



NESHAMINY MALL TRANSIT CENTER EVALUATION AND CONCEPT PLAN



February 2014



The Delaware Valley Regional Planning Commission is dedicated to uniting the region's elected officials, planning professionals, and the public with a common vision of making a great region even greater. Shaping the way we live, work, and play, DVRPC builds consensus on improving transportation,

promoting smart growth, protecting the environment, and enhancing the economy. We serve a diverse region of nine counties: Bucks, Chester, Delaware, Montgomery, and Philadelphia in Pennsylvania; and Burlington, Camden, Gloucester, and Mercer in New Jersey. DVRPC is the federally designated Metropolitan Planning Organization for the Greater Philadelphia Region — leading the way to a better future.



The symbol in our logo is adapted from the official DVRPC seal and is designed as a stylized image of the Delaware Valley. The outer ring symbolizes the region as a whole while the diagonal bar signifies the Delaware River. The two adjoining crescents represent the Commonwealth of Pennsylvania and the State of New Jersey.

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Acknowledgements

The Delaware Valley Regional Planning Commission would like to acknowledge the contributions made to this project by its Technical Advisory Committee and partner agency staff:

- ◆ Richard Brahler, Senior Transportation Planner, Bucks County Planning Commission
- ◆ Steven D'Antonio, Manager, City Service Planning, SEPTA
- ◆ Mark Cassell, Senior Operations Planner, SEPTA
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- ◆ Matthew Takita, Director of Building & Planning, Bensalem Township
- ◆ Stephen Noll, Deputy Director, TMA Bucks
- ◆ Joe Howard, Operations Manager, Neshaminy Mall

Executive Summary

The purpose of this project was to explore options to enhance transit facilities at Neshaminy Mall in Bensalem Township, Bucks County. Two options for an enhanced transit center were developed. Each would enhance accommodations for current passengers and operations while also making transit more attractive and better able to accommodate future demand and emerging service opportunities.

◆ **Option 1: Enhance the current stop location near Boscov's.**

This concept shows a centralized stop near the present location but enhances it with additional passenger amenities and bus storage capacity.

◆ **Option 2: Relocate transit center off Rockhill Drive.**

The second option relocates bus-related activities to the southwest side of the mall, accessed via Rockhill Drive. In addition to the primary transit center and its access path, this concept adds additional pedestrian amenities and passenger waiting areas adjacent to the mall's current shared-ride park-and-ride lot, enabling additional service and access flexibility for future service concepts like enhanced Roosevelt Boulevard service.

The Delaware Valley Regional Planning Commission (DVRPC) will continue to work with this project's partners—the Southeastern Pennsylvania Transportation Authority (SEPTA), Bucks County Planning Commission, the Transportation Management Association of Bucks County (TMA Bucks), Bensalem Township, and Neshaminy Mall—to explore both potential funding alternatives and additional opportunities to coordinate with other planning efforts such as ongoing transit alternatives development work for Roosevelt Boulevard (US 1).

Introduction

Study Purpose and Goals

The purpose of the **Neshaminy Mall Transit Center Evaluation and Concept Plan** is to identify ways to improve the transit climate at Neshaminy Mall in Bensalem, Bucks County. This includes:

- ◆ identifying appropriate locations on mall property where an enhanced bus center could be constructed;
- ◆ identifying the infrastructure needs at these locations; and
- ◆ identifying passenger amenities that would make the transit center more attractive to potential transit customers.

Taking these factors into consideration, two options for an enhanced transit center were developed. These options are summarized in Chapter 4. While the concepts differ in detail and location, they maintain certain standards for accommodations described in Chapter 3.

Project Context

There are some special circumstances that make this project particularly relevant now. First, the ongoing reconstruction of I-95 is expected to take a number of years and have significant impacts on local and regional traffic. As a result, the transit service presently available at Neshaminy Mall—or new services that could be developed, such as Bus Rapid Transit (BRT) proposed along US 1 (Roosevelt Boulevard)—could become more attractive to a greater number of riders. In this context, Neshaminy Mall may become more relevant as a regional transportation node rather than just a shopping destination.

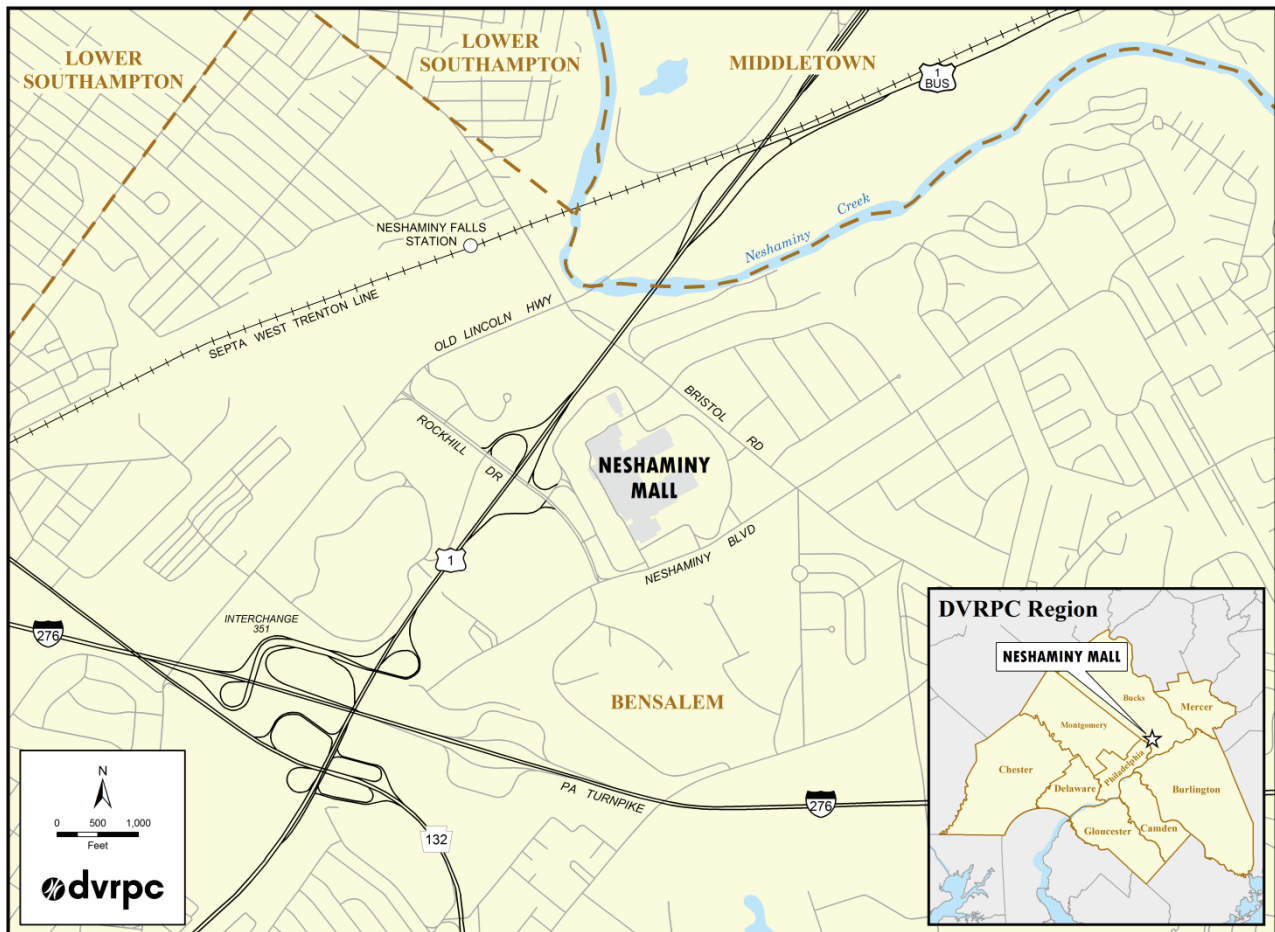
In addition, as SEPTA ridership (and transit ridership nationally) continues to grow and more people look to transit as a mobility option for more types of trips, malls, office parks, and other commercial centers have increasingly sought opportunities to better leverage transit connectivity. The strategies summarized in this report would help Neshaminy Mall better leverage its frequent SEPTA bus service for both employee and consumer access.

Study Area Context

Neshaminy Mall is located in Bensalem, Bucks County, Pennsylvania. Bensalem is the southernmost municipality in Bucks County and borders the City of Philadelphia to the south and west, Bristol Township to the east and northeast, Southampton Township to the west, and Middletown Township and Hulmeville Borough to the north. The township has a population of over 60,000, which makes it the largest municipality in Bucks County and one of the largest in all of Pennsylvania. Bensalem was founded in 1682, which makes it almost as old as the state itself.

