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2040 Roosevelt Boulevard Route for Change Project

Order of Magnitude Capital Cost Methodology Report

> December 2024 Prepared by:

> > HNTB











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2040 ROOSEVELT BOULEVARD ROUTE FOR CHANGE PROJECT PLANNING AND ENVIRONMENTAL LINKAGES STUDY ORDER OF MAGNITUDE CAPITAL COST METHODOLOGY REPORT DRAFT – Advisory, Consultative, Deliberative

Introduction & Project Background

The following report outlines the methodology used to develop the Order of Magnitude Capital Costs estimates for the 2040 Roosevelt Boulevard Route for Change Project (Project). The Pennsylvania Department of Transportation (PennDOT)—in partnership and coordination with the Southeastern Pennsylvania Transportation Authority (SEPTA), the City of Philadelphia (City), the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA)—is undertaking a *Planning and Environmental Linkages Study* (the PEL Study) to address identified long-range transportation and safety-related needs along Roosevelt Boulevard within the City of Philadelphia. The PEL approach brings agencies together early to achieve shared understanding on the technical approach to addressing mobility needs and system gaps in advance of a subsequent National Environmental Policy Act (NEPA) process. Roosevelt Boulevard is on the City of Philadelphia's High Injury Network and experiences persistently high rates of fatalities and serious injury crashes, recurring traffic congestion, and is characterized by poor conditions for transit throughput and safe connections for non-motorized system users.

The Project has two phases or tiers of analysis. The Tier 1 analysis focuses on evaluating and screening a long list of alternatives. The long list of candidate alternatives is being comparatively assessed with the aim of selecting a short list of alternatives for a more detailed analysis in Tier 2 of the Project. The long list of candidate alternatives has been developed to allow for a comparative analysis of anticipated benefits, development of order of magnitude capital cost_and operations and maintenance cost estimates, transit ridership forecasts, and other preliminary elements that focus on estimating safety, mobility, and environmental impacts.

The long list of candidate alternatives draws from multiple prior studies and planning efforts—including the May 2021 *Roosevelt Boulevard Route for Change Study* (Route for Change Study) and the 2003 *Roosevelt Boulevard Corridor Transportation Investment Study* (2003 Study). Both analyses described the deteriorating performance of Roosevelt Boulevard and emphasize its multimodal transportation deficiencies. These previous analyses form the foundation of the PEL Study and represent the starting point for the analysis of transportation network gaps the Project intends to address.

The long list of alternatives includes six build alternatives, with the addition of four alternatives that include "add-on" transit components. Two of the build alternatives have been carried over from the Route for Change Study. The list of alternatives has been expanded to consider







additional transit mobility concepts considered in the 2003 Study and other efforts. The outcome of this process has produced six candidate alternatives that assume a roadway reconfiguration matched with a transit capital investment. For more detail on each of Alternatives, please refer to the Definition of Alternatives Report.

Table 1. Route for Change List of Alternatives

Alternative Number	Alternative Description				
1A	Partially Capped Expressway with Light Rail Transit (LRT)				
1B	Partially Capped Expressway with Bus Rapid Transit (BRT)				
2A	Neighborhood Boulevard with LRT				
2B	Neighborhood Boulevard with BRT				
3	Partially Capped Expressway with Subway				
4	Neighborhood Boulevard with Subway				
3.2	Partially Capped Expressway with Subway and Underground Extension of Market- Frankford Line (MFL)				
3.3	Partially Capped Expressway with Subway and Elevated Extension of MFL				
4.2	Neighborhood Boulevard with Subway and Underground Extension of MFL				
4.3	Neighborhood Boulevard with Subway and Elevated Extension of MFL				



Purpose

The purpose of this document is to outline the methodology and assumptions used to prepare the Order of Magnitude Capital Cost Estimates for the Tier 1 alternatives, as defined in the Definition of Alternatives Report. These estimates represent high-level rough order-of-magnitude calculations based on numerous Project assumptions, elements, and unit prices. No design work has been performed for the Tier 1 alternatives at this project phase.

Estimating Methodology

The following sections describe the process used to develop the quantities and unit costs for the roadway and transit elements for the Tier 1 alternatives for the 2040 Roosevelt Boulevard Route for Change Project.

Estimate Format

The Order of Magnitude Cost Estimate has been presented with Project cost totals in dollars for two analysis years: 2024 and 2040. Costs developed in 2024 dollars were escalated to 2040 dollars through the application of an annualized escalation of 3.5 percent. No construction schedule has been created in the Tier 1 phase of the Project, therefore the analysis year of 2040 is subject to change. The Order of Magnitude Capital Cost Estimates for the transit elements of the project will be presented consistent with FTA's Standard Cost Categories (SCC) during the Tier 2 phase of the Project.









Roadway Methodology

The Tier 1 analysis process considers two separate roadway configurations—a Partially Capped Expressway and a Neighborhood Boulevard. Key elements for each roadway configuration are described in the Definition of Alternatives Report and are identified below in Table 2 and Table 3.

Table 2. Partially Capped Expressway Key Elements

Partially Capped Expressway	Key Assumptions Applied in Capital Cost Estimation
Depressed Full Cap	 Four 12-foot travel lanes, one 8-foot left shoulder, one 10-foot right shoulder. 2.5-foot top and bottom slab thickness. Includes excavation, backfill, temporary excavation support system, concrete, pavement courses, waterproofing, foundation drains, architecture surface treatments, coating for concrete surfaces, aggregate, median barrier, pavement markings, and impact attenuating devices.
Depressed Full Cap with Ramps	 Six 12-foot travel lanes, one 8-foot left shoulder, one 10-foot right shoulder. 2.5-foot top and bottom slab thickness. Includes excavation, backfill, temporary excavation support system, concrete, pavement courses, waterproofing, foundation drains, architecture surface treatments, coating for concrete surfaces, aggregate, median barrier, pavement markings, and impact attenuating devices.
Partially Capped Expressway with At-Grade Crossing Intersections	 Four 12-foot travel lanes, one 8-foot left shoulder, one 10-foot right shoulder. 2.5-foot top and bottom slab thickness. 1-foot deck thickness. Includes excavation, backfill, temporary excavation support system, concrete, pavement courses, waterproofing, foundation drains, architecture surface treatments, coating for concrete surfaces, aggregate, median barrier, pavement markings, and impact attenuating devices.
Depressed Partial Cap	 Four 12-foot travel lanes, one 8-foot left shoulder, one 10-foot right shoulder. 2.5-foot bottom slab thickness. Includes excavation, backfill, temporary excavation support system, concrete, pavement courses, waterproofing, foundation drains, architecture surface treatments, coating for concrete surfaces, aggregate, median barrier, pavement markings, and impact attenuating devices.



Partially Capped Expressway	Key Assumptions Applied in Capital Cost Estimation
Depressed Partial Cap with Ramps	 Six 12-foot travel lanes, one 8-foot left shoulder, one 10-foot right shoulder. 2.5-foot bottom slab thickness. Includes excavation, backfill, temporary excavation support system, concrete, pavement courses, waterproofing, foundation drains, architecture surface treatments, coating for concrete surfaces, aggregate, median barrier, pavement markings, and impact attenuating devices.
Travel Lanes (At- Grade)	 Four 12-foot travel lanes. Includes excavation, geotextile, subbase, pavement courses, pavement base drain, concrete curb, pavement markings, guide rail, and end treatments.
Travel Lanes (Local Lanes)	 Four 12-foot travel lanes. Includes excavation, geotextile, subbase, pavement courses, pavement base drain, concrete curb, pavement markings, guide rail, and end treatments.
Bike Lanes	 Two 11-foot two-way bicycle tracks. Includes excavation, subbase, pavement courses, concrete curb, and green bicycle pavement markings.
Median Landscaping	Includes excavation, topsoil, and seeding.
Sidewalk	■ Includes excavation and concrete.
Drainage and Stormwater Management	 Includes inlet boxes, inlet grates, 18" RCP pipe, RECP, and excavation.
Existing Signal Upgrades and Retiming	 Includes the required upgrades and retiming necessary for the existing signalized intersections.
Utility Relocations	 Includes the cost of utility relocations for the new roadway configuration.
Signage and Delineation	 Includes the cost of roadway signage and roadway delineation for the new configuration.
Landscaping and Public Art	 Includes the plantings required for the new roadway configuration, landscaping for public open spaces and public art.





Partially Capped Expressway	Key Assumptions Applied in Capital Cost Estimation	
Roadway Lighting	 Includes the required lighting for the new roadway configuration. 	

Table 3. Neighborhood Boulevard Key Elements

Neighborhood Boulevard	Key Assumptions Applied in Capital Cost Estimation					
Travel Lanes (At- Grade)	 Eight 12-foot travel lanes Includes excavation, subbase, pavement courses, pavement base drain, concrete curb, pavement base drains, pavement markings, guide rail and end treatments. 					
Bike Lanes	 Two 11-foot two-way bicycle tracks Includes excavation, subbase, pavement courses, concrete curb, and green bicycle pavement markings. 					
Median Landscaping	 Includes excavation, topsoil and seeding. 					
Sidewalk	 Includes excavation and concrete. 					
Drainage and Stormwater Management	 Includes inlet boxes and inlet grates, 18" RCP pipe, and excavation. 					
Existing Signal Upgrades and Retiming	 Includes the required upgrades and retiming necessary for the existing signalized intersections. 					
Utility Relocations	 Includes the cost of utility relocations for the new roadway configuration. 					
Signage and Delineation	 Includes the cost of roadway signage and roadway delineation for the new configuration. 					
Landscaping and Public Art	 Includes the plantings required for the new roadway configuration, landscaping for public open spaces and public art. 					
Roadway Lighting	 Includes the required lighting for the new roadway configuration. 					







2040 ROOSEVELT BOULEVARD ROUTE FOR CHANGE PROJECT
PLANNING AND ENVIRONMENTAL LINKAGES STUDY
ORDER OF MAGNITUDE CAPITAL COST METHODOLOGY REPORT
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Roadway Cost Development

The key project elements for the roadway configurations are based on typical PennDOT materials along with specialty items infrequently included on projects throughout the Commonwealth of Pennsylvania. Unit costs for the PennDOT standard items and specialty items were developed based on recent bid prices and historical data obtained from PennDOT's Engineering and Construction Management System (ECMS). The unit costs include labor, equipment, and materials. Landscaping, signing, and roadway lighting are presented as lump sum items that are assumed as a percentage of the total roadway costs. Landscaping, signing, and roadway lighting will be further defined in future project phases.

Planning-level quantities were developed for each standard and specialty item based on the anticipated length of each Tier 1 alternative. Total costs for each item were developed by multiplying unit costs by quantities. Each cost estimate includes sources, assumptions, and unit costs.









Transit Methodology

The Tier 1 analysis process considers three separate transit configurations: Light Rail Transit (LRT), Bus Rapid Transit (BRT) and Subway. Key elements for each transit configuration are described in the Definition of Alternatives Report and listed below in Table 4, Table 5, and Table 6. Cost assumptions for the Subway alternative are shown in Figure 1 below.



Figure 1. 2040 Roosevelt Boulevard Order of Magnitude Capital Cost Estimates for **Subway Alternative**

Table 4. LRT Key Elements

LRT Elements	Assumptions
Guideway - Aerial	 Two Tracks (Inbound and Outbound).
	 Includes foundation excavation, guideway structures
	including caissons, columns, bridges, viaducts, cross- overs, and fly-overs.
	 Direct Fixation (DF) Track: includes rails and connectors.
Guideway – At-Grade in Mixed Traffic	 Two Tracks (Inbound and Outbound).
	 Embedded Track: includes rail, fasteners, concrete
	encasement, and steel ties.
Guideway – At-Grade Semi Exclusive	Two Tracks (Inbound and Outbound).
	 Embedded Track: includes rail, fasteners, concrete
	encasement, and steel ties.
Special Work for Intersections & Yard	Fifteen Switches/ turnouts (TO) within the system.
	Five Switches / TO for yard.





LRT Elements	Assumptions
	 Includes transitional curves and turnouts or interlockings within the system and yard.
Light Rail Vehicle (LRV) Yard Track	■ Eight 250' storage tracks.
	 Includes yard construction, guideway and track
At-Grade Stations	associated with the yard.Includes station structures including caissons, columns,
At-Grade Stations	platforms, canopies, etc.
Aerial Stations	 Includes station structures including caissons, columns,
	platforms, superstructures etc.
Maintenance Facility	 Size and cost based on 69th Street Master Plan Project.
	Site for maintenance facility has not been selected but
	assumed to be close to the alignment.
Transition Structures from At-Grade to	 Does not include cost for Right-of-Way acquisition. 350' transition from at-grade to aerial guideway.
Elevated	
Roadway Reconstruction for At-Grade	 Includes excavation, subbase, pavement courses,
LRT	pavement base drain, concrete curb and pavement base drains.
Vehicles	 Quantity assumes 31 peak vehicles and a spare ratio of
	35%.
	 Based on SEPTA's purchase of new LRVs under Trolley Modernization Program.
Overhead Contact Systems	 Includes material and labor for new catenary system.
Signals	 Includes material and labor for wayside signals.
Communications	 Include passenger information systems at stations and on vehicles (real time travel information; static maps and schedules).
	 Includes equipment to allow communications among vehicles and with central control.
Substations	Traction Power Supply.
	 Includes material and labor associated with substations.
Mechanical/Electrical/Plumbing	 Includes any costs associated with mechanical,
	electrical, and plumbing systems for the transit system.
Transit Lighting	 Includes the required lighting for the transit system.
Station Signage	 Includes costs and material for signage at stations.

Table 5. BRT Key Elements

BRT Elements	Assumptions		
At-Grade BRT Dedicated Lane	■ Two, 12-foot Travel Lanes.		







	 Includes excavation, subbase, pavement courses, pavement base drain, concrete curb, and pavement markings.
Vehicles	 Quantity based on 31 peak vehicles, and a 35% spare ratio.
Stations	 Includes station structures including caissons, columns, platforms, canopies, etc.
Maintenance Facility	 Size and cost based on 69th Street Master Plan Project. Site for maintenance facility has not been selected but assumed to be close to the alignment. Does not include cost for Right-of-Way acquisition.

Table 6 Subway Key Elements

Subway Elements	Assumptions
2 – Track, Bored Tunnel Subway	 Includes tunneling by means of a tunnel boring machine, drill blasting, mining, and immersed tube tunneling; tunnel structure and finishes. Direct Fixation (DF) Track: Includes rails and connectors.
2 – Track, Cut and Cover Subway	 Includes excavation, retaining walls, backfill, underground guideway structure and finishes. Direct Fixation (DF) Track: Includes rails and connectors.
2 – Track, Elevated Subway	 Includes foundation excavation, guideway structure including caissons, columns, bridges, viaducts, crossovers, fly-overs. Direct Fixation (DF) Track: Includes rails and connectors. Right-of-Way (ROW) acquisition.
2 –Track, At Grade Subway	 Direct Fixation (DF) Track: Includes rails and connectors. Security fencing.
Interlockings	 Number 8 diamond cross-over (DXO) every 2.5 miles, this was the average of miles between each crossover move between BSS. Cost from cost estimate of new DXO for MFL Subway-Elevated Resignalization Project.
Broad Street Line (BSL) Terminal Yard Tracks	 Based on Fern Rock Yard 800'/storage track, 10 tracks - this needs refinement of design & capacity, is subject to change. Includes yard construction, guideway and track associated with the yard.
Junction @ Erie BSL Subway Station	 Assumes crossover at Erie Station of BSL off the Express Track.
Yard Turnouts	 Number of turnouts from Fern Rock Yard tracks.





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Subway Elements	Assumptions
Subgrade Stations	 Includes retaining walls, backfill and structure.
	Fare Collection Systems.
Elevated Stations	 Includes station structures including caissons, columns,
	platforms, superstructures, etc.
	Fare Collection Systems.
Maintenance Facility	 Used 50 vehicles; subject to change based on how many
	vehicles we are storing & servicing at this facility.
	 Includes heavy maintenance and overhaul facilities.
	Site for maintenance facility has not been selected but
	assumed to be close to the alignment.
	Does not include cost for Right-of-Way acquisition.
BSS Vehicles	 Quantity based on 120 peak vehicles and 20% spare ratio.
	Based on price of SEPTA M5 procurement.
Market Frankford Line (MFL) Vehicles	 Quantity based on 12 peak vehicles and 20% spare ratio
	for the extension to MFL.
	Based on price of SEPTA M5 procurement.
Signals	 Includes material and labor for wayside signals.
Communications	 Include passenger information systems at stations and on
	vehicles (real time travel information, static maps and
	schedules).
	Includes equipment to allow communications among
	vehicles and with central control.
Traction Power System	 Includes materials and labor costs associated with a third
	rail system.
Substations	 Traction power supply.
	 Includes material and labor associated with substations.
Mechanical/Electrical/Plumbing	 Includes any costs associated with mechanical,
	electrical, and plumbing systems for the transit system.
	Includes ventilation.
Transit Lighting	 Includes the required lighting for the transit system.
Station Signage	 Includes costs and material for signage at stations.

Transit Cost Development

Specific transit cost elements are based on FTA's Capital Cost Database. The FTA Capital Cost Database is comprised of observed costs for 65 projects that received federal funding, including federally funded bus rapid transit, commuter rail, light rail, heavy rail, and trolley projects. Of those 65 projects, the development of costs for the Roosevelt Boulevard Tier 1 alternatives were further examined by projects that reside in their Mid-Atlantic and Northeastern United States.







Specific cost estimates for the LRT alternative are based on the following projects:

- Charlotte South Light Rail Line, At-Grade, 2007
- Hudson-Bergen MOS-1, At-Grade, 2002
- New Jersey Southern New Jersey Light Rail Transit System, At-Grade, 2003
- Newark Broad Street Light Rail Line, At-Grade, 2006
- Pittsburgh Light Rail Stage I, At-Grade, 1987
- Pittsburgh Light Rail Stage II, Aerial, 2004
- Pittsburgh North Shore LRT Connector, Underground, 2012
- The Tide Light Rail Project, At-Grade, 2011

Specific cost estimates for the Subway alternative are based on the following projects:

- Atlanta MARTA Red Line Dunwoody Extension, Underground, 2000
- Atlanta MARTA North-South Line, At-Grade, 1987
- Baltimore MDMTA Metro Sections A and B, Underground, 1983
- Boston MBTA Orange Line, Aerial, 1987
- Miami Dade Metrorail, Aerial, 1985
- Philadelphia SEPTA Frankford Rehabilitation, Aerial, 2005
- Washington, D.C. Anacostia Outer (F), Aerial, 2001
- Washington, D.C. Glenmont Outer (B), Underground, 1998
- Washington, D.C. Greenbelt Mid (E), Underground, 1999

Specific cost estimates for the BRT alternatives are based on the following projects:

- Boston MBTA South Boston Piers, 2004
- Cleveland Euclid Avenue BRT, 2008
- New Britain Hartford Busway, 2015
- Pittsburgh Airport Busway, 2000

Three project elements are provided as estimates of lump sum costs due to the level of concept design consistent with this Tier 1 project phase. Mechanical, Electric, and Plumbing





(MEP), Transit Lighting, and Station Signage are provided as lump sum costs. They will be further defined in future project phases. MEP and Transit Lighting are represented as a percentage of the overall transit capital costs. Station Signage is represented as a percent of the station costs for each of the transit configurations.

Planning-level quantities were developed for each standard and specialty item based on the anticipated length of each Tier 1 alternative. Total costs for each item were developed by multiplying the unit cost by quantities. Each cost estimate includes sources, assumptions, and unit costs.





Project-Wide Lump Sum Items

Erosion and sediment control, maintenance and protection of traffic, mobilization, and clearing and grubbing are all items that are calculated based off the total project costs. Each project subtotal was developed by adding the roadway subtotal to the transit subtotal. These items were identified to be lump sum items due to the complexity and variability of the scope of work for those specific items.

The cost of erosion and sediment control is assumed to be 5.00% of the total project subtotal. This cost may include silt fences, inlet protections, filter socks, rolled erosion control products, and any additional measures the contractor may need to adequately control the sediment runoff during construction.

The cost of Maintenance and Protection of traffic is assumed to be 5.00% of the project subtotal. Construction for this project is assumed to be for the entire width of the existing corridor (from curb to curb). This cost may include concrete barrier, temporary guide rail, arrow panels, signage, changeable messages signs, and additional traffic control devices the contractor may need to adequately and safely construct the proposed improvements. Due to the early stages of this project, consideration has not been given to the phasing or staging of work during construction.

The cost of mobilization is assumed to be 5.00% of the project subtotal. This cost may include contractor overhead, project overhead, sub-contractor markup, contract bond, profit, and any other cost the contractor might incur to transfer equipment and resources to the project. Due to the early stages of this project, consideration has not been given to any specialized equipment, working season and frequency of remobilization.

The cost of clearing and grubbing is assumed to be 2.00% of the total project subtotal. This cost includes the work that needs to occur to remove and dispose of all vegetation, trash, natural and manmade objects that need to be removed for within the construction zone.

These project-wide lump sum items will be reviewed and updated as the alternatives and scope of work become more defined as the project advances through the preliminary planning stages.





Soft Costs

Soft cost add-ons are included to represent the costs of engineering, project and construction management and administration, insurance, permits and fees, training/startup/testing, and any force account work. These add-on costs are calculated as a percentage of the project subtotal, including the cost of erosion and sediment control, maintenance and protection of traffic, mobilization, and clearing and grubbing. The percentages are applied individually and not cumulatively. Due to the variability in length, cost, and transit mode, the soft costs vary between the different Tier 1 alternatives. Table 7 below identifies the soft cost percentages.

Preliminary Engineering is defined as the cost of early design, interagency coordination, and agreements, environmental clearance, development of financial plans, and ridership studies. Final Design includes the cost of the development of final construction plans. Project Management and Construction Administration includes the cost to support design, construction management, and administrative efforts for legal, technical, and environmental consultants. Insurance includes the cost of project insurance to cover professionals' liability insurance, owner-provided builder's risk, and other agency insurance. This cost does not include contractors' liability insurance or general insurance. The Other percentage includes the cost for legal, permit, survey, testing, investigation, and other start-up costs.

Table 7. Soft Cost Percentages

Alternative	Soft Cost Category	Soft Cost Percentage
	Preliminary Engineering	2.25%
	Final Design	13.00%
1A and 2A	Project Management and Construction Administration	13.50%
	Insurance	2.25%
	Other	1.00%
	Preliminary Engineering	2.00%
	Final Design	11.50%
1B and 2B	Project Management and Construction Administration	12.00%
	Insurance	2.00%
	Other	1.00%
	Preliminary Engineering	8.25%
	Final Design	12.75%
3 and 4	Project Management and Construction Administration	13.25%
	Insurance	2.00%
	Other	1.00%



Contingency

Contingency funds are typically meant to cover a variety of possible events and problems that have not yet been specifically identified and to account for a lack of project definition during the preparation of the construction cost estimate throughout project development. A <u>40%</u> <u>contingency</u> has been applied to the entire project subtotal.

Exclusions

The following has not been included in the Order of Magnitude Capital Cost Estimate:

- Operation and Maintenance Cost
- Charging Stations for bus vehicle fleet









APPENDIX A: ORDER OF MAGNITUDE CAPITAL COST ESTIMATES







Project Information						
Project Name	Roosevelt Blvd 2040 Cost Estimates					
Job No.	74882					

Roosevelt Boulevard 2040 Order of Magnitude Cost Estimate Summary

SUMMARY		
ALTERNATIVE DESCRIPTION	TOTAL COST (2024) (\$ in millions)	TOTAL COST (2040) (\$ in millions)
Alternative 1A (Partially Capped Expressway with LRT)	\$9,662	\$16,753
Alternative 1B (Partially Capped Expressway with BRT)	\$5,825	\$10,100
Alternative 2A (Neighborhood Boulevard with LRT)	\$5,603	\$9,716
Alternative 2B (Neighborhood Boulevard with BRT)	\$1,874	\$3,255
Alternative 3 (Partially Capped Expressway with Subway)	\$15,820	\$27,432
Alternative 3.2 (Partially Capped Expressway with Subway, Underground Extension to MFL)	\$16,353	\$28,355
Alternative 3.3 (Partially Capped Expressway with Subway, Elevated Extension to MFL)	\$16,219	\$28,123
Alternative 4 (Neighborhood Boulevard with Subway)	\$11,631	\$20,168
Alternative 4.2 (Neighborhood Boulevard with Subway, Underground Extension to MFL)	\$12,164	\$21,091
Alternative 4.3 (Neighborhood Boulevard with Subway, Elevated Extension to MFL)	\$12,030	\$20,860

Notes:

- Total Length of Roadway Improvements = 11.6 Miles
 - Old York Road to Southampton Road
- Total Length of Subway Improvements = 14.7 Miles
- Broad and Erie to Neshaminy Mall
 Total Length of BRT Improvements = 18.7 Miles
 Wissahickon Transportation Center to Neshaminy Mall
 Total Length of LRT and BRT Improvements = 18.5 Miles
 Wissahickon Transportation Contexts Neshaminy Mall
- Wissahickon Transportation Center to Neshaminy Mall
- Inflation Rate = 3.5%
- See Definition of Alternatives Report for roadway and transit segmentation.
- ESTIMATE VARIABILITY: The costs shown in this estimate represent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive bidding or negotiating methods and does not make any commitment or assume any duty to assure that bids or negotiated prices will not vary from this estimate.



