190,173	100.0			

Table 11: Transit-Supportive Retail Investment Opportunities in the Half-Mile Station Area Radius by Industry Sector

Source: Esri and Infogroup, 2015.

DVRPC's publication *Revitalizing Suburban Downtown Retail Districts* (2013) identified seven characteristics of successful retail districts. Table 12 explains each characteristic and shows how Darby's Main Street shopping area compares with the most successful districts.

	Characteristics of Successful Retail Districts	How Does Darby Compare?
Managed	Management can be as small and informal as a group of retailers getting together, or as large and complex as a business improvement district. Most important is that there be a single point of contact, creating clarity and efficiency.	No management.
Retail Appropriate	Generally, high ceiling heights and clearly identifiable storefronts with large windows are preferred. Retail should not be interrupted by non-retail uses, such as banks, residences, and professional offices, and should have a vacancy rate of less than 20 percent.	Main Street (from 9th Street to Mill Street) contains suitable retail spaces. Non-retail uses are scattered throughout. The vacancy rate is much less than 20 percent.
Pedestrian-Friendly	Elements that contribute to a pedestrian-friendly environment are: clean and safe streets, appropriate sidewalk widths (eight feet or more), street furniture, appropriate lighting, active uses above the ground floor, and low levels of crime.	The street network is very walkable and sidewalks are generally in good repair with appropriate widths. Street furniture is lacking, but there is some pedestrian-scaled lighting. Above the ground level, uses tend to be residential or office. Crime in the area should be reduced.
Parking Options	Parking must be well planned, well lit, signed, and convenient to use. The most convenient parking should be the most expensive, and pricing should allow that about 15 percent of the spaces are free at any time.	There is too much surface parking; most is underutilized. The most convenient parking is free, and although there are some signs indicating one-hour parking on the busiest retail blocks, it is unclear if there is any enforcement.
Unified	Urban form and branding are key to creating a unified retail district. There should not be significant gaps between the buildings or non-retail uses on the street. Where there are non-retail uses, they should contribute to the retail environment, with awnings and window displays.	No uniform approach to form or branding.
Transit Accessible	Proximity to a transit stop provides retailers with additional access to customers, as customers can run errands on their way to and from work.	The retail area is easily accessible via multiple trolley and bus lines.
Programmed	Events can be fundraisers or simply special events designed to bring the community together, organized by local governments, business improvement districts, or community groups. Examples could include parades, book fairs, craft fairs, or festivals.	No current programming.

Sources: DVRPC, 2013, 2016.

While the Retail Trade sector is already the second largest in the area around the DTC, and there is a low vacancy rate for commercial spaces, there is great opportunity to improve the Main Street retail corridor through the application of the seven characteristics listed.

#### **Office Market**

Office space is typically divided into three categories: Class A, Class B, and Class C. Class A office space tends to be newest, is outfitted with the highest finishes, and is often centrally located. Class B is more affordable for smaller- or medium-sized companies, while Class C is functional but of a lower quality than Class B and has the lowest rents.

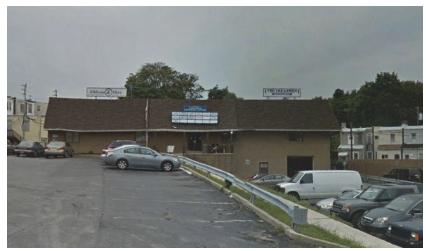
There is no Class A office space within the one-and-a-half-mile radius of the DTC. There are six Class B office buildings, providing 85,181 total square feet of rentable space, all of which is fully leased. The vast majority of the office space in the one-and-a-half-mile radius of the station—68.6 percent—is Class C, containing 185,800 square feet available for rent in 35 buildings, of which only an extremely low 2.8 percent is vacant.

The office market profile of Delaware County overall is significantly different than that of the study area; although it does have some Class A office space, it has a much higher vacancy rate across all three classes as shown below in Table 13.

#### Table 13: Delaware County Office Space

Туре	Square Feet	Percentage of Total Office Space	Vacancy Rate
Class A	7,354,519	32.8%	17.1%
Class B	9,555,645	42.7%	12.9%
Class C	5,478,909	24.5%	17.0%

Source: CoStar Group, www.costar.com, 1/21/2016.



Class C office building in the quarter-mile radius of the DTC



Class C office building in the quarter-mile radius of the DTC

#### **Industrial Market**

There is significantly more industrial space than office space within a mile and a half of the DTC: a total of 4,296,072 square feet. Although Delaware County also has more industrial space than office space, the proportion is much lower–32,205,715 square feet of industrial space to 22,389,073 square feet of office space (CoStar Group, www.costar.com, 1/21/2016).

The industrial market is divided generally into flex and warehouse space and then subdivided into specialized categories. In the quartermile station area radius alone, there are 54,000 square feet of industrial flex space and just over 70,000 square feet of industrial warehouse space.



Light industrial property adjacent to the DTC

Following are descriptions of the specialized types of industrial spaces found in the one-and-a-half-mile radius of the DTC.

# Flex Buildings with Light Distribution and/or Light Manufacturing and/or Showroom Space

These buildings include a broad range of uses and are often used to combine one or more uses into a single facility, including office space, research and development (R&D), showroom retail sales, light manufacturing, and even small warehouse and distribution uses. Flex buildings can be used for light manufacturing that does not require extensive physical plant and space requirements that heavy industrial buildings provide, such as light assembly. They typically have ceiling heights under 18 feet and have a higher percentage of office space than larger industrial buildings (CoStar Group, www.costar.com, 1/21/2016).

- 843,525 square feet total; and
- 12.7 percent is vacant.

#### **Showroom Buildings**

These buildings are similar to flex buildings in basic construction and layout; showroom buildings combine retail display space with extensive onsite storage and distribution; however, typically up to 50 percent of the interior space in showroom buildings is dedicated to sales (CoStar Group, www.costar.com, 1/21/2016).

- 20,985 square feet total; and
- fully leased.