The mall is located along US 1, approximately three-quarters of a mile north of its interchange with the Pennsylvania Turnpike (Figure 1). It is bordered on the west by US 1 (and accessed via the Neshaminy interchange), Bristol Road to the north, Neshaminy Boulevard to the east, and Rockhill Drive to the south, and comprises a local commercial center when considered together with adjacent big-box retail stores and the Horizon Business Center. Neshaminy Mall is located less than a mile from the Neshaminy Falls station on SEPTA's West Trenton line.

Figure 1: Neshaminy Mall Regional Context



Source: DVRPC, 2013.

The mall was built in 1968 and has been renovated several times, most recently in 1998. There are over one million square feet of leasable commercial space and 6,300 parking spaces. Anchor stores are Macy's, Boscov's, Sears, and an AMC movie theatre. There are 120 smaller stores at the mall, and the mall is ringed by a number of other stores and restaurants. Other major destinations located nearby are Parx Casino, approximately two miles away on Street Road, and several corporate centers located on the west side of US 1. Figure 2 depicts an aerial photograph of the mall and its surrounding environs.

Figure 2: Aerial Photograph of Neshaminy Mall



Source: General Growth Properties, 2013.

The mall is owned by General Growth Properties, a real estate investment trust company based in Chicago, Illinois. The company owns over 100 malls throughout the United States and Brazil, including Tyson's Galleria in Washington, D.C., and Water Tower Place along Michigan Avenue in Chicago.

Transit Activity at Neshaminy Mall

Summary of Bus Routes

Four SEPTA bus routes serving lower Bucks County and Northeast Philadelphia make stops at Neshaminy Mall. These are:

- ◆ Route 14 has several service patterns. The route variation serving Neshaminy Mall travels along US 1 between the mall and Frankford Transportation Center. Additionally, one or two trips per hour begin or end at Oxford Valley Mall in Langhorne, Bucks County.
- ◆ Route 58 travels along State Route 532 between Neshaminy Mall and Frankford Transportation Center.
- ◆ Route 128 travels between Neshaminy Mall and Oxford Valley Mall, serving Bristol Borough. It also serves the Croydon and Levittown Regional Rail stations and portions of US 13 (Bristol Pike) in Bensalem and Bristol townships.
- ◆ Route 130 travels between the Frankford and Knights Loop, on the border of Philadelphia and Bucks County, and the Bucks County Community College campus in Newtown. It also serves segments of State Route 413.

Table 1 (on the following page) summarizes the frequency and ridership of the four routes as well as other relevant data.

Table 1: SEPTA Bus Route Summaries

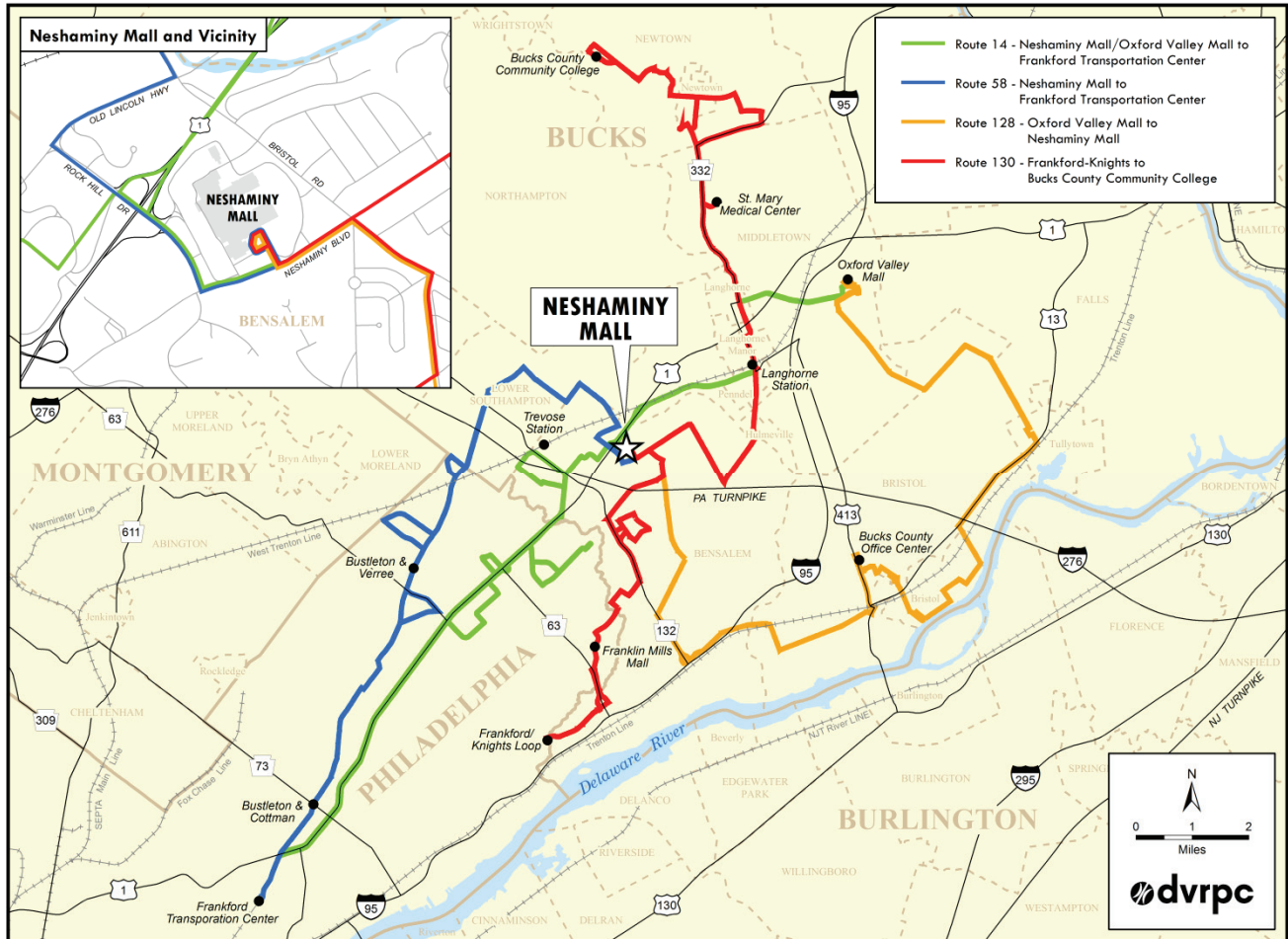
Weekday Frequencies (minutes)	14	58	128	130
AM Peak	5	8	60	60
AM Peak (Neshaminy Mall)	6-15 (varies)	32-53 (varies)	60	60
Base	11	12	90	60
Peak PM Peak	5	8	60	60
Early Evening	18	14	x	60/120
Late Night	15	30	x	1 TRIP
Route Summary	14	58	128	130
One-way Route Miles (average)	19.2	15.9	24.4	26.7
Average Weekday Ridership	12,828	9,930	350	631
Vehicle Hours (annual)	112,217	71,152	9,727	15,253
Vehicle Miles (annual)	1,279,250	792,520	207,616	280,387
Peak Vehicles	27	15	3	4
Fully Allocated Expenses	\$15,283,865	\$9,790,392	\$1,055,491	\$1,507,716
Passenger Revenue	\$3,885,678	\$3,007,857	\$138,166	\$261,376
Operating Ratio	25%	31%	13%	17%
On Time %	77%	78%	63%	75%

Source: SEPTA Route Statistics Report, 2013.

The four routes combined carry over 23,700 riders via 564 vehicle trips per weekday. Routes 14 and 58 run regular service into the night. Combined, the routes travel more than 2.5 million miles annually and cost slightly less than \$28,000,000 with revenues of about \$7.3 million. The combined operating ratio for the four routes is roughly 26 percent.

Figure 3 illustrates the different bus routes, their termini, and some major locations where stops are made. Aside from Neshaminy Mall, the four bus routes make stops at several important destinations. Routes 14 and 58 make stops in Northeast Philadelphia, including Frankford Transportation Center and locations along Roosevelt Boulevard and Bustleton Avenue. Significant stops on Routes 128 and 130 include the Bucks County Office Center, Parx Casino, Franklin Mills Mall, and St. Mary Medical Center.