Project Information						
Project Name	Roosevelt Blvd 2040 Cost Estimates					
Job No.	74882					

Roosevelt Blvd Alt 1A Cost Estimate

Depressed Full Cap with Ramps			ROADWAY				
Depressed Full Casp with Ramps	IMPROVEMENT DESCRIPTION	UOM	QUANTITY	то	TAL COST (2024)		TOTAL COST (2040)
Depressed Full Cap with A-Crade Interactions I.F. 4,779 \$ 399,177,804.17 \$ 641,154.87	Depressed Full Cap	LF	20,427	\$	800,476,406.68	\$	1,388,014,914
Depressed Partials/ Capped with Al-Grade Intersections LF	Depressed Full Cap with Ramps	LF	4,779	\$		\$	641,154,870
Depressed Partial Cap with Ramps	Depressed Partially Capped with At-Grade Intersections	LF	2,122	\$		-	
Depressed Partial Capo with Ramps		LF					
Travel Lanes (Local Lanes)	Depressed Partial Cap with Ramps	LF	4.779	•			
Travel Lanes (AC Grade)	· · · · · · · · · · · · · · · · · · ·						
Sidewalk	, ,						
Bike Lanes	· · · · · · · · · · · · · · · · · · ·						
Median Landscaping							
Drainage and Stortwater Management							
Existing Signal Upgrades and Retimings LERCH 54 \$ \$200 000.00 \$ 68.817.62 Billing Relocations LF 614.29 \$ \$9.858.065.00 \$ 17.277.10 Signing Delineation LS 1.5% \$ \$3.722.20 .00 \$ 63.745.14 Landscaping and Public Art LS 2.0% \$ 40.016.276.78 \$ 64.903.52 Roadway Lighting LS 2.0% \$ 40.016.276.78 \$ 64.903.52 ROAdway Lighting LS 2.0% \$ 40.016.276.78 \$ 64.903.52 ROAdway SUBTOTAL \$ 2.585.668.130.23 \$ 4.933.62 IMPROVEMENT DESCRIPTION UOM UANITY TOTAL COST (2014) Guideway - A-Grade in Meed Traffic LE 29.387 \$ 245.150.132.00 \$ 4.756.68.00 Guideway - A-Grade in Meed Traffic LE 29.387 \$ 245.150.132.00 \$ 425.086.90 Guideway - A-Grade in Meed Traffic LE 29.387 \$ 245.150.132.00 \$ 425.086.90 Guideway - A-Grade in Meed Traffic LE 29.387 \$ 245.150.132.00 \$ 425.086.90 Guideway - A-Grade in Meed Traffic LE 29.387 \$ 245.150.132.00 \$ 425.086.90 Guideway - A-Grade in Meed Traffic LE 29.387 \$ 245.150.132.00 \$ 425.086.90 Guideway - A-Grade Semi Exclusive LF 39.653 \$ 39.730.124.00 \$ 43.99.90 LRY Yard Track Turnouts EA 5 \$ 80.000.00 \$ 1.491.22 A-Grade Stations EA 18 \$ 97.000.714.00 \$ 1.693.686.90 LRY Yard Track Turnouts EA 5 \$ 80.000.00 \$ 1.491.22 A-Grade Stations EA 18 \$ 97.000.00 \$ 1.491.22 A-Grade Stations EA 18 \$ 97.000.00 \$ 1.491.22 A-Grade Stations EA 18 \$ 97.000.00 \$ 1.491.22 B-A-Grade Stations EA 18 \$ 97.000.00 \$ 1.491.22 A-Grade Stations EA 4 \$ 38.393.76.00 \$ 5.293.57.00 Transition Structures from A-Grade to Elevated EA 1 \$ 8.80.00.00 \$ 1.491.22 B-A-Grade Stations EA 18 \$ 97.000.00 \$ 1.491.22						-	
Utility Relocations							
Signing/Delineation	0 0 10 0						
Landscaping and Public Art	· · · · · · · · · · · · · · · · · · ·						
Roadway Lighting							
ROADWAY SUBTOTAL \$ 2,585,608,130.23 \$ 4,483,408,408						-	
MRROYEMENT DESCRIPTION GUIdeway - Aerial LF 28,570 \$ 644,064,170.00 \$ 1,116,798,27 Guideway - Aerial LF 28,570 \$ 644,064,170.00 \$ 1,116,798,27 Guideway - Aerial LF 28,570 \$ 245,150,132.00 \$ 425,008,90 Guideway - Aerial Statistical LF 28,373 \$ 245,150,132.00 \$ 425,008,90 \$ 39,730,124.00 \$ 689,914.80 \$ 39,730,124.00 \$ 689,914.80 \$ 3375,000.00 \$ 5,852,20 \$ 225,000.00 \$ 5,852,20 \$ 245,000,00 \$ 5,852,20 \$ 245,000,00 \$ 5,852,20 \$ 245,000,00 \$ 4,809,90 \$ 245,000,00 \$ 4,809,90 \$ 245,000,00 \$ 4,809,90 \$ 245,000,00 \$ 4,809,90 \$ 245,000,00 \$ 4,809,90 \$ 245,000,00 \$ 4,809,90 \$ 245,000,00 \$ 4,809,90 \$ 245,000,00 \$ 4,809,90 \$ 245,000,00 \$ 4,809,90 \$ 245,000,00	Roadway Lighting	LS	2.0%	\$	49,016,267.87	\$	84,993,52
Mirror Caude Line		RO	ADWAY SUBTOTAL	\$	2,585,608,130.23	\$	4,483,408,40
Guideway - Aerial LF 29,570 \$ 844,084,170.00 \$ 1,116,798,27			TRANSIT				
Guideway - Al-Grade Mixed Traffic LF 28,337 \$ 245,150,132.00 \$ 425,086,90	IMPROVEMENT DESCRIPTION	UOM	QUANTITY	то	TAL COST (2024)		TOTAL COST (2040)
Special Work for Intersections & Yard (To & Switches)	Guideway - Aerial	LF	29,570	\$	644,064,170.00	\$	1,116,798,27
Guideway - Al-Grade Semi Exclusive	Guideway - At-Grade in Mixed Traffic	LE	28,387	\$	245,150,132.00	\$	425,086,90
Special Work for Intersections & Yard (TO & Switches)	Guideway - At-Grade Semi Exclusive	LF	39,635			-	
LRV Yard Track TF 2,000 \$ 252,000.00 \$ 436,96	· · · · · · · · · · · · · · · · · · ·						
LRV Yard Track Turnouts	, , , , , , , , , , , , , , , , , , , ,					-	
At-Grade Stations Aerial Stations EA 4 \$ 3,86,59,376.00 \$ 67,000,13 Maintenance Facility SF 30,000 \$ 30,000,000.00 \$ 52,219,288 Transition Structures from At-Grade to Elevated EA 4 \$ 3,86,59,376.00 \$ 67,000,13 Maintenance Facility SF 30,000 \$ 30,000,000.00 \$ 52,219,288 Transition Structures from At-Grade to Elevated EA 4 \$ \$ 38,639,376.00 \$ 67,000,13 Station Structures from At-Grade to Elevated EA 4 \$ \$ 38,639,376.00 \$ 57,000,13 Station Structures from At-Grade to Elevated EA 4 \$ \$ 38,600,000 \$ 52,219,288 Transition Structures from At-Grade to Elevated EA 4 \$ \$ 38,600,000 \$ \$ 67,000,13 EA 8 \$ 228,387,76 \$ \$ 33,106,62 Station Structures from At-Grade to Elevated EA 4 \$ \$ 38,600,000 \$ \$ 67,000,13 EA 8 \$ 228,000,000 \$ \$ 1,432,27 Station Structures from At-Grade to Elevated EA 4 \$ \$ 38,600,000 \$ \$ 52,000,000 S \$ 228,282,575 \$ \$ 33,106,62 Station Structures from At-Grade to Elevated EA 5 \$ 19,002,785,75 \$ \$ 33,106,62 Station Structures from At-Grade to Elevated EA 6 \$ 1,432,27 EA 8 \$ 26,000,00 \$ \$ 1,432,27 S \$ 33,106,62 S \$ 29,532,828,36 \$ \$ 15,209,51 EA 8 \$ 1,400,80 \$ \$ 29,532,828,36 \$ \$ 15,209,51 EA 8 \$ 1,400,80 \$ \$ 1,432,27 S \$ 1,407,44 EA 8 \$ 1,400,80 \$ \$ 1,432,27 EA 8 \$ 1,400,80 \$ 1,400,80 EA 8 \$ 1,400,80 \$ \$ 1,400,80 EA 9 \$ 1,400,80 \$ \$ 1,400,80 EA 1,882,902,829.54 \$ \$ 3,264,927,22 EA 1,882,902,				-		-	
Aerial Stations Maintenance Facility SF 30,000 \$ 30,000,000.00 \$ 52,019,56 Transition Structures from Al-Grade to Elevated EA 1 \$ 826,000,00 \$ 1,432,27 Roadway Reconstruction for At grade LRT LF 28,387 \$ 19,092,785,75 \$ 33,106,62 Vehicles VEH 42 \$ 331,072,140.00 \$ 574,074,46 MEP LS 2,0% \$ 29,532,828,36 \$ 51,209,51 Transit Lighting LS 3,0% \$ 44,299,242,53 \$ 76,814,26 Station Signage LS 1,0% \$ 1,357,200.90 \$ 2,353,36 TRANSIT SUBTOTAL TRANS							, - ,
Maintenance Facility						-	
Transition Structures from At-Grade to Elevated EA							
Roadway Reconstruction for At grade LRT	·			•			
Vehicles				т.			
Second S						-	
Transit Lighting				•		-	
Station Signage LS 1.0% \$ 1,357,200.90 \$ 2,353,36 Es: Total Length of Roadway Improvements = 11.6 Miles Old York Road to Southampton Road Total Length of LRT Improvements = 18.5 Miles Wissahickon Transportation Center to Neshaminy Mall necludes cost for Trackless Trolley Modifications at Frankford Transportation Center Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. Seementation. Seementation. Seementation. Seementation. Seementation. Seementation. Seementation. Clearing and Grubbing Preliminary Engineering Ensolo & Sediment Control Subtrotal.				•		-	
res: Total Length of Roadway Improvements = 11.6 Miles Old York Road to Southampton Road Fotal Length of LRT Improvements = 18.5 Miles Wissahickon Transportation Center to Neshaminy Mall Includes cost for Trackless Trolley Modifications at Frankford Transportation Center to Reshaminy Mall Includes cost for Trackless Trolley Modifications at Frankford Transportation Center Inflation Rate = 3.5% Bee Definition of Alternatives Report for roadway and transit segmentation. Set IMATE VARIABILITY: The costs shown in this estimate epresent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive promitiment or assure any duty to assure that bids or negotiated prices will not vary from this estimate. TRANSIT SUBTOTAL \$ 1,882,902,829.54 \$ 3,264,927,22 \$ 4,468,510,959.78 \$ 223,425,547.99 \$ 387,416,78 \$ 5,00% \$ 223,425,547.99 \$ 387,416,78 \$ 5,00% \$ 223,425,547.99 \$ 387,416,78 \$ 387,416,78 \$ 5,00% \$ 223,425,547.99 \$ 387,416,78 \$ 3,87,416,78 \$ 5,00% \$ 223,425,547.99 \$ 387,416,78 \$ 5,00% \$ 223,425,547.99 \$ 387,416,78 \$ 5,00% \$ 223,425,547.99 \$ 387,416,78 \$ 3,87,416,78 \$ 5,00% \$ 223,425,547.99 \$ 387,416,78 \$ 5,00% \$ 223,425,547.99 \$ 387,416,78 \$ 5,00% \$ 387,416,78 \$ 5,00% \$ 223,425,547.99 \$ 387,416,78 \$ 5,00% \$ 223,425,547.99 \$ 387,416,78 \$ 5,00% \$ 387,416,78 \$ 9,065,552,67 \$ 117,633,551.02 \$ 117,633,5				•		-	
Fotal Length of Roadway Improvements = 11.6 Miles Old York Road to Southampton Road Total Length of LRT Improvements = 18.5 Miles Wissahickon Transportation Center to Neshaminy Mall ncludes cost for Trackless Trolley Modifications at Frankford Transportation Center to Neshaminy Mall ncludes cost for Trackless Trolley Modifications at Frankford Transportation Center and Protection of Traffic Maintenance and Protection of Traffic Mobilization See Definition of Alternatives Report for roadway and transit segmentation. SETIMATE VARIABILITY: The costs shown in this estimate represent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive protection in a summe any duty to assure that bids or negotiated prices will not vary from this estimate. PROJECT SUBTOTAL \$ 4,468,510,959.78 \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 387,416,78 \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 5.0	Station Signage	LS	1.0%	\$	1,357,200.90	\$	2,353,36
Fotal Length of Roadway Improvements = 11.6 Miles Old York Road to Southampton Road Total Length of LRT Improvements = 18.5 Miles Wissahickon Transportation Center to Neshaminy Mall ncludes cost for Trackless Trolley Modifications at Frankford Transportation Center to Neshaminy Mall ncludes cost for Trackless Trolley Modifications at Frankford Transportation Center and Protection of Traffic Maintenance and Protection of Traffic Mobilization See Definition of Alternatives Report for roadway and transit segmentation. SETIMATE VARIABILITY: The costs shown in this estimate represent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive protection in a summe any duty to assure that bids or negotiated prices will not vary from this estimate. PROJECT SUBTOTAL \$ 4,468,510,959.78 \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 387,416,78 \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 5.00% \$ 5.0							
PROJECT SUBTOTAL \$ 4,468,510,959.78 \$ 7,748,335,62 \$ 8,77,748,335,62 \$ 8,7,748,335,62 \$ 8,77,748,335,62 \$ 8,77,748,335,62 \$ 8,77,748,335,62 \$ 8,77,748,335,62 \$ 8,77,748,335,62 \$ 8,77,748,335,62 \$ 8,77,748,335,62 \$ 8,77,748,335,62 \$ 8,77,748,335,62 \$ 8,77,748,335,62 \$ 8,77,748,335,62 \$ 8,77,748,335,62 \$ 8,77,748,335,6	tes:	Т	RANSIT SUBTOTAL	\$	1,882,902,829.54	\$	3,264,927,22
Total Length of LRT Improvements = 18.5 Miles • Wissahickon Transportation Center to Neshaminy Mall ncludes cost for Trackless Trolley Modifications at Frankford Transportation Center inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate represent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive bidding or negotiating methods and does not make any commitment or assume any duty to assure that bids or negotiated prices will not vary from this estimate. Total Length of LRT Improvements = 18.5 Miles **Wissahickon Transportation Center to Neshaminy Mall Rerosion & Sediment Control S.00% **Sed Definition of Alternatives Report for roadway and transit segmentation. **Clearing and Grubbing SubTOTAL **SubTOTAL **SubTOTAL **SubTOTAL **SubTOTAL **SubTOTAL **SubTOTAL **Total SubJective Su	Total Length of Roadway Improvements = 11.6 Miles						
Wissahickof Transportation Center to Neshaminy Mall Internations at Frankford Transportation Center of Trackless Trolley Modifications at Frankford Transportation Center of Trackless Trolley Modifications at Frankford Transportation Center of Trackless Trolley Modifications at Frankford Maintenance and Protection of Traffic S.00% \$223,425,547.99 \$387,416,78 Mobilization S.00% \$89,370,219.20 \$154,966,71 \$98,067,510 \$154,966,71 \$98,070,219.20 \$154,966,71 \$98,070,219.20 \$154,966,71 \$98,070,219.20 \$154,966,71 \$98,070,219.20 \$154,966,71 \$98,070,219.20 \$154,966,71 \$98,070,219.20 \$154,966,71 \$98,070,219.20 \$154,966,71 \$98,070,219.20 \$154,966,71 \$98,070,219.20 \$154,966,71 \$98,070,219.20 \$154,966,71 \$98,070,219.20 \$154,966,71 \$98,070,219.20 \$154,966,71 \$98,070,219.20 \$154,966,71 \$98,070,219.20 \$154,966,71 \$98,070,219.20 \$154,966,71 \$99,065,552,67 \$174,98 \$17		PF	ROJECT SUBTOTAL		\$ 4,468,510,959.78		\$ 7,748,335,62
Includes cost for Trackless Trolley Modifications at Frankford Transportation Center Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. SESTIMATE VARIABILITY: The costs shown in this estimate epresent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive pidding or negotiating methods and does not make any commitment or assume any duty to assure that bids or negotiated prices will not vary from this estimate. Erosion & Sediment Control Maintenance and Protection of Traffic S.00% S.223,425,547.99 S.223,	lotal Length of LR I Improvements = 18.5 Miles						-
Maintenance and Protection of Traffic Mobilization Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate represent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive bidding or negotiating methods and does not make any commitment or assume any duty to assure that bids or negotiated prices will not vary from this estimate. Maintenance and Protection of Traffic Mobilization 5.00% \$ 223,425,547.99 \$ 387,416,78 \$ 387,416,78 \$ 2.00% \$ 89,370,219.20 \$ 154,966,71 \$ 2.00% \$ 152,281,578,822.94 \$ 9,065,552,67 \$ 9,065,552,67 \$ 9,065,552,67 \$ 9,065,552,67 \$ 9,065,552,67 \$ 117,633,551.02		Erosio	n & Sediment Control	5.00%	\$ 223,425,547.99		\$ 387,416,78
See Definition of Alternatives Report for roadway and transit beginneration. SUBTOTAL SUBTOTAL \$ 89,370,219.20 \$ 154,966,71 \$ 9,065,552,67 SUBTOTAL \$ 177,633,551.02 \$ 177,	Wissahickon Transportation Center to Neshaminy Mall						\$ 387,416,78
See Definition of Alternatives Report for roadway and transit segmentation. SUBTOTAL \$ 89,370,219.20 \$ 154,966,71 \$ 9,065,552,67 \$ 9,065,52	Wissahickon Transportation Center to Neshaminy Mall ncludes cost for Trackless Trolley Modifications at Frankford	Maintenance an	d Protection of Traffic	5.00%	\$ 223,425,547.99		\$ 387,416,78
segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate represent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive pidding or negotiating methods and does not make any commitment or assume any duty to assure that bids or negotiated prices will not vary from this estimate. SUBTOTAL \$ 5,228,157,822.94 \$ 9,065,552,67 \$ 117,633,551.02 \$ 203,974,93 \$ 1,178,521,84 \$ 705,801,306.10 \$ 1,223,849,61 \$ 117,633,551.02 \$ 203,974,93 \$ 117,633,551.02 \$ 203,974,93 \$ 117,633,551.02 \$ 203,974,93 \$ 117,633,551.02 \$ 203,974,93 \$ 117,633,551.02 \$ 203,974,93 \$ 117,633,551.02 \$ 203,974,93 \$ 117,633,551.02 \$ 203,974,93 \$ 117,633,551.02 \$ 203,974,93 \$ 117,633,551.02 \$ 117,633,551.02 \$ 203,974,93 \$ 203,974,93 \$ 203,974	Wissahickon Transportation Center to Neshaminy Mall ncludes cost for Trackless Trolley Modifications at Frankford Transportation Center	Maintenance an					
represent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive pidding or negotiating methods and does not make any commitment or assume any duty to assure that bids or negotiated prices will not vary from this estimate. Preliminary Engineering 2.25% \$ 117,633,551.02 \$ 203,974,93 \$ 1,178,521,84	Wissahickon Transportation Center to Neshaminy Mall neludes cost for Trackless Trolley Modifications at Frankford Transportation Center nflation Rate = 3.5%		Mobilization	5.00%	\$ 223,425,547.99		\$ 154.966.71
And with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive point of the costs of construction labor, materials, or equipment, nor over competitive point of the costs of commitment or assume any duty to assure that bids or negotiated prices will not vary from this estimate. Preliminary Engineering 2.25% \$ 117,633,551.02 \$ 203,974,93 \$ 1,178,521,84 \$ 1,178,521,84 \$ 1,178,521,84 \$ 1,178,521,84 \$ 1,178,33,551.02 \$ 203,974,93 \$ 1,00% \$ 52,281,578.23 \$ 90,655,52 \$ 117,633,551.02 \$ 203,974,93 \$ 1,00% \$ 52,281,578.23 \$ 90,655,52 \$ 11,966,529,53 \$ 11,96	Wissahickon Transportation Center to Neshaminy Mall Includes cost for Trackless Trolley Modifications at Frankford Fransportation Center Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation.		Mobilization	5.00% 2.00%	\$ 223,425,547.99 \$ 89,370,219.20		
Final Design 13.00% \$ 679,660,516.98 \$ 1,178,521,84	Wissahickon Transportation Center to Neshaminy Mall noludes cost for Trackless Trolley Modifications at Frankford Fransportation Center nollation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate		Mobilization	5.00% 2.00%	\$ 223,425,547.99 \$ 89,370,219.20		
Defiding or negotiating methods and does not make any commitment or assume any duty to assure that bids or negotiated prices will not vary from this estimate. PM/CA 13.50% \$ 705,801,306.10 \$ 1,223,849,61	Wissahickon Transportation Center to Neshaminy Mall includes cost for Trackless Trolley Modifications at Frankford Transportation Center inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate represent an estimate of probable costs prepared in good faith	C	Mobilization Clearing and Grubbing	5.00% 2.00% SUBTOTAL	\$ 223,425,547.99 \$ 89,370,219.20 \$ 5,228,157,822.94		\$ 9,065,552,67
commitment or assume any duty to assure that bids or negotiated prices will not vary from this estimate. 10	Wissahickon Transportation Center to Neshaminy Mall nucleas cost for Trackless Trolley Modifications at Frankford Transportation Center nflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate represent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of	C	Mobilization Clearing and Grubbing eliminary Engineering	5.00% 2.00% SUBTOTAL 2.25%	\$ 223,425,547.99 \$ 89,370,219.20 \$ 5,228,157,822.94 \$ 117,633,551.02		\$ 9,065,552,67 \$ 203,974,93
orices will not vary from this estimate. Insurance 2.25% \$ 117,633,551.02 \$ 203,974,93	Wissahickon Transportation Center to Neshaminy Mall ncludes cost for Trackless Trolley Modifications at Frankford Transportation Center of Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate represent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive	C	Mobilization Clearing and Grubbing eliminary Engineering Final Design	5.00% 2.00% SUBTOTAL 2.25% 13.00%	\$ 223,425,547.99 \$ 89,370,219.20 \$ 5,228,157,822.94 \$ 117,633,551.02 \$ 679,660,516.98		\$ 9,065,552,67 \$ 203,974,93 \$ 1,178,521,84
SUBTOTAL \$ 6,901,168,326.28 \$ 11,966,529,53	Wissahickon Transportation Center to Neshaminy Mall nucleus cost for Trackless Trolley Modifications at Frankford Transportation Center Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate represent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive bidding or negotiating methods and does not make any	C	Mobilization Clearing and Grubbing eliminary Engineering Final Design PM/CA	5.00% 2.00% SUBTOTAL 2.25% 13.00% 13.50%	\$ 223,425,547.99 \$ 89,370,219.20 \$ 5,228,157,822.94 \$ 117,633,551.02 \$ 679,660,516.98 \$ 705,801,306.10		\$ 9,065,552,67 \$ 203,974,93 \$ 1,178,521,84 \$ 1,223,849,61
	Wissahickon Transportation Center to Neshaminy Mall Induces cost for Trackless Trolley Modifications at Frankford Transportation Center Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate represent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive bidding or negotiating methods and does not make any commitment or assume any duty to assure that bids or negotiated	C	Mobilization Clearing and Grubbing eliminary Engineering Final Design PM/CA Insurance	5.00% 2.00% SUBTOTAL 2.25% 13.00% 13.50% 2.25%	\$ 223,425,547.99 \$ 89,370,219.20 \$ 5,228,157,822.94 \$ 117,633,551.02 \$ 679,660,516.98 \$ 705,801,306.10 \$ 117,633,551.02		\$ 9,065,552,67 \$ 203,974,93 \$ 1,178,521,84 \$ 1,223,849,61 \$ 203,974,93
Contingency 40.00% \$ 2,760,467,330.51 \$ 4,786,611,81	Wissahickon Transportation Center to Neshaminy Mall Induces cost for Trackless Trolley Modifications at Frankford Transportation Center Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate represent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive bidding or negotiating methods and does not make any commitment or assume any duty to assure that bids or negotiated	C	Mobilization Clearing and Grubbing eliminary Engineering Final Design PM/CA Insurance	5.00% 2.00% SUBTOTAL 2.25% 13.00% 13.50% 2.25% 1.00%	\$ 223,425,547.99 \$ 89,370,219.20 \$ 5,228,157,822.94 \$ 117,633,551.02 \$ 679,660,516.98 \$ 705,801,306.10 \$ 117,633,551.02 \$ 52,281,578.23		\$ 9,065,552,67 \$ 203,974,93 \$ 1,178,521,84 \$ 1,223,849,61 \$ 203,974,93 \$ 90,655,52
		C	Mobilization Clearing and Grubbing eliminary Engineering Final Design PM/CA Insurance	5.00% 2.00% SUBTOTAL 2.25% 13.00% 13.50% 2.25% 1.00%	\$ 223,425,547.99 \$ 89,370,219.20 \$ 5,228,157,822.94 \$ 117,633,551.02 \$ 679,660,516.98 \$ 705,801,306.10 \$ 117,633,551.02 \$ 52,281,578.23		\$ 9,065,552,67 \$ 203,974,93 \$ 1,178,521,84 \$ 1,223,849,61 \$ 203,974,93 \$ 90,655,52
	Wissahickon Transportation Center to Neshaminy Mall nucleas cost for Trackless Trolley Modifications at Frankford Transportation Center Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate represent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive bidding or negotiating methods and does not make any commitment or assume any duty to assure that bids or negotiated	C	Mobilization Clearing and Grubbing eliminary Engineering Final Design PM/CA Insurance Other	5.00% 2.00% SUBTOTAL 2.25% 13.00% 13.50% 2.25% 1.00% SUBTOTAL	\$ 223,425,547.99 \$ 89,370,219.20 \$ 5,228,157,822.94 \$ 117,633,551.02 \$ 679,660,516.98 \$ 705,801,306.10 \$ 117,633,551.02 \$ 62,281,578.23 \$ 6,901,168,326.28		\$ 9,065,552,67 \$ 203,974,93 \$ 1,178,521,84 \$ 1,223,849,61 \$ 203,974,93 \$ 90,655,52 \$ 11,966,529,53



10,100,109,908.26

Project Information							
Project Name	Roosevelt Blvd 2040 Cost Estimates						
Job No.	74882						