# Industrial Buildings Including Those with Warehouse and/or Distribution and/or Service Space

These buildings are very large, single-story structures used primarily for warehousing and the distribution of business inventory. These buildings are large and can house up to hundreds of thousands of square feet and have up to 60-foot ceiling heights to accommodate extensive racking and storage systems. These buildings may have a small amount of office space in addition to numerous loading docks, truck doors, and large surface parking lots for semi-trailers. Some buildings may be served by rail cars (CoStar Group, www.costar.com, 1/21/2016).

- 3,019,350 square feet total; and
- 6.2 percent is vacant.

#### **Manufacturing Buildings**

These buildings, sometimes called "heavy industrial" facilities, are designed to house specialized equipment used to produce goods or materials. In addition to providing three-phase high-capacity electric power, these properties may include heavy ductwork, pressurized air or water lines, buss ducts, high-capacity ventilation and exhaust systems, floor drains, storage tanks and cranes (CoStar Group, www.costar.com, 1/21/2016).

- 412,212 square feet total and
- 13.4 percent is vacant.

The prevalence of industrial businesses is due to the existing supportive infrastructure. These types of businesses pay local taxes and provide valuable jobs for the community. While new industrial businesses should not be recruited to locate near the DTC, most of the existing businesses should be retained for their value to the community.

#### **Market-Based Recommendations**

New development in the station area—both the quarter- and half-mile radii of the station—should be focused on meeting the needs of the existing community. The analysis performed for this project identified several areas of need—housing, commercial, and public space—and recommendations for each area are listed below.

Increase residential density through the following strategies:

- Rehabilitate existing housing stock as needed.
- Construct residential infill in existing neighborhoods.
- Build new housing—ensuring affordability and a variety of unit types—within a quarter-mile of the DTC.

Add commercial development that is supportive of the existing community.

- Appoint a borough representative as the Main Street Business District Liaison to:
  - Convene regular meetings of business owners to identify and address their concerns.
  - Seek out grant funding for façade improvements and retail district branding.
  - o Implement programming.

- Recruit transit-supportive retail businesses (General Merchandise Stores, Food Services & Drinking Places, and Full-Service Restaurants) to locate along the Main Street corridor and in available storefronts within a quarter-mile of the DTC.
- Add Class B and C office space on upper floors of existing buildings where possible.

Create public spaces on underutilized land that is both within a quartermile of the DTC and in the floodplain of the Darby Creek.

Utilize public spaces as opportunities to connect with nature.

# CHAPTER 4: TOD Readiness Analysis

The project team looked at the seven factors considered necessary for an area to be transit-oriented-development (TOD) ready (walkability, density, mix of uses, travel options, public space, housing choice, and community engagement) and compared them with what exists in the area around the Darby Transportation Center (DTC) to see how TOD ready it is now, and if opportunities exist to move closer to TOD readiness in the future.

## Walkability

Walkability measures how easy it is to navigate an area as a pedestrian. TOD ready places are very walkable and can support the added foot traffic generated by TOD style development. The area around the DTC is very walkable. There are numerous short, direct walking connections to the station. The sidewalks nearby are mostly in good repair and block lengths are not overly long. In addition, there are two areas of zoning regulation—the CBD's Special Development Regulations and the TOD Overlay—that include provisions to preserve and enhance walkability.

The biggest barriers to walkability are intersections around the station where there are difficult crossings. Those intersections have been identified in this report and recommendations proposed to mitigate their impact.

Two factors may make walkability more challenging for those with mobility issues: several streets—Hamilton Avenue, Highland Avenue, Lawrence Avenue, and Pine Street—have steep slopes, and there are very few places to sit and rest. Finally, some people are discouraged from walking due to high crime rates in the area; however, crime can be mitigated in numerous ways from increasing density and street-level activity to environmental design treatments.

# Density

An area must have an absolute minimum gross residential density of six units per acre to be considered TOD ready; however, residential density reaching 30 or more units per acre corresponds with much higher rates of transit ridership.

In the quarter-mile radius around the DTC, gross residential density is only 4.1 units per acre. Low-density uses predominate: surface parking lots, industrial parcels, and churches.

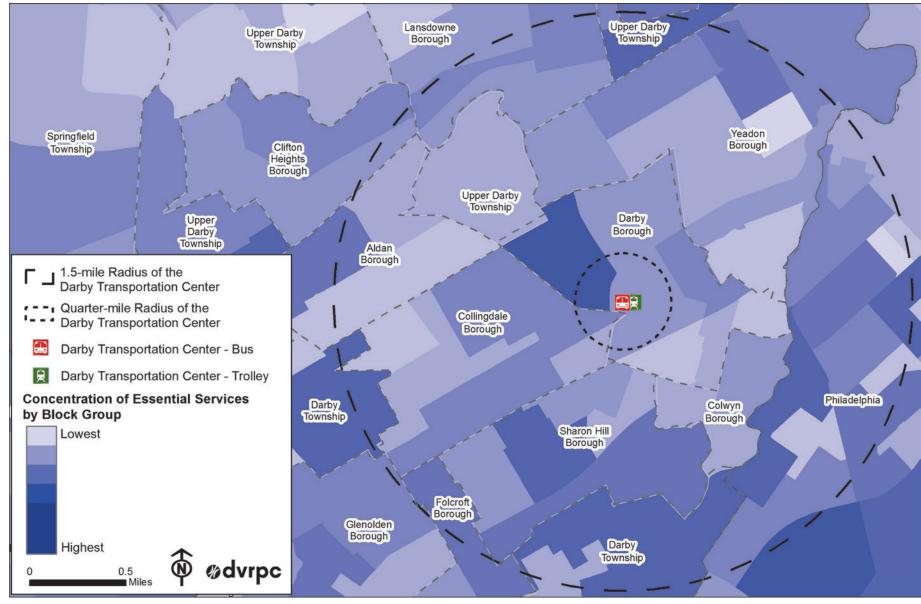
While the area does not currently meet the minimum density standards for TOD readiness, the abundance of underutilized land provides many opportunities to increase density.