Figure 3: Bus Routes Serving Neshaminy Mall

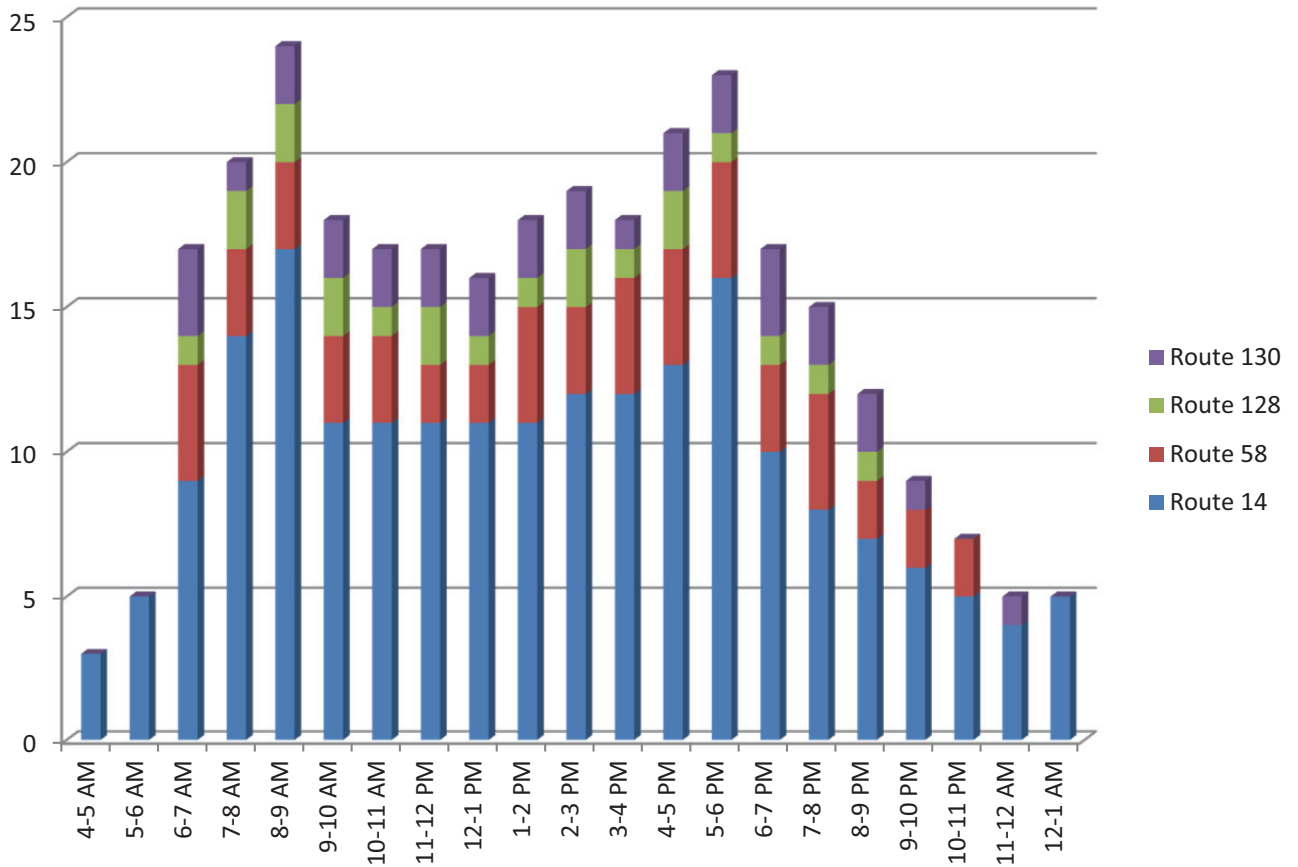


Source: DVRPC, 2013.

Bus Activity at Neshaminy Mall

Neshaminy Mall is a major stop along each of these SEPTA routes. Figure 4 depicts the total number of weekday buses stopping at the mall per hour between 4:00 AM and 1:00 AM the following day.

Figure 4: Hourly Bus Volumes at Neshaminy Mall



Source: SEPTA Ridecheck Data, 2012.

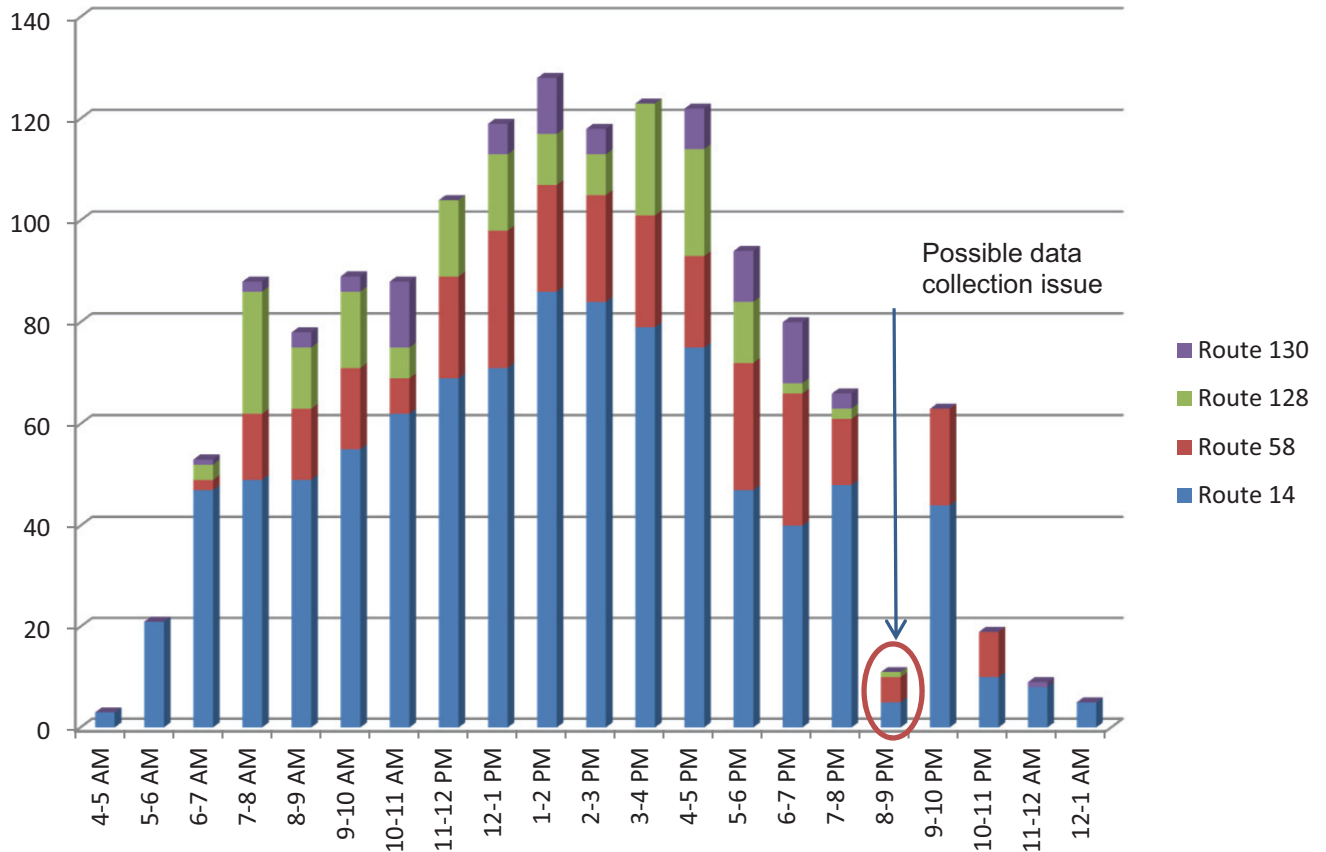
The highest peaks in bus volumes at the mall occur between 8:00 AM–9:00 AM and 4:00 PM–6:00 PM. At least 20 buses stop at the mall per hour during these times. Between 6:00 AM and 9:00 PM, at least 10 buses stop at the mall per hour. The majority (65 percent) of these buses are Route 14 buses.

SEPTA staff also conducted an accumulation analysis for the mall. An accumulation analysis determines how many buses stop at a location over a given day in five-minute increments. The highest number of buses making stops at the mall in a five-minute span is five. This happens several times throughout the day. Often there are three or four buses stopping at once.

Passenger Activity at Neshaminy Mall

Figure 5 depicts the volumes of hourly passenger activity (boards plus alights) at Neshaminy Mall on one weekday.

Figure 5: Hourly Passenger Activity at Neshaminy Mall



Source: SEPTA Ridecheck Data, 2012 (one-day totals).