Roosevelt Blvd Alt 1B Cost Estimate

Partially Capped Expressway with BRT

			ROADWAY				
IMPROVEMENT DESCRIPTION		UOM	QUANTITY	TC	OTAL COST (2024)		TOTAL COST (2040)
Depressed Full Cap		LF	20,427	\$	800,476,406.68	\$	1,388,014,914
Depressed Full Cap with Ramps		LF	4,779	\$	369,757,804.17	\$	641,154,870
Depressed Partially Capped with At-Grade Intersections		LF	2,122	\$	158,888,662.84	\$	275,510,723
Depressed Partial Cap		LF	11.455	\$	403,187,126.68	\$	699,120,849
Depressed Partial Cap with Ramps		LF	4,779	\$	176,980,361.47	\$	306,881,476
Travel Lanes (Local Lanes)		LF	61,429	\$	88,737,963.45	\$	153,870,389
Travel Lanes (At Grade)		LF	19,989	\$	28,875,590.21	\$	50,069,870
Sidewalk		LF	61.429	\$	62,111,686.00	\$	107,700,796
Bike Lanes		LF	61,429	\$	37,774,507.30	\$	65,500,468
		LF	27,329	\$		\$	
Median Landscaping		LF	61,429	_	6,788,126.16 190,597,093.54	\$	11,770,510
Drainage and Stormwater Management			54	\$			330,492,69
Existing Signal Upgrades and Retimings		EACH		\$		\$	46,817,623
Utility Relocations		LF	61,429	\$	99,638,065.08	\$	172,771,01
Signing/Delineation		LS	1.5%	\$	36,762,200.90	\$	63,745,14
Landscaping and Public Art		LS	2.0%	\$	49,016,267.87	\$	84,993,52
Roadway Lighting		LS	2.0%	\$	49,016,267.87	\$	84,993,52
			ADWAY SUBTOTAL	\$	2,585,608,130.23	\$	4,483,408,40
			TRANSIT				
IMPROVEMENT DESCRIPTION		UOM	QUANTITY		OTAL COST (2024)		TOTAL COST (2040)
At Grade BRT Dedicated Lane		LF	56,339	\$	54,430,745.32	\$	94,382,15
Stations		EA	22	\$	31,761,664.00	\$	55,074,28
Maintenance Facility		SF	40,000	\$	32,000,000.00	\$	55,487,55
Vehicles		VEH	42	\$	57,318,324.00	\$	99,389,17
MEP		LS	2.0%	\$	2,363,848.19	\$	4,098,87
Transit Lighting	4	LS	3.0%	\$	3,545,772.28	\$	6,148,31
Station Signage		LS	1.0%	\$	317,616.64	\$	550,74
		T	RANSIT SUBTOTAL		404 707 070 40	_	315,131,10
tes:			KANSII SUBTUTALI	5	181./3/.9/0.43 I	\$	315.131.10
			RANSII SUBTUTAL	\$	181,737,970.43	\$	315,131,10
Total Length of Roadway Improvements = 11.6 Miles			· ·	\$		\$	
Total Length of Roadway Improvements = 11.6 Miles Old York Road to Southampton Road			OJECT SUBTOTAL	\$	\$ 2,767,346,100.66	\$	
Total Length of Roadway Improvements = 11.6 Miles Old York Road to Southampton Road Total Length of BRT Improvements = 18.7 Miles Wissahickon Transportation Center to Neshaminy Mall		PR	OJECT SUBTOTAL		\$ 2,767,346,100.66	\$	\$ 4,798,539,50
Total Length of Roadway Improvements = 11.6 Miles Old York Road to Southampton Road Total Length of BRT Improvements = 18.7 Miles Wissahickon Transportation Center to Neshaminy Mall Inflation Rate = 3.5%	Mainton	PR Erosion	OJECT SUBTOTAL	5.00%	\$ 2,767,346,100.66 \$ 138,367,305.03	\$	\$ 4,798,539,50 \$ 239,926,97
Total Length of Roadway Improvements = 11.6 Miles Old York Road to Southampton Road Total Length of BRT Improvements = 18.7 Miles Wissahickon Transportation Center to Neshaminy Mall Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit	Mainten	PR Erosion	OJECT SUBTOTAL & Sediment Control Protection of Traffic	5.00% 5.00%	\$ 2,767,346,100.66 \$ 138,367,305.03 \$ 138,367,305.03	\$	\$ 4,798,539,50 \$ 239,926,97 \$ 239,926,97
Total Length of Roadway Improvements = 11.6 Miles Old York Road to Southampton Road Total Length of BRT Improvements = 18.7 Miles Wissahickon Transportation Center to Neshaminy Mall Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation.	Mainten	PR Erosion ance and	OJECT SUBTOTAL	5.00% 5.00% 5.00%	\$ 2,767,346,100.66 \$ 138,367,305.03 \$ 138,367,305.03 \$ 138,367,305.03	\$	\$ 4,798,539,50 \$ 239,926,97 \$ 239,926,97 \$ 239,926,97
Total Length of Roadway Improvements = 11.6 Miles Old York Road to Southampton Road Total Length of BRT Improvements = 18.7 Miles Wissahickon Transportation Center to Neshaminy Mall Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate	Mainten	PR Erosion ance and	OJECT SUBTOTAL & Sediment Control Protection of Traffic	5.00% 5.00% 5.00% 2.00%	\$ 2,767,346,100.66 \$ 138,367,305.03 \$ 138,367,305.03 \$ 138,367,305.03 \$ 55,346,922.01	\$	\$ 4,798,539,50 \$ 239,926,97 \$ 239,926,97 \$ 239,926,97 \$ 95,970,79
Total Length of Roadway Improvements = 11.6 Miles Old York Road to Southampton Road Total Length of BRT Improvements = 18.7 Miles Wissahickon Transportation Center to Neshaminy Mall Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate represent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of	Mainten	PR Erosion ance and	OJECT SUBTOTAL	5.00% 5.00% 5.00%	\$ 2,767,346,100.66 \$ 138,367,305.03 \$ 138,367,305.03 \$ 138,367,305.03 \$ 55,346,922.01	\$	\$ 4,798,539,50 \$ 239,926,97 \$ 239,926,97 \$ 239,926,97 \$ 95,970,79
Total Length of Roadway Improvements = 11.6 Miles • Old York Road to Southampton Road Total Length of BRT Improvements = 18.7 Miles • Wissahickon Transportation Center to Neshaminy Mall Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate represent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive	Mainten	PR Erosion ance and C	OJECT SUBTOTAL Sediment Control Protection of Traffic Mobilization learing and Grubbing	5.00% 5.00% 5.00% 2.00% SUBTOTAL	\$ 2,767,346,100.66 \$ 138,367,305.03 \$ 138,367,305.03 \$ 138,367,305.03 \$ 55,346,922.01 \$ 3,237,794,937.78	\$	\$ 4,798,539,50 \$ 239,926,97 \$ 239,926,97 \$ 239,926,97 \$ 95,970,79 \$ 5,614,291,22
Total Length of Roadway Improvements = 11.6 Miles Old York Road to Southampton Road Total Length of BRT Improvements = 18.7 Miles Wissahickon Transportation Center to Neshaminy Mall Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate represent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive bidding or negotiating methods and does not make any	Mainten	PR Erosion ance and C	OJECT SUBTOTAL Sediment Control Protection of Traffic Mobilization learing and Grubbing	5.00% 5.00% 5.00% 2.00% SUBTOTAL	\$ 2,767,346,100.66 \$ 138,367,305.03 \$ 138,367,305.03 \$ 138,367,305.03 \$ 55,346,922.01 \$ 3,237,794,937.78 \$ 64,755,898.76	\$	\$ 4,798,539,50 \$ 239,926,97 \$ 239,926,97 \$ 239,926,97 \$ 95,970,79 \$ 5,614,291,22
Total Length of Roadway Improvements = 11.6 Miles Old York Road to Southampton Road Total Length of BRT Improvements = 18.7 Miles Wissahickon Transportation Center to Neshaminy Mall Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate represent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive bidding or negotiating methods and does not make any commitment or assume any duty to assure that bids or	Mainten	PR Erosion ance and C	OJECT SUBTOTAL Seal Sediment Control Protection of Traffic Mobilization learing and Grubbing Pliminary Engineering Final Design	5.00% 5.00% 5.00% 2.00% SUBTOTAL 2.00% 11.50%	\$ 2,767,346,100.66 \$ 138,367,305.03 \$ 138,367,305.03 \$ 138,367,305.03 \$ 55,346,922.01 \$ 3,237,794,937.78 \$ 64,755,898.76 \$ 372,346,417.84	\$	\$ 4,798,539,50 \$ 239,926,97 \$ 239,926,97 \$ 239,926,97 \$ 95,970,79 \$ 5,614,291,22 \$ 112,285,82 \$ 645,643,49
Total Length of Roadway Improvements = 11.6 Miles Old York Road to Southampton Road Total Length of BRT Improvements = 18.7 Miles Wissahickon Transportation Center to Neshaminy Mall Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate represent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive bidding or negotiating methods and does not make any commitment or assume any duty to assure that bids or	Mainten	PR Erosion ance and C	OJECT SUBTOTAL Sediment Control Protection of Traffic Mobilization learing and Grubbing	5.00% 5.00% 5.00% 2.00% SUBTOTAL	\$ 2,767,346,100.66 \$ 138,367,305.03 \$ 138,367,305.03 \$ 138,367,305.03 \$ 55,346,922.01 \$ 3,237,794,937.78 \$ 64,755,898.76 \$ 372,346,417.84 \$ 388,535,392.53	\$	\$ 4,798,539,50 \$ 239,926,97 \$ 239,926,97 \$ 239,926,97 \$ 95,970,79 \$ 5,614,291,22 \$ 112,285,82 \$ 645,643,49 \$ 673,714,94
Total Length of Roadway Improvements = 11.6 Miles Old York Road to Southampton Road Total Length of BRT Improvements = 18.7 Miles Wissahickon Transportation Center to Neshaminy Mall Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate represent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive bidding or negotiating methods and does not make any commitment or assume any duty to assure that bids or	Mainten	PR Erosion ance and C	OJECT SUBTOTAL Seal Sediment Control Protection of Traffic Mobilization learing and Grubbing Pliminary Engineering Final Design	5.00% 5.00% 5.00% 2.00% SUBTOTAL 2.00% 11.50%	\$ 2,767,346,100.66 \$ 138,367,305.03 \$ 138,367,305.03 \$ 138,367,305.03 \$ 55,346,922.01 \$ 3,237,794,937.78 \$ 64,755,898.76 \$ 372,346,417.84	\$	\$ 4,798,539,50 \$ 239,926,97 \$ 239,926,97 \$ 95,970,79 \$ 5,614,291,22 \$ 112,285,82 \$ 645,643,49 \$ 673,714,94
Total Length of Roadway Improvements = 11.6 Miles Old York Road to Southampton Road Total Length of BRT Improvements = 18.7 Miles Wissahickon Transportation Center to Neshaminy Mall Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate represent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive bidding or negotiating methods and does not make any commitment or assume any duty to assure that bids or	Mainten	PR Erosion ance and C	OJECT SUBTOTAL See Sediment Control Protection of Traffic Mobilization learing and Grubbing eliminary Engineering Final Design PM/CA	5.00% 5.00% 5.00% 2.00% SUBTOTAL 2.00% 11.50% 12.00%	\$ 2,767,346,100.66 \$ 138,367,305.03 \$ 138,367,305.03 \$ 138,367,305.03 \$ 55,346,922.01 \$ 3,237,794,937.78 \$ 64,755,898.76 \$ 372,346,417.84 \$ 388,535,392.53	\$	\$ 4,798,539,50 \$ 239,926,97 \$ 239,926,97 \$ 239,926,97 \$ 95,970,79 \$ 5,614,291,22 \$ 112,285,82 \$ 645,643,49 \$ 673,714,94 \$ 112,285,82
Total Length of Roadway Improvements = 11.6 Miles Old York Road to Southampton Road Total Length of BRT Improvements = 18.7 Miles	Mainten	PR Erosion ance and C	OJECT SUBTOTAL A Sediment Control Protection of Traffic Mobilization learing and Grubbing Pliminary Engineering Final Design PM/CA Insurance	5.00% 5.00% 5.00% 2.00% SUBTOTAL 2.00% 11.50% 12.00% 2.00%	\$ 2,767,346,100.66 \$ 138,367,305.03 \$ 138,367,305.03 \$ 138,367,305.03 \$ 55,346,922.01 \$ 3,237,794,937.78 \$ 64,755,898.76 \$ 372,346,417.84 \$ 388,535,392.53 \$ 64,755,898.76 \$ 32,377,949.38	\$	\$ 4,798,539,500 \$ 239,926,970 \$ 239,926,970 \$ 95,970,790 \$ 5,614,291,22 \$ 112,285,820 \$ 645,643,490 \$ 673,714,940 \$ 112,285,820

TOTAL PROJECT COST \$

5,824,793,093.06



Project Information								
Project Name	Roosevelt Blvd 2040 Cost Estimates							
Job No.	74882							

Roosevelt Blvd Alt 2A Cost Estimate

Neighborhood Blvd with LRT

		ROADWAY				
IMPROVEMENT DESCRIPTION	UO	M QUANTITY	то	TAL COST (2024)	TO	TAL COST (2040)
Travel Lanes	LF	61,429	\$	176,296,487.42	\$	305,695,648
New Intersection Signalization	EAC	CH 29	\$	14,500,000.00	\$	25,142,797
Sidewalk	LF	61,429	\$	57,970,906.93	\$	100,520,743
Bike Lanes	LF	61,429	\$	37,774,507.30	\$	65,500,468
Median Landscaping	LF	61,429	\$	11,495,925.10	\$	19,933,773
Drainage and Stormwater Management	LF		\$	259,952,287.98	\$	450,753,638
Existing Signal Upgrades and Retimings	EAC		\$	27,000,000.00	\$	46,817,623
Utility Relocations	LF		\$	99,638,065.08	\$	172,771,013
Signing/Delineation	LS		_	10,269,422.70	\$	17,807,035
Landscaping and Public Art	LS	·	T .	13,692,563.60	\$	23,742,714
Zanassaping and Fability at		ROADWAY SUBTOTAL		708,590,166.11		1,228,685,456
		TRANSIT	3	708,390,166.11	Ą	1,220,000,430
IMPROVEMENT DESCRIPTION	UO		то	TAL COST (2024)	TO	TAL COST (2040)
Guideway - Aerial	LF			644,064,170.00		1,116,798,279
Guideway - At-Grade in Mixed Traffic	LF		\$	245,150,132.00	\$	425,086,906
Guideway - At-Grade Semi Exclusive	LF			397,301,240.00	\$	688,914,80
Special Work for Intersections & Yard (TO & Switches)	TF		\$	3,375,000.00	\$	5,852,20
LRV Yard Track	TE		\$	252,000.00	\$	436,96
LRV Yard Track Turnouts	EA		•	860,000.00	\$	1,491,22
At-Grade Stations	EA		\$	97,080,714.00	\$	168,336,60
Aerial Stations	E/		\$	38,639,376.00	\$	67,000,13
Maintenance Facility	SF		\$	30,000,000.00	\$	52,019,58
Transition Structures from At-Grade to Elevated	EA			826,000.00	\$	1,432,27
	LF.		\$		\$	
Roadway Reconstruction for At grade LRT Vehicles				19,092,785.75		33,106,62
MEP	VE		_	331,072,140.00	\$	574,074,46
	LS		7	29,532,828.36		51,209,51
Transit Lighting	LS		T	44,299,242.53	\$	76,814,26
Station Signage	ĻS	1.0%	\$	1,357,200.90	\$	2,353,36
		TRANSIT SUBTOTAL	\$	1,882,902,829.54	\$	3,264,927,22
tes: Total Length of Roadway Improvements = 11.6 Miles				, ,		-, - ,- ,
Old York Road to Southampton Road		PROJECT SUBTOTAL		\$ 2,591,492,995.65	\$	4,493,612,67
Total Length of LRT Improvements = 18.5 Miles		TROUEST GODIOTAL		ψ 2,001,402,000.00	I L*	4,400,012,01
Wissahickon Transportation Center to Neshaminy Mall	Ero	sion & Sediment Control	5.00%	\$ 129,574,649.78	\$	224,680,63
ncludes cost for Trackless Trolley Modifications at Frankford		and Protection of Traffic		\$ 129,574,649.78	\$	
Fransportation Center nflation Rate = 3.5%	Mannenance	Mobilization		\$ 129,574,649.78	\$	
See Definition of Alternatives Report for roadway and transit		Clearing and Grubbing		\$ 129,574,049.78	\$	
segmentation.		Cleaning and Grubbing				
ESTIMATE VARIABILITY: The costs shown in this estimate			SUBTOTAL	\$ 3,032,046,804.91	\$	5,257,526,83
epresent an estimate of probable costs prepared in good faith						
and with reasonable care. HNTB has no control over the costs of		Preliminary Engineering		\$ 68,221,053.11	\$	118,294,35
construction labor, materials, or equipment, nor over competitive bidding or negotiating methods and does not make any		Final Design		\$ 394,166,084.64	\$	
commitment or assume any duty to assure that bids or		PM/CA		\$ 409,326,318.66	\$	
negotiated prices will not vary from this estimate.		Insurance	2.25%	\$ 68,221,053.11	\$	
-g		Other	1.00%	\$ 30,320,468.05	\$	
			SUBTOTAL	\$ 4,002,301,782.49	\$	6,939,935,41
					. –	
		Contingency	40.00%	\$ 1,600,920,712.99	\$	2,775,974,167
		TOTAL DI	ROJECT COST	\$ 5.603.222.495.48	 	9,715,909,58
		IOIALFI	COLCI COSI	Ψ 3,003,222,495.46	ĮΨ	3,7 13,303,30



3,254,804,159.33

Project Info	Project Information								
Project Name	Roosevelt Blvd 2040 Cost Estimates								
Job No.	74882								

TOTAL PROJECT COST \$ 1,873,989,371.64

Roosevelt Blvd Alt 2B Cost Estimate

Neighborhood Blvd with BRT

Neighborhood Bivd with BRI		ROADWAY				
IMPROVEMENT DESCRIPTION	UOM	QUANTITY	TO	OTAL COST (2024)		TOTAL COST (2040)
Travel Lanes	LF	61,429	\$	176,296,487.42	\$	305,695,648.06
New Intersection Signalization	EACH	29	\$	14,500,000.00	\$	25,142,797.58
Sidewalk	LF	61,429	\$	57,970,906.93	\$	100,520,743.34
Bike Lanes	LF	61,429	\$	37,774,507.30	\$	65,500,468.32
Median Landscaping	LF	61,429	\$	11,495,925.10	\$	19,933,773.63
Drainage and Stormwater Management	LF	61,429	\$	259,952,287.98	\$	450,753,638.38
Existing Signal Upgrades and Retimings	EACH	54	\$	27,000,000.00	\$	46,817,623.08
Utility Relocations	LF	61,429	\$	99,638,065.08	\$	172,771,013.88
Signing/Delineation	LS	1.5%	\$	10,269,422.70	\$	17,807,035.59
Landscaping and Public Art	LS	2.0%	\$	13,692,563.60	\$	23,742,714.13
	RO	ADWAY SUBTOTAL	\$	708,590,166.11	\$	1,228,685,456.00
		TRANSIT				
IMPROVEMENT DESCRIPTION	UOM	QUANTITY		OTAL COST (2024)		TOTAL COST (2040)
At Grade BRT Dedicated Lane	LF	56,339	-	54,430,745.32	\$	94,382,152.53
Stations	EA	22	\$	31,761,664.00	\$	55,074,281.98
Maintenance Facility	SF	40,000	\$	32,000,000.00	\$	55,487,553.27
Vehicles	VEH	42	\$	57,318,324.00	\$	99,389,173.64
MEP	LS	2.0%	Ψ	2,363,848.19	\$	4,098,879.76
Transit Lighting	LS	3.0%	-	3,545,772.28	\$	6,148,319.63
Station Signage	LS	1.0%	\$	317,616.64	\$	3,084,320.41
Neter	Т	RANSIT SUBTOTAL	s	181,737,970.43	\$	317,664,681.22
Notes: Total Length of Roadway Improvements = 11.6 Miles		TOTAL		101,101,010.40	<u> </u>	017,004,001.22
Old York Road to Southampton Road	DE	OJECT SUBTOTAL		\$ 890,328,136.54		\$ 1,546,350,137.22
Total Length of BRT Improvements = 18.7 Miles		COLOT CODIOTAL		ψ 030,020,100.04		1,040,000,107.22
Wissahickon Transportation Center to Neshaminy Mall	Fresio	n & Sediment Control	5.00%	\$ 44,516,406.83		\$ 77,317,506.86
Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit		Protection of Traffic	5.00%	\$ 44,516,406.83		\$ 77,317,506.86
segmentation.	Walliteriance and	Mobilization	5.00%	\$ 44,516,406.83		\$ 77,317,506.86
ESTIMATE VARIABILITY: The costs shown in this estimate		learing and Grubbing	2.00%	\$ 17,806,562.73		\$ 30,927,002.74
represent an estimate of probable costs prepared in good faith		louring and Grabbing	SUBTOTA	,,		\$ 1,809,229,660.55
and with reasonable care. HNTB has no control over the costs			OODIOIA	Ε ψ 1,041,000,313.70		1,003,223,000.33
of construction labor, materials, or equipment, nor over competitive bidding or negotiating methods and does not make	Dr	eliminary Engineering	2.00%	\$ 20,833,678.40		\$ 36,184,593.21
any commitment or assume any duty to assure that bids or	FI	Final Design	11.50%	\$ 119,793,650.77		\$ 208,061,410.96
negotiated prices will not vary from this estimate.		PM/CA	12.00%	\$ 125,002,070.37		\$ 208,001,410.90
		Insurance	2.00%	\$ 20,833,678.40		\$ 36,184,593.21
		Other	1.00%	\$ 10,416,839.20		\$ 18,092,296.61
		Other	SUBTOTA	1, 1,111		\$ 2,324,860,113.81
		Contingency	JUDIUIA	L φ 1,330,303,030.00		φ 2,324,000,113.81
	7	Contingency	40%	\$ 535,425,534.75		\$ 929,944,045.52
			40 70	ψ 555,425,554.75		Ψ 929,944,045.52



Project Information								
Project Name	Roosevelt Blvd 2040 Cost Estimates							
Job No.	74882							

Roosevelt Blvd Alt 3 Cost Estimate

		ROADWAY				
IMPROVEMENT DESCRIPTION	UOM	QUANTITY		TAL COST (2024)		AL COST (2040)
Depressed Full Cap	LF	20,427	\$	800,476,406.68	\$	1,388,014,914
Depressed Full Cap with Ramps	LF	4,779	\$	369,757,804.17	\$	641,154,870.
Depressed Partially Capped with At-Grade Intersections	LF	2,122	\$	158,888,662.84	\$	275,510,723
Depressed Partial Cap	LF	11,455	\$	403,187,126.68	\$	699,120,849
Depressed Partial Cap with Ramps	LF	4,779	\$	176,980,361.47	\$	306,881,476
Travel Lanes (Local Lanes)	LF	61,429	\$	88,737,963.45	\$	153,870,389
Travel Lanes (At Grade)	LF	19,989 61,429	\$	28,875,590.21	\$	50,069,870
Sidewalk	LF LF	61,429	\$	62,111,686.00	\$	107,700,796
Bike Lanes Median Landscaping		27,329	\$	37,774,507.30	\$	65,500,468
1 3	LF LF	61,429	\$	6,788,126.16	\$	11,770,516
Drainage and Stormwater Management		54	\$	190,597,093.54	\$	330,492,699
Existing Signal Upgrades and Retimings	EACH		\$	27,000,000.00	\$	46,817,623
Utility Relocations	LF	61,429	\$	99,638,065.08	\$	172,771,013
Signing/Delineation	LS	1.5%	\$	36,762,200.90	\$	63,745,143
Landscaping and Public Art	LS	2.0%	\$	49,016,267.87	\$	84,993,524
Roadway Lighting	LS	2.0%	\$	49,016,267.87	\$	84,993,52
	RU	ADWAY SUBTOTAL TRANSIT	\$	2,585,608,130.23	\$	4,483,408,40
IMPROVEMENT DESCRIPTION	UOM	QUANTITY	то	TAL COST (2024)	тот	AL COST (2040)
2-Track, Bored Tunnel Subway	LF	5,332	\$	173,705,896.00	\$	301,203,59
2- Track, Cut and Cover Subway	LE	38,785	\$	1,352,937,155.00	\$	2,345,974,13
2- Track, Elevated Subway	LF	29,590	\$	605,497,045.71	\$	1,049,923,42
2- Track, At Grade Subway	LF.	3,889	\$	17,671,616.00	\$	30,642,33
Interlockings	EA	6	\$	40,800,000.00	\$	70,746,63
BSS Terminal Yard Tracks	TE	8,000	\$	11,168,000.00	\$	19,365,15
Junction @ Erie BSS	EA	2	\$	450,000.00	\$	780,29
Yard Turnouts	EA	8	\$	1,376,000.00	\$	2,385,96
Subgrade Stations	EA	8	\$	958,340,608.00	\$	1,661,749,23
Elevated Stations	EA	4	\$	262,507,504.00	\$	455,184,34
Fare Collection System @ Stations	EA	12	\$	45,297,456.00	\$	78,545,15
Maintenance Facility	SF	30,000	\$	30,000,000.00	\$	52,019,58
Vehicles	VEH	144	\$	741,543,696.00	\$	1,285,826,41
MEP	LS	2.0%	\$	69,995,025.61	\$	1,265,626,41
	LS	3.0%	\$	104,992,538.42	\$	182,055,59
Transit Lighting Station Signage	LS	1.0%	\$	34,997,512.81	\$	60,685,19
Station Signage	- 13	1.070	Ψ	34,997,312.01	Ψ	00,003,13
es:	Т	RANSIT SUBTOTAL	\$	4,451,280,053.55	\$	7,718,457,47
Total Length of Roadway Improvements = 11.6 Miles						
Old York Road to Southampton Road Fotal Length of Subway Improvements = 14.7 Miles	PF	ROJECT SUBTOTAL		\$ 7,036,888,183.79	\$	12,201,865,87
Broad and Erie to Neshaminy Mall						
Cost for extension to Frankford Transportation Center not	Erosio	n & Sediment Control	5.00%	\$ 351,844,409.19	\$	610,093,29
ncluded	Maintenance an	d Protection of Traffic	5.00%	\$ 351,844,409.19	\$	610,093,29
		Mobilization	5.00%	\$ 351,844,409.19	\$	610,093,29
					\$	244,037,31
Neshaminy Mall estimated at \$264,100,000.00 (2024).	C	Clearing and Grubbing	2.00%	\$ 140,737,763.68		44.070.400.07
Neshaminy Mall estimated at \$264,100,000.00 (2024). Inflation Rate = 3.5%	C	Clearing and Grubbing	2.00% SUBTOTAL		\$	14,276,183,07
Neshaminy Mall estimated at \$264,100,000.00 (2024). Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit	C	Clearing and Grubbing			\$	14,276,183,07
Cost includes subway extension from Southampton Road to Neshaminy Mall estimated at \$264,100,000.00 (2024). Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate			SUBTOTAL	\$ 8,233,159,175.03		
Neshaminy Mall estimated at \$264,100,000.00 (2024). Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate epresent an estimate of probable costs prepared in good faith		eliminary Engineering	SUBTOTAL 8.25%	\$ 8,233,159,175.03 \$ 679,235,631.94	\$	1,177,785,10
Neshaminy Mall estimated at \$264,100,000.00 (2024). Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. SESTIMATE VARIABILITY: The costs shown in this estimate epresent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs			SUBTOTAL	\$ 8,233,159,175.03		1,177,785,10 1,820,213,34
Neshaminy Mall estimated at \$264,100,000.00 (2024). Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate epresent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over		eliminary Engineering Final Design PM/CA	8.25% 12.75%	\$ 8,233,159,175.03 \$ 679,235,631.94 \$ 1,049,727,794.82 \$ 1,090,893,590.69	\$ \$ \$	1,177,785,10 1,820,213,34 1,891,594,25
Neshaminy Mall estimated at \$264,100,000.00 (2024). Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate represent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive bidding or negotiating methods and does not make		eliminary Engineering Final Design PM/CA Insurance	8.25% 12.75% 13.25% 2.00%	\$ 8,233,159,175.03 \$ 679,235,631.94 \$ 1,049,727,794.82 \$ 1,090,893,590.69 \$ 164,663,183.50	\$ \$ \$	1,177,785,10 1,820,213,34 1,891,594,25 285,523,66
Neshaminy Mall estimated at \$264,100,000.00 (2024). Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate epresent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over		eliminary Engineering Final Design PM/CA	8.25% 12.75% 13.25%	\$ 8,233,159,175.03 \$ 679,235,631.94 \$ 1,049,727,794.82 \$ 1,090,893,590.69 \$ 164,663,183.50 \$ 82,331,591.75	\$ \$ \$	1,177,785,10 1,820,213,34 1,891,594,25 285,523,66 142,761,83
Neshaminy Mall estimated at \$264,100,000.00 (2024). Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate represent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive bidding or negotiating methods and does not make any commitment or assume any duty to assure that bids or		eliminary Engineering Final Design PM/CA Insurance	8.25% 12.75% 13.25% 2.00% 1.00%	\$ 8,233,159,175.03 \$ 679,235,631.94 \$ 1,049,727,794.82 \$ 1,090,893,590.69 \$ 164,663,183.50 \$ 82,331,591.75	\$ \$ \$ \$	14,276,183,07 1,177,785,10 1,820,213,34 1,891,594,25 285,523,66 142,761,83 19,594,061,26
Neshaminy Mall estimated at \$264,100,000.00 (2024). Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. Is TIMATE VARIABILITY: The costs shown in this estimate epresent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive bidding or negotiating methods and does not make any commitment or assume any duty to assure that bids or		eliminary Engineering Final Design PM/CA Insurance	8.25% 12.75% 13.25% 2.00% 1.00%	\$ 8,233,159,175.03 \$ 679,235,631.94 \$ 1,049,727,794.82 \$ 1,090,893,590.69 \$ 164,663,183.50 \$ 82,331,591.75	\$ \$ \$ \$	1,177,785,10 1,820,213,34 1,891,594,25 285,523,66 142,761,83