# Mix of Uses

A mix of transit-supportive uses—offices, neighborhood-oriented retail including restaurants, entertainment venues, social services, parks, and cultural/educational/governmental institutions—in a station area complements higher residential densities and contributes to walkability.

Although Darby does have its Main Street shopping area and residences near the station, most of Darby's uses are not transit supportive. They include working industrial sites, low-intensity institutional uses, and strip-style shopping (Macdade Boulevard & Chester Pike) with limited retail and food options. In addition, while tax-exempt properties such as government facilities and churches can be part of a healthy land use mix, these uses are too predominant and both sap energy and detract from the tax base near the DTC.

Figure 17 shows the proximity of the DTC to concentrations of local essential services—jobs, schools, health care facilities, grocery stores, senior centers, and recreational open space.





Source: DVRPC, 2016.

# **Travel Options**

Options for public transit must be present for an area to be considered TOD ready. In Darby, there are both trolley (Routes 11 and 13) and bus (Routes 113, 114, and 115) transit alternatives with frequent service to a variety of destinations, both into Center City Philadelphia and further out into the suburbs. SEPTA's upcoming Trolley Modernization project will further expand the accessibility of public transportation in the area.

Although there are limited bicycle facilities (little bike parking, no bike lanes, etc.) around the DTC, the low volume of traffic on most of Darby Borough's streets does not discourage cycling. As activity around the DTC increases with new development, including the proposed Darby Creek Trail, the borough may need to expand its bicycle facilities.

## **Public Spaces**

Public spaces such as parks, plazas, pedestrian malls, or decorative gardens provide a balance to higher-density development patterns in which people have access to less private outdoor space. They also add value to the marketability of an area. Public outdoor space should be created as part of any TOD and be carefully balanced against the need to increase density around the transportation hub. When planned properly, not only can public open space help to define the character of the surrounding community, it can also strengthen pedestrian connections between uses.

The area around the DTC has very little public open space (and no public restrooms), although there is abundant vacant and underutilized land available for the creation of high-quality public space. Future public open space in Darby should capitalize on its proximity to the Darby Creek and nearby trails.

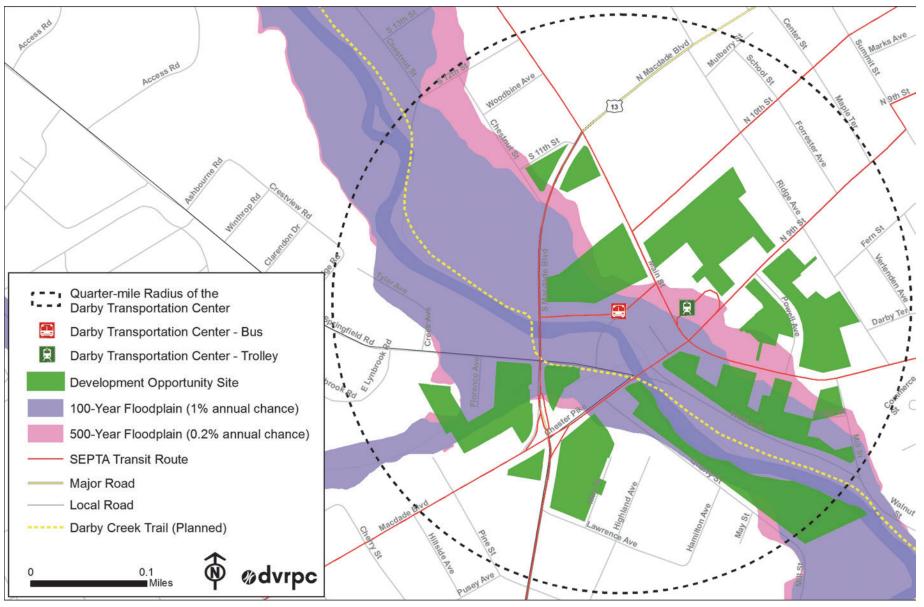
# Housing Choice

Housing choice refers not only to housing units at different price points, but also to the variety in types of units available, including small-lot single-family and two-family homes, to rowhouses, to low-rise and high-rise multi-unit apartments. While Darby has housing available at a variety of prices, including a supply of affordable housing that is much needed in the region, it does not have a lot of variety in the types of housing units available. Indeed, nearly 75 percent of all housing units within a mile and a half of the DTC are single-family homes (U.S. Census Bureau, 2010–2014 ACS, 5-year Estimates, B25024). New residential development should incorporate a variety of housing types to begin to diversify the area's supply.

# **Community Engagement**

Darby Borough has, to date, not conducted public outreach to solicit input for planning near the DTC, although borough leadership including Borough Council—contributed to the recommendations in this report. At the conclusion of this study, at which time they will have a current synopsis of the conditions in the area around the DTC and an analysis of viable development options within the context of requirements for TOD readiness, Darby Borough officials will be wellpositioned to begin the public outreach process.





Source: DVRPC, 2016.

# CHAPTER 5: Development Opportunity Sites

After assessing current conditions and developing market-sensitive recommendations, the project team re-examined land parcels within a quarter-mile of the station to identify sites where those recommendations could be implemented.

Seven potential development sites were identified (see Figure 18), all within a quarter-mile of the station, where the various elements needed for TOD readiness can be created, strengthened, or expanded. Four are suitable for mixed-use development, one for residential development, and two could be used to create public spaces and connect with the area's natural amenities. Each site is subsequently detailed in this chapter.

The form that new development takes around the DTC is very important and Darby Borough leadership is at a critical decisionmaking point: the form new development takes will move the area either towards or away from TOD readiness in the future.

#### S. Macdade Boulevard and Chester Pike Site



Intersection of S. Macdade Boulevard and Chester Pike (Source: GoogleEarthPro, 2016)

One of the most difficult intersections for pedestrians to navigate is S. Macdade Boulevard and Chester Pike. Traffic is heavy and fast moving with multiple lanes of traffic in each direction plus turning lanes. Three SEPTA bus routes pass through this area, although there are no bus shelters or streetscaping to encourage either walking through the area or waiting for the bus. Buildings are lacking to complete the street wall on three of the four corners, and the abundance of pavement is visually unappealing to pedestrians. Finally, the shortest crosswalk is longer than 50 feet.