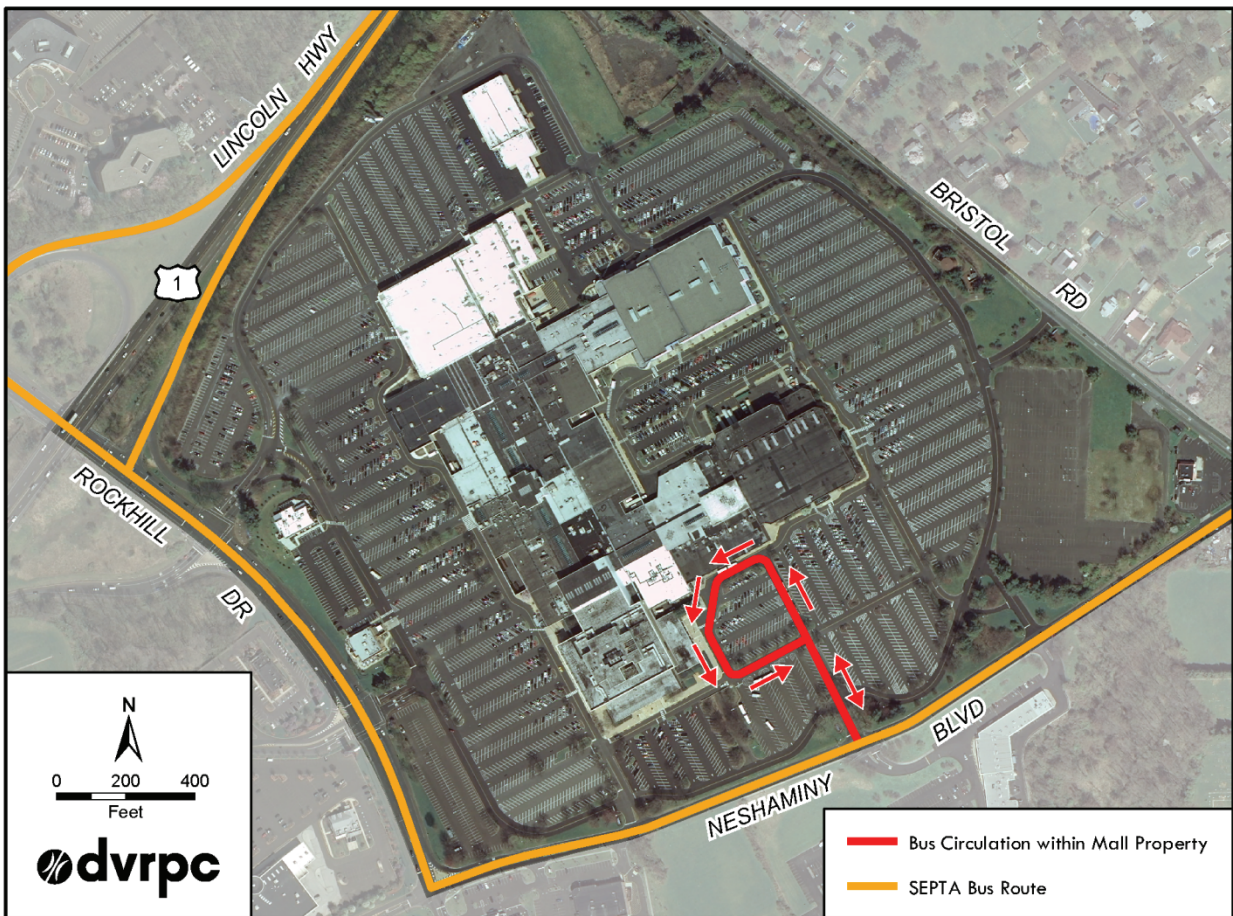
Between 11:00 AM and 5:00 PM, at least 100 passengers board or alight at Neshaminy Mall each hour, with activity peaking between 1:00 PM and 2:00 PM. At least 60 passengers per hour use the mall each hour until 10:00 PM. According to the available data, there is a significant drop-off between 8:00 PM and 9:00 PM. (circled in red), but that may be explained by a missed run or other issue related to data collection on this particular day.

Current Stop Configuration

Current Bus Loop

Figure 6 depicts the current bus loop configuration on Neshaminy Mall property. Currently buses turn into mall property from Neshaminy Boulevard and travel 575 feet to their stop location. Buses pick up passengers and then loop back out of the mall lot onto Neshaminy Boulevard. In total, each bus travels about 1,600 feet on mall property, or about a third of a mile.

Figure 6: Current Bus Loop



Source: DVRPC aerial imagery, 2010.

Current Location Amenities

Figure 7 depicts existing conditions for buses and bus passengers at Neshaminy Mall. The photographs of the stop depict buses stopping at the narrow sidewalk to pick up passengers and a narrow median where buses wait to pull up to the mall.

Figure 7: Current Bus Stop Conditions



Source: DVRPC, 2013.

Photos on the bottom depict passengers waiting for the bus (left) and the closest mall entrance to the bus stops (right). Passengers wait against a common wall. The mall entrance has benches but is poorly lit and has a cavernous appearance. There is no information inside the mall pointing people to the buses, or even indicating that transit is available. Bus schedules are only available in the mall's administrative offices.

Transit Center Recommendations

In consultation with SEPTA and this project’s advisory committee, two primary options were developed to improve transit facilities at the mall. While the size and location of each option differed, each reflects several key traits that are important for improving bus service at Neshaminy Mall.

General Requirements

Designated bus bays

As per the accumulation analysis, the highest number of buses stopping at the mall over a five-minute span is five. As a result, to ensure adequate capacity any redesigned transit center should have at least five bays. Future needs and opportunities should also be considered. For example, more bays may be needed if BRT—higher quality bus service with strategies that emphasize faster travel times and a rail-like feel—or express bus service along Roosevelt Boulevard (US 1) emerges as a realistic prospect and Neshaminy Mall becomes a stop or end-of-line station.

Improved waiting and loading areas for bus passengers

Right now passengers waiting to board a bus stand against a dark, blank wall. In inclement weather, they stand in the cavernous entrance adjacent to the bus stop, which is dark and poorly lit. Any improvements to transit amenities at the mall should include a more attractive waiting area for passengers. This includes seating, shelters, and high-quality pedestrian connections. Figure 8 on the following page depicts Northgate Transportation Center in Seattle Washington, a “best practice” transit center adjacent to a similar indoor shopping mall.

Space for buses to pass each other

The circulation of buses around the mall is key in the design of the facility. There must be enough space for buses to pass each other, and for cars and other vehicles to pass buses when necessary.

Figure 8: Northgate Transportation Center (Seattle, Washington)



Source: DVRPC, 2010.

Additional space for lay-by buses

In addition to the space needed for buses boarding and alighting passengers at the mall, additional space is needed for buses that have layovers. Presently buses park in several different locations adjacent to the current stop. Improvements created by a transit center should include a designated location for layovers as well as for those buses that pause before proceeding to their final destination.

Quality pedestrian connections to the mall

Since both options presented move the buses further from the mall than the current stop location, ensuring that there is a high quality connection for passengers that is well-marked and ADA accessible is necessary. Figure 9 depicts Plymouth Meeting Mall in Plymouth Meeting, Montgomery County. Six SEPTA bus routes make stops here, and while the transit center is approximately 400 feet from the mall entrance, there is a well-marked pedestrian walkway that guides passengers through the parking lot.

Figure 9: Pedestrian Walkway at Plymouth Meeting Mall Transit Center



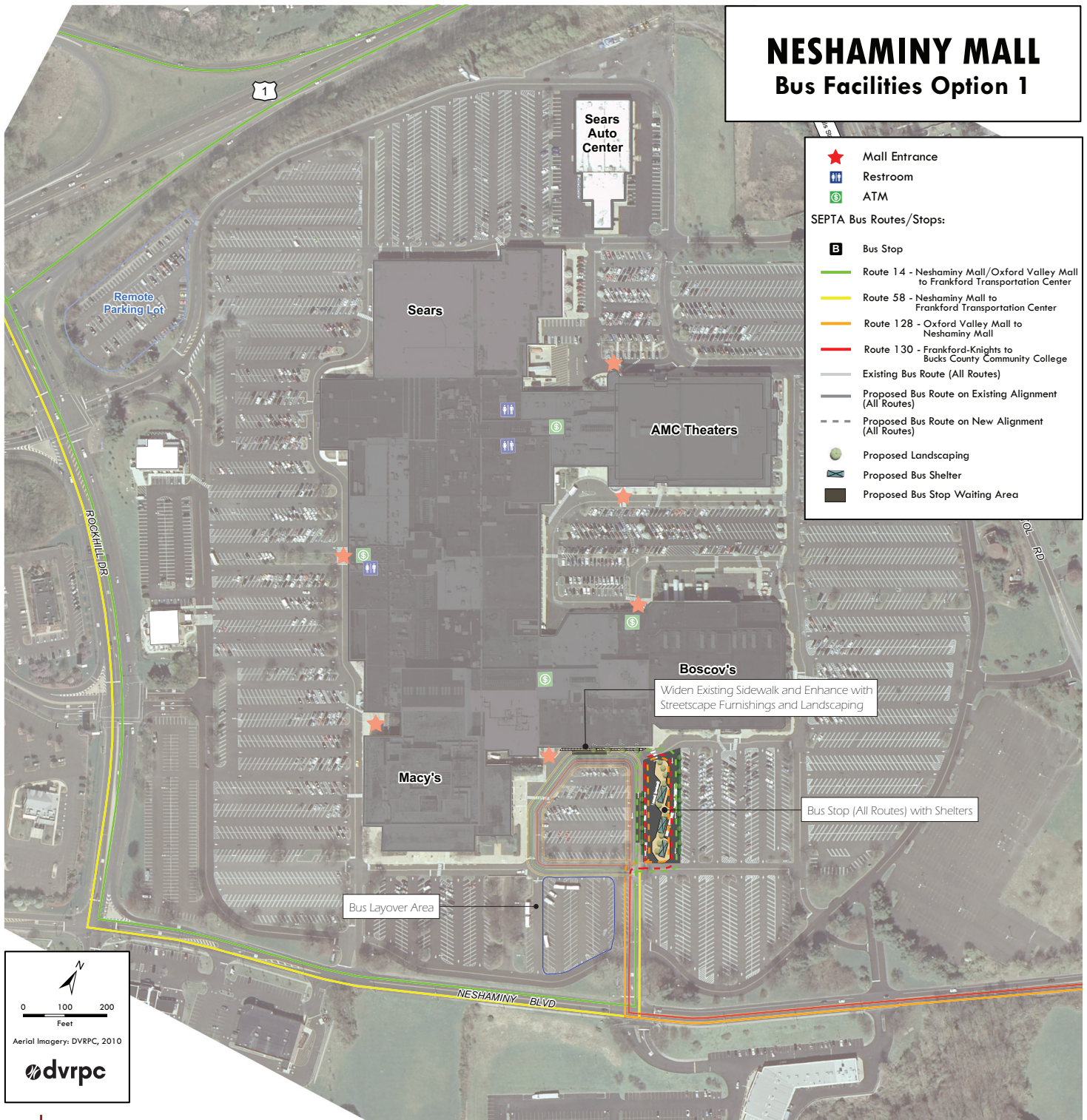
Source: Google Maps, 2013.