Project Info	ormation
Project Name	Roosevelt Blvd 2040 Cost Estimates
Job No.	74882

Roosevelt Blvd Alt 3.2 Cost Estimate

		ROADWAY				
IMPROVEMENT DESCRIPTION	UOM	QUANTITY	то	TAL COST (2024)	TOT	AL COST (2040)
Depressed Full Cap	LF	20,427	\$	800,476,406.68	\$	1,388,014,914
Depressed Full Cap with Ramps	LF	4,779	\$	369,757,804.17	\$	641,154,870
Depressed Partially Capped with At-Grade Intersections	LF	2,122	\$	158,888,662.84	\$	275,510,72
Depressed Partial Cap	LF	11,455	\$	403,187,126.68	\$	699,120,849
Depressed Partial Cap with Ramps	LF	4,779	\$	176,980,361.47	\$	306,881,470
Travel Lanes (Local Lanes)	LF	61,429	\$	88,737,963.45	\$	153,870,389
Travel Lanes (At Grade)	LF	19,989	\$	28,875,590.21	\$	50,069,87
Sidewalk	LF	61,429	\$	62,111,686.00	\$	107,700,79
Bike Lanes	LF	61,429	\$	37,774,507.30	\$	65,500,46
Median Landscaping	LF	27,329	\$	6,788,126.16	\$	11,770,51
Drainage and Stormwater Management	LF	61,429	\$	190,597,093.54	\$	330,492,69
Existing Signal Upgrades and Retimings	EACH	54	\$	27,000,000.00	\$	46,817,62
Utility Relocations	LF	61,429	\$	99,638,065.08	\$	172,771,01
Signing/Delineation	LS	1.5%	\$	36,762,200.90	\$	63,745,14
Landscaping and Public Art	LS	2.0%	\$	49,016,267.87	\$	84,993,52
Roadway Lighting	LS	2.0%	\$	49,016,267.87	\$	84,993,52
	RO	ADWAY SUBTOTAL	\$	2,585,608,130.23	\$	4,483,408,40
		TRANSIT				
IMPROVEMENT DESCRIPTION	UOM	QUANTITY	то	TAL COST (2024)	TOT	AL COST (2040)
2-Track, Bored Tunnel Subway	LF	5,332	\$	173,705,896.00	\$	301,203,59
2- Track, Cut and Cover Subway	LF	38,785	\$	1,352,937,155.00	\$	2,345,974,13
2- Track, Elevated Subway	LF	29,590	\$	605,497,045.71	\$	1,049,923,42
2- Track, At Grade Subway	_LF	3,889	\$	17,671,616.00	\$	30,642,33
2- Track, Cut and Cover Extension to MFL	LF	4,224	\$	143,451,264.00	\$	248,742,48
Bridge Street Garage Demolition	LF	370	\$	396,640.00	\$	687,76
Interlockings	EA	6	\$	40,800,000.00	\$	70,746,63
BSS Terminal Yard Tracks	TF	8,000	\$	11,168,000.00	\$	19,365,15
Junction @ Erie BSS	EΑ	2	\$	450,000.00	\$	780,29
Yard Turnouts	EA	8	\$	1,376,000.00	\$	2,385,96
Subgrade Stations	EA	8	\$	958,340,608.00	\$	1,661,749,23
Elevated Stations	EA	4	\$	262,507,504.00	\$	455,184,34
Fare Collection System @ Stations	EA	12	\$	45,297,456.00	\$	78,545,15
Maintenance Facility	SF	30,000	\$	30,000,000.00	\$	52,019,58
Vehicles	VEH	159	\$	818,787,831.00	\$	1,419,766,66
MEP	LS	2.0%	\$	72,871,983.69	\$	126,359,00
Transit Lighting	LS	3.0%	\$	109,307,975.54	\$	189,538,50
Station Signage	LS	1.0%		43,615,531.03	\$	75,628,72
Julian Lighting			Ť	,,	Ť	,,.
es:	T	RANSIT SUBTOTAL	\$	4,688,182,505.98	\$	8,129,243,01
otal Length of Roadway Improvements = 11.6 Miles	,			,, . ,		-, -, -,-
Old York Road to Southampton Road otal Length of Subway Improvements = 14.7 Miles Broad and Erie to Neshaminy Mall	PF	ROJECT SUBTOTAL		\$ 7,273,790,636.22	\$	12,612,651,4
ost for underground extension to Frankford Transportation	Erosio	n & Sediment Control	5.00%	\$ 363,689,531.81	\$	630,632,57
enter included	Maintenance an	d Protection of Traffic	5.00%	\$ 363,689,531.81	\$	630,632,57
ost includes subway extension from Southampton Road to		Mobilization	5.00%	\$ 363,689,531.81	\$	630,632,57
eshaminy Mall estimated at \$264,100,000.00 (2024).	C	Clearing and Grubbing	2.00%	\$ 145,475,812.72	\$	252,253,02
flation Rate = 3.5% ee Definition of Alternatives Report for roadway and transit			SUBTOTAL	. \$ 8,510,335,044.37	\$	14,756,802,10
egmentation.						
STIMATE VARIABILITY: The costs shown in this estimate	Pr	eliminary Engineering	8.25%	\$ 702,102,641.16	\$	1,217,436,17
present an estimate of probable costs prepared in good faith		Final Design	12.75%	\$ 1,085,067,718.16	\$	1,881,492,27
nd with reasonable care. HNTB has no control over the costs of		PM/CA		\$ 1,127,619,393.38	\$	1,955,276,28
		Insurance		\$ 170,206,700.89	\$	295,136,04
		modranoc		\$ 85,103,350.44	\$	147,568,02
onstruction labor, materials, or equipment, nor over competitive dding or negotiating methods and does not make any		Other	1 ()()%			177,000,0
dding or negotiating methods and does not make any ommitment or assume any duty to assure that bids or		Other			_	20 253 740 0
		Other	1.00% SUBTOTAL		\$	20,253,710,96
dding or negotiating methods and does not make any ommitment or assume any duty to assure that bids or		Other Contingency	SUBTOTAL		_	20,253,710,96 8,101,484,38



Project Info	ormation
Project Name	Roosevelt Blvd 2040 Cost Estimates
Job No.	74882

Roosevelt Blvd Alt 3.3 Cost Estimate

		ROADWAY				
IMPROVEMENT DESCRIPTION	UOM	QUANTITY	TC	OTAL COST (2024)	T	OTAL COST (2040)
Depressed Full Cap	LF	20,427	\$	800,476,406.68	\$	1,388,014,914
Depressed Full Cap with Ramps	LF	4,779	\$	369,757,804.17	\$	641,154,870
Depressed Partially Capped with At-Grade Intersections	LF	2,122	\$	158,888,662.84	\$	275,510,72
Depressed Partial Cap	LF	11,455	\$	403,187,126.68	\$	699,120,84
Depressed Partial Cap with Ramps	LF	4,779	\$	176,980,361.47	\$	306,881,47
Travel Lanes (Local Lanes)	LF	61,429	\$	88,737,963.45	\$	153,870,38
Travel Lanes (At Grade)	LF	19,989	\$	28,875,590.21	\$	50,069,87
Sidewalk	LF	61,429	\$	62,111,686.00	\$	107,700,79
Bike Lanes	LF	61,429	\$	37,774,507.30	\$	65,500,46
Median Landscaping	LF	27,329	\$	6,788,126.16	\$	11,770,51
Drainage and Stormwater Management	LF	61,429	\$	190,597,093.54	\$	330,492,69
Existing Signal Upgrades and Retimings	EACH	54	\$	27,000,000.00	\$	46,817,62
Utility Relocations	LACIT	61,429	\$	99,638,065.08	\$	172,771,01
Signing/Delineation	LS	1.5%		36,762,200.90	\$	63,745,14
Landscaping and Public Art	LS	2.0%	\$	49,016,267.87	\$	84,993,52
Roadway Lighting	LS	2.0%		49,016,267.87	\$	84,993,52
Roadway Lighting						
	RO	ADWAY SUBTOTAL	\$	2,585,608,130.23	\$	4,483,408,40
IMPROVEMENT DESCRIPTION	ПОМ	TRANSIT	Τ.	TAL COST (2024)		OTAL COST (2040)
	UOM	QUANTITY		OTAL COST (2024)		OTAL COST (2040)
2-Track, Bored Tunnel Subway	LF	5,332 38,785		173,705,896.00	\$	301,203,59
2- Track, Cut and Cover Subway	LF	· ·	\$	1,352,937,155.00	\$	2,345,974,13
2- Track, Elevated Subway	LF	29,590	\$	605,497,045.71	\$	1,049,923,42
2- Track, At Grade Subway	LF	3,889	\$	17,671,616.00	\$	30,642,33
2- Track, Elevated Extension to MFL	LF	4,224	\$	85,341,028.85	\$	147,980,15
MFL Junction @ FTC (Special Work and WYE)	EA	2	\$	2,000,000.00	\$	3,467,97
Bridge Street Garage Demolition	LF	370	\$	396,640.00	\$	687,76
Interlockings	EA	6"	\$	40,800,000.00	\$	70,746,63
BSS Terminal Yard Tracks	TF	8,000	\$	11,168,000.00	\$	19,365,15
Junction @ Erie BSS	EA	2	\$	450,000.00	\$	780,29
Yard Turnouts	EA	8	\$	1,376,000.00	\$	2,385,96
Subgrade Stations	EA	8	\$	958,340,608.00	\$	1,661,749,23
Elevated Stations	EA	4	\$	262,507,504.00	\$	455,184,34
Fare Collection System @ Stations	EA	12	\$	45,297,456.00	\$	78,545,15
Maintenance Facility	SF	30,000	\$	30,000,000.00	\$	52,019,58
Vehicles	VEH	159	\$	818,787,831.00	\$	1,419,766,66
MEP	LS	2.0%	\$	71,749,778.99	\$	124,413,11
Transit Lighting	LS	3.0%	\$	107,624,668.49	\$	186,619,67
Station Signage	LS	1.0%	\$	43,043,206.64	\$	74,636,31
es:	T	RANSIT SUBTOTAL	\$	4,628,694,434.67	\$	8,026,091,53
otal Length of Roadway Improvements = 11.6 Miles Old York Road to Southampton Road otal Length of Subway Improvements = 14.7 Miles	PR	OJECT SUBTOTAL		\$ 7,214,302,564.91		\$ 12,509,499,93
Broad and Erie to Neshaminy Mall Cost for elevated extension to Frankford Transportation Center	Erosion	n & Sediment Control	5.00%	\$ 360,715,128.25		\$ 625,474,99
ncluded	Maintenance and	d Protection of Traffic	5.00%	\$ 360,715,128.25		\$ 625,474,99
Cost includes subway extension from Southampton Road to		Mobilization	5.00%	\$ 360,715,128.25		\$ 625,474,99
leshaminy Mall estimated at \$264,100,000.00 (2024).	С	learing and Grubbing	2.00%	\$ 144,286,051.30		\$ 250,189,99
oflation Rate = 3.5%		3 - 3	SUBTOTAL			\$ 14,636,114,92
See Definition of Alternatives Report for roadway and transit				3, 11, 11, 11, 11, 11, 11, 11, 11, 11, 1		* **,***,***,**
egmentation. STIMATE VARIABILITY: The costs shown in this estimate	Drz	eliminary Engineering	8.25%	\$ 696,360,555.08		\$ 1,207,479,48
epresent an estimate of probable costs prepared in good faith	FIG	Final Design	12.75%	\$ 1,076,193,585.12		\$ 1,866,104,65
nd with reasonable care. HNTB has no control over the costs of		PM/CA	13.25%	\$ 1,118,397,255.12		\$ 1,939,285,22
onstruction labor, materials, or equipment, nor over competitive			2.00%			
idding or negotiating methods and does not make any		Insurance				
ommitment or assume any duty to assure that bids or egotiated prices will not vary from this estimate.		Other	1.00%	\$ 84,407,340.01		
ogonatoa prioco wili not vary irom tilis coninate.			SUBTOTAL	\$ 11,584,907,416.29		\$ 20,088,067,73
I I						
		Contingency	40.00%	\$ 4,633,962,966.52		\$ 8,035,227,09



Ì	Project Inf	formation
	Project Name	Roosevelt Blvd 2040 Cost Estimates
ſ	Job No.	74882

Roosevelt Blvd Alt 4 Cost Estimate

Neighborhood Blvd with Subway

Neighborhood Blvd with Subway		ROADWAY				
IMPROVEMENT DESCRIPTION	UOM	QUANTITY	тот	AL COST (2024)	TOTAL COST (20	40)
Travel Lanes	LF	61,429	\$	176,296,487.42	\$	305,695,648.06
New Intersection Signalization	EACH	29	\$	14,500,000.00	\$	25,142,797.58
Sidewalk	LF	61,429	\$	57,970,906.93	\$	100,520,743.34
Bike Lanes	LF	61,429	\$	37,774,507.30	\$	65,500,468.32
Median Landscaping	LF	61,429	\$	11,495,925.10	\$	19,933,773.63
Drainage and Stormwater Management	LF	61,429	\$	259,952,287.98	\$	450,753,638.38
Existing Signal Upgrades and Retimings	EACH	54	\$	27,000,000.00	\$	46,817,623.08
Utility Relocations	LF	61,429	\$	99,638,065.08	\$	172,771,013.88
Signing/Delineation	LS	1.5%	\$	10,269,422.70	\$	17,807,035.59
Landscaping and Public Art	LS	2.0%	\$	13,692,563.60	\$	23,742,714.13
Roadway Lighting	LS	2.0%	\$	13,692,563.60	\$	23,742,714.13
	ROAD	WAY SUBTOTAL	\$	722,282,729.71	\$ 1,3	252,428,170.12
		TRANSIT				
IMPROVEMENT DESCRIPTION	UOM	QUANTITY		AL COST (2024)	TOTAL COST (20	40)
2-Track, Bored Tunnel Subway	LF	5,332	\$	173,705,896.00	\$	301,203,598.70
2- Track, Cut and Cover Subway	LF	38,785	\$	1,352,937,155.00	\$ 2,	345,974,139.54
2- Track, Elevated Subway	LF	29,590	\$	605,497,045.71	\$ 1,1	049,923,424.42
2- Track, At Grade Subway	LF	3,889	\$	17,671,616.00	\$	30,642,335.45
Interlockings	EA	6	\$	40,800,000.00	\$	70,746,630.43
BSS Terminal Yard Tracks	TF	8,000	\$	11,168,000.00	\$	19,365,156.09
Junction @ Erie BSS	EA	2	\$	450,000.00	\$	780,293.72
Yard Turnouts	EA	8	\$	1,376,000.00	\$	2,385,964.79
Subgrade Stations	EA	8	\$	958,340,608.00	\$ 1,0	661,749,235.67
Elevated Stations	EA	4	\$	262,507,504.00	\$	455,184,347.29
Fare Collection System @ Stations	EA	12	\$	45,297,456.00	\$	78,545,156.34
Maintenance Facility	SF	30,000	\$	30,000,000.00	\$	52,019,581.19
Vehicles	VEH	144	\$	741,543,696.00	\$ 1,3	285,826,416.79
MEP	LS	2.0%	\$	69,995,025.61	\$	121,370,397.27
Transit Lighting	LS	3.0%	s	104,992,538.42	\$	182,055,595.91
Station Signage	LS	1.0%	\$	34,997,512.81	\$	60,685,198.64
	TPA	NSIT SUBTOTAL	¢	4,451,280,053.55	\$ 7	718,457,472.23
Nation.	110	MOIT CODITOTAL	*	4,401,200,000.00	Ψ ',	110,407,472.20
Notes: Total Length of Roadway Improvements = 11.6 Miles Old York Road to Southampton Road Total Length of Subway Improvements = 14.7 Miles	PRO	JECT SUBTOTAL		\$ 5,173,562,783.26	\$ 8,9	970,885,642.35
Broad and Frie to Neshaminy Mall		Sediment Control	5.00%	\$ 258,678,139.16		448,544,282.1
Cost for extension to Frankford Transportation Center not	faintenance and P	rotection of Traffic	5.00%	\$ 258,678,139.16	<u> </u>	448,544,282.12
included		Mobilization	5.00%	\$ 258,678,139.16		448,544,282.12
Cost includes subway extension from Southampton Road to	Clea	aring and Grubbing	2.00%	\$ 103,471,255.67		179,417,712.8
Neshaminy Mall estimated at \$264,100,000.00 (2024). Inflation Rate = 3.5%			SUBT	OTAL \$ 6,053,068,456.42	\$ 10,	495,936,201.5
See Definition of Alternatives Report for roadway and transit						
segmentation.	Prelir	ninary Engineering	8.25%	\$ 499,378,147.65		865,914,736.6
ESTIMATE VARIABILITY: The costs shown in this estimate		Final Design	12.75%	\$ 771,766,228.19		338,231,865.70
represent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of		PM/CA	13.25%	\$ 802,031,570.48		390,711,546.7
construction labor, materials, or equipment, nor over competitive		Insurance	2.00%	\$ 121,061,369.13		209,918,724.0
bidding or negotiating methods and does not make any		Other	1.00%	\$ 60,530,684.56		104,959,362.0
commitment or assume any duty to assure that bids or negotiated prices will not vary from this estimate.			SUBT	OTAL \$ 8,307,836,456.43	\$ 14,	405,672,436.6
negotiated prices will not vary norm und estimate.		Contingency	40.00%	\$ 3,323,134,582.57	\$ 5,	762,268,974.6
		_				
•		Т	OTAL PROJECT	COST \$ 11,630,971,039.01	\$ 20,	167,941,411.29



Project In	formation
Project Name	Roosevelt Blvd 2040 Cost Estimates
Job No.	74882

Roosevelt Blvd Alt 4.2 Cost Estimate

Neighborhood Blvd with Subway (Underground to MFL)

	UOM	ROADWAY QUANTITY	TOTAL	COST (2024)		TOTAL COST (2040)
Travel Lanes	LF	61,429	\$	176,296,487.42	\$	305,695,648.0
New Intersection Signalization	EACH	29	\$	14,500,000.00	\$	25,142,797.5
Sidewalk	LF	61,429	\$	57,970,906.93	\$	100,520,743.3
Bike Lanes	LF	61,429	\$	37,774,507.30	\$	65,500,468.3
Median Landscaping	LF		\$	11,495,925.10	\$	19,933,773.6
Drainage and Stormwater Management	LF	61,429	\$	259,952,287.98	\$	450,753,638.3
Existing Signal Upgrades and Retimings	EACH		\$	27,000,000.00	\$	46,817,623.0
Utility Relocations	LF		\$	99.638.065.08	\$	172.771.013.8
Signing/Delineation	LS		\$	10,269,422.70	\$	17,807,035.
Landscaping and Public Art	LS		\$	13,692,563.60	\$	23,742,714.
Roadway Lighting	LS		\$	13,692,563.60	\$	23,742,714.
. rodding Lighting			\$	722,282,729.71	\$	1,252,428,170.
	NOAD	TRANSIT		722,202,720.71	<u> </u>	1,202,420,170.
IMPROVEMENT DESCRIPTION	UOM	QUANTITY	TOTAL	COST (2024)		TOTAL COST (2040)
2-Track, Bored Tunnel Subway	LF	5,332	\$	173,705,896.00	\$	301,203,598.
2- Track, Cut and Cover Subway	LF	38,785	\$	1,352,937,155.00	\$	2,345,974,139.
2- Track, Elevated Subway	LF	29,590	\$	605,497,045.71	\$	1,049,923,424.
2- Track, At Grade Subway	LF	3,889	\$	17,671,616.00	\$	30,642,335.
2- Track, Cut and Cover Extension to MFL	LF	4,224	S . /	143,451,264.00	\$	248,742,489.
Bridge Street Garage Demolition	LF	370	\$	396,640.00	\$	687,768.
Interlockings	EA		\$	40,800,000.00	\$	70,746,630.
BSS Terminal Yard Tracks	TF		\$	11,168,000.00	\$	19.365.156.
Junction @ Erie BSS	EA		\$	450,000.00	\$	780,293.
Yard Turnouts	EA		\$	1,376,000.00	\$	2,385,964
Subgrade Stations	EA		\$	958,340,608.00	\$	1,661,749,235.
Elevated Stations	EA		\$	262,507,504.00	\$	455,184,347.
Fare Collection System @ Stations	EA		\$	45,297,456.00	\$	78,545,156.
Maintenance Facility	SF		\$	30,000,000.00	\$	52,019,581.
Vehicles	VEH		\$	818,787,831.00	\$	1,419,766,668
MEP	LS		\$	72,871,983.69	\$	126,359,002
Transit Lighting	LS		\$	109,307,975.54	\$	189,538,503
Station Signage	LS		\$	43,615,531.03	\$	75,628,721.
	TRA	NSIT SUBTOTAL	\$	4,688,182,505.98	\$	8,129,243,017.
lotes:			\$		\$	
lotes: Total Length of Roadway Improvements = 11.6 Miles • Old York Road to Southampton Road		JECT SUBTOTAL	\$	4,688,182,505.98 \$ 5,410,465,235.69	\$	\$,129,243,017. \$ 9,381,671,187.
Total Length of Roadway Improvements = 11.6 Miles Old York Road to Southampton Road Total Length of Subway Improvements = 14.7 Miles	PRO	JECT SUBTOTAL		\$ 5,410,465,235.69	\$	\$ 9,381,671,187.
Total Length of Roadway Improvements = 11.6 Miles Old York Road to Southampton Road Total Length of Subway Improvements = 14.7 Miles Broad and Erie to Neshaminy Mall	PRO Erosion 8	JECT SUBTOTAL Sediment Control	5.00%	\$ 5,410,465,235.69 \$ 270,523,261.78	\$	\$ 9,381,671,187. \$ 469,083,559.
Total Length of Roadway Improvements = 11.6 Miles Old York Road to Southampton Road Total Length of Subway Improvements = 14.7 Miles Broad and Erie to Neshaminy Mall Cost for underground extension to Frankford Transportation	PRO	JECT SUBTOTAL Sediment Control Protection of Traffic	5.00% 5.00%	\$ 5,410,465,235.69 \$ 270,523,261.78 \$ 270,523,261.78	\$	\$ 9,381,671,187. \$ 469,083,559. \$ 469,083,559.
Total Length of Roadway Improvements = 11.6 Miles • Old York Road to Southampton Road Total Length of Subway Improvements = 14.7 Miles • Broad and Erie to Neshaminy Mall Cost for underground extension to Frankford Transportation Center included	PRO Erosion 8 Maintenance and P	JECT SUBTOTAL A Sediment Control Protection of Traffic Mobilization	5.00% 5.00% 5.00%	\$ 5,410,465,235.69 \$ 270,523,261.78 \$ 270,523,261.78 \$ 270,523,261.78	\$	\$ 9,381,671,187 \$ 469,083,559 \$ 469,083,559 \$ 469,083,559
Total Length of Roadway Improvements = 11.6 Miles	PRO Erosion 8 Maintenance and P	JECT SUBTOTAL Sediment Control Protection of Traffic	5.00% 5.00% 5.00% 2.00%	\$ 5,410,465,235.69 \$ 270,523,261.78 \$ 270,523,261.78 \$ 270,523,261.78 \$ 108,209,304.71	\$	\$ 9,381,671,187 \$ 469,083,559 \$ 469,083,559 \$ 469,083,559 \$ 187,633,423
Total Length of Roadway Improvements = 11.6 Miles Old York Road to Southampton Road Total Length of Subway Improvements = 14.7 Miles Broad and Erie to Neshaminy Mall Cost for underground extension to Frankford Transportation Center included	PRO Erosion 8 Maintenance and P	JECT SUBTOTAL A Sediment Control Protection of Traffic Mobilization	5.00% 5.00% 5.00%	\$ 5,410,465,235.69 \$ 270,523,261.78 \$ 270,523,261.78 \$ 270,523,261.78 \$ 108,209,304.71	\$	\$ 9,381,671,187 \$ 469,083,559 \$ 469,083,559 \$ 469,083,559 \$ 187,633,423
Total Length of Roadway Improvements = 11.6 Miles	PRO. Erosion 8 Maintenance and P	JECT SUBTOTAL A Sediment Control Protection of Traffic Mobilization aring and Grubbing	5.00% 5.00% 5.00% 2.00% SUBTOT	\$ 5,410,465,235.69 \$ 270,523,261.78 \$ 270,523,261.78 \$ 270,523,261.78 \$ 108,209,304.71 AL \$ 6,330,244,325.76	\$	\$ 9,381,671,187 \$ 469,083,559 \$ 469,083,559 \$ 469,083,559 \$ 187,633,423 \$ 10,976,555,289
Total Length of Roadway Improvements = 11.6 Miles • Old York Road to Southampton Road Total Length of Subway Improvements = 14.7 Miles • Broad and Erie to Neshaminy Mall Cost for underground extension to Frankford Transportation Center included Cost includes subway extension from Southampton Road to Neshaminy Mall estimated at \$264,100,000.00 (2024). Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation.	PRO. Erosion 8 Maintenance and P	JECT SUBTOTAL Sediment Control Protection of Traffic Mobilization aring and Grubbing	5.00% 5.00% 5.00% 2.00% SUBTO1	\$ 5,410,465,235.69 \$ 270,523,261.78 \$ 270,523,261.78 \$ 270,523,261.78 \$ 270,523,261.78 \$ 108,209,304.71 AL \$ 6,330,244,325.76 \$ 522,245,156.87	\$	\$ 9,381,671,187 \$ 469,083,559 \$ 469,083,559 \$ 469,083,559 \$ 187,633,423 \$ 10,976,555,289
Total Length of Roadway Improvements = 11.6 Miles • Old York Road to Southampton Road Total Length of Subway Improvements = 14.7 Miles • Broad and Erie to Neshaminy Mall Cost for underground extension to Frankford Transportation Center included Cost includes subway extension from Southampton Road to Neshaminy Mall estimated at \$264,100,000.00 (2024). Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate	PRO. Erosion 8 Maintenance and P	JECT SUBTOTAL Sediment Control Protection of Traffic Mobilization aring and Grubbing minary Engineering Final Design	5.00% 5.00% 5.00% 2.00% SUBTOT 8.25% 12.75%	\$ 5,410,465,235.69 \$ 270,523,261.78 \$ 270,523,261.78 \$ 270,523,261.78 \$ 108,209,304.71 \$ 6,330,244,325.76 \$ 522,245,156.87 \$ 807,106,151.53	\$	\$ 9,381,671,187 \$ 469,083,559 \$ 469,083,559 \$ 469,083,559 \$ 187,633,423 \$ 10,976,555,289 \$ 905,565,811 \$ 1,399,510,799
Total Length of Roadway Improvements = 11.6 Miles	PRO. Erosion 8 Maintenance and P	JECT SUBTOTAL Sediment Control Protection of Traffic Mobilization aring and Grubbing minary Engineering Final Design PM/CA	5.00% 5.00% 5.00% 2.00% SUBTOT 8.25% 12.75% 13.25%	\$ 5,410,465,235.69 \$ 270,523,261.78 \$ 270,523,261.78 \$ 270,523,261.78 \$ 108,209,304.71 AL \$ 6,330,244,325.76 \$ 522,245,156.87 \$ 807,106,151.53 \$ 838,757,373.16	\$	\$ 9,381,671,187 \$ 469,083,559 \$ 469,083,559 \$ 469,083,559 \$ 187,633,423 \$ 10,976,555,289 \$ 905,565,811 \$ 1,399,510,799 \$ 1,454,393,575
Total Length of Roadway Improvements = 11.6 Miles	PRO. Erosion 8 Maintenance and P	JECT SUBTOTAL Sediment Control Protection of Traffic Mobilization aring and Grubbing minary Engineering Final Design PM/CA Insurance	5.00% 5.00% 5.00% 2.00% SUBTOT 8.25% 12.75% 13.25% 2.00%	\$ 5,410,465,235.69 \$ 270,523,261.78 \$ 270,523,261.78 \$ 108,209,304.71 \$ 6,330,244,325.76 \$ 522,245,156.87 \$ 807,106,151.53 \$ 838,757,373.16 \$ 126,604,886.52	\$	\$ 9,381,671,187 \$ 469,083,559 \$ 469,083,559 \$ 187,633,423 \$ 10,976,555,289 \$ 905,565,811 \$ 1,399,510,799 \$ 1,454,393,575 \$ 219,531,105
Total Length of Roadway Improvements = 11.6 Miles • Old York Road to Southampton Road Total Length of Subway Improvements = 14.7 Miles • Broad and Erie to Neshaminy Mall Cost for underground extension to Frankford Transportation Center included Cost includes subway extension from Southampton Road to Neshaminy Mall estimated at \$264,100,000.00 (2024). Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate represent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive bidding or negotiating methods and does not make any	PRO. Erosion 8 Maintenance and P	JECT SUBTOTAL Sediment Control Protection of Traffic Mobilization aring and Grubbing minary Engineering Final Design PM/CA	5.00% 5.00% 5.00% 2.00% SUBTOT 8.25% 12.75% 13.25% 2.00% 1.00%	\$ 5,410,465,235.69 \$ 270,523,261.78 \$ 270,523,261.78 \$ 108,209,304.71 \$ 6,330,244,325.76 \$ 522,245,156.87 \$ 807,106,151.53 \$ 838,757,373.16 \$ 126,604,886.52 \$ 63,302,443.26	\$	\$ 9,381,671,187 \$ 469,083,559 \$ 469,083,559 \$ 469,083,559 \$ 187,633,423 \$ 10,976,555,289 \$ 905,565,811 \$ 1,399,510,799 \$ 1,454,393,575 \$ 219,531,105 \$ 109,765,552
Total Length of Roadway Improvements = 11.6 Miles • Old York Road to Southampton Road Total Length of Subway Improvements = 14.7 Miles • Broad and Erie to Neshaminy Mall Cost for underground extension to Frankford Transportation Center included Cost includes subway extension from Southampton Road to Neshaminy Mall estimated at \$264,100,000.00 (2024). Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate represent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive bidding or negotiating methods and does not make any commitment or assume any duty to assure that bids or negotiated	PRO. Erosion 8 Maintenance and P	JECT SUBTOTAL Sediment Control Protection of Traffic Mobilization aring and Grubbing minary Engineering Final Design PM/CA Insurance	5.00% 5.00% 5.00% 2.00% SUBTOT 8.25% 12.75% 13.25% 2.00%	\$ 5,410,465,235.69 \$ 270,523,261.78 \$ 270,523,261.78 \$ 108,209,304.71 \$ 6,330,244,325.76 \$ 522,245,156.87 \$ 807,106,151.53 \$ 838,757,373.16 \$ 126,604,886.52 \$ 63,302,443.26	\$	\$ 9,381,671,187 \$ 469,083,559 \$ 469,083,559 \$ 469,083,559 \$ 187,633,423 \$ 10,976,555,289 \$ 905,565,811 \$ 1,399,510,799 \$ 1,454,393,575 \$ 219,531,105 \$ 109,765,552
Total Length of Roadway Improvements = 11.6 Miles • Old York Road to Southampton Road Total Length of Subway Improvements = 14.7 Miles • Broad and Erie to Neshaminy Mall Cost for underground extension to Frankford Transportation Center included Cost includes subway extension from Southampton Road to Neshaminy Mall estimated at \$264,100,000.00 (2024). Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate represent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive bidding or negotiating methods and does not make any	PRO. Erosion 8 Maintenance and P	JECT SUBTOTAL A Sediment Control Protection of Traffic Mobilization aring and Grubbing minary Engineering Final Design PM/CA Insurance Other	5.00% 5.00% 5.00% 2.00% SUBTOT 8.25% 12.75% 13.25% 2.00% 1.00% SUBTOT	\$ 5,410,465,235.69 \$ 270,523,261.78 \$ 270,523,261.78 \$ 270,523,261.78 \$ 108,209,304.71 AL \$ 6,330,244,325.76 \$ 522,245,156.87 \$ 807,106,151.53 \$ 838,757,373.16 \$ 126,604,886.52 \$ 63,302,443.26 AL \$ 8,688,260,337.10	\$	\$ 9,381,671,187. \$ 469,083,559. \$ 469,083,559. \$ 469,083,559. \$ 187,633,423. \$ 10,976,555,289. \$ 905,565,811. \$ 1,399,510,799. \$ 1,454,393,575. \$ 219,531,105. \$ 109,765,552. \$ 15,065,322,134.
Total Length of Roadway Improvements = 11.6 Miles • Old York Road to Southampton Road Total Length of Subway Improvements = 14.7 Miles • Broad and Erie to Neshaminy Mall Cost for underground extension to Frankford Transportation Center included Cost includes subway extension from Southampton Road to Neshaminy Mall estimated at \$264,100,000.00 (2024). Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate represent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive bidding or negotiating methods and does not make any commitment or assume any duty to assure that bids or negotiated	PRO. Erosion 8 Maintenance and P	JECT SUBTOTAL Sediment Control Protection of Traffic Mobilization aring and Grubbing minary Engineering Final Design PM/CA Insurance	5.00% 5.00% 5.00% 2.00% SUBTOT 8.25% 12.75% 13.25% 2.00% 1.00%	\$ 5,410,465,235.69 \$ 270,523,261.78 \$ 270,523,261.78 \$ 108,209,304.71 \$ 6,330,244,325.76 \$ 522,245,156.87 \$ 807,106,151.53 \$ 838,757,373.16 \$ 126,604,886.52 \$ 63,302,443.26	\$	\$ 9,381,671,187. \$ 469,083,559. \$ 469,083,559. \$ 469,083,559. \$ 187,633,423. \$ 10,976,555,289. \$ 905,565,811. \$ 1,399,510,799. \$ 1,454,393,575. \$ 219,531,105.