The developable parcels at this site total 4.84 acres (see Figure 19):

- 302 S. Macdade Boulevard is currently home to a shopping center and surface parking. It is owned by Yeadon Industrial Park East, LLC, and is not tax-exempt.
- 14-20 S. Macdade Boulevard currently houses a shopping center and surface parking. It is owned by Lee Yong W. and is not tax-exempt.

- 54-68 Chester Pike is currently the site of a retail store and parking. It is owned by the Salvation Army and is not taxexempt.
- 52 Chester Pike is currently the site of a retail store and surface parking. It is owned by Walgreens, Inc. and is not tax-exempt.

This site presents an opportunity to change the character of the Macdade Boulevard and Chester Pike intersection, increasing both building density and pedestrian safety, adding transit amenities, and completing the street frontage to create a more appropriate gateway into Darby's downtown.

Although a significant portion of this site is in the floodplain, there appears to be enough space to locate mixed-use buildings— ground-floor commercial with residential or office above—on two of the corners.

Improvements should be made to the ingress and egress areas of the parking lots located in the floodplain to reduce the potential for pedestrian conflicts. Streetscaping elements should be added along all parking areas to define the pedestrian space. Property owners, particularly Walgreens and Dunkin Donuts, should be encouraged to make pedestrian improvements along the edges of their properties. In addition, the floodplain parking lots provide a ready location for the addition of stormwater infrastructure.

Traffic improvements should include improved crossings for pedestrians and possible elimination of slip ramps (although the ultimate decision on the slip ramps would be PennDOT's). Bus shelters should be added wherever possible in this area. The streets and sidewalks in this area are the responsibility of Darby Borough; however, all of the properties except for Walgreens are in Collingdale Borough.

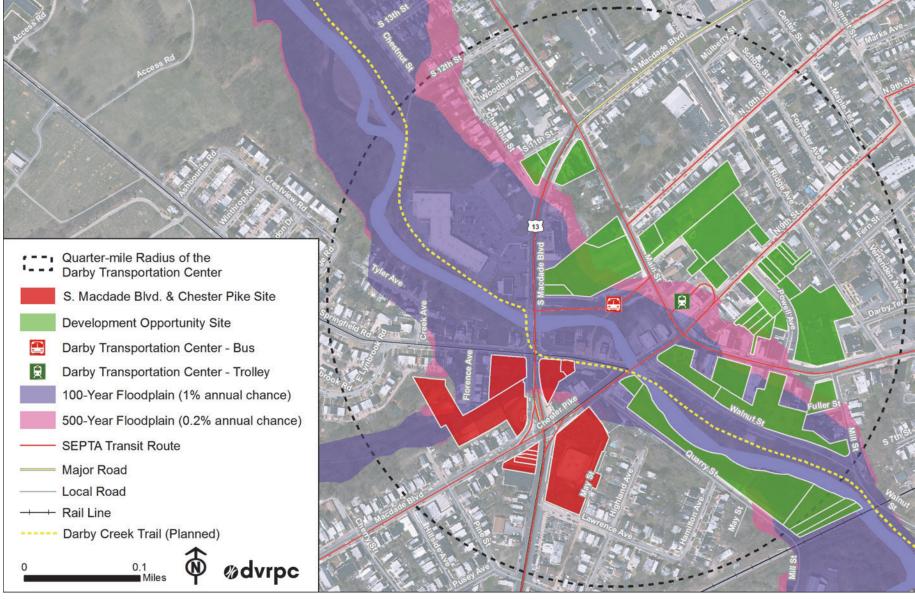


Figure 19: S. Macdade Boulevard and Chester Pike Site

Source: DVRPC, 2016.

#### 25 & 100 S. Macdade Boulevard Site



View towards the intersection of S. Macdade Boulevard and Main Street

The intersection of Macdade Boulevard and Main Street is another potential gateway into Darby's downtown. Currently the site of the Sneaker Outlet and Pickett's Auto Service, this site is a barrier between the residential neighborhoods to the north and the DTC and Main Street shopping district downtown. This intersection sees heavy traffic volumes and a large number of turns and is difficult to cross for pedestrians.

The developable parcels at this site total .82 acres (see Figure 20):

- 25 S. Macdade Boulevard is currently the Sneaker Outlet and in the future will house residential apartments and surface parking. It is owned by KP 1018, LLC, and is not tax-exempt.
- 100 S. Macdade Boulevard is currently used as a gas station and parking lot for vehicles being serviced. It is owned by Pickett's Auto Service, Inc., and is not taxexempt.

Initially the study team thought that this site would be a good one to add mixed-use development, but the owner of the Sneaker Outlet site was recently approved to construct four apartments on the site. This project will renovate the existing building and create an addition on the adjacent lot. Increasing residential density is very important in this area, so this is a good use, although locating the parking along Main Street is not ideal; it would have been better to have the off-street parking tucked behind the housing units. However, the project does present an opportunity for Darby Borough to work with the property owner to ensure that the final project enhances the corner. It is important that future development be coupled with intersection improvements that strengthen the connections across the intersection for pedestrians, and mitigate the traffic volume and turning movements of vehicles, if possible.

The owner of Pickett's Auto Service—the gas station across the street from the Sneaker Outlet—should be encouraged to beautify the corner lot, adding streetscaping and pedestrian amenities, such as plantings, benches, or bollards.