Concept Alternative Development

A variety of alternative locations and configurations for transit facilities and routings were considered by this project's advisory committee during a February 2013 workshop, after which a handful of initial alternatives were developed for more detailed review by SEPTA service planning staff. The illustrations that follow detail the two refined alternative concept plans that emerged from this review:

- ◆ **Option 1: Enhance the current stop location near Boscov's.**
This concept shows a centralized stop near the present location but enhances it with additional passenger amenities and bus storage capacity.
- ◆ **Option 2: Relocate transit center off Rockhill Drive.**
The second option relocates bus-related activities to the southwest side of the mall, accessed via Rockhill Drive. In addition to the primary transit center and its access path, this concept adds additional pedestrian amenities and passenger waiting areas adjacent to the mall's current shared-ride park-and-ride lot, enabling additional service and access flexibility for future service concepts.

NESHAMINY MALL Bus Facilities Option 1



OPTION 1 SOUTH

Option 1 retains the current access into the mall site, but moves the stop location to an expanded transit center location adjacent to the mall with shelters, landscaping, and streetscape furnishings. Without the lane needed for a bus stop, the sidewalk in front of the mall can be widened and enhanced with landscaping and streetscape furnishings, providing a welcoming, accessible path between the transit center and the mall entrance.

Several changes would have to be made to the circulation of cars in the parking lot closest to the transit center. Traffic lanes would have to be altered to facilitate two-way traffic. This would require restriping this area or removing parking spots so that traffic can comfortably move in both directions.

NESHAMINY MALL

Bus Facilities Option 1

Focus Area



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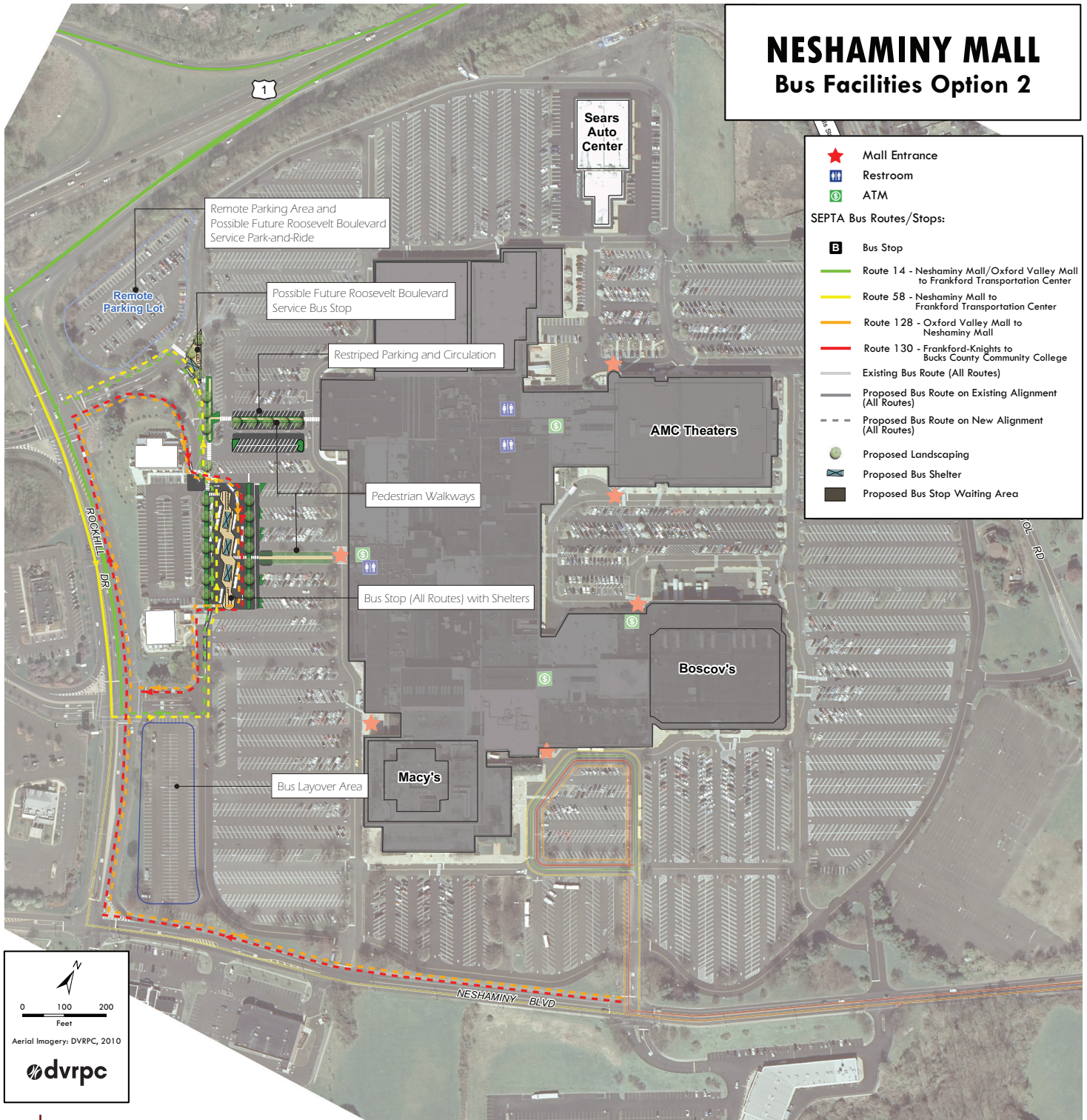
Opportunities

- The south entrance to the mall is enhanced for pedestrian access.
- Transit operations are centralized near the mall entrance.
- Transit loading areas are protected from the mall's other vehicular traffic.

Challenges

- Transit center uses approximately 66 existing parking spaces. The loss of parking spaces could potentially be overcome through further analysis of parking utilization or through replacement.