Project I	formation
Project Name	Roosevelt Blvd 2040 Cost Estimates
Job No.	74882

Roosevelt Blvd Alt 4.3 Cost Estimate

Neighborhood Blvd with Subway (Elevated to MFL)

Junction @ Erie BSS	Neighborhood Blvd with Subway (Elevated to MFL)		ROADWAY				
New Intersection Signalization					<u> </u>		• • •
Bit Lunes						_	
Bite Larrier F 61.429 \$ \$77.74.507.20 \$ 65.00.640.23 Bite Larrier F 61.429 \$ \$ \$ \$1.450.551 \$ \$ \$ \$ \$ \$ \$ \$ \$	0					· ·	
Median Landscaping							
Dinatego and Stormwater Management					- 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
Existing Signal Upgrades and Returning	. 0						
Use Description LF 61-429 \$ 99,638 0650 \$ 172,771,013.88	· · · · · · · · · · · · · · · · · · ·						
Signing Defineation LS	0 0 10 0						
Landscaping and Public Art IS 2.0% \$ 1,38,82,983.60 \$ 23,742,74.13 Roadway Lighting IS 2.0% \$ 1,38,82,983.60 \$ 23,742,74.13 ROADWAY SUBTOTAL \$ 722,822,728.71 \$ 1,252,428,770.12 TRANSIT IMPROVEMENT DESCRIPTION IMPRO	- ,						
Roadway Lighting	3 3					_	
Name	· •		2.0%				
MRROVEMENT DESCRIPTION	rosamay Eighning						
MPROVEMENT DESCRIPTION UOM		ROAD		•	122,202,120.11	۳	1,202,420,110.12
2-Track, Bored Turnell Subway	IMPROVEMENT DESCRIPTION	UOM		тот	AL COST (2024)		TOTAL COST (2040)
2-Track_Cut and Cover Subvay						\$	
2. Track, Elevated Subway 2. Track, Clored Subway 4. LF 3.889, \$ 1.7671,816.00 \$ 3.03642,324.42.42 3. 88.541,028.85 \$ 1.7671,816.00 \$ 3.03642,324.42 4. 88.541,028.85 \$ 147,980,152.65 MFL Junction @ FTC (Special Work and WYE) EA 2. 2 \$ 2.000,000.00 \$ 3.467,972.86 MFL Junction @ FTC (Special Work and WYE) EA 2. 3 \$ 2.000,000.00 \$ 3.467,972.82 Bridge Street Garage Demolition LF 370, \$ 3.05642,00 \$ 3.0677.82.22 Bridge Street Garage Demolition LF 370, \$ 3.05642,00 \$ 3.0677.82.22 Bridge Street Garage Demolition LF 370, \$ 3.05642,00 \$ 3.077,982.23 BSD Terminal Yard Tracks TF 8.000 \$ 3.11,168,000.00 \$ 3.10,746,503.00 Junction @ File BSS EA 2 \$ 4,000.00 \$ 3.176,000.00 \$ 3.0593,772 Subgrade Stations EA 4 \$ 4 \$ 5 \$ 6,000,000.00 \$ 3.000.00	·						
2. Track, At Grade Subway	·					_	
2-Track Elevated Extension to MFL	· · · · · · · · · · · · · · · · · · ·				,		,,-
MFL Junction @ FTC (Special Work and WYE)	· · · · · · · · · · · · · · · · · · ·		4,224			_	
Bridge Street Carage Demotition	· · · · · · · · · · · · · · · · · · ·	FA	2				
Interlockings							
BSS Teminal Yard Tracks	, ,						
Yard Turnouts	·	TF	8,000	\$		\$	19,365,156.09
Subgrade Stations	Junction @ Erie BSS	EA	2	\$	450,000.00	\$	780,293.72
Elevated Stations	Yard Turnouts	EA	8	\$	1,376,000.00	\$	2,385,964.79
Fare Collection System @ Stations	Subgrade Stations	EA	8	\$	958,340,608.00	\$	1,661,749,235.67
Maintenance Facility	Elevated Stations	EA	4	\$	262,507,504.00	\$	455,184,347.29
Vehicles	Fare Collection System @ Stations	EA	12	\$	45,297,456.00	\$	78,545,156.34
MEP	Maintenance Facility		30,000	\$	30,000,000.00	\$	52,019,581.19
Transit Lighting LS 3.0% \$ 107,624,668.49 \$ 186,619,672.70	Vehicles	VEH		\$	818,787,831.00	\$	1,419,766,668.54
Station Signage LS 1.0% \$ 43,043,206.64 \$ 74,636,319.42	MEP	LS		\$	71,749,778.99	\$	124,413,115.13
Notes: Total Length of Roadway Improvements = 11.6 Miles Old York Road to Southampton Road Total Length of Subway Improvements = 14.7 Miles PROJECT SUBTOTAL Broad and Erie to Neshaminy Mail Cost for elevated extension for Frankford Transportation Center included Cost includes subway extension from Southampton Road to Neshaminy Mail estimated at \$264,100,000.00 (2024) Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate represent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive bidding or negotiating methods and does not make any commitment or assume any duty to assure that bids or negotiated							
Notes: Total Length of Roadway Improvements = 11.6 Miles Old York Road to Southampton Road Total Length of Subway Improvements = 14.7 Miles Broad and Erie to Neshaminy Mall Cost for elevated extension to Frankford Transportation Center included Cost for elevated extension for maker of Transportation Road to Neshaminy Mall estimated at \$264,100,000.00 (2024). Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate represent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive bidding or negotiating methods and does not make any commitment or assume any duty to assure that bids or negotiated PROJECT SUBTOTAL \$ 5,350,977,164.38 \$ 9,278,519,702.48 \$ 267,548,858.22 \$ 463,925,985.12 \$ 463,925,985.12 \$ 463,925,985.12 \$ 0,00% \$ 267,548,858.22 \$ 463,925,985.12 \$ 463,925,985.12 \$ 463,925,985.12 \$ 463,925,985.12 \$ 463,925,985.12 \$ 10,855,868.05.20 \$ 107,019,543.29 \$ 10,855,868,051.90 \$	Station Signage	LS	1.0%	\$	43,043,206.64	\$	74,636,319.42
Notes: Total Length of Roadway Improvements = 11.6 Miles Old York Road to Southampton Road Total Length of Subway Improvements = 14.7 Miles Broad and Erie to Neshaminy Mall Cost for elevated extension to Frankford Transportation Center included Cost for elevated extension for maker of Transportation Road to Neshaminy Mall estimated at \$264,100,000.00 (2024). Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate represent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive bidding or negotiating methods and does not make any commitment or assume any duty to assure that bids or negotiated PROJECT SUBTOTAL \$ 5,350,977,164.38 \$ 9,278,519,702.48 \$ 267,548,858.22 \$ 463,925,985.12 \$ 463,925,985.12 \$ 463,925,985.12 \$ 0,00% \$ 267,548,858.22 \$ 463,925,985.12 \$ 463,925,985.12 \$ 463,925,985.12 \$ 463,925,985.12 \$ 463,925,985.12 \$ 10,855,868.05.20 \$ 107,019,543.29 \$ 10,855,868,051.90 \$		TPA	NSIT SURTOTAL	¢	4 628 694 434 67	¢	8 026 091 532 36
Old York Road to Southampton Road Total Length of Subway Improvements = 14.7 Miles Broad and Erie to Neshaminy Mall Cost for elevated extension to Frankford Transportation Center included Cost includes subway extension from Southampton Road to Neshaminy Mall estimated at \$264,100,000.00 (2024). Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate represent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive bidding or negotiating methods and does not make any commitment or assume any duty to assure that bids or negotiated Erosion & Sediment Control Maintenance and Protection of Traffic 5.00% \$ 267,548,858.22 \$ 463,925,985.12 \$ 463,925,985.12 \$ 463,925,985.12 \$ 108,555,868.052 \$ 107,019,543.29 \$ 107,019,543.29 \$ 107,019,543.29 \$ 107,019,543.29 \$ 107,019,543.29 \$ 108,558,680,51.90 \$ 108,558,680,51.90 Preliminary Engineering Brial Design Final Design Final Design Final Design 12.75% Total Preliminary Engineering S 229,535,234.91 S 29,535,234.91 S 1,438,402,516.88 S 1,384,123,176.62 S 1,384	Notes:	110-	The state of the s	<u> </u>	4,020,004,404.01	Ι Ψ	0,020,001,002.00
Broad and Erie to Neshaminy Mall Cost for elevated extension to Frankford Transportation Center included Cost includes subway extension from Southampton Road to Neshaminy Mall estimated at \$264,100,000.00 (2024). Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate represent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive bidding or negotiating methods and does not make any commitment or assume any duty to assure that bids or negotiated Erosion & Sediment Control 5.00% \$ 267,548,858.22 \$ 463,925,985.12 \$ 463,925,985.12 \$ 463,925,985.12 \$ 463,925,985.12 \$ 19,855,868.22 \$ 463,925,985.12 \$ 10,855,703,94.05 \$ 107,019,543.29 \$ 10,855,868,051.90 \$ 107,019,543.29 \$ 10,855,868,051.90 \$ 10,	Old York Road to Southampton Road	PRO	JECT SUBTOTAL		\$ 5,350,977,164.38	<u>l</u>	\$ 9,278,519,702.48
Cost for elevated extension to Frankford Transportation Center included Maintenance and Protection of Traffic Mobilization Cost includes subway extension from Southampton Road to Neshaminy Mall estimated at \$264,100,000.00 (2024). Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate represent an estimate of probable costs prepared in good fash and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive bidding or negotiating methods and does not make any commitment or assume any duty to assure that bids or negotiated Maintenance and Protection of Traffic Mobilization 5.00% \$ 267,548,858.22 \$ 463,925,985.12 \$ 463,925,985.12 \$ 463,925,985.12 \$ 463,925,985.12 \$ 10,855,868.02 \$ 10,7019,543.29 \$ 10,855,868.02 \$ 10,7019,543.29 \$ 10,855,868.05 \$ 10,855,868.051.90 \$ 1	Broad and Frie to Neshaminy Mall						
Cost includes subway extension from Southampton Road to Neshaminy Mall estimated at \$264,100,000.00 (2024). Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate represent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive bidding or negotiating methods and does not make any commitment or assume any duty to assure that bids or negotiated Clearing and Grubbing 2.00% \$ 107,019,543.29 \$ 10,855,868,051.90 \$ 1,0855,868,051.90 \$ 185,570,394.05 \$ 10,855,868,051.90 \$ 10,855,868,051.90 \$ 1,384,123,176.62 \$ 1,384,123,176.62 \$ 1,384,123,176.62 \$ 1,438,402,516.85 \$ 1,438,402,516.85 \$ 1,438,402,516.85 \$ 1,438,402,516.85 \$ 1,438,402,516.85 \$ 1,00% \$ 62,606,432.82 \$ 108,558,680.52 \$ 10,855,868.05 \$ 1,489,678,901.23 Contingency \$ 1,4899,678,901.23		Maintenance and P	rotection of Traffic			1	
Neshaminy Mall estimated at \$264,100,000.00 (2024). Inflation Rate = 3.5% \$6,260,643,282.33 \$10,855,868,051.90 \$895,609,114.28			Mobilization	5.00%		1	
Inflation Rate = 3.5% See Definition of Alternatives Report for roadway and transit segmentation. ESTIMATE VARIABILITY: The costs shown in this estimate represent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive bidding or negotiating methods and does not make any commitment or assume any duty to assure that bids or negotiated Preliminary Engineering 8.25% \$ 516,503,070.79 \$ 895,609,114.28 Final Design 12.75% \$ 798,232,018.50 \$ 1,384,123,176.62 \$ 1,438,402,516.86 Insurance 2.00% \$ 125,212,865.65 \$ 217,117,361.04 \$ 1.00% \$ 62,606,432.82 \$ 108,558,680.52 \$ 14,899,678,901.23 Contingency 40.00% \$ 3,437,093,162.00 \$ 5,959,871,560.49		Clea	aring and Grubbing			1	
segmentation. Preliminary Engineering 8.25% \$ 16,503,070.79 \$ 895,609,114.26 • ESTIMATE VARIABILITY: The costs shown in this estimate represent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive bidding or negotiating methods and does not make any commitment or assume any duty to assure that bids or negotiated Preliminary Engineering 8.25% \$ 516,503,070.79 \$ 895,609,114.26 \$ 1,384,123,176.62 \$ 1,384,123,176.62 \$ 1,384,123,176.62 \$ 1,484,402,516.88 \$ 148,402,516.88 \$ 148,402,516.88 \$ 217,117,361.04 \$ 200% \$ 125,212,865.65 \$ 217,117,361.04 \$ 108,558,680.52 \$ 108,558,680.52 \$ 108,558,680.52 \$ 108,558,680.52 \$ 14,899,678,901.23 Contingency 40.00% \$ 3,437,093,162.00 \$ 5,959,871,560.49				SUBT	OTAL \$ 6,260,643,282.33]	\$ 10,855,868,051.90
ESTIMATE VARIABILITY: The costs shown in this estimate represent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive bidding or negotiating methods and does not make any commitment or assume any duty to assure that bids or negotiated Final Design PM/CA Final Design PM/CA P						1	
represent an estimate of probable costs prepared in good faith and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive bidding or negotiating methods and does not make any commitment or assume any duty to assure that bids or negotiated PM/CA 13.25% \$ 829,535,234.91 \$ 1,438,402,516.88 \$ 217,117,361.04 \$ 1,00% \$ 62,606,432.82 \$ 108,558,680.52 \$ 108,558,680.52 \$ 108,558,680.52 \$ 108,558,680.52 \$ 14,899,678,901.23 \$ 14,899,678,		Prelin				4	
and with reasonable care. HNTB has no control over the costs of construction labor, materials, or equipment, nor over competitive bidding or negotiating methods and does not make any commitment or assume any duty to assure that bids or negotiated Contingency August 1.00% \$ 125,212,865.65 \$ 217,117,361.04 \$ 100% \$ 62,606,432.82 \$ 108,558,680.5					, . ,	-	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
construction labor, materials, or equipment, nor over competitive bidding or negotiating methods and does not make any commitment or assume any duty to assure that bids or negotiated Contingency Con						-	
SUBTOTAL \$ 8,592,732,904.99 \$ 14,899,678,901.23 \$ 5,959,871,560.49						-	
Contingency 40.00% \$ 3,437,093,162.00 \$ 5,959,871,560.48			otner			ł	
	commitment or assume any duty to assure that bids or negotiated			SUBI	OTAL 3 0,092,732,904.99	1	\$ 14,899,678,901.23
TOTAL PROJECT COST \$ 12,029,826,066.99 \$ 20,859,550,461.73			Contingency	40.00%	\$ 3,437,093,162.00]	\$ 5,959,871,560.49
			т	OTAL PROJECT	COST \$ 12,029,826,066.99	1	\$ 20,859,550,461.73



Project Information	n
Project Name	Roosevelt Blvd
Job No.	
MPMS No.	

Total Roadway 61429.14 Length (FT) 11
Inflation Rate 3.5%

Roosevelt Blvd Cost Estimate - Partially Capped Expressway Items

				Depre	ssed Full Cap					
					Layout					
Length (Ft)	20427.25	Travel Lane Width (Ft)	12	LT Shoulder Width	8	RT Shoulder Width (Ft)	10	Total Width		90.0
Length (Mile)	3.87	Number of Travel Lanes	4	Number of Shoulders	2	Number of Shoulders	2	Total Area (SY)		204,272.5
		Wall Thickness	2	Wall Offset	1	Top Slab Thickness	2.5	Excavation Depth		:
		Number of Walls	2	Wall Offset Multiplier	2	Bottom Slab Thickness	2.5	Total Area (CY)		1,906,543.3
		Tunnel Clearance	20	Center Wall Thickness	5	Clean Fill	3			
					Items					
		Name			Sourc	e and Assumptions	UOM	Unit Cost		Total Cost
CLASS 3 EXCAVAT	ION				PennDOT Standard	d Item 0204-0100	CY	\$ 50.00	\$	95,327,200.0
SELECT BACKFILL					PennDOT Standard	d Item 0205-0100	CY	\$ 21.00	\$	5,179,461.0
EMPORARY EXCAVATION SUPPORT					PennDOT Special for price history.	tem. Utilized PennDOT ECMS	SF	\$ 100.00	\$	116,435,400.0
CLASS AAAP CEMENT CONCRETE						PennDOT Standard Item 1001-1001				474,863,475.0
PLAIN CEMENT CONCRETE BASE COURSE, 10" DEPTH					PennDOT Standard	d Item 0301-0006	SY	\$ 115.00	\$	21,925,325.0
SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, 3 TO < 10 MILLION ESALS, 19.0 MM MIX, 2 1/2" DEPTH SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, PG 64S-22, 3 TO < 10 MILLION ESALS, 9.5 MM					PennDOT Standard	d Item 0413-6055	SY	\$ 20.00	\$	3,813,100.0
MIX, 1 1/2" DEPTH,		ESIGN, WEARING COURSE,	PG 645-22, 3 TO 4	TO MILLION ESALS, 9.5 MIM	PennDOT Standard	Hem 0413-0297	SY	\$ 13.00	\$	2,478,515.0
ASPHALT TACK CO	OAT (NTT/CNTT)				PennDOT Standard	d Item 0460-0003	SY	\$ 1.00	\$	381,310.0
MEMBRANE WATE	RPROOFING SY	STEM INSTALLED ON OTHER	SURFACES		PennDOT Standard	d Item 0680-0121	SY	\$ 82.00	\$	59,929,044.0
6" STRUCTURE FO	UNDATION DRA	N			PennDOT Standard		LF	\$ 23.00	\$	2,818,972.0
ARCHITECTURAL S					for price history.	tem. Utilized PennDOT ECMS	SY	\$ 210.00	\$	1,634,180.0
CONCRETE SUBST		ORCED CONCRETE SURFAC FACES)	ES (PENETRATIN	IG SEALERS, REINFORCED	PennDOT Standard	d Item 1019-0040	SY	\$ 10.00	\$	907,880.0
NO. 57 COARSE AC	GREGATE				PennDOT Standard	d Item 0703-0025	CY	\$ 119.00	\$	1,215,421.3
CONCRETE MEDIA	N BARRIER, F-S	HAPE, 50" HEIGHT			PennDOT Standard		LF	\$ 150.00	\$	12,256,350.0
LONGITUDINAL PAVEMENT MARKINGS				Item 0960-0005	ne lines. PennDOT Standard	LF	\$ 1.25	\$	153,204.3	
TRANSVERSE PAV	EMENT MARKIN	GS			Standard item 0960		LF	\$ 8.00	\$	522,937.6
PAVEMENT MARKI		O DEVICE TYPE V TEST	VEL O MAGIL WIT	OTHER LEGIS THAN OR FOLLOW	Standard Item 0960		EACH	\$ 285.00	\$	46,574.1
TO 36 INCHES		G DEVICE, TYPE V, TEST LE	VEL 3, MASH, WIL	OTHS LESS THAN OR EQUAL	Spaced out 0.5 mile Standard Item 0619		EACH	\$ 38,000.00	\$	588,057.2
	Total Cost (2024)	\$ 800,476,406.68				Total Cost (2040)	\$ 1,388,014,914.39	1		



				Depressed F	ull Cap with F	Ramps			
					Layout				
Length (Ft)	Length (Ft) 4779.04 Travel Lane Width (F		dth (Ft) 12 LT Shoulder Width			RT Shoulder Width (Ft)	10	Total Width	114.00
Length (Mile)	0.90512121	Number of Travel Lanes 6 Number of Shoulders			2	Number of Shoulders	2	Total Area (SY)	60,534.51
		Wall Thickness	2	Wall Offset	1 2	Top Slab Thickness	2.5	Excavation Depth	28
		Number of Walls	2	Wall Offset Multiplier		Bottom Slab Thickness	2.5	Total Area (CY)	564,988.73
		Tunnel Clearance	20	Center Wall Thickness	5	Clean Fill	3		·
		-			Items				
		Name			Source	e and Assumptions	UOM	Unit Cost	Total Cost
CLASS 3 EXCAVATION					PennDOT Standar	d Item 0204-0100	CY	\$ 50.00	\$ 28,249,450.00
SELECT BACKFILL					PennDOT Standar		CY	\$ 21.00	\$ 1,479,387.00
TEMPORARY EXCAVATION SUPPORT					PennDOT Special for price history.	Item. Utilized PennDOT ECMS	SF	\$ 100.00	\$ 27,240,600.00
CLASS AAAP CEMI	ENT CONCRETE				PennDOT Standar	d Item 1001-1001	CY	\$ 1,545.00	\$ 202,367,190.00
PLAIN CEMENT CONCRETE BASE COURSE, 10" DEPTH					PennDOT Standar	d Item 0301-0006	SY	\$ 115.00	\$ 6,595,075.20
SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, 3 TO < 10 MILLION ESALS, 19.0 MM MIX, 2 1/2" DEPTH				PennDOT Standar	d Item 0413-6055	SY	\$ 20.00	\$ 1,146,980.00	
SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, PG 64S-22, 3 TO < 10 MILLION ESALS, 9.5 MM MIX, 1 1/2" DEPTH, SRL-E			PennDOT Standar	d Item 0413-0297	SY	\$ 13.00	\$ 745,537.00		
ASPHALT TACK CO	DAT (NTT/CNTT)				PennDOT Standar	d Item 0460-0003	SY	\$ 1.00	\$ 114,698.00
MEMBRANE WATE	RPROOFING SY	STEM INSTALLED ON OTHER	SURFACES		PennDOT Standar	d Item 0680-0121	SY	\$ 82.00	\$ 17,155,712.00
6" STRUCTURE FO	UNDATION DRA	IN			PennDOT Standar	d Item 1001-0611 Item, Utilized PennDOT ECMS	LF	\$ 23.00	\$ 659,525.00
ARCHITECTURAL S		TMENT FORCED CONCRETE SURFACE	PEC /DENIETDATING	CEALEDS DEINEODOED	for price history.	Item, Otilized Perindo i ECMS	SY	\$ 210.00	\$ 80,288,040.00
CONCRETE SUBST			ES (PENETRATING	SEALERS, REINFORCED	PennDOT Standar	d Item 1019-0040	SY	\$ 10.00	\$ 212,410.00
NO. 57 COARSE AC	GGREGATE				PennDOT Standar	d Item 0703-0025	CY	\$ 119.00	\$ 284,352.88
CONCRETE MEDIAN BARRIER, F-SHAPE, 50" HEIGHT					PennDOT Standar		LF	\$ 150.00	\$ 2,867,550.00
LONGITUDINAL PAVEMENT MARKINGS			Item 0960-0005			\$ 1.25	\$ 59,738.00		
TRANSVERSE PAV	EMENT MARKIN	GS			Assumed 20% of length per lane. PennDOT Standard item 0960-0021 2 lengends spaced out every 1000', PennDOT		LF	\$ 8.00	\$ 137,636.35
PAVEMENT MARKI		IG DEVICE. TYPE V. TEST LE	VEL 2 MACH WIDT	US LESS THAN OR FOLIAL	Standard Item 096		EACH	\$ 285.00	\$ 16,344.32
TO 36 INCHES			VEL 3, MASH, WIDT	no lego ihan uk equal	Standard Item 061	9-0744	EACH	\$ 38,000.00	\$ 137,578.42
	Total Cost (2024)	\$ 369,757,804.17				Total Cost (2040) \$ 641,154,870.55		

Notes: Depressed expressway with fully capped section and on/off ramps.