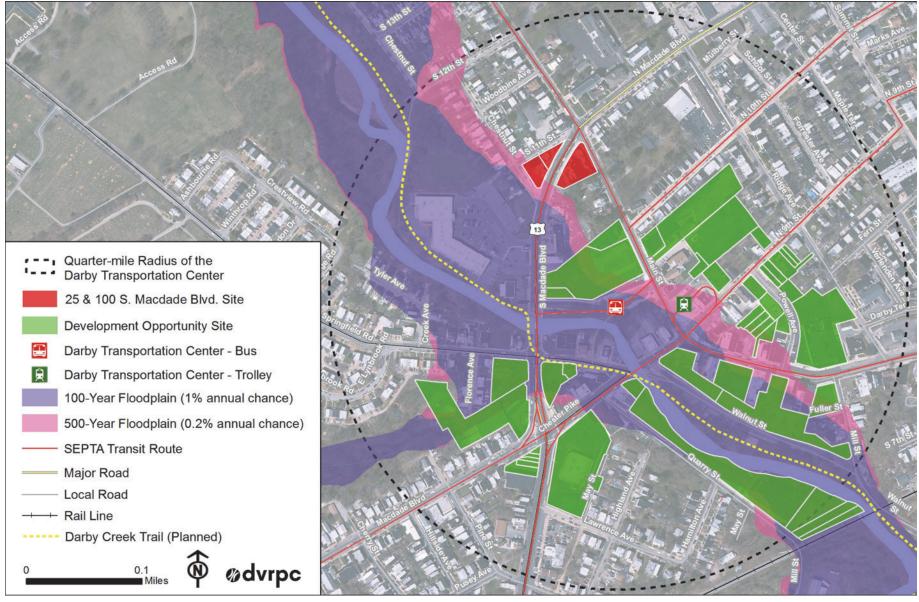


Figure 20: 25 & 100 S. Macdade Boulevard Site

Source: DVRPC, 2016.

#### **Former Bus Parking Site**





Views of a surface parking lot formerly used for school bus parking

Directly adjacent to the DTC, this site provides a valuable opportunity to increase density within a quarter-mile of the station. Formerly used by the William Penn School District for bus parking, this site is now vacant and being shopped around for development.

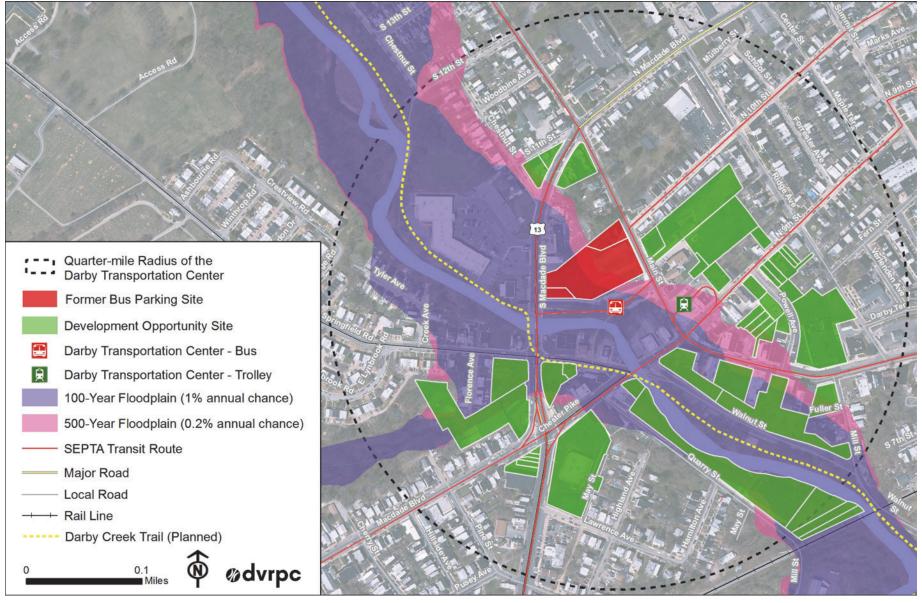
All of the parcels that comprise this site are tax-exempt, and total 2.17 acres (see Figure 21):

- 934 Main Street is currently a vacant parking lot owned by the William Penn School District. There are two small, one-story structures on this property, a shed and a trailer, both of which are unused.
- 936 Main Street is currently a vacant parking lot owned by the Delaware County Redevelopment Authority.
- 199 Macdade Boulevard is currently home to a three-story residential building owned by the Delaware County Redevelopment Authority.

The study team learned that a deal to locate a Wawa on this site recently fell through—a very good thing for the borough if it wants to move toward TOD readiness. While there are many appropriate locations for a Wawa, in this area it would have further diminished the pedestrian realm to prioritize vehicle traffic. Moving forward, it is important that Darby Borough work with the William Penn School District to ensure that development of this site is supportive of future TOD in the area.

Even though a significant portion of this site is in the floodplain, there is buildable area available to complete the street frontage along Main Street with a mixed-use building. Locating multiple uses here would be helpful in generating activity adjacent to the station. The portion of the site in the floodplain can be used for parking.

# Figure 21: Former Bus Parking Site



Source: DVRPC, 2016.

#### 925 Main Street & 9th Street Lots Site



Developable land at the rear of the Tracey Mechanical/Apache site

This site, adjacent to the DTC with no floodplain constraints, provides the best opportunity to increase residential density in the station area, which is critical for TOD readiness in the future.

The developable parcels at this site total 2.87 acres (see Figure 22):

- 925 Main Street is partly used for light industrial activity, while the back portion of the lot is vacant land. It is owned by Tracey Mechanical/Apache and is not tax-exempt.
- The 9th Street lots are vacant, tax-exempt land owned by SEPTA. (SEPTA may need this land to facilitate reintroduction of trolley service in the future, so until the site been analyzed for potential impacts to future DTC operations, it should not be considered developable.)

If redevelopment is compatible with SEPTA operations, the 9th Street lots should be used for infill residential development, along with the unused portion of the adjacent Tracey Mechanical/Apache light industrial site. The working portion of the Tracey Mechanical/Apache site should be preserved, but the rear of the property contains a significant amount of vacant land that, if added to the 9th Street lots owned by SEPTA, could greatly increase the overall development potential of the site.