NESHAMINY MALL Bus Facilities Option 2



OPTION 2 WEST

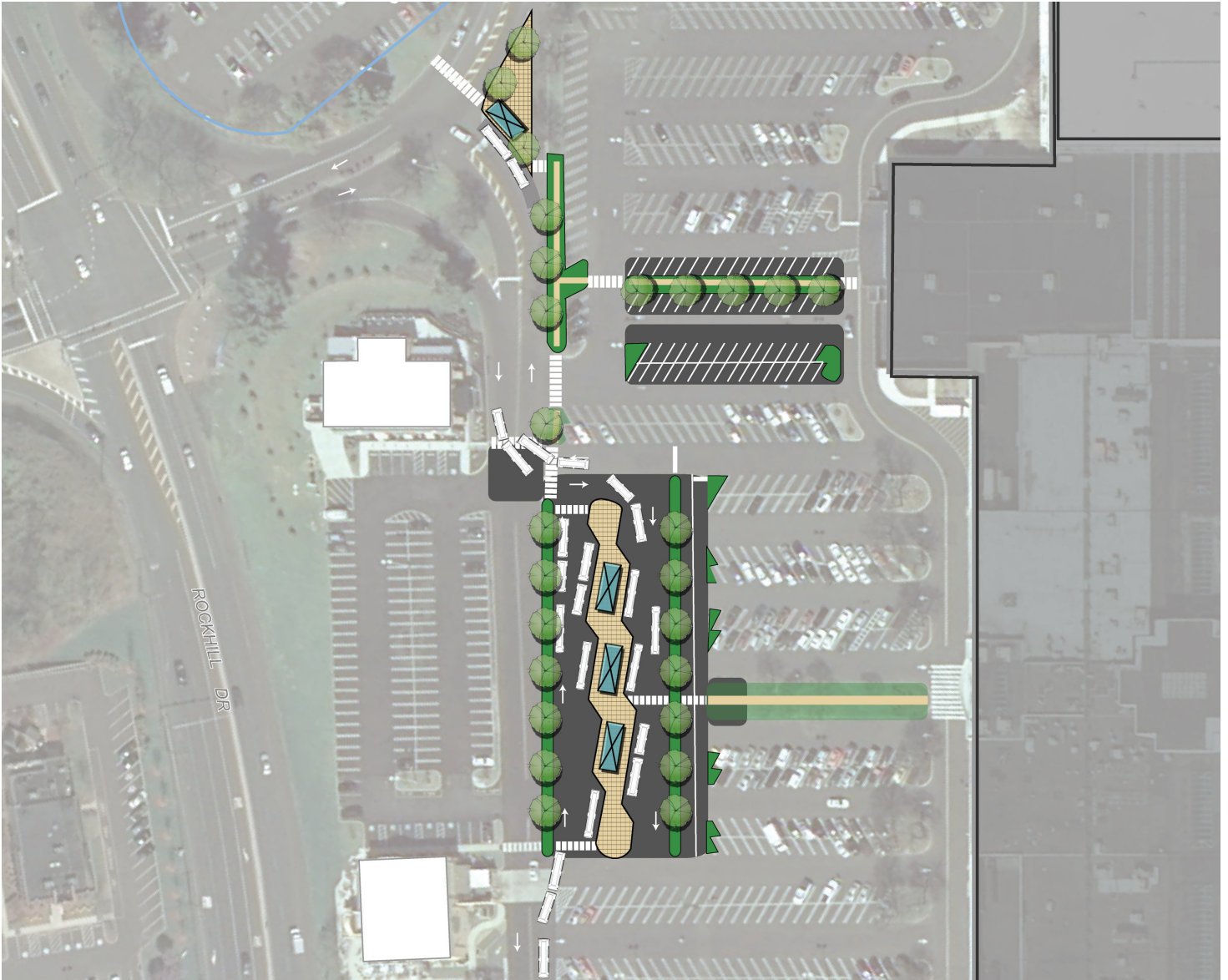
The second option relocates transit-related activities to the southwest side of the mall, adjacent to Rock Hill Road, where a transit center would be built in the parking lot.

Buses would enter mall property from one of two entrances from Rock Hill Road, then would drop off and pick up passengers at the transit center. They would then continue straight to the mall exit on the opposite side of the lot.

NESHAMINY MALL

Bus Facilities Option 2

Focus Area



OPTION 2 WEST

Opportunities

- Routes 14 and 58, which have the most frequent service, would have a shortened route, resulting in potential operating cost savings.
- Transit operations sited west of the mall are favorable for potential future rapid transit along Roosevelt Boulevard (US 1).
- High-quality transit operations have increased visibility.
- The stop is centrally located to most stores and to the food court.

Challenges

- Some overflow parking for the restaurant pad sites would need to be reappropriated.
- Transit center uses approximately 132 existing parking spaces. The loss of parking spaces could potentially be overcome through further analysis of parking utilization or through replacement.

Cost Estimates and Next Steps

SEPTA Cost Engineering staff have prepared itemized cost estimates for Option 1 and two variations of Option 2: one that includes a second stop adjacent to the current park-and-ride lot (Option 2A), and one that does not (Option 2B).

Option 2 could also be implemented in a modular way, with the second stop being added in a later phase. For more detail on these cost estimates, SEPTA's full, itemized cost estimates can be found in Appendix A.

- ◆ **Option 1:** total estimated cost of \$1,148,992;
- ◆ **Option 2A (both stop locations):** total estimated cost of \$1,678,124; and
- ◆ **Option 2B (main stop location only):** total estimated cost of \$1,240,512.

These cost estimates reflect a level of financial investment that would be significant but yield significant benefits as well: bringing a “best practice” transit center to Neshaminy Mall, and making mall access by transit much more convenient and attractive for customers and employees, now and in the future.

DVRPC will continue to work with this project's partners—SEPTA, Bucks County Planning Commission, TMA Bucks, Bensalem Township, General Growth Properties, and Neshaminy Mall—to explore both potential funding strategies and additional opportunities to coordinate with other planning efforts, such as ongoing transit alternatives development work for Roosevelt Boulevard (US 1).

APPENDIX A

Appendix A. SEPTA Concept Plan Cost Estimates

The full, itemized cost estimates compiled by Southeastern Pennsylvania Transportation Authority (SEPTA) cost engineering staff can be found in the pages that follow, inserted directly as-is from the SEPTA originals. Note that the total costs for each option assume a 20-percent contingency, 6-percent overhead, and 10-percent profit, with work being performed at a union wage scale.

DVRPC - Neshaminy Mall SEPTA Bus Facility Improvements Conceptual Cost Estimate Option 1 Value is \$1,148,992

CBS Outline Report

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY

Job Code: DVRPC Neshaminy Mall SEPTA Bus Facility Improvements Option One

Description: Improvements to the bus stop facilities at the Mall

From Cost Item: 1	To Cost Item: 7		Unit Cost	Total Cost (Forecast)
Code Description	Forecast (T/O)	Unit of Measure Quantity		
1 Division One - General Conditions				
1.1 Project Manager (Part Time)	1.00	LS	10,400.00	10,400.00
1.2 Site Supervision	1.00	LS	77,625.60	77,625.60
1.3 Maintenance & Protection of Traffic	1.00	LS	1,115.61	1,115.61
1.4 Erosion & Sediment Control	1.00	LS	2,953.56	2,953.56
1.5 Temporary Relocation of Loading & Unloading Location	1.00	LS	1,058.80	1,058.80
1.6 Sweeping Parking Lot	6.00	Each	1,081.34	6,488.04
1.7 Survey Lines & Grades including Office Calculations	1.00	LS	8,880.20	8,880.20
1.8 Storage Trailer	1.00	Each	1,500.00	1,500.00
1.9 Temporary Barricades & Fencing	1.00	LS	7,583.06	7,583.06
1.10 Final Cleaning	1.00	Day	439.28	439.28
Total: Division One - General Conditions				118,044.15
2 Division Two - Site Work / Demolition				
2.1 Demolition	1.00	Each	32,260.74	32,260.74
2.1.1 Trees	2.00	Each	1,045.00	2,090.00
2.1.2 Landscape Island Curb & Landscape Soils	180.00	LF	34.03	6,126.00
2.1.3 Asphalt Paving	2,775.00	SY	8.51	23,605.46
2.1.4 Miscellaneous Signage	1.00	Allowance	439.28	439.28
2.2 Miscellaneous Storm Water Management	1.00	Allowance	5,000.00	5,000.00
2.3 New CIP Concrete Curb	1,500.00	LF	25.00	37,498.45
2.4 CIP Concrete Foundation for Shelters	1.00	Allowance	15,000.00	15,000.00
2.5 Platform Deck - CIP Stamped Color Concrete 6" Thick	5,500.00	SF	8.10	44,573.65
2.6 Extended CIP Concrete Walk To Match Existong at Adjacent to Mall Entrance	1,800.00	SF	6.34	11,414.33
2.7 Tactile Surface at Loading / Unloading	370.00	LF	24.80	9,175.28
2.8 Bus Pad at Saw Tooth 10" Thick {No Reinforcing}	5,250.00	SF	13.28	69,702.83
2.9 HD Asphalt Paving Section at Perimeter of Passenger Loading & Unloading	1,960.00	SY	39.47	77,368.88
2.10 Miscellaneous Asphalt Paving Repair	1.00	Allowance	2,500.00	2,500.00
2.11 Tree Grates w/ Mall Logo	24.00	Each	1,173.21	28,157.12
2.12 Trees	24.00	Each	506.28	12,150.72
2.13 Miscellaneous Landscaping	1.00	Allowance	5,000.00	5,000.00
2.14 Traffic / Parking Slot Striping	1.00	Allowance	5,000.00	5,000.00
Total: Division Two - Site Work / Demolition				354,802.00
3 Division Five - Metals				
3.1 Tubular Steel Frame Galvanized & Shop Painted	20.00	Ton	6,855.60	137,112.00
3.2 Special Framing Features	1.00	Allowance	7,500.00	7,500.00
3.3 Tubular Frame Shipped to Site & Installed	1.00	LS	7,500.00	7,500.00
Total: Division Five - Metals				152,112.00
4 Division Seven - Thermal & Moisture Protection				
4.1 Special Roof Design Features	1.00	Allowance	7,500.00	7,500.00
4.2 SYP T&G Roof Decking	2,160.00	SF	3.43	7,418.49
4.3 Standing Seam Metal Roof Panels	2,160.00	SF	10.56	22,811.49
4.4 Flashing & Ice Dam Prevention Membrane	1.00	LS	1,500.00	1,500.00

