



Capital Improvements Plan December 2021 Update

Acknowledgments

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CRANBERRY TOWNSHIP TRANSPORTATION IMPACT FEE PROGRAM *CAPITAL IMPROVEMENTS PLAN*

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I. Introduction

On December 19, 1990, Pennsylvania Act 209 was effectively signed into law. Under this Act, municipalities are able to assess impact fees to new development within their communities. Impact fees are clearly defined in Act 209 as "a fee imposed by a municipality against new development to generate revenue for funding the cost of transportation capital improvements necessitated by and attributable to new development." In order to institute the Act, a four component Transportation Impact Fee Program must be developed and



implemented by the municipality. The Transportation Impact Fee Program consists of a *Land Use Assumptions Report*, a *Roadway Sufficiency Analysis*, a *Capital Improvement Plan* and an *Adopting Ordinance*. This process is directed by a Transportation Impact Fee Advisory Committee, which is established by the Board of Supervisors. The Cranberry Township Board of Supervisors made public its intention to update the impact fee program and established the Impact Fee Advisory Committee by Resolution No. 2021-24 on May 27, 2021. The following *Capital Improvements Plan* (CIP) update has been prepared on behalf of Cranberry Township, Butler County, Pennsylvania and has been completed in accordance with Pennsylvania Act 209 of 1990 and subsequent updates.

The results of the *Roadway Sufficiency Analysis* served as the basis for the CIP for Cranberry Township. As part of the *Roadway Sufficiency Analysis*, the existing transportation system was analyzed to identify existing deficiencies and to determine the preferred level of service. A travel demand model was used to project future traffic volumes, which were used to determine roadway and intersection deficiencies caused by projected growth within the Township. Mitigation improvements were developed for each deficient intersection and roadway segment. This CIP thoroughly investigates the eligibility and feasibility of each improvement identified in the *Roadway Sufficiency Analysis*. This study also determines the appropriate impact fee per PM peak hour site development trip for Cranberry Township's Transportation Service Areas (hereafter referred to as Transportation Districts).

II. Purpose

The primary objective of the CIP is to select projects from the list of eligible transportation improvement projects developed during the *Roadway Sufficiency Analysis* that efficiently and safely accommodate anticipated future traffic within the Township. Major tasks were performed

in cooperation with the Impact Fee Advisory Committee and Township Staff using generally accepted engineering and planning practices. These tasks included:

- Development of cost estimates for all identified improvements (in accordance with Act 209);
- Distinguish improvements as to whether they are needed to correct existing deficiencies, future base deficiencies and/or new site development traffic;
- Selection of candidate transportation improvement projects that will be included as impact fee projects on the CIP; and
- Provide a time schedule for when the improvements are to be implemented as part of the CIP.

III. Cost Estimate

Cost estimates were calculated for each improvement proposed in the *Roadway Sufficiency Analysis*. The estimates were completed using the most current (2021) construction costs. In order for the cost estimates to reflect actual costs in any given year, an inflation rate per year was applied. The inflation rate of 4% was used and was based on Turner Building Cost Index over the past 10 years. Therefore, if a project is anticipated to be constructed in 2025, it would reflect a cost 4% higher than the cost if the project was constructed in 2024.

Cost estimates for each proposed project were previously determined by developing conceptual designs of the improvements. Aerial mapping was used to conceptually design each transportation improvement. Estimated quantities for pavement, earthwork, drainage systems, pavement markings, structures, required right-ofway and various other pay items were



determined from the conceptual designs. Utility relocations were estimated based upon visible utilities such as gas valves and utility poles. Lastly, the cost estimates for each pay item were determined by referencing the PennDOT Electronic Contract Management Software (ECMS) website master list of construction items. The conceptual drawings for each applicable improvement project can be viewed in Appendix A and B. The report included a review of the projects and a refresh of the cost estimates to 2021 costs.

IV. Project Summary Sheets

A detailed summary sheet has been provided for each improvement. The sheets are arranged in ascending order based on the intersection or roadway segment nomenclature defined in the *Roadway Sufficiency Analysis*. Each summary sheet identifies the project location, type of deficiency, and proposed improvement. A suggested project schedule and project-funding scheme has also been provided for each project.

The travel demand model used throughout the *Roadway Sufficiency Analysis* determined anticipated 2030 Base traffic volumes as a result of background growth. The travel demand model also determined anticipated 2030 Development traffic volumes which were based on the projected land use assumptions found in the adopted *Land Use Assumptions Report*. The following five (5) possible funding source classifications were assumed for implementing