Moving forward, Darby Borough should engage in discussions with Tracey Mechanical/Apache as they may be willing to subdivide their site and sell off the back portion to enable development. In addition, Tracey Mechanical/Apache should be encouraged to improve its frontage along Main Street so that it contributes to a pleasant pedestrian experience next to the DTC.

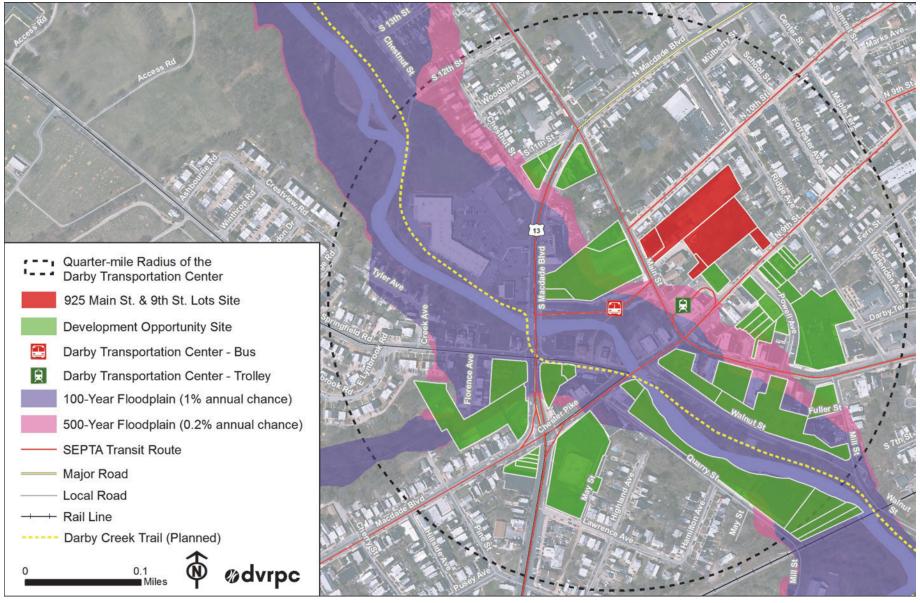
Development of this site would also provide the borough with an opportunity to address the current shared parking situation in which a church uses the Tracey Mechanical/Apache parking lot on Sundays, causing traffic and parking problems in the area.

Redevelopment of this site should not commence until after SEPTA has determined its need for the 9<sup>th</sup> Street lots; however, even without the inclusion of the 9<sup>th</sup> Street lots, the back portion of the Tracey Mechanical/Apache site could be used to increase residential density adjacent to the DTC.



Views looking out of the site along 9<sup>th</sup> St





Source: DVRPC, 2016.

#### **Powell Avenue Parking Lots Site**



Aerial view of the Powell Avenue parking lots site (Source: Google)

This site provides an opportunity for development on the current County Assistance Building parking lot and adjacent parcels through to Ridge Avenue.

Together, the parcels at this site total 2.87 acres (see Figure 23):

- 879 Main Street is currently used for surface parking. It is a tax-exempt parcel owned by Darby Borough.
- 36-48 N 9th Street is the site of the former Borough Hall and currently houses the borough's public works garage. It is owned by Darby Borough and is tax-exempt.
- 845 Main Street is the County Assistance Office building and its surface parking lot. It is owned by the State of Pennsylvania and is tax-exempt.
- 140 Powell Avenue is currently used for light industrial. It is owned by Martin and Audrey Scheier and is not exempt.

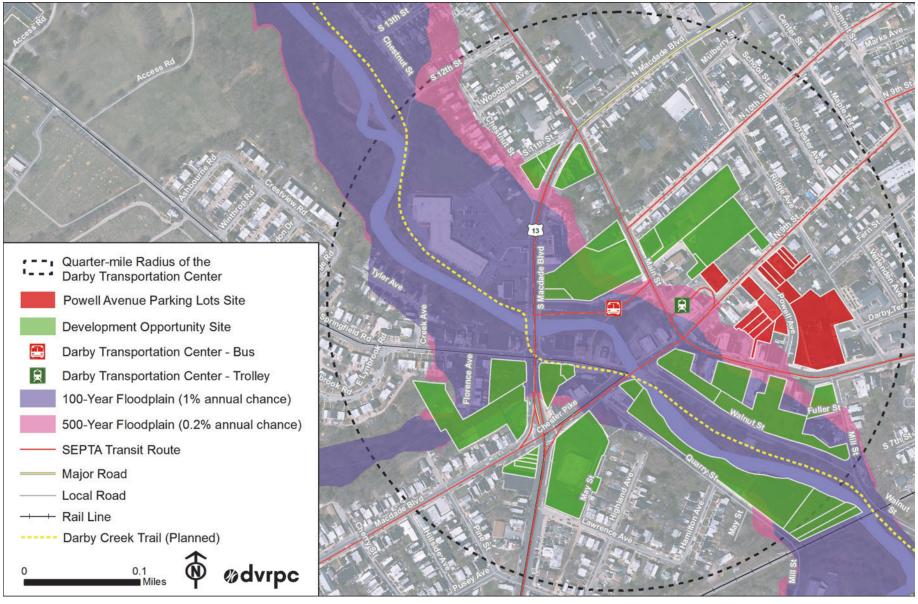
More residential density should be added here, either as a standalone residential development, or as part of a mixed-use building. In addition to residential units, this site could support new Class B and C office space, adaptively reuse old buildings, and share surface parking. It would be ideal to have mixed-use development (ground floor retail with office or residential above) fronting N. 9th Street on either side of Powell Avenue.

Parking will need to be carefully managed here; the Salvation Army parking lot could remain, but a shared parking agreement between them and the County Assistance Office would need to be negotiated. The parking for the County Assistance Building would need to be relocated, and an ideal location would be to move it to the interior block across the street that is partially in the floodplain (although the triangular parking area directly adjacent to the building can be retained to provide required on-site parking if needed). Furthermore, the underutilized parking lot adjacent to the DTC could be used for access into the proposed residential infill development instead of parking.