DVRPC - Neshaminy Mall SEPTA Bus Facility Improvements Conceptual Cost Estimate Option 1 Value is \$1,148,992

Code Description	Forecast (T/O) Quantity	Unit of Measure	Unit Cost	Total Cost (Forecast)
4.5 HD Gutters & Downspouts	400.00	LF	15.00	6,000.00
Total: Division Seven - Thermal & Moisture Protection				45,229.98
5 Division Nine - Finishes				
5.1 Seal SYP T&G Decking	2,160.00	SF	0.99	2,138.28
5.2 1 1/2" Glass Block Panel at Shelters {Allowance}	350.00	SF	65.00	22,750.00
Total: Division Nine - Finishes				24,888.28
6 Division Ten - Specialties				
6.1 Costum 10'-0" Stainless Steel Benches	9.00	Each	6,831.25	61,481.28
6.2 Combo Recycle / Waste Receptacles	6.00	Each	1,543.13	9,258.76
6.3 Passenger Shelter Mounted Signage at Two Sides {Allowance}	3.00	Each	3,500.00	10,500.00
6.4 SEPTA Bus Route Pylon Signage	3.00	Each	5,012.25	15,036.76
6.5 Pedestrian Way Finding Signage	5.00	Each	229.59	1,147.94
6.6 Bus Operator Information Signage	5.00	Each	229.59	1,147.94
Total: Division Ten - Specialties				98,572.68
7 Division Sixteen - Electrical				
7.1 U/G 100A Electrical Feed {2- 2" Dia Conduits 30" Deep}	200.00	LF	25.98	5,195.20
7.2 3 - #6 Feeders	750.00	LF	3.07	2,304.79
7.3 Power Panel Enclosure NEMA Rated Exterior & Locakable	1.00	Each	2,419.94	2,419.94
7.4 Lighting Controller	1.00	Each	3,043.62	3,043.62
7.5 LED Light Bollard	12.00	Each	2,221.56	26,658.72
7.6 LED Shelter Fixture	12.00	Each	2,247.71	26,972.48
7.7 Exterior Power Receptacles	8.00	Each	342.89	2,743.12
7.8 Wiring	1.00	LS	7,500.00	7,500.00
Total: Division Sixteen - Electrical				76,837.87
Grand Total:				870,486.96

DVRPC Neshaminy Mall SEPTA Bus Facility Conceptual Design Option 2A Cost Estimate

Value is \$1,678,124

CBS Outline Report

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY

Job Code: DVRPC Neshaminy Mall SEPTA Bus Facility Option 2A

Description: Improvements to the bus stop facilities at the Mall

From Cost Item: 1	To Cost Item: 7			
Code Description	Forecast (T/O)	Unit of Measure	Unit Cost	Total Cost (Forecast)
	Quantity			
1 Division One - General Conditions				
1.1 Project Manager (Part Time)	1.00	LS	23,400.00	23,400.00
1.2 Site Supervision	1.00	LS	135,844.80	135,844.80
1.3 Maintenance & Protection of Traffic	1.00	LS	3,414.24	3,414.24
1.4 Erosion & Sediment Control	1.00	LS	4,882.12	4,882.12
1.5 Sweeping Parking Lot	10.00	Each	1,081.34	10,813.40
1.6 Survey Lines & Grades including Office Calculations	1.00	LS	14,272.20	14,272.20
1.7 Storage Trailer	1.00	Each	1,500.00	1,500.00
1.8 Temporary Barricades & Fencing	1.00	LS	11,409.68	11,409.68
1.9 Final Cleaning	1.00	Day	878.56	878.56
Total: Division One - General Conditions				206,415.00
2 Division Two - Site Work / Demolition				
2.1 Demolition	1.00	Each	64,944.60	64,944.60
2.1.1 Trees	8.00	Each	1,045.00	8,360.00
2.1.2 Landscape Island Curb & Landscape Soils	350.00	LF	34.03	11,911.67
2.1.3 Asphalt Paving	5,200.00	SY	8.51	44,233.65
2.1.4 Miscellaneous Signage	1.00	Allowance	439.28	439.28
2.2 Miscellaneous Storm Water Management	1.00	Allowance	10,000.00	10,000.00
2.3 New CIP Concrete Curb	3,100.00	LF	25.00	77,496.80
2.4 CIP Concrete Foundation for Shelters	1.00	Allowance	20,000.00	20,000.00
2.5 Platform Deck - CIP Stamped Color Concrete 6" Thick	7,830.00	SF	8.04	62,927.12
2.6 Tactile Surface at Loading / Unloading	430.00	LF	24.80	10,663.16
2.7 Bus Pad at Saw Tooth & at Rt 58 & 14 Shelter Stop, 10" Thick {No Reinforcing}	6,300.00	SF	13.28	83,643.40
2.8 HD Asphalt Paving Section at Perimeter of Passenger Loading & Unloading	1,960.00	SY	39.47	77,368.88
2.9 Mall Standard Asphalt Section at Restriped Parking Slots	1,100.00	SY	22.20	24,421.34
2.10 Miscellaneous Asphalt Paving Repair	1.00	Allowance	7,500.00	7,500.00
2.11 Tree Grates w/ Mall Logo	3.00	Each	1,173.21	3,519.64
2.12 Trees	26.00	Each	506.28	13,163.28
2.13 Miscellaneous Landscaping	1.00	Allowance	10,000.00	10,000.00
2.14 Traffic / Parking Slot Striping	1.00	Allowance	7,500.00	7,500.00
Total: Division Two - Site Work / Demolition				473,148.22
3 Division Five - Metals				
3.1 Tubular Steel Frame Galvanized & Shop Painted	30.00	Ton	6,855.60	205,668.00
3.2 Special Framing Features	1.00	Allowance	10,000.00	10,000.00
3.3 Tubular Frame Shipped to Site & Installed	1.00	LS	10,000.00	10,000.00
Total: Division Five - Metals				225,668.00
4 Division Seven - Thermal & Moisture Protection				
4.1 Special Roof Design Features	1.00	Allowance	10,000.00	10,000.00
4.2 SYP T&G Roof Decking	2,873.00	SF	5.13	14,735.18

DVRPC Neshaminy Mall SEPTA Bus Facility Conceptual Design Option 2A Cost Estimate

Value is \$1,678,124

Code Description	Forecast (T/O) Quantity	Unit of Measure	Unit Cost	Total Cost (Forecast)
4.3 Standing Seam Metal Roof Panels	2,873.00	SF	10.56	30,341.39
4.4 Flashing & Ice Dam Prevention Membrane	1.00	LS	2,000.00	2,000.00
4.5 HD Gutters & Downspouts	600.00	LF	15.00	9,000.00
Total: Division Seven - Thermal & Moisture Protection				66,076.57
5 Division Nine - Finishes				
5.1 Seal SYP T&G Decking	2,873.00	SF	0.99	2,844.11
5.2 1 1/2" Glass Block Panel at Shelters {Allowance}	470.00	SF	65.00	30,550.00
Total: Division Nine - Finishes				33,394.11
6 Division Ten - Specialties				
6.1 Costum 10'-0" Stainless Steel Benches	12.00	Each	6,831.25	81,975.04
6.2 Combo Recycle / Waste Receptacles	8.00	Each	1,543.13	12,345.01
6.3 Passenger Shelter Mounted Signage at Two Sides {Allowance}	4.00	Each	3,500.00	14,000.00
6.4 SEPTA Bus Route Pylon Signage	4.00	Each	5,012.25	20,049.01
6.5 Pedestrian Way Finding Signage	10.00	Each	229.59	2,295.88
6.6 Bus Operator Information Signage	8.00	Each	229.59	1,836.70
Total: Division Ten - Specialties				132,501.65
7 Division Sixteen - Electrical				
7.1 U/G 100A Electrical Feed {2- 2" Dia Conduits 30" Deep}	650.00	LF	25.98	16,884.40
7.2 3 - #6 Feeders	2,630.00	LF	3.07	8,082.13
7.3 Power Panel Enclosure NEMA Rated Exterior & Locakable	1.00	Each	2,419.94	2,419.94
7.4 Lighting Controller	1.00	Each	3,043.62	3,043.62
7.5 LED Light Bollard	24.00	Each	2,221.56	53,317.44
7.6 LED Shelter Fixture	15.00	Each	2,247.71	33,715.60
7.7 Exterior Power Receptacles	12.00	Each	342.89	4,114.68
7.8 Wiring	1.00	LS	12,500.00	12,500.00
Total: Division Sixteen - Electrical				134,077.81
Grand Total:				1,271,281.37