		Partially C	apped Expressway	with At-Grade	Crossing Intersection	S			
				Layout					
Length (Ft)	2122 Travel Lane Width (Ft)	12	LT Shoulder Width	8	RT Shoulder Width (Ft)	10	Headwall Thickness (FT	6.5	
Length (Mile) 0.40198			Number of Shoulders	2	Number of Shoulders	2	Total Width		90.0
	Wall Thickness	2	Wall Offset	1	Top Slab Thickness (FT)	2.5	Total Area (SY)	21,2	,224.9
	Number of Walls	2	Wall Offset Multiplier	2	Bottom Slab Thickness (FT)	2.5	Excavation Depth		2
Deck Thickness (FT)	1 Tunnel Clearance	20	Center Wall Thickness	5	Clean Fill	3	Total Area (CY)	198,0	,099.0
(17)				Items	!				
	Name			Source	ce and Assumptions	UOM	Unit Cost	Total Cos	st
CLASS 3 EXCAVATION					d Item 0204-0100	CY	\$ 50.00	\$ 9,905,0	,000.0
SELECT BACKFILL	SELECT BACKFILL					CY	\$ 21.00	\$ 538,1	,188.0
TEMPORARY EXCAVATION SU	PPORT		PennDOT Special for price history.	Item. Utilized PennDOT ECMS	SF	\$ 100.00	\$ 12,098,2	,200.00	
CLASS AAAP CEMENT CONCE	ETE			PennDOT Standar	d Item 1001-1001	CY	\$ 1,545.00	\$ 89,560,5	,560.00
PLAIN CEMENT CONCRETE BA				PennDOT Standar	d Item 0301-0006	SY	\$ 115.00	\$ 2,278,1	,150.00
SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, 3 TO < 10 MILLION ESALS, 19.0 MM MIX, 2 1/2" DEPTH SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, PG 64S-22, 3 TO < 10 MILLION ESALS, 9.5 MM					d Item 0413-6055	SY	\$ 20.00	\$ 396,2	,200.00
MIX, 1 1/2" DEPTH, SRL-E	RE DESIGN, WEARING COUR	SE, PG 64S-22, 3 TO < 1	0 MILLION ESALS, 9.5 MM	PennDOT Standar	d Item 0413-0297	SY	\$ 13.00	\$ 257,5	,530.0
ASPHALT TACK COAT (NTT/C)	ITT)			PennDOT Standar	d Item 0460-0003	SY	\$ 1.00	\$ 39,6	,620.00
MEMBRANE WATERPROOFING	SYSTEM INSTALLED ON OT	HER SURFACES		PennDOT Standar	rd Item 0680-0121	SY	\$ 82.00	\$ 6,226,9	,916.0
6" STRUCTURE FOUNDATION	DRAIN			PennDOT Standar	d Item 1001-0611 Item. Utilized PennDOT ECMS	LF	\$ 23.00	\$ 292,9	,905.0
ARCHITECTURAL SURFACE T PROTECTIVE COATING FOR F		EACES (DENETDATING	SEM EDS DEINEODOED	for price history.	Item, Otilized Perindo i ECMS	SY	\$ 210.00	\$ 35,658,0	,000.00
CONCRETE SUBSTRUCTURE		FACES (PENETRATING	SEALERS, REINFORCED	PennDOT Standar	d Item 1019-0040	SY	\$ 10.00	\$ 101,4	,410.00
NO. 57 COARSE AGGREGATE				PennDOT Standar	d Item 0703-0025	CY	\$ 119.00	\$ 126,2	,288.1
CONCRETE MEDIAN BARRIER, F-SHAPE, 50" HEIGHT					d Item 0623-0303	LF	\$ 150.00	\$ 1,273,5	,500.0
LONGITUDINAL PAVEMENT MARKINGS					6" wide lines for lane lines. PennDOT Standard Item 0960-0005 Assumed 20% of length per lane. PennDOT		\$ 1.25	\$ 15,9	,918.6
TRANSVERSE PAVEMENT MARKINGS			Standard item 096		LF	\$ 8.00	\$ 54,3	,335.7	
PAVEMENT MARKING LEGENT PERMANENT IMPACT ATTENU		LEVEL 3 MASH WIDT	HS LESS THAN OR FOLIAL	Standard Item 096		EACH	\$ 285.00	\$ 4,8	,839.2
TO 36 INCHES			TIO EESO TITAL ON EQUAL	Standard Item 061	9-0744	EACH	\$ 38,000.00	\$ 61,1	,101.9
Total Cost (2	024) \$ 158,888,662.8 with at-grade intersections cr				Total Cost (2040)	\$ 275,510,723.24	L		

Notes: Depressed expressway with at-grade intersections crossing. Cap thickness is increased to account for crossing traffic and at-grade intersection.



				Layout				
Length (Ft) 11455		12	LT Shoulder Width	8	RT Shoulder Width (Ft)	10	Depth to Footing	3
Length (Mile) 2.169524		4	Number of Shoulders	2	Number of Shoulders	2	Total Width	116.00
	Footing Width (FT)	15	Wall Offset	1	Footing Thickness (FT)	2.5	Total Area (SY)	147,643.38
	Number of Walls	2	Wall Offset Multiplier	2	Number of Footings	2	Excavation Depth	28.
Height of Vertical Face (FT)	3.5 Tunnel Clearance	20	Width of Excavation (FT)	10	Toe Width	4	Total Area (CY)	1,402,612.13
	•			Items			•	
	Name			Source	e and Assumptions	иом	Unit Cost	Total Cost
CLASS 3 EXCAVATION				PennDOT Standard	I Item 0204-0100	CY	\$ 50.00	\$ 48,344,750.00
SELECT BACKFILL				PennDOT Standard		CY	\$ 21.00	\$ 5,951,568.00
TEMPORARY EXCAVATION SUR	PORT			PennDOT Special for price history.	tem. Utilized PennDOT ECMS	SF	\$ 100.00	\$ 65,294,100.00
CLASS AAAP CEMENT CONCRE	TE			PennDOT Standard	I Item 1001-1001	CY	\$ 1,545.00	\$ 126,181,695.00
PLAIN CEMENT CONCRETE BASE COURSE, 10" DEPTH					I Item 0301-0006	SY	\$ 115.00	\$ 12,295,225.00
SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, 3 TO < 10 MILLION ESALS, 19.0 MM MIX, 2 1/2" DEPTH					i Item 0413-6055	SY	\$ 20.00	\$ 2,138,300.00
SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, PG 64S-22, 3 TO < 10 MILLION ESALS, 9.5 MM MIX, 1 1/2" DEPTH, SRL-E					i Item 0413-0297	SY	\$ 13.00	\$ 1,389,895.00
ASPHALT TACK COAT (NTT/CN	T)			PennDOT Standard	i Item 0460-0003	SY	\$ 1.00	\$ 213,830.00
MEMBRANE WATERPROOFING	SYSTEM INSTALLED ON OTHE	R SURFACES		PennDOT Standard	I Item 0680-0121	SY	\$ 82.00	\$ 17,847,054.00
6" STRUCTURE FOUNDATION D	RAIN			PennDOT Standard		LF	\$ 23.00	\$ 1,580,813.00
ARCHITECTURAL SURFACE TR				PennDOT Special for price history.	tem. Utilized PennDOT ECMS	SY	\$ 210.00	\$ 113,061,900.00
PROTECTIVE COATING FOR RE CONCRETE SUBSTRUCTURE S		CES (PENETRATING S	SEALERS, REINFORCED	PennDOT Standard	1 Item 1019-0040	SY	\$ 10.00	\$ 598,220.00
NO. 57 COARSE AGGREGATE				PennDOT Standard	Item 0703-0025	CY	\$ 119.00	\$ 681,577.86
CONCRETE MEDIAN BARRIER,	F-SHAPE, 50" HEIGHT			PennDOT Standard		LF	\$ 150.00	\$ 6,873,150.00
LONGITUDINAL PAVEMENT MARKINGS					e lines. PennDOT Standard	LF	\$ 1.25	\$ 85,913.17
TRANSVERSE PAVEMENT MARKINGS				Assumed 20% of length per lane. PennDOT Standard item 0960-0021		LF	\$ 8.00	\$ 293,250.30
PAVEMENT MARKING LEGEND				Standard Item 096		EACH	\$ 285.00	\$ 26,117.61
PERMANENT IMPACT ATTENUA TO 36 INCHES		EVEL 3, MASH, WIDTH	S LESS THAN OR EQUAL	Spaced out 0.5 mil Standard Item 061		EACH	\$ 38,000.00	\$ 329,767.74
Total Cost (20 Notes: Depressed roadway sec					Total Cost (2040)	\$ 699,120,849.10		



				Depressed Pa		Ramps			
	.=== = .1				Layout				_
Length (Ft)	4778.54	Travel Lane Width (Ft)	12	LT Shoulder Width	8	RT Shoulder Width (Ft)	10	Depth to Footing	3
Length (Mile)	0.905026515	Number of Travel Lanes	6 15	Number of Shoulders LT Wall Offset	1	Number of Shoulders	2.5	Total Width	140.0
		Footing Width (FT) Number of Walls	2	Wall Offset Multiplier	2	Footing Thickness (FT) Number of Footings	2.5	Total Area (SY) Excavation Depth	74,332.8
Height of		Number of walls		wall Offset wultiplier	2	Number of Footings	2	Excavation Depth	20
Vertical Face (FT)	3.5	Tunnel Clearance	20	Width of Excavation (FT)	10	Toe Width	4	Total Area (CY)	706,162.0
				-	Items				
		Name			Source	e and Assumptions	иом	Unit Cost	Total Cost
CLASS 3 EXCAVAT	ION				PennDOT Standard	d Item 0204-0100	CY	\$ 50.00	\$ 25,813,000.0
SELECT BACKFILL					PennDOT Standard	d Item 0205-0100	CY	\$ 21.00	\$ 2,623,950.0
TEMPORARY EXCA	VATION SUPPO	RT				Item. Utilized PennDOT ECMS	SF	\$ 100.00	
CLASS AAAP CEME	ENT CONCRETE				PennDOT Standard	d Item 1001-1001	CY	\$ 1,545.00	\$ 52,638,150.0
PLAIN CEMENT CONCRETE BASE COURSE, 10" DEPTH					PennDOT Standard	d Item 0301-0006	SY	\$ 115.00	\$ 6,594,445.0
SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, 3 TO < 10 MILLION ESALS, 19.0 MM MIX, 2 1/2" DEPTH					PennDOT Standard	d Item 0413-6055	SY	\$ 20.00	\$ 1,146,860.0
SUPERPAVE ASPH MIX, 1 1/2" DEPTH,		ESIGN, WEARING COURSE	PG 64S-22, 3 TO < 10) MILLION ESALS, 9.5 MM	PennDOT Standard	d Item 0413-0297	SY	\$ 13.00	\$ 745,459.0
ASPHALT TACK CO	OAT (NTT/CNTT)				PennDOT Standard	d Item 0460-0003	SY	\$ 1.00	\$ 114,686.0
MEMBRANE WATE	RPROOFING SYS	STEM INSTALLED ON OTHE	R SURFACES		PennDOT Standard	d Item 0680-0121	SY	\$ 82.00	\$ 8,489,952.0
6" STRUCTURE FO	UNDATION DRAI	N			PennDOT Standard	t Item 1001-0611	LF	\$ 23.00	\$ 659,456.0
ARCHITECTURAL S	SURFACE TREAT	MENT			for price history.	item: Guilzed i emibo i Edivid	SY	\$ 210.00	\$ 47,164,320.0
PROTECTIVE COAT CONCRETE SUBST		ORCED CONCRETE SURFA FACES)	CES (PENETRATING	SEALERS, REINFORCED	PennDOT Standard	d Item 1019-0040	SY	\$ 10.00	\$ 249,550.0
NO. 57 COARSE AG	GREGATE				PennDOT Standard	d Item 0703-0025	CY	\$ 119.00	\$ 284,323.1
CONCRETE MEDIAN BARRIER, F-SHAPE, 50" HEIGHT					PennDOT Standard		LF	\$ 150.00	\$ 2,867,250.0
LONGITUDINAL PAVEMENT MARKINGS					Item 0960-0005			\$ 1.25	\$ 59,731.7
TRANSVERSE PAV	EMENT MARKIN	GS			Standard item 0960		LF	\$ 8.00	\$ 137,621.9
PAVEMENT MARKI		G DEVICE, TYPE V. TEST LI	EVEL 3 MASH WIDTE	IS LESS THAN OR FOLIAL	2 lengends spaced out every 1000', PennDOT Standard Item 0960-0101. Spaced out 0.5 mile per direction. PennDOT		EACH	\$ 285.00	\$ 16,342.6
TO 36 INCHES	Fotal Cost (2024)		_vll 3, IVIA3H, WIDTE	IO LLOS THAN ON EQUAL	Standard Item 061		EACH \$ 306.881.476.11	\$ 38,000.00	\$ 137,564.0
		no capped section and on/o	off rampe			Total Cost (2040)	3 300,881,4/6.11		

	Bike Lanes			
	Layout			
Length (Ft) 61429.14 Width (Ft) 5.5 Number of Lanes	4 Excavation Depth (Ft)	1.04	Total Area	1,351,441.08
	Items			
Name	Source and Assumptions	UOM	Unit Cost	Total Cost
SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 9.5 MM MIX, $11/2$ " DEPTH, SRL-E	PennDOT Standard Item 0313-0424	SY	\$ 11.00	\$ 1,651,761.32
SUPERPAVE ASPHALT MIXTURE DESIGN, BASE COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALs, 25.0 MM MIX 5" DEPTH	PennDOT Standard Item 0413-0244	SY	\$ 31.00	\$ 4,654,963.72
SUBBASE 6" DEPTH (NO.2A)	PennDOT Standard Item 0350-0106	SY	\$ 16.50	\$ 2,477,641.98
CLASS 1 EXCAVATION	PennDOT Standard Item 0203-0001	CY	\$ 42.00	\$ 2,189,835.08
PLAIN CEMENT CONCRETE CURB, 8" HEIGHT	PennDOT Standard Item 0630-0041	LF	\$ 46.00	\$ 11,302,961.76
LONGITUDINAL PAVEMENT MARKINGS	6" wide lines for lane lines. PennDOT Standard Item 0960-0005	LF	\$ 1.25	\$ 153,572.85
GREEN BIKE LANE PAVEMENT MARKINGS	PennDOT Special Item. Utilized PennDOT ECMS for price history.	SF	\$ 11.25	\$ 15,203,712.15
PAVEMENT MARKING LEGENDS	2 lengends spaced out every 1000'. PennDOT Standard Item 0960-0101.	EACH	\$ 285.00	\$ 140,058.44
Total Cost (2024) \$ 37,774,507.30	Total Cost (2040)	\$ 65,500,468.32		
Notes: At-Grade bike lanes.				

	Sidewalk											
	Layout											
Length (Ft)	61429.14	Width (Ft)	10	Number of Lanes	6	Excavation Depth (Ft)		0.83	Total Area	3,685,748.40		
	ltems											
	Name				Source and Assumptions		UOM		Unit Cost	Total Cost		
CEMENT CONCRI	ETE SIDEWALK				PennDOT Standa	rd Item 0676-0001	SY	\$	140.00	\$ 57,333,864.00		
CLASS 1 EXCAVATION				PennDOT Standa	CY	\$	42.00	\$ 4,777,822.00				
	Total Cost (2024)	62,111,686.00				Total Cost (2040)	\$ 107,700,796	.43				
Notes:				<u> </u>		-						



				Travel La	nes (Local L	anes)			
Lamenth (F4)	61429.14	Width (Ft)	12	Number of Lanes	Layout	Francisco Danib (F4)	1.83	Total Area	0.040.500
Length (Ft)	61429.14	wiath (Ft)	12	Number of Lanes	Items	Excavation Depth (Ft)	1.83	I otal Area	2,948,598.
		Name			So	ource and Assumptions	UOM	Unit Cost	Total Cost
GEOTEXTILE, CLA	SS 4, TYPE A				PennDOT Stan	dard Item 0212-0014	SY	\$ 2.70	\$ 884,579.
SUBBASE 8" DEPTH (NO. 2A)					PennDOT Stan	dard Item 0350-0108	SY	\$ 22.00	\$ 7,207,685.
Plain Cement Conc					PennDOT Stan	dard Item 0301-0006	SY	\$ 115.00	\$ 37,676,539.
MIX, 2 1/2" DEPTH		DESIGN, BINDER COURSE, F			PennDOT Stan	dard Item 0413-6055	SY	\$ 20.00	\$ 6,552,441.
SUPERPAVE ASPI MIX, 1 1/2" DEPTH		DESIGN, WEARING COURSE	, PG 64S-22, 3 TO < 10) MILLION ESALS, 9.5 MM	PennDOT Stan	dard Item 0413-0297	SY	\$ 13.00	\$ 4,259,087.
ASPHALT TACK COAT (NTT/CNTT)					PennDOT Standard Item 0460-0003			\$ 1.00	\$ 655,244.
6" PAVEMENT BAS	SE DRAIN				PennDOT Stan	dard Item 0610-7002	LF	\$ 20.00	\$ 4,914,331.
GEOTEXTILE, CLA	SS 1				PennDOT Stan	dard Item 0212-0001	LF	\$ 1.60	\$ 393,146.
NO. 8 COARSE AG	GREGATE				PennDOT Stan	dard Item 0703-0022	CY	\$ 60.00	\$ 378,151.
CLASS 1 EXCAVA	TION				PennDOT Star	ndard Item 0203-0001	CY	\$ 42.00	\$ 8,408,966.
PLAIN CEMENT CO	ONCRETE CURB,	, 8" HEIGHT				ndard Item 0630-0041	LF	\$ 46.00	\$ 11,302,961.
LONGITUDINAL PA	AVEMENT MARKI	NGS			Item 0960-0005		LF	\$ 1.25	\$ 460,718.
TRANSVERSE PA	VEMENT MARKIN	IGS			Standard item (LF	\$ 8.00	\$ 1,572,585.
PAVEMENT MARKING LEGENDS				Standard Item		EACH	\$ 285.00	\$ 140,058.	
TYPE 31-S GUIDE	RAIL				Standard Item		LF	\$ 38.00	\$ 1,867,445.
PERMANENT IMPA	ACT ATTENUATIN	NG DEVICE, TYPE II, TEST L	EVEL 3, TANGENT (MA	ASH)	Spaced out 0.5 Standard Item	mile per direction. PennDOT 0619-0459	EACH	\$ 4,200.00	\$ 2,064,019.
Notes: At-Grade fo	Total Cost (2024)	\$ 88,737,963.45		•		Total Cost (2040)	\$ 153,870,389.83		•

Travei La	nes (At- Grade)			
Length (Ft) 19989.22 Width (Ft) 12 Number of Lanes	4 Excavation Depth (Ft)	1.83	Total Area	959,482.5
Name	Source and Assumptions	UOM	Unit Cost	Total Cost
GEOTEXTILE, CLASS 4, TYPE A	PennDOT Standard Item 0212-0014	SY	\$ 2.70	\$ 287,844.7
SUBBASE 8" DEPTH (NO. 2A)	PennDOT Standard Item 0350-0108	SY	\$ 22.00	\$ 2,345,401.8
Plain Cement Concrete Base Course, 10" Depth	PennDOT Standard Item 0301-0006	SY	\$ 115.00	\$ 12,260,054.9
SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64\$-22, 3 TO < 10 MILLION ESALS, 19.0 MM MIX, 2 1/2" DEPTH	PennDOT Standard Item 0413-6055	SY	\$ 20.00	\$ 2,132,183.4
SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, PG 64S-22, 3 TO < 10 MILLION ESALS, 9.5 MM MIX, 1 1/2" DEPTH, SRL-E	PennDOT Standard Item 0413-0297	SY	\$ 13.00	\$ 1,385,919.2
ASPHALT TACK COAT (NTT/CNTT)	PennDOT Standard Item 0460-0003	SY	\$ 1.00	\$ 213,218.3
S" PAVEMENT BASE DRAIN	Assumed 4 locations of PDB. PennDOT Standard Item 0610-7002	LF	\$ 20.00	\$ 1,599,137.60
GEOTEXTILE, CLASS 1	PennDOT Standard Item 0212-0001	LF	\$ 1.60	\$ 127,931.0
NO. 8 COARSE AGGREGATE	PennDOT Standard Item 0703-0022	CY	\$ 60.00	\$ 123,051.7
CLASS 1 EXCAVATION	PennDOT Standard Item 0203-0001	CY	\$ 42.00	\$ 2,736,302.1
PLAIN CEMENT CONCRETE CURB, 8" HEIGHT	Assumed 4 locations of curb. PennDOT Standard Item 0630-0041	LF	\$ 46.00	\$ 3,678,016.4
ONGITUDINAL PAVEMENT MARKINGS	6" wide lines for lane lines. PennDOT Standard	LF	\$ 1.25	\$ 149,919.1
TRANSVERSE PAVEMENT MARKINGS	Assumed 20% of length per lane. PennDOT Standard item 0960-0021	LF	\$ 8.00	\$ 511,724.03
PAVEMENT MARKING LEGENDS	2 lengends spaced out every 1000'. PennDOT Standard Item 0960-0101.	EACH	\$ 285.00	\$ 45,575.42
TYPE 31-S GUIDE RAIL	Assumed 20% of corridor has guide rail. PennDOT Standard Item 0620-1600	LF	\$ 38.00	\$ 607,672.2
PERMANENT IMPACT ATTENUATING DEVICE, TYPE II, TEST LEVEL 3, TANGENT (MASH)	Spaced out 0.5 mile per direction. PennDOT Standard Item 0619-0459	EACH	\$ 4,200.00	
Total Cost (2024) \$ 28,875,590.21	Total Cost (2040)	\$ 50,069,870.32		



	Median Landscaping													
			Layout											
Length (Ft) 27328.78 Width (Ft)	146	Number of Lanes	1	Excavation Depth (Ft)	0.33	Total Area		3,990,001.88						
			Items											
Name														
TOPSOIL FURNISHED AND PLACED			PennDOT Standar	d Item 0802-0001	CY	\$ 89.00	\$	4,384,076.14						
SEEDING AND SOIL SUPPLEMENTS - FORMULA B RESIDENTIAL M	IX		Type B Seeding 42 item 0804-0036.	2 LB/1000 sy. PennDOT standard	LB	\$ 18.00	\$	335,160.16						
CLASS 1 EXCAVATION			PennDOT Standar	d Item 0203-0001	CY	\$ 42.00	\$	2,068,889.86						
Total Cost (2024) \$ 6,788,126.16				Total Cost (2040)	\$ 11,770,516.00									
Notes: Width is the total width of all median areas.			_	•		-								

	Misc			
	Layout			
Length (Ft) 61429.14			Total Area	-
	Items			
Name	Source and Assumptions	иом	Unit Cost	Total Cost
Utilities Relocation	FTA Database	LF	\$ 1,622.00	\$ 99,638,065.08
Total Cost (2024) \$ 99,638,065.08	Total Cost (2040)	\$ 172,771,013.88		
Notes:				

				DR	AINAGE					
					Layout					•
Local Lane Lengt	61429.14	Local Lanes	4	2-way Cycle Track Lanes	4	Type C Spacing	150	Туре	C Inlets	4,876.00
At Grade Length	19989.22	At Grade Lanes	4					Swa	le Excavation Area	16.00
Median Length	27328.78	Medians	5	Depth of Swale	2	Side Slope (H:V)	3	Swa	le Excavation (CY)	80,974.16
		Swale Bottom Width	2	RECP Area	3,990,001.88			ECM	B Area (SY)	443,333.54
		Type M Spacing	200	Length of Pipe	708033.9			Туре	M Inlets	684.00
					Items					
		Name		Source and Assu	mptions	Quantity	UOM		Unit Cost	Total Cost
CLASS 2 EXCAVAT	ION			PennDOT Standard item 020-	4-0001	80,974.16	CY	\$	100.00	\$ 8,097,416.30
TYPE C INLET				PennDOT Standard item 060	5-5720	4,876.00	SET	\$	2,000.00	\$ 9,752,000.00
TYPE M INLET				PennDOT Standard item 060	5-2780	684.00	SET	\$	1,800.00	\$ 1,231,200.00
STANDARD INLET	BOX, HEIGHT =</td <td>= 10'</td> <td></td> <td>PennDOT Standard item 060</td> <td>5-2850</td> <td>5,560.00</td> <td>EA</td> <td>\$</td> <td>3,250.00</td> <td>\$ 18,070,000.00</td>	= 10'		PennDOT Standard item 060	5-2850	5,560.00	EA	\$	3,250.00	\$ 18,070,000.00
18" REINFORCED (CONCRETE PIPE	, TYPE A, 100 YR DESIGN L	IFE	PennDOT Standard item 060	1-7014	708,034.00	LF	\$	215.00	\$ 152,227,310.00
RECP				PennDOT Standard item 080	6-0121	443,333.54	SY	\$	2.75	\$ 1,219,167.24
	Total Cost (2024)	\$ 190,597,093.54				Total Cost (2040)	\$ 330,492,699.43			
Notes:									•	

	Existing Signal Upgrades and Retimings												
							Layout						
Length (Ft)	N/A		Width (Ft)	N/A		Number of Intersections	54.00	Excavation Depth (Ft)	N/A		Total Area	N/A	
	Items												
					Name					UOM	Unit Cost	Total Cost	
ntersection Sign	nalization									EACH	\$ 500,000.00	\$ 27,000,000.0	
	Total Cost	(2024) \$	27,000,000.00					Total Cost (2040)	\$	46,817,623.08			
lotes: Cost pe	r intersection	= \$250,000.0	00. Each intersection	to acts as	2 intersections	s to get cost of \$500.000.00	j						



Project Informatio	n
Project Name	Roosevelt Blvd
Job No.	
MPMS No.	