A project in this area would also provide an opportunity to mitigate the hazardous pedestrian conditions caused by the width of Main Street and the function of the back-in angle parking near the Post Office and County Assistance Office.

Unfortunately, borough leadership is currently unwilling to relocate the public works garage that currently fronts 9th Street (in fact, there are plans to demolish the old Borough Hall on 9th Street to expand the public works area to provide more storage for salt & trucks). And because of the public works garage, borough leadership seems reluctant to attract residential development to the interior lots because of possible interference with public works trucks. Despite the complicated nature of moving the public works garage, the borough should strongly consider it because of the critical location of this site next to the DTC.





Source: DVRPC, 2016.

#### **Main Street Corridor Site**



Vacant lot on Main Street (868-878 Main Street)



Mixed-use building at Main Street & Chester Pike (896 Main Street)



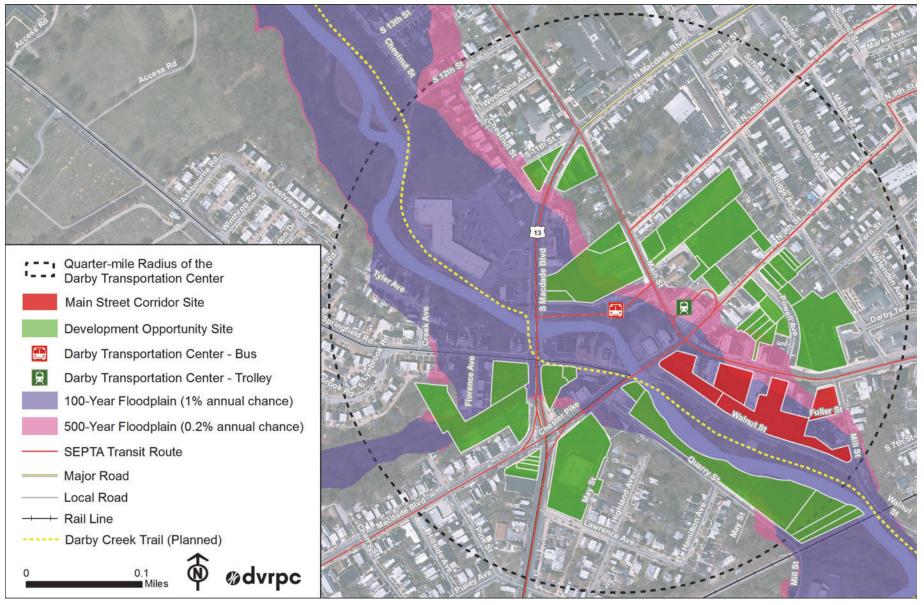
Vacant lot at Main and Mill streets (842 Main Street)

This is an ideal site to locate public space and outdoor recreation opportunities, both of which are necessary if the borough intends to move towards TOD readiness. Nearly the entire site is in the floodplain, therefore, not only is this site good to preserve for public use rather than develop, it provides an opportunity to add stormwater infrastructure.

The parcels that comprise this site total 2.36 acres (see Figure 24):

- 842 Main Street is the site of a burned down building owned by Thomas & Patricia Healy. It is not tax-exempt.
- 864-866 Main Street is a tax-exempt, vacant building owned by Darby Borough.
- 868-878 Main Street is a tax-exempt, vacant lot owned by Delaware County Redevelopment Authority.
- 896 Main Street is a mixed-use building (commercial & residential). It is owned by Darby Court Assoc LP and is not tax-exempt.

Darby Borough should coordinate with the County Redevelopment Authority regarding future programming of the open lot fronting Main Street. The borough should also encourage the owners of 842 Main Street to move forward with their idea of building a hot dog stand on their parcel since that is the type of business that the market analysis indicated was needed downtown. A hot dog stand could be a particularly good fit for this corridor if it includes outdoor seating on the portion of the site in the floodplain. Figure 24: Main Street Corridor Site



Source: DVRPC, 2016.

#### **Quarry Street Corridor Site**



The old suspender factory building at 901 Quarry Street (Source: Google)

This site provides a place to extend the core of public space created on the Main Street Corridor Site and connect it with the Darby Creek Trail, a high-priority trail in the Delaware County Open Space Plan.

The five parcels that make up this site share the same address, 901 Quarry Street, and total 3.23 acres (see Figure 25). In addition:

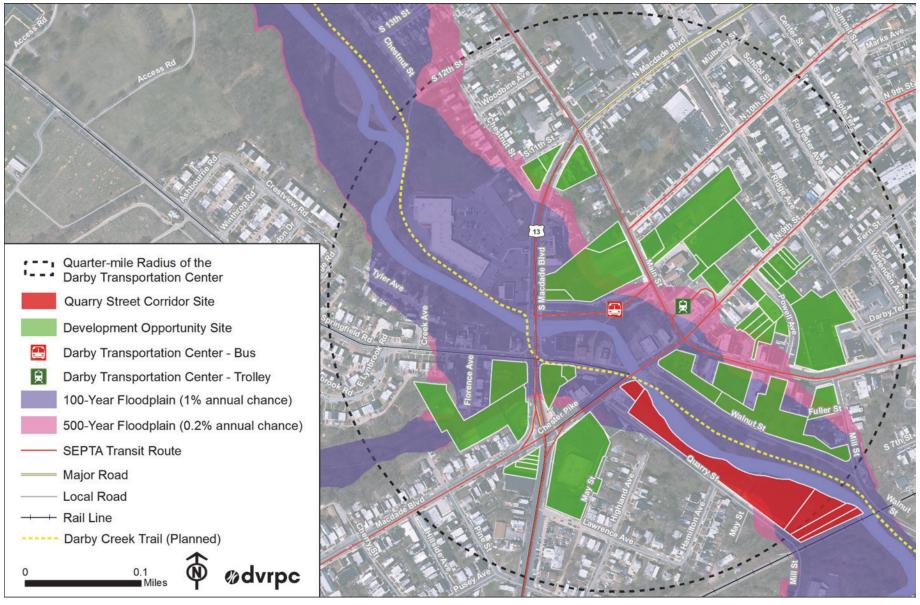
- The site is currently comprised of vacant land, surface parking, and a former industrial building.
- The entire site is owned by Quarry Bridge Associates, LP.
- The site is not tax-exempt.