DVRPC Neshaminy Mall SEPTA Bus Facility Improvements Conceptual Construction Cost Estimate Option 2B Value is \$1,240,512

CBS Outline Report

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY

Job Code: DVRPC Neshaminy Mall SEPTA Bus Facility Improvements Option 2B

Description: Improvements to the bus stop facilities at the Mall without the remote shelter and pedestrian walkway

From Cost Item: 0.2

To Cost Item: 7

Code Description	Forecast (T/O) Unit of Measure Quantity	Unit Cost	Total Cost (Forecast)
1 Division One - General Conditions			
1.1 Project Manager {Part Time}	1.00 LS	15,600.00	15,600.00
1.2 Site Supervision	1.00 LS	103,500.80	103,500.80
1.3 Maintenance & Protection of Traffic	1.00 LS	2,450.86	2,450.86
1.4 Erosion & Sediment Control	1.00 LS	4,132.12	4,132.12
1.5 Sweeping Parking Lot	8.00 Each	1,081.34	8,650.72
1.6 Survey Lines & Grades including Office Calculations	1.00 LS	12,115.40	12,115.40
1.7 Storage Trailer	1.00 Each	1,500.00	1,500.00
1.8 Temporary Barricades & Fencing	1.00 LS	9,303.92	9,303.92
1.9 Final Cleaning	1.00 Day	878.56	878.56
Total: Division One - General Conditions			158,132.38
2 Division Two - Site Work / Demolition			
2.1 Demolition	1.00 Each	64,944.60	64,944.60
2.1.1 Trees	8.00 Each	1,045.00	8,360.00
2.1.2 Landscape Island Curb & Landscape Soils	350.00 LF	34.03	11,911.67
2.1.3 Asphalt Paving	5,200.00 SY	8.51	44,233.65
2.1.4 Miscellaneous Signage	1.00 Allowance	439.28	439.28
2.2 Miscellaneous Storm Water Management	1.00 Allowance	10,000.00	10,000.00
2.3 New CIP Concrete Curb	1,900.00 LF	25.00	47,498.04
2.4 CIP Concrete Foundation for Shelters	1.00 Allowance	15,000.00	15,000.00
2.5 Platform Deck - CIP Stamped Color Concrete 6" Thick	1.00 SF	1,257.88	1,257.88
2.6 Tactile Surface at Loading / Unloading	370.00 LF	24.80	9,175.28
2.7 Bus Pad at Saw Tooth & at Rt 58 & 14 Shelter Stop, 10" Thick {No Reinforcing}	5,500.00 SF	13.28	73,022.01
2.8 HD Asphalt Paving Section at Perimeter of Passenger Loading & Unloading	1,960.00 SY	39.47	77,368.88
2.9 Mall Standard Asphalt Section at Restriped Parking Slots	500.00 SY	22.20	11,100.61
2.10 Miscellaneous Asphalt Paving Repair	1.00 Allowance	7,500.00	7,500.00
2.11 Tree Grates w/ Mall Logo	3.00 Each	1,173.21	3,519.64
2.12 Trees	26.00 Each	506.28	13,163.28
2.13 Miscellaneous Landscaping	1.00 Allowance	7,500.00	7,500.00
2.14 Traffic / Parking Slot Striping	1.00 Allowance	7,500.00	7,500.00
Total: Division Two - Site Work / Demolition			348,550.22
3 Division Five - Metals			
3.1 Tubular Steel Frame Galvanized & Shop Painted	20.00 Ton	6,855.60	137,112.00
3.2 Special Framing Features	1.00 Allowance	7,500.00	7,500.00
3.3 Tubular Frame Shipped to Site & Installed	1.00 LS	7,500.00	7,500.00
Total: Division Five - Metals			152,112.00
4 Division Seven - Thermal & Moisture Protection			
4.1 Special Roof Design Features	1.00 Allowance	7,500.00	7,500.00
4.2 SYP T&G Roof Decking	2,160.00 SF	5.13	11,078.31
4.3 Standing Seam Metal Roof Panels	2,160.00 SF	10.56	22,811.49
4.4 Flashing & Ice Dam Prevention Membrane	1.00 LS	1,500.00	1,500.00

**DVRPC Neshaminy Mall SEPTA Bus Facility Improvements Conceptual Construction Cost
Estimate Option 2B Value is \$1,240,512**

Code Description	Forecast (T/O) Quantity	Unit of Measure	Unit Cost	Total Cost (Forecast)
4.5 HD Gutters & Downspouts	600.00	LF	15.00	9,000.00
Total: Division Seven - Thermal & Moisture Protection				51,889.80
5 Division Nine - Finishes				
5.1 Seal SYP T&G Decking	2,160.00	SF	0.99	2,138.28
5.2 1 1/2" Glass Block Panel at Shelters {Allowance}	360.00	SF	65.00	23,400.00
Total: Division Nine - Finishes				25,538.28
6 Division Ten - Specialties				
6.1 Costum 10'-0" Stainless Steel Benches	9.00	Each	6,831.25	61,481.28
6.2 Combo Recycle / Waste Receptacles	6.00	Each	1,543.13	9,258.76
6.3 Passenger Shelter Mounted Signage at Two Sides {Allowance}	3.00	Each	3,500.00	10,500.00
6.4 SEPTA Bus Route Pylon Signage	3.00	Each	5,012.25	15,036.76
6.5 Pedestrian Way Finding Signage	8.00	Each	229.59	1,836.70
6.6 Bus Operator Information Signage	6.00	Each	229.59	1,377.53
Total: Division Ten - Specialties				99,491.03
7 Division Sixteen - Electrical				
7.1 U/G 100A Electrical Feed {2- 2" Dia Conduits 30" Deep}	500.00	LF	25.98	12,988.00
7.2 3 - #6 Feeders	1,500.00	LF	3.07	4,609.58
7.3 Power Panel Enclosure NEMA Rated Exterior & Locakable	1.00	Each	2,419.94	2,419.94
7.4 Lighting Controller	1.00	Each	3,043.62	3,043.62
7.5 LED Light Bollard	18.00	Each	2,221.56	39,988.08
7.6 LED Shelter Fixture	12.00	Each	2,247.71	26,972.48
7.7 Exterior Power Receptacles	10.00	Each	342.89	3,428.90
7.8 Wiring	1.00	LS	9,500.00	9,500.00
Total: Division Sixteen - Electrical				102,950.60
0.2 PRIME BOND	1.00	Lump Sum	10,760.48	10,760.48
Total: PRIME BOND				10,760.48
0.3 PRICE % ADD-ON	1.00	Lump Sum	0.00	0.00
Total: PRICE % ADD-ON				
0.4 JOB FINANCING	1.00	Lump Sum	0.00	0.00
Total: JOB FINANCING				
0.5 INDIRECT COST ESCALATION	1.00	Lump Sum	0.00	0.00
Total: INDIRECT COST ESCALATION				
0.6 DIRECT COST ESCALATION	1.00	Lump Sum	0.00	0.00
Total: DIRECT COST ESCALATION				
0.7 INDIRECT COST ADD-ON	1.00	Lump Sum	0.00	0.00
Total: INDIRECT COST ADD-ON				
0.8 JOB MANAGEMENT & EQUIPMENT	1.00	Lump Sum	0.00	0.00
Total: JOB MANAGEMENT & EQUIPMENT				
0.9 GENERAL EXPENSE	1.00	Lump Sum	0.00	0.00
Total: GENERAL EXPENSE				
0.10 DIRECT COST ADD-ON	1.00	Lump Sum	187,732.86	187,732.86
Total: DIRECT COST ADD-ON				187,732.86

Grand Total:

1,137,157.65

Publication Title: Neshaminy Mall Transit Center Evaluation and Concept Plan

Publication Number: 13025

Date Published: February 2014

Geographic Area Covered: Neshaminy Mall, Bensalem Township, Bucks County

Key Words: SEPTA, Bus, Transit, Transit Center, Mall, Roosevelt Boulevard

Abstract: The purpose of this project was to explore options to enhance transit facilities at Neshaminy Mall in Bensalem Township, Bucks County. Two options for an enhanced transit center were developed; each would enhance accommodations for current passengers and operations while also making transit more attractive and better able to accommodate future demand and emerging service opportunities.

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