Total Roadway
Length (FT) 61429.14
Inflation Rate 3.5%

Roosevelt Blvd Cost Estimate - Neighborhood Blvd Items

	Bike Lanes												
					Layout								
Length (Ft)	61429.14	Width (Ft)	5.5	Number of Lanes		Excavation Depth (Ft)	1.04	Total Area (SF)		1,351,441.08			
					Items								
		Name			Source	and Assumptions	UOM	Unit Cost		Total Cost			
	HALT MIXTURE DE IX, 1 1/2" DEPTH, S		RSE, PG 64S-22, 0.3 TO	O < 3 MILLION	PennDOT Standa	rd Item 0313-0424	SY	\$ 11.00	\$	1,651,761.32			
SUPERPAVE ASP 25.0 MM MIX, 5" D		SIGN, BASE COURSE	, PG 64S-22, 0.3 TO < 3	MILLION ESALs,	PennDOT Standa	rd Item 0413-0244	SY	\$ 31.00	\$	4,654,963.72			
SUBBASE 6" DEP	TH (NO.2A)				PennDOT Standa	ard Item 0350-0106	SY	\$ 16.50	\$	2,477,641.98			
CLASS 1 EXCAVA	TION				PennDOT Standa	ard Item 0203-0001	CY	\$ 42.00	\$	2,189,835.08			
PLAIN CEMENT CO	NCRETE CURB, 8" H	EIGHT				ard Item 0630-0041	LF	\$ 46.00	\$	11,302,961.76			
LONGITUDINAL P	AVEMENT MARKIN	IGS			6" wide lines for la Standard Item 09	ane lines. PennDOT 60-0005	LF	\$ 1.25	\$	153,572.85			
GREEN BIKE LAN	E PAVEMENT MAR	KINGS			ECMS for price h		SF	\$ 11.25	\$	15,203,712.15			
PAVEMENT MAR	KING LEGENDS					d out every 1000'. and Item 0960-0101.	EACH	\$ 285.00	\$	140,058.44			
	Total Cost (2024)	\$ 37,774,507.30				Total Cost (2040)	\$ 65,500,468.32						
Notes: At-Grade i	oike lanes.												

					Sidewalk				
					Layout				
Length (Ft)	61429.14	Width (Ft)	28	Number of Lanes	2	Excavation Depth (Ft)	0.83	Total Area (SF)	3,440,031.84
					Items				
		Name			Source a	nd Assumptions	UOM	Unit Cost	Total Cost
CEMENT CONCR	ETE SIDEWALK				PennDOT Standard	I Item 0676-0001	SY	\$ 140.00	\$ 53,511,606.40
CLASS 1 EXCAVA	TION				PennDOT Standard	I Item 0203-0001	CY	\$ 42.00	\$ 4,459,300.53
	Total Cost (2024)	\$ 57,970,906.93				Total Cost (2040)	\$ 100,520,743.34		
Notes:	_						_	·	_

Name Source and Assumptions UOM Unit Cost Tot			The state of the s	ravel Lanes						
Name Source and Assumptions UOM Unit Cost Tot				Layout					_	
Name Source and Assumptions UOM Unit Cost Total	Length (Ft) 6142	9.14 Width (Ft)	12 Number of Lanes	8	Excavation Depth (Ft)	1.83	Т	Γotal Area (SF)		5,897,197.4
PennDOT Standard Item 0212-0014 SY \$ 2,70 \$ 1				Items						
PennDOT Standard Item 02/12-0014 \$ 2.70 \$ 1		Name		Source	and Assumptions	UOM		Unit Cost		Total Cost
PennDOT Standard Item 0301-0006 SY \$ 115.00 \$ 75	GEOTEXTILE, CLASS 4, TYP	PEA		PennDOT Standa	ard Item 0212-0014	SY	\$	2.70	\$	1,769,159.2
Plain Cement Concrete Base Course, 10" Depth PennDOT Standard Item 0301-0006 \$ 115.00 \$ 75.	SUBBASE 8" DEPTH (NO. 2)	A)		PennDOT Standa	ard Item 0350-0108	SY	\$	22.00	\$	14,415,371.5
19.0 MM MIX, 2 1/2" DEPTH PennDOT Standard Item 0413-6055 SY \$ 20.00 \$ 13				PennDOT Standa	ard Item 0301-0006	SY	\$	115.00	\$	75,353,078.40
PennDOT Standard Item 0413-0297 SY \$ 13.00 \$ 8	19.0 MM MIX, 2 1/2" DEPTH			PennDOT Standa	ard Item 0413-6055	SY	\$	20.00	\$	13,104,883.20
PennDOT Standard Item 0460-0003 \$ 1.00 \$ 1			RSE, PG 64S-22, 3 TO < 10 MILLION	PennDOT Standa	ırd Item 0413-0297	SY	\$	13.00	\$	8,518,174.08
Standard Item 0610-7002	ASPHALT TACK COAT (NTT	T/CNTT)		PennDOT Standa	ard Item 0460-0003	SY	\$	1.00	\$	1,310,488.32
PennDOT Standard Item 0212-0001	5" PAVEMENT BASE DRAIN					LF	\$	20.00	\$	9,828,662.40
NO. 8 COARSE AGGREGATE	GEOTEXTILE, CLASS 1			PennDOT Standa	ard Item 0212-0001	LF	\$	1.60	\$	786,292.99
PennDOT Standard Item 0203-0001	NO. 8 COARSE AGGREGAT	E		PennDOT Standa	ırd Item 0703-0022	CY	\$	60.00	\$	756,303.94
Assumed 8 locations of curb. PennDOT Stand	CLASS 1 EXCAVATION			PennDOT Standa	ard Item 0203-0001	CY	\$	42.00	\$	16,817,933.4
Longitudinal Pavement Markings	PLAIN CEMENT CONCRETE CU	JRB, 8" HEIGHT		Assumed 8 location	ons of curb. PennDOT Stand	LF	\$	46.00	\$	22,605,923.52
TRANSVERSE PAVEMENT MARKINGS Standard item 0960-0021	ONGITUDINAL PAVEMENT	MARKINGS				LF	\$	1.25	\$	921,437.10
PAVEMENT MARKING LEGENDS PennDOT Slandard Item 0960-0101. EACH \$ 285.00 \$ Assumed 20% of corridor has guide rail. 1.5	FRANSVERSE PAVEMENT I	MARKINGS		Standard item 09	60-0021	LF	\$	8.00	\$	1,965,732.4
	PAVEMENT MARKING LEGE	ENDS		PennDOT Standa	rd Item 0960-0101.	EACH	\$	285.00	\$	280,116.88
	TYPE 31-S GUIDE RAIL			PennDOT Standa	rd Item 0620-1600	LF	\$	38.00	\$	3,734,891.7
					19-0459		\$	4,200.00	\$	4,128,038.2
Total Cost (2024) \$ 176,296,487.42 Total Cost (2040) \$ 305,695,648.06	Total Cos	t (2024) \$ 176,296,487.42			Total Cost (2040)	\$ 305,695,648.06				



					Layout									
Length (Ft)	61429.14	Width (Ft)	110	Number of Lanes	1	Excavation Depth (Ft)	0.33	Т	otal Area (SF)		6,757,205.40			
					Items									
	Name Source and Assumptions UOM Unit Cost Total Cost													
TOPSOIL FURNIS	HED AND PLACED)			PennDOT Standar	CY	\$	89.00	\$	7,424,583.71				
SEEDING AND SO	DIL SUPPLEMENTS	- FORMULA B RESIDE	NTIAL MIX		Type B Seeding 42 standard item 0804	LB/1000 sy. PennDOT I-0036.	LB	\$	18.00	\$	567,605.25			
CLASS 1 EXCAVA	TION				PennDOT Standar	d Item 0203-0001	CY	\$	42.00	\$	3,503,736.13			
	Total Cost (2024)	\$ 11,495,925.10				Total Cost (2040)	\$ 19,933,773.63							
Notes: Width is th	lotes: Width is the total width of all median areas.													

	Signalized Intersections											
	Layout											
Length (Ft)	N/A	Width (Ft)	N/A	Number of Intersections	29.00	Excavation Depth (Ft)	N/A		Total Area	N/A		
					Items							
			Name					UOM	Unit Cost	Total Cost		
Intersection Signa	lization							EACH	\$ 500,000.00	14500000		
	Total Cost (2024)	\$ 14,500,000.00				Total Cost (2040) \$	25,142,797.58				
Notes: Cost per	lotes: Cost per intersection = \$250,000.00. Each intersection to acts as 2 intersections to get cost of \$500.000.00											

				Misc				
				Layout				
Length (Ft)	61429.14						Total Area	-
				Items				
Name				Source a	nd Assumptions	UOM	Unit Cost	Total Cost
Utilities Relocation				FTA Database		LF	\$ 1,622.00	\$ 99,638,065.08
	Total Cost (2024)	\$ 99,638,065.08			Total Cost (2040)	\$ 172,771,013.88		
Notes:								
1								
1								

				I	DRAINAGE						
					Layout						•
Local Lane Lengt	61429.14	Lanes	8	2-way Cycle Track Lanes	4	Type C Spacing	150		Туре	C Inlets	4,915.0
Median Length	61429.14	Medians*	4	Depth of Swale	2	Side Slope (H:V)	3		Swal	e Excavation (CY)	145,609.81
		Swale Bottom Width	2	RECP Area	6,757,205.40	Swale Excavation Area (SF)			ECMB Area (SY)		750,800.60
		Type M Spacing	200	Length of Pipe	982866.24				Type	M Inlets	1,229.00
					Items						
		Name		Source and A	Assumptions	Quantity	UOM			Unit Cost	Total Cost
CLASS 2 EXCAVAT	ΓΙΟΝ			PennDOT Standard	item 0204-0001	145,610	CY		\$	100.00	\$ 14,560,981.33
TYPE C INLET				PennDOT Standard	item 0605-5720	4,915	SET		\$	2,000.00	\$ 9,830,000.00
TYPE M INLET				PennDOT Standard	item 0605-2780	1,229	SET		\$	1,800.00	\$ 2,212,200.00
STANDARD INLET	BOX, HEIGHT =</td <td>= 10'</td> <td></td> <td>PennDOT Standard</td> <td>item 0605-2850</td> <td>6,144</td> <td>EA</td> <td></td> <td>\$</td> <td>3,250.00</td> <td>\$ 19,968,000.00</td>	= 10'		PennDOT Standard	item 0605-2850	6,144	EA		\$	3,250.00	\$ 19,968,000.00
18" REINFORCED	CONCRETE PIPE	, TYPE A, 100 YR DESIG	GN LIFE	PennDOT Standard	item 0601-7014	982,867	LF		\$	215.00	\$ 211,316,405.00
RECP				PennDOT Standard	item 0806-0121	750,801	SY		\$	2.75	\$ 2,064,701.65
	Total Cost (2024)	\$ 259,952,287.98				Total Cost (2040)	\$ 450,753	,638.38			
		ans wider than 16' wou				Total cost (2040)	, 430,733	,030.30			

Length (Ft) N/A	Width (Ft)	N/A	Number of	Layout	Excavation Depth (Ft)	N/A		Total Area	N/A
N/A		N/A	Intersections	Items	excavation Depth (Ft)	IN/A			IN/A
		Name	9			UOM		Unit Cost	Total Cost
ntersection Signalization						EACH	\$	500,000.00	2700000
Total Cos	t (2024) \$ 27,000,000.	00			Total Cost (2040)	\$ 46,817,623	.08		



Project Information	on
Project Name	Roosevelt Blvd
Job No.	
MPMS No.	

	Guideway - Aerial			
	Layout			
	Items		Length (Ft)	29570.00
Name	Source and Assumptions	иом	Unit Cost	Total Cost
Aerial Guideway	FTA Database: foundation excavation; guideway structures including caissons, columns, bridges, viaducts, cross-overs, fly-overs	LF	\$ 17,323.00	\$ 512,241,110.00
Ballastless Track	FTA Database: Include rails, connectors. DF	TF	\$ 1,146.00	\$ 67,774,440.00
ocs	FTA Database: Catenary	TF	\$ 462.00	\$ 13,661,340.00
Communications	FTA Database: Wired	TF	\$ 373.00	\$ 11,029,610.00
Signals	FTA Database: Wayside	TF	\$ 743.00	\$ 21,970,510.00
Substations	FTA Database: Traction Power Supply	ŢF	\$ 588.00	\$ 17,387,160.00
Total Cost (2024) \$ 644,064,170.00	Total Cost (2040)	\$ 1,116,798,279.53		
Notes:				

Guideway - At-	grade in mixed traffic			
	Layout			
			Length (Ft)	28387.00
	Items			
Name	Source and Assumptions	UOM	Unit Cost	Total Cost
Concrete Encasement and steel ties	FTA Database	LF	\$ 2,691.00	\$ 152,778,834.00
Embedded Track	FTA Database: Include rails, connectors. DF	TF	\$ 544.00	\$ 30,885,056.00
ocs	FTA Database: Catenary	TF	\$ 462.00	\$ 13,114,794.00
Communications	FTA Database: Wired	TF	\$ 373.00	\$ 10,588,351.00
Signals	FTA Database: Wayside	TF	\$ 743.00	\$ 21,091,541.00
Substations	FTA Database: Traction Power Supply	LF	\$ 588.00	\$ 16,691,556.00
Total Cost (2024) \$ 245,150,132.00	Total Cost (2040)	\$ 425,086,906.55		
Notes:				

Guidewa	y - At-grade Semi Exclusive										
	Layout										
Length (Ft)											
Items											
Name	Source and Assumptions	UOM	Unit Cost	Total Cost							
Concrete Encasement and steel ties	FTA Database	LF	\$ 3,385.00	\$ 268,328,950.00							
Embedded Track	FTA Database: Include rails, connectors. DF	TF	\$ 544.00	\$ 43,122,880.00							
ocs	FTA Database: Catenary	TF	\$ 462.00	\$ 18,311,370.00							
Communications	FTA Database: Wired	TF	\$ 373.00	\$ 14,783,855.00							
Signals	FTA Database: Wayside	TF	\$ 743.00	\$ 29,448,805.00							
Substations	FTA Database: Traction Power Supply	LF	\$ 588.00	\$ 23,305,380.00							
¥											
Total Cost (2024) \$ 397,301,240.00	Total Cost (2040)	\$ 688,914,803.77									
Notes:											



		Misc Items					
Name	Source and Assumptions	UOM	Quantity	Unit Cost	Total Cost	1	Fotal Cost (204
LRV Vehicles	FTA Database. Quantity assumes 31 peak vehicles and a spare ratio of 35%	VEHICLES	42	\$ 7,882,670.00	\$ 331,072,140.	00 \$	574,074,4
Special Work for Intersections (TO & Switches)	Based on SEPTA TO cost & inflation calculator: 15 in system	EACH	15	\$ 225,000.00	\$ 3,375,000.	00 \$	5,852,2
LRV Yard Track	FTA Database: estimate from 69th St LRV Yard - 8, 250' storage Tracks. Includes yard construction, quideway and track associated with the yard.	TF	2000	\$ 126.00	\$ 252,000.	00 5	436,9
LRV Yard Track Turnouts	Based on SEPTA TO cost & inflation calculator: Estimate from 69th St LRV Yard: 5 in yard	EACH	5	\$ 172,000.00			1,491,2
At-Grade Stations	FTA Database: Includes station structures including caissons, columns, platforms, canopys, etc.	EACH	18	\$ 5,393,373.00	\$ 97,080,714.	00 \$	168,336,6
Aerial Stations	FTA Database: Includes station structures including caissons, columns, platforms, superstructures, etc.	EACH	4	\$ 9,659,844.00	\$ 38,639,376.	00 \$	67,000,1
Maintenance Facility	Size and cost based on 69th Master Plan Project.	SF	30000	\$ 1,000.00	\$ 30,000,000.	00 \$	52,019,5
Transition Structures from At-Grade to Elevated	FTA Database: Special Structures (\$6502/ft) assuming 350' transition	EACH	1	\$ 826,000.00	\$ 826,000.	00 \$	1,432,2

				Roadway Reconst	ruction for	At grade LRT			
					Layout				
Length (Ft)	28387.00	Width (Ft)	12	Number of Lanes	2	Excavation Depth (Ft)	1.83	Total Area (SF)	681,288.00
					Items			1	T
		Name			Sou	rce and Assumptions	UOM	Unit Cost	Total Cost
		GEOTEXTILE, CLASS	1, TYPE A		PennDOT Stand	ard Item 0212-0014	SY	\$ 2.70	\$ 204,386.40
		SUBBASE 8" DEPTH	NO. 2A)		PennDOT Stand	ard Item 0350-0108	SY	\$ 22.00	\$ 1,665,370.67
		lain Cement Concrete Base C			PennDOT Stand	ard Item 0301-0006	SY	\$ 115.00	\$ 8,705,346.67
		DESIGN, BINDER COURSE, MIX, 2 1/2" DEP	TH		PennDOT Stand	ard Item 0413-6055	SY	\$ 20.00	\$ 1,513,973.33
SUPERPAVE ASI	PHALT MIXTURE (DESIGN, WEARING COURS MIX, 1 1/2" DEPTH,			PennDOT Stand	ard Item 0413-0297	SY	\$ 13.00	\$ 984,082.67
		ASPHALT TACK COAT (NTT/CNTT)		PennDOT Stand	ard Item 0460-0003	SY	\$ 1.00	\$ 151,397.33
		6" PAVEMENT BASE	DRAIN		PennDOT Stand	ard Item 0610-7002	LF	\$ 20.00	\$ 1,135,480.00
		GEOTEXTILE, CLA	ASS 1		PennDOT Stand	ard Item 0212-0001	LF	\$ 1.60	\$ 90,838.40
		NO. 8 COARSE AGGI	REGATE		PennDOT Stand	ard Item 0703-0022	CY	\$ 60.00	\$ 87,373.84
		CLASS 1 EXCAVA	TION		PennDOT Stand	dard Item 0203-0001	CY	\$ 42.00	\$ 1,942,932.44
	PL	LAIN CEMENT CONCRETE O	CURB, 8" HEIGHT		PennDOT Stand	dard Item 0630-0041	LF	\$ 46.00	\$ 2,611,604.00
	Total Cost (2024)					Total Cost (2040	33,106,623.96		
Notes: These item	s are for the reco	enstruction of the existing r	padway when the LRT	is in mixed traffic.					





Project Information	
Project Name	Roosevelt Blvd
Job No.	
MPMS No.	

77596.00 Inflation Rate 3.5%

Roosevelt Blvd Cost Estimate - Subway Items

	Layout			
			Length (Ft)	5332.00
	Items			
Name	Source and Assumptions	иом	Unit Cost	Total Cost
Ballastless Track	FTA Database: Include rails, connectors. DF	TF	\$ 922.00	\$ 9,832,208.0
Signals System	FTA Database: Wayside	TF	\$ 1,229.00	\$ 6,553,028.0
Communications	FTA Database: Wired	TF	\$ 329.00	\$ 1,754,228.0
Traction Power System	FTA Database: Third Rail System	TF	\$ 566.00	\$ 3,017,912.0
Substations	FTA Database: Traction Power Supply	TF	\$ 576.00	\$ 3,071,232.0
Guideway: Bored Tunnel	FTA Database/include tunneling by means of a tunnel boring machine, drill blasting, minig, and immersed tube tunneling; tunnel structure and finished	LF	\$ 28,034.00	\$ 149,477,288.0
Total Cost (2024) \$ 173,705,896.00	Total Cost (2040)	\$ 301,203,598.70		

	Layout		Length	/E#\	38785.00
	Items		Lengu	(Ft)	38785.00
Name	Source and Assumptions	иом	Unit Cost		Total Cost
Ballastless Track	FTA Database: Include rails, connectors. DF	TF	\$ 922	.00 \$	71,519,540.0
Signals System	FTA Database: Wayside	TF	\$ 1,229	.00 \$	47,666,765.0
Communications	FTA Database: Wired	TF	\$ 329	.00 \$	12,760,265.0
Fraction Power System	FTA Database: Third Rail System	TF	\$ 560	.00 \$	21,952,310.0
Substations	FTA Database: Traction Power Supply	TF	\$ 576	.00 \$	22,340,160.0
Guideway: Cut and Cover Tunnel	FTA Database: Excavation, retaining walls, backfunderground guideway structure and finishes	ill, LF	\$ 30,339	.00 \$	1,176,698,115.0
Total Cost (2024) \$ 1,352,937,155.00	Total Cost (204	0) \$ 2,345,974,139.54	1		

		$\overline{}$		0 T	ala Elavatad				_	
				2- I ra	ick, Elevated					
					Layout					
Out-Out Width (FT)	50.00	Length within ROW	17090.00	Length Outside ROW	12500.00			Total Length (Ft)		29590.00
					Items					
		Name			Source	ce and Assumptions	UOM	Unit Cost		Total Cost
Ballastless Track					FTA Database:	: Include rails, connectors. DF	TF	\$ 922.00	\$	54,563,960.00
Signals System					FTA	Database: Wayside	TF	\$ 1,229.00	\$	36,366,110.00
Communications					FTA	A Database: Wired	TF	\$ 329.00	\$	9,735,110.00
Traction Power Syste	em				FTA Data	base: Third Rail System	TF	\$ 566.00	\$	16,747,940.00
Substations					FTA Databa	ase: Traction Power Supply	TF	\$ 576.00	\$	17,043,840.00
Guideway: Aerial					structures includ	oundation excavation; guideway ing caissons, columns, bridges, cross-overs, fly-overs.	LF	\$ 15,434.00	ś	456,692,060.00
Right-of-Way Acquis	sition					taken from KOP Rail Cost	AC	\$ 1,000,000.00		14,348,025.71
	Total Cost (2024)	\$ 605,497,045.71		·		Total Cost (2040)	\$ 1,049,923,424.42			
Notes: North of Sou	uthampton Rd w	ill be outside PennDOT ROW	and will require RO	OW Acquisition.						



	Layout			
			Length (Ft)	3889.00
	Items			
Name	Source and Assumptions	иом	Unit Cost	Total Cost
Ballastless Track	FTA Database: Include rails, connectors. DF	TF	\$ 922.00	\$ 7,171,316.00
Signals System	FTA Database: Wayside	TF	\$ 1,229.00	\$ 4,779,581.00
Communications	FTA Database: Wired	TF	\$ 329.00	\$ 1,279,481.00
Traction Power System	FTA Database: Third Rail System	TF	\$ 566.00	\$ 2,201,174.00
Substations	FTA Database: Traction Power Supply	TF	\$ 576.00	\$ 2,240,064.00
Total Cost (2024) \$ 17,671,616.00	Total Cost (2040)	\$ 30,642,335.45		
Notes:	Total Cost (2040)	\$ 30,642,335.45		

		Track				
		Items				
Name	Source and Assumptions	UOM	Quantity	Unit Cost	Total Cost	Total Cost (2040)
BSL Vehicles	FTA Database. Quantity based on 120 peak vehicles and 20% spare ratio.	VEHICLES	144	\$ 5,149,609.00	\$ 741,543,696.00	\$ 1,285,826,416.79
MFL Vehicles	FTA Database. Quantity based on 12 peak vehicles and 20% spare ratio for the extension to MFL	VEHICLES	15	\$ 5,149,609.00	\$ 77,244,135.00	\$ 133,940,251.75
Interlockings	Taken from cost estimate of new DXO for MFSE Resignalization Project: No. 8 DXO every 2.5 Miles, this was the average of miles between each crossover move between BSS	EACH	6	\$ 6,800,000.00	\$ 40,800,000.00	\$ 70,746,630.43
Junction @ Erie BSS	SEPTA Special trackwork cost of recent procurement & inflation calculator FTA Database: Estimate based on Fern Rock Yard	EACH	2	\$ 225,000.00	\$ 450,000.00	\$ 780,293.72
	800'/storage track, 10 tracks - this needs an idea of design & capacity, is subject to change. Includes yard construction, guideway and track associated	TF	8000			
BSS Terminal Yard Tracks	with the yard. SEPTA Special trackwork cost of recent			\$ 1,396.00	\$ 11,168,000.00	\$ 19,365,156.09
Yard Turnouts	procurement & inflation calculator: Number of	EACH	8	\$ 172,000.00	\$ 1,376,000.00	\$ 2,385,964.79
Sub-Grade Stations	FTA Database: Includes retaining walls backfill and structure.	EACH	8	\$ 119,792,576.00	\$ 958,340,608.00	\$ 1,661,749,235.67
Elevated Stations	FTA Database: Includes station structures including caissons, columns, platforms, superstructures, etc.	EACH	4	\$ 65,626,876.00	\$ 262,507,504.00	\$ 455,184,347.29
Fare Collection System @ Sub Grade Stations	FTA Database: fare collection gates etc.	EACH	8	\$ 3,774,788.00	\$ 30,198,304.00	\$ 52,363,437.56
Fare Collection System @ Elevated Stations	FTA Database: fare collection gates etc.	EACH	4	\$ 3,774,788.00	\$ 15,099,152.00	\$ 26,181,718.78
Maintenance Facility	FTA Database: Used 50 Vehicles, subject to change based on how many vehicles we are storing & servicing at this facility. Includes heavy maintenance and overhaul facilities.	SF	30000	\$ 1,000.00	\$ 30,000,000.00	\$ 52,019,581.19
MFL Junction @ FTC (SPECIAL WORK & WYE) *ONLY FOR ELEVATED EXT TO MFL*	Assuming stub ending at Roosevelt	EACH	2	\$ 1,000.00		
Bridge Street Garage Demolition *ONLY FOR EXT TO MFL*	FTA Database	LF	370	\$ 1,072.00	\$ 396,640.00	\$ 687,768.22
Notes:						



	2- Track, Underground Extension to MFL Layout				
	•		Length (Ft)	4224.00	
	Items			-	
Name	Source and Assumptions	иом	Unit Cost	Total Cost	
Ballastless Track	FTA Database: Include rails, connectors. DF	TF	\$ 922.00	\$ 3,894,528.00	
Signals System	FTA Database: Wayside	TF	\$ 1,229.00	\$ 5,191,296.00	
Communications	FTA Database: Wired	TF	\$ 329.00	\$ 1,389,696.00	
Traction Power System	FTA Database: Third Rail System	TF	\$ 566.00	\$ 2,390,784.00	
Substations	FTA Database: Traction Power Supply	TF	\$ 576.00	\$ 2,433,024.00	
Guideway: Cut and cover	FTA Database: Excavation, retaining walls, backfill, underground guideway structure and finishes	LF	\$ 30,339.00	\$ 128,151,936.00	
Total Cost (2024) \$ 143,451,264.00	Total Cost (2040)	\$ 248,742,489.17			
Notes:					

		2- Track, Eleva	ted Extension to MFL				
			Layout			•	
Out-Out Width (FT) 50.00		Length Outside ROW	4224.00		Length (Ft)	4224.00	
		•	Items		•		
	Name		Source and Assumptions	UOM	Unit Cost	Total Cost	
Ballastless Track			FTA Database: Include rails, connectors. DF	TF	\$ 922.00	\$ 3,894,528.00	
Signals System			FTA Database; Wayside	TF	\$ 1,229.00	\$ 5,191,296.00	
Communications			FTA Database: Wired	TF	\$ 329.00	\$ 1,389,696.00	
Traction Power System			FTA Database: Third Rail System	TF	\$ 566.00	\$ 2,390,784.00	
Substations			FTA Database: Traction Power Supply	TF	\$ 576.00	\$ 2,433,024.00	
Guideway: Aerial			FTA Database: Foundation excavation; guideway structures including caissons, columns, bridges,	LF	\$ 15,434.00	\$ 65,193,216.00	
Right-of-Way Acquisition			Cost Per Acreage taken from KOP Rail Cost Estimate	AC	\$ 1,000,000.00	\$ 4,848,484.85	
Total Cost (2024)	\$ 85,341,028.85		Total Cost (2040)	\$ 147,980,152.65			
Notes:					-		



Project Informatio	n
Project Name	Roosevelt Blvd
Job No.	
MPMS No.	