While new construction is not advisable in the floodplain, there is opportunity to adaptively re-use the former industrial building, an old suspender factory. A drug rehab facility, two of which have been proposed, would not be compatible with the recommended adjacent recreation uses. There was also an attempt to re-use this site as a charter school, but that was not approved. Instead, the building would be well-utilized as a community center, recreation space, or event venue (for weddings, parties, etc).

This site is now scheduled to be converted to open space and the future of the building is unclear.

Also important to note: Quarry Bridge Associates, LP, also owns the parcel on the south side of the rail line that is adjacent to the former Sheboygan Company paint site. This parcel, which is both contaminated and in the floodplain, could be made part of this project.





Source: DVRPC, 2016.

# CHAPTER 6: Conclusion

After assessing transportation infrastructure and land uses, circulation and access issues, and market conditions, the project team determined that the area around the Darby Transportation Center (DTC), while not currently TOD ready, does have potential to support TOD.<sup>3</sup> Whether or not this potential is realized is dependent on future development and infrastructure investments in the area. Below is a summary of the recommendations contained in this report that have been prepared to guide decisions for future investments.

# **Transportation Recommendations**

(See page 18 for more information.)

- Renovate the trolley loop at the DTC in preparation for Trolley Modernization to ensure full ADA compliance.
- Conduct a study of Trolley Modernization impacts to the DTC, Route 11, and Route 13, examining on-street operations and stop locations within Delaware County and the future utility of the SEPTA-owned, unused loop track parcel behind the DTC.
- Provide additional passenger amenities at the DTC trolley and bus terminals, including public restrooms and bicycle parking.
- Develop a trolley station creation strategy, identifying locations for construction of ADA-accessible, on-street stop locations.
- Repair gaps in the sidewalk network.

• Implement the recommendations of DVRPC's Darby Borough Grade Crossing Study.

# Land Use / Zoning Recommendations

(See page 27 for more information.)

- Modify the TOD Overlay District and Central Business District (CBD):
  - Abolish parking minimums; instead, set parking maximums.
  - Eliminate surface parking lots—other than the public municipal lot—as permitted uses.
  - Set a build-to line instead of a required front setback in order to maintain a consistent street frontage.
- Modify the Residential Districts (R-2, R-3, and R-4):
  - Allow semi-attached and attached dwellings to reach three stories by right.
  - Eliminate off-street parking requirements for development of new residential units.
- Modify the Business/Institutional District (BI):
  - Allow public parks and outdoor recreation facilities by right.

# Market Recommendations

(See page 49 for more information.)

- Increase residential density through the following strategies:
  - o Rehabilitate existing housing stock as needed.

<sup>3</sup> These findings are supported by a separate, concurrent analysis of the TOD potential of 161 transit stations in the Delaware Valley, which rated the Darby Transportation Center a 2.67 on a scale of 1 to 4, with 4 being the most TOD-ready. For more information on that analysis, see *Building on our Strengths: Evaluating Transit-Oriented Development (TOD) Opportunities in Greater Philadelphia* (DVRPC publication #16036).

- o Construct residential infill in existing neighborhoods.
- Build new housing–ensuring affordability and a variety of unit types–within a quarter mile of the Transportation Center.
- Add commercial development that is supportive of the existing community.
- Appoint a Borough representative as the Main Street Business District Liaison to:
  - Convene regular meetings of business owners to identify and address their concerns.
  - Seek out grant funding for façade improvements and retail district branding.
  - o Implement programming.
  - Recruit transit-supportive retail businesses (General Merchandise Stores, Food Services & Drinking Places, and Full-Service Restaurants) to locate along the Main Street corridor and in available storefronts within a quarter mile of the DTC.
- Add Class B and C office space on upper floors of existing buildings where possible.
- Create public spaces on underutilized land that is both within a quarter mile of the DTC and in the floodplain of the Darby Creek.
- Utilize public spaces as opportunities to connect with nature.

# Next Steps

In order to implement the recommendations in this report, Darby Borough will need to engage directly with SEPTA, various government entities and owners of key properties around the DTC, and the general public.

SEPTA's Trolley Modernization will result in physical changes in the DTC vicinity and along the trolley routes, providing the borough with an opportunity to advocate for the inclusion of additional transit amenities in that project.

The properties identified in Chapter 5 are owned by a variety of entities—governments, nonprofits, individuals, and businesses—with whom the borough will have to work in order to realize the type of development needed to eventually support TOD. These property owners may or may not be willing to work with the borough regarding future development; therefore, it is important to begin these conversations as soon as possible.

Finally, the borough should conduct a public visioning process to identify the community's priorities for the DTC area and decide how best to implement their vision within the realm of possibilities presented in this report, including the creation and programming of new public open space.

# Darby Transportation Center Access & Development Opportunities Study

Publication Number: 16031

Date Published: October 2016

#### **Geographic Area Covered:**

Darby Borough, Delaware County, PA

#### Key Words:

Darby Transportation Center (DTC), Darby Borough, Delaware County, Quarry Street, Powell Avenue, Macdade Boulevard, 9th Street, Chester Pike, Main Street, transit-oriented development (TOD), public transit, bus, trolley, SEPTA, Trolley Modernization, land use/development, circulation, station area planning, TOD readiness, smart growth, housing, business district, market analysis, demographics, Darby Creek, proposed Darby Creek Trail, Tapestry Segmentation, potential development sites

#### **Abstract:**

This document provides an analysis of access issues and development opportunities in the area surrounding the Darby Transportation Center. The project team looked at TOD readiness factors and existing conditions, market conditions, circulation and access issues, and developable sites in order to make recommendations for future development.

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