Total Transit 98589.00 Length (FT) 18.6 Inflation Rate 3.5%

Roosevelt Blvd Cost Estimate - BRT Items

ength (Ft)		1.83	Total Area (SF)	
			Total Arca (or)	1,352,136.0
	Items			
Name	Source and Assumptions	UOM	Unit Cost	Total Cost
TEXTILE, CLASS 4, TYPE A	PennDOT Standard Item 0212-0014	SY	\$ 2.70	\$ 405,640.8
BASE 8" DEPTH (NO. 2A)	PennDOT Standard Item 0350-0108	SY	\$ 22.00	\$ 3,305,221.3
Cement Concrete Base Course, 10" Depth	PennDOT Standard Item 0301-0006	SY	\$ 115.00	\$ 17,277,293.3
ERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, 3 TO < 10 MILLION ESALS, 19.0 $21/2^\circ$ DEPTH	PennDOT Standard Item 0413-6055	SY	\$ 20.00	\$ 3,004,746.6
ERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, PG 64S-22, 3 TO < 10 MILLION ESALS, 9. 1 1/2" DEPTH, SRL-E	.5 MM PennDOT Standard Item 0413-0297	SY	\$ 13.00	\$ 1,953,085.3
HALT TACK COAT (NTT/CNTT)	PennDOT Standard Item 0460-0003	SY	\$ 1.00	\$ 300,474.6
AVEMENT BASE DRAIN	PennDOT Standard Item 0610-7002	LF	\$ 20.00	\$ 2,253,560.0
TEXTILE, CLASS 1	PennDOT Standard Item 0212-0001	LF	\$ 1.60	\$ 180,284.8
8 COARSE AGGREGATE	PennDOT Standard Item 0703-0022	CY	\$ 60.00	\$ 173,408.7
SS 1 EXCAVATION	PennDOT Standard Item 0203-0001	CY	\$ 42.00	\$ 3,856,091.5
IN CEMENT CONCRETE CURB, 8" HEIGHT	PennDOT Standard Item 0630-0041	LF	\$ 46.00	\$ 5,183,188.0
BUS LANE PAVEMENT MARKINGS	PennDOT Special Item. Utilized PennDOT ECMS for price history.	SF	\$ 11.25	\$ 15,211,530.0
NSVERSE PAVEMENT MARKINGS	Assumed 20% of length per lane. PennDOT Standard item 0960-0021	LF	\$ 8.00	\$ 1,261,993.6
EMENT MARKING LEGENDS	2 lengends spaced out every 1000'. PennDOT Standard Item 0960-0101.	EACH	\$ 285.00	\$ 64,226.4
Total Cost (2024) \$ 54,430,745.32	Total Cost (2040) \$ 94,382,152.53		

	BRT Misc Items											
Items												
Name		Source and Assumptions	иом	Quantity		Unit Cost	т	otal Cost	To	otal Cost (2040)		
Zero Emissions Bus	FTA D	atabase. Quantity based on 31 peak vehicles, and a 35% spare ratio	VEHICLES	42	\$	1,364,722.00	\$	57,318,324.00	\$	99,389,173.64		
Stations	FTA D	atabase	EACH	22	\$	1,443,712.00	\$	31,761,664.00	\$	55,074,281.98		
Maintenance Facility	Size ar	d cost based on 69th Master Plan Project.	SF	40000	\$	800.00	\$	32,000,000.00	\$	55,487,553.27		
Notes:												



Project Information								
Project Name	Roosevelt Blvd							
Job No.								
MPMS No.								

Roosevelt Boulevard 2040 Order of Magnitude Cost Estimate - Roadway Unit Cost Justification

0203-0001	Class 1 E	xcavation						
PROJECT	DISTRICT	LET DATE	QUANTITY	UNIT	BID	UNIT PRICE	NO	TES
16334	6	2/29/2024	11667	CY	1	\$58.00		
48175	6	4/27/2023	19466	CY	1	\$35.00		
107794	6	2/15/2024	41260	CY	1	\$33.00		
							ESTIMATOR PRICE	ESTIMATOR
		Roosevelt Blvd			AVERAGE	\$ 42.00	\$ 42.00	"INITIALS"
					TOTAL COST	\$ -		
Notes:								

0301-0006	Plain Cen	nent Concrete I	Base Course, 10)" Depth				
PROJECT	DISTRICT	LET DATE	QUANTITY	UNIT	BID	UNIT PRICE	TON	ES
79910	6	6/30/2022	2796	SY	1	\$150.00		
106264	6	12/16/2022	3046	SY	1	\$100.00		
110415	6	5/13/2021	849	SY	1	\$75.00		
111501	6	1/13/2022	38	SY	1	\$100.00		
115759	6	7/13/2023	173	SY	1	\$135.00		
							ESTIMATOR PRICE	ESTIMATOR
		Roosevelt Blvd			AVERAGE	\$ 112.00	\$ 115.00	"INITIALS"
					TOTAL COST	\$ -		
Notes:								

0413-6055		SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, 3 TO < 10 MILLION ESALS, 19.0 MM MIX, 2 1/2" DEPTH											
PROJECT	DISTRICT	LÉT DATE	QUANTITY	UNIT	BID	UNIT PRICE	NOT	ES					
14541	6	8/25/2022	10743	SY	1	\$20.00							
48175	6	4/27/2023	38699	SY	1	\$16.50							
79910	6	6/30/2022	18609	SY	1	\$17.00							
116262	6	3/30/2023	5762	SY	1	\$25.00							
119160	6	12/14/2023	479	SY	1	\$24.00							
							ESTIMATOR PRICE	ESTIMATOR					
		Roosevelt Blvd			AVERAGE	\$ 20.50	\$ 20.00	"INITIALS"					
					TOTAL COST	\$ -							
Notes:													



0413-0297			MIXTURE DESI 2" DEPTH, SRL		ARING COUR	SE, PG 64S-22	2, 3 TO < 10 M	ILLION		
PROJECT	DISTRICT	LET DATE	QUANTITY	UNIT	BID	UNIT PRICE	ГОИ	ES		
14541	6	8/25/2022	64319	SY	1	\$10.50				
79910	6	6/30/2022	52807	SY	1	\$13.00				
106264	6	12/16/2022	80740	SY	1	\$18.00				
111170	6	10/20/2022	22417	SY	1	\$12.00				
116262	6	3/30/2023	36015	SY	1	\$11.00				
							ESTIMATOR PRICE	ESTIMATOR		
		Roosevelt Blvd			AVERAGE	\$ 12.90	\$ 13.00	"INITIALS"		
					TOTAL COST	\$ -				
Notes:										

0350-0108	SUBBASE	E 8" DEPTH (NO	O. 2A)					
PROJECT	DISTRICT	LET DATE	QUANTITY	UNIT	BID	UNIT PRICE	NO.	TES
16334	6	2/29/2024	12667	SY	1	\$22.00		
79910	6	6/30/2022	70413	SY	1	\$21.00		
90612	6	4/27/2023	5206	SY	1	\$22.84		
92323	6	3/23/2023	8388	SY	1	\$20.00		
							ESTIMATOR PRICE	ESTIMATOR
		Roosevelt Blvd	,		AVERAGE	\$ 21.46	\$ 22.00	"INITIALS"
					TOTAL COST	\$ -		
Notes:								

0460-0003	ASPHALT	TACK COAT (NTT/CNTT)					
PROJECT	DISTRICT	LET DATE	QUANTITY	UNIT	BID	UNIT PRICE	NOT	ES
79910	6	6/30/2022	148603	SY	1	\$0.80		
15306	6	3/2/2023	14134	SY	1	\$1.10		
16738	6	9/28/2023	15872	SY	1	\$2.00		
112298	6	5/25/2023	1738016	SY	1	\$0.67		
112299	6	2/2/2023	640940	SY	1	\$0.65		
							ESTIMATOR PRICE	ESTIMATOR
		Roosevelt Blvd			AVERAGE	\$ 1.04	\$ 1.00	"INITIALS"
					TOTAL COST	\$ -		
Notes:								

0610-7002		MENT BASE DR	AIN					
PROJECT	DISTRICT	LET DATE	QUANTITY	UNIT	BID	UNIT PRICE	NOT	ΓES
79910	6	6/30/2022	29945	LF	1	\$19.00		
16738	6	9/28/2023	21496	LF	1	\$14.25		
16334	6	2/29/2024	4561	LF	1	\$25.00		
107794	6	2/15/2024	7663	LF	1	\$20.00		
							ESTIMATOR PRICE	ESTIMATOR
		Roosevelt Blvd			AVERAGE	\$ 19.56	\$ 20.00	"INITIALS"
					TOTAL COST	\$ -		



0212-0001	GEOTEXT	TILE, CLASS 1						
PROJECT	DISTRICT	LET DATE	QUANTITY	UNIT	BID	UNIT PRICE	NOT	ΓES
16738	6	9/28/2023	21496	LF	1	\$2.00		
79910	6	6/30/2022	34043	LF	1	\$1.40		
92323	6	3/23/2023	1985	LF	1	\$1.24		
							ESTIMATOR PRICE	ESTIMATOR
		Roosevelt Blvd			AVERAGE	\$ 1.55	\$ 1.60	"INITIALS"
					TOTAL COST	\$		

Notes:

0212-0014	GEOTEXT	TILE, CLASS 4,	TYPE A					
PROJECT	DISTRICT	LET DATE	QUANTITY	UNIT	BID	UNIT PRICE	NOT	ES
16738	6	9/28/2023	87983	SY	1	\$2.50		
79910	6	6/30/2022	120115	SY	1	\$2.40		
106264	6	12/16/2022	66602	SY	1	\$3.00		
							ESTIMATOR PRICE	ESTIMATOR
		Roosevelt Blvd			AVERAGE	\$ 2.63	\$ 2.70	"INITIALS"
					TOTAL COST	\$ -		

Notes:

0703-0022	NO. 8 CO	ARSE AGGRE	GATE					
PROJECT	DISTRICT	LET DATE	QUANTITY	UNIT	BID	UNIT PRICE	NOT	ES
110949	6	5/25/2023	103	CY	1	\$63.00		
110963	6	10/20/2022	13	CY	1	\$60.00		
57849	6	11/3/2022	61	CY	1	\$52.75		
106264	6	12/16/2022	233	CY	1	\$65.00		
							ESTIMATOR PRICE	ESTIMATOR
		Roosevelt Blvd			AVERAGE	\$ 60.19	\$ 60.00	"INITIALS"
					TOTAL COST	\$ -		

Notes:

0630-0041	PLAIN CE	MENT CONCR	ETE CURB, 8" I	HEIGHT				
PROJECT	DISTRICT	LET DATE	QUANTITY	UNIT	BID	UNIT PRICE	TON	TES
14541	6	8/25/2022	5691	LF	1	\$50.00		
48175	6	4/27/2023	7931	LF	1	\$44.00		
107794	6	2/15/2024	8063	LF	1	\$45.00		
116262	6	3/30/2023	9810	LF	1	\$45.00		
							ESTIMATOR PRICE	ESTIMATOR
		Roosevelt Blvd			AVERAGE	\$ 46.00	\$ 46.00	"INITIALS"
					TOTAL COST	\$ -		

Notes:



0676-0001	0676-0001 CEMENT CONCRETE SIDEWALK										
PROJECT	DISTRICT	LET DATE	QUANTITY	UNIT	BID	UNIT PRICE	NOTES				
79910	6	6/30/2022	10711	SY	1	\$140.00					
48175	6	4/27/2023	4036	SY	1	\$165.00					
106264	6	12/16/2022	4487	SY	1	\$110.00					
							ESTIMATOR PRICE	ESTIMATOR			
		Roosevelt Blvd			AVERAGE	\$ 138.33	\$ 140.00	"INITIALS"			
					TOTAL COST	\$ -					
Notes:											

0350-0106	SUBBASE	E 6" DEPTH (NO	D.2A)					
PROJECT	DISTRICT	LET DATE	QUANTITY	UNIT	BID	UNIT PRICE	NOT	ES
16738	6	9/28/2023	29050	SY	1	\$12.50		
17697	6	11/3/2022	14677	SY	1	\$16.00		
79910	6	6/30/2022	34428	SY	1	\$20.00		
							ESTIMATOR PRICE	ESTIMATOR
		Roosevelt Blvd			AVERAGE	\$ 16.17	\$ 16.50	"INITIALS"
					TOTAL COST	\$ -		
Notes:								

0313-0424		AVE ASPHALT MIX, 5" DEPTH		TURE DESIG	GN, BAS	E COURSE, F	PG 64S-22, 0.	3 ТО	< 3 MILLI	ON ESALs,
PROJECT	DISTRICT	LET DATE	C	QUANTITY	UNIT	BID	UNIT PRICE		NOT	ES
16334	6	2/29/2024		11804	SY	1	\$37.50			
63486	6	1/14/2021		19767	SY	1	\$24.50			
110415	6	5/13/2021		2451	SY	1	\$30.00			
									TIMATOR PRICE	ESTIMATOR
		Roosevelt Blvd				AVERAGE	\$ 30.67	\$	31.00	"INITIALS"
						TOTAL COST	\$ -			
Notes:										

0413-0244	SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 9.5 MM MIX, 1 1/2" DEPTH, SRL-E										
PROJECT	DISTRICT	LÉT DATE	QUANTITY	UNIT	BID	UNIT PRICE	TON	ES			
92323	6	3/23/2023	19948	SY	1	\$11.09					
115422	6	1/25/2024	30002	SY	1	\$10.35					
16334	6	2/29/2024	13068	SY	1	\$11.00					
							ESTIMATOR PRICE	ESTIMATOR			
		Roosevelt Blvd			AVERAGE	\$ 10.81	\$ 11.00	"INITIALS"			
					TOTAL COST	\$ -					

Notes: Using SRL-E instead of L due to limited projects using L.



0804-0036	0804-0036 SEEDING AND SOIL SUPPLEMENTS - FORMULA B RESIDENTIAL MIX											
PROJECT	DISTRICT	LET DATE	QUANTITY	UNIT	BID	UNIT PRICE	NOT	ΓES				
16738	6	9/28/2023	1150	LB	1	\$16.00						
102709	6	11/2/2023	149	LB	1	\$20.00						
111024	6	7/13/2023	330	LB	1	\$17.00						
							ESTIMATOR PRICE	ESTIMATOR				
		Roosevelt Blvd			AVERAGE	\$ 17.67	\$ 18.00	"INITIALS"				
					TOTAL COST	\$ -						

0802-0001	TOPSOIL	FURNISHED A	ND PLACED					
PROJECT	DISTRICT	LET DATE	QUANTITY	UNIT	BID	UNIT PRICE	NOT	ΓES
79830	6	5/12/2022	1267	CY	1	\$96.50		
79910	6	6/30/2022	16115	CY	1	\$98.00		
16738	6	9/28/2023	7147	CY	1	\$70.00		
							ESTIMATOR PRICE	ESTIMATOR
		Roosevelt Blvd			AVERAGE	\$ 88.17	\$ 89.00	"INITIALS"
					TOTAL COST	\$ -		
			_					

0204-0100	CLASS 3	EXCAVATION						
PROJECT	DISTRICT	LET DATE	QUANTITY	UNIT	BID	UNIT PRICE	TON	ES
47992	6	5/26/2022	595	CY	1	\$46.75		
106264	6	12/16/2022	1573	CY	1	\$50.00		
116878	6	8/11/2022	680	CY	1	\$55.00		
							ESTIMATOR PRICE	ESTIMATOR
		Roosevelt Blvd			AVERAGE	\$ 50.58	\$ 50.00	"INITIALS"
					TOTAL COST	\$ -		

			*								
0205-0100	0205-0100 FOREIGN BORROW EXCAVATION										
PROJECT	DISTRICT	LET DATE	QUANTITY	UNIT	BID	UNIT PRICE	TON	ES			
102709	6	11/2/2023	12000	CY	1	\$16.00					
105077	6	3/23/2023	6073	CY	1	\$25.00					
106264	6	12/16/2022	13184	CY	1	\$20.00					
							ESTIMATOR PRICE	ESTIMATOR			
		Roosevelt Blvd			AVERAGE	\$ 20.33	\$ 21.00	"INITIALS"			
					TOTAL COST	\$ -					
	•				•		•	•			

1001-1001	CLASS A	CLASS AAAP CEMENT CONCRETE								
PROJECT	DISTRICT	LET DATE	QUANTITY	UNIT	BID	UNIT PRICE	NOTES			
110354	2	8/12/2021	512	CY	1	\$1,000.00				
10328	5	9/14/2023	555	CY	1	\$1,929.46				
114378	5	8/24/2023	25	CY	1	\$1,700.00				



					ES	STIMATOR PRICE	ESTIMATOR
	Roosevelt Blvd		AVERAGE	\$ 1,543.15	\$	1,545.00	"INITIALS"
			TOTAL COST	\$ -			

0680-0121	MEMBRA	NE WATERPRO	OOFING SYSTE	M INSTA	LLED ON OT	HER SURFAC	ES	
PROJECT	DISTRICT	LET DATE	QUANTITY	UNIT	BID	UNIT PRICE	TON	ΓES
69423	2	4/13/2023	238	SY	1	\$95.00		
74344	12	3/14/2024	225	SY	1	\$45.00		
87778	11	12/14/2023	240	SY	1	\$105.00		
							ESTIMATOR PRICE	ESTIMATOR
		Roosevelt Blvd			AVERAGE	\$ 81.67	\$ 82.00	"INITIALS"
					TOTAL COST	\$ -		

1001-0611	6" STRUC	TURE FOUND	ATION DRAIN					
PROJECT	DISTRICT	LET DATE	QUANTITY	UNIT	BID	UNIT PRICE	NOT	ES
87778	11	12/14/2023	486	LF	1	\$32.56		
106124	3	9/15/2022	834	5	1	\$13.90		
120915	1	3/14/2024	385	LF	1	\$20.00		
							ESTIMATOR PRICE	ESTIMATOR
		Roosevelt Blvd			AVERAGE	\$ 22.15	\$ 23.00	"INITIALS"
					TOTAL COST	\$ -		

9000-XXXX	ARCHITE	ARCHITECTURAL SURFACE TREATMENT									
PROJECT	DISTRICT	LET DATE	QUANTITY	UNIT	BID	UNIT PRICE	TON	ES			
				SY							
							ESTIMATOR PRICE	ESTIMATOR			
		Roosevelt Blvc			AVERAGE	#DIV/0!	\$ 210.00	"INITIALS"			
					TOTAL COST	\$ -					

Note: Cost taken from 2020 Cost Estimate

1019-0040	PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES (PENETRATING SEALERS, REINFORCED CONCRETE SUBSTRUCTURE SURFACES)									
PROJECT	DISTRICT	LET DATE	QUANTITY	UNIT	BID	UNIT PRICE	NOT	ES		
10328	5	9/14/2023	3711	SY	1	\$9.98				
63515	11	12/15/2022	3223	SY	1	\$9.50				
87778	11	12/14/2023	8226	SY	1	\$7.65				
							ESTIMATOR PRICE	ESTIMATOR		
		Roosevelt Blvd			AVERAGE	\$ 9.04	\$ 10.00	"INITIALS"		
					TOTAL COST	\$ -				



0703-0025	NO. 57 C	DARSE AGGRE	GATE					
PROJECT	DISTRICT	LET DATE	QUANTITY	UNIT	BID	UNIT PRICE	TON	ΓES
16738	6	9/28/2023	667	CY	1	\$92.00		
87107	6	9/14/2023	1433	CY	1	\$170.00		
111464	6	11/2/2023	899	CY	1	\$94.00		
							ESTIMATOR PRICE	ESTIMATOR
		Roosevelt Blvd			AVERAGE	\$ 118.67	\$ 119.00	"INITIALS"
					TOTAL COST	\$ -		
					•		·	

0623-0303	CONCRE	TE MEDIAN BA	RRIER, F-SHAP	E, 50" H	EIGHT			
PROJECT	DISTRICT	LET DATE	QUANTITY	UNIT	BID	UNIT PRICE	NOT	ΓES
16738	6	9/28/2023	7443	LF	1	\$150.00		
86006	5	12/14/2023	13334	LF	1	\$150.00		
97013	8	7/13/2023	5205	LF	1	\$151.00		
				,			ESTIMATOR PRICE	ESTIMATOR
		Roosevelt Blvd			AVERAGE	\$ 150.33	\$ 150.00	"INITIALS"
			/		TOTAL COST	\$ -		

0960-0005	6" WHITE	HOT THEMOP	LASTIC PAVEM	ENT MA	RKINGS			
PROJECT	DISTRICT	LET DATE	QUANTITY	UNIT	BID	UNIT PRICE	NOT	ES
104989	6	5/11/2023	515405	LF	1	\$1.15		
112500	6	8/24/2023	409566	LF	1	\$1.17		
119265	6	5/11/2023	45000	LF	1	\$1.35		
							ESTIMATOR PRICE	ESTIMATOR
		Roosevelt Blvd			AVERAGE	\$ 1.22	\$ 1.25	"INITIALS"
					TOTAL COST	\$ -		

0960-0021 24" WHITE HOT THEMOPLASTIC PAVEMENT MARKINGS										
PROJECT	DISTRICT	LET DATE	QUANTITY	UNIT	BID	UNIT PRICE	NOT	ΓES		
109083	6	5/11/2023	13252	LF	1	\$7.00				
112500	6	8/24/2023	147430	LF	1	\$8.60				
119265	6	5/11/2023	17020	LF	1	\$8.00				
							ESTIMATOR PRICE	ESTIMATOR		
		Roosevelt Blvd			AVERAGE	\$ 7.87	\$ 8.00	"INITIALS"		
					TOTAL COST	\$ -				



PROJECT	DISTRICT	LET DATE	QUANTITY	UNIT	BID	UNIT PRICE	NOT	ES
112500	6	8/24/2023	12439	SF	1	\$9.80		
97828	8	8/24/2023	6572	SF	1	\$10.00		
111496	6	12/14/2023	890	SF	1	\$13.70		
							ESTIMATOR PRICE	ESTIMATOR
		Roosevelt Blvd			AVERAGE	\$ 11.17	\$ 11.25	"INITIALS"
					TOTAL COST	\$ -		

0960-0101	WHITE HO	OT THERMOPL	ASTIC LEGEND	, "ONLY	′", 8' - 0"						
PROJECT	DISTRICT	LET DATE	QUANTITY	UNIT	BID	UNIT PRICE	TON	ES			
104989	6	5/11/2023	234	EACH	1	\$300.00					
112500	6	8/24/2023	160	EACH	1	\$310.00					
104813	6	4/13/2023	124	EACH	1	\$244.44					
							ESTIMATOR PRICE	ESTIMATOR			
		Roosevelt Blvd			AVERAGE	\$ 284.81	\$ 285.00	"INITIALS"			
					TOTAL COST	\$ -					

0620-1600	TYPE 31-	S GUIDE RAIL									
PROJECT	DISTRICT	LET DATE	QUANTITY	UNIT	BID	UNIT PRICE	NOT	ES			
16738	6	9/28/2023	11513	LF	1	\$32.00					
112299	6	2/2/2023	10625	LF	1	\$41.40					
115424	6	12/15/2022	9313	LF	1	\$40.00					
							ESTIMATOR PRICE	ESTIMATOR			
		Roosevelt Blvd			AVERAGE	\$ 37.80	\$ 38.00	"INITIALS"			
					TOTAL COST	\$ -					

0619-0459 PERMANENT IMPACT ATTENUATING DEVICE, TYPE II, TEST LEVEL 3, TANGENT (MASH)												
PROJECT	DISTRICT	LET DATE	QUANTITY	UNIT	BID	UNIT PRICE	NOT	ES				
112298	6	5/25/2023	31	EACH	1	\$5,022.50						
16738	6	9/28/2023	15	EACH	1	\$4,000.00						
115424	6	12/15/2022	19	EACH	1	\$3,550.00						
							ESTIMATOR PRICE	ESTIMATOR				
		Roosevelt Blvd			AVERAGE	\$ 4,190.83	\$ 4,200.00	"INITIALS"				
					TOTAL COST	\$ -						

0619-0744		ENT IMPACT A L TO 36 INCHE		EVICE, 7	TYPE V, TEST	T LEVEL 3, MA	ASH, WIDTHS LESS THAN
PROJECT	DISTRICT	LET DATE	QUANTITY	UNIT	BID	UNIT PRICE	NOTES
112299	6	2/2/2023	10	EACH	1	\$53,000.00	
79910	6	6/30/2022	5	EACH	1	\$26,000.00	
48175	6	4/27/2023	2	EACH	1	\$35,000.00	



				ES	STIMATOR PRICE	ESTIMATOR
Roosevelt Blvd		AVERAGE	\$ 38,000.00	\$	38,000.00	"INITIALS"
		TOTAL COST	\$ -			

9000-XXXX	TEMPORA	ARY EXCAVAT	ION SUPPORT	AND PRO	OTECION SYS	STEM		
PROJECT	DISTRICT	LET DATE	QUANTITY	UNIT	BID	UNIT PRICE	TON	ES
							ESTIMATOR PRICE	ESTIMATOR
		Roosevelt Blvd		SF	AVERAGE		\$ 100.00	"INITIALS"
					TOTAL COST	\$ -		

Note: Cost taken from 2020 Cost Estimate

0204-0001	CLASS 2	EXCAVATION								
PROJECT	DISTRICT	LET DATE	QUANTITY	UNIT	BID	UNIT PRICE	TON	ES		
107794	6	2/15/2024	973	CY	1	\$110.00				
111024	6	7/13/2023	701	CY	1	\$95.00				
48175	6	4/27/2023	504	CY	1	\$90.00				
							ESTIMATOR PRICE	ESTIMATOR		
		Roosevelt Blvd			AVERAGE	\$ 98.33	\$ 100.00	"INITIALS"		
					TOTAL COST	\$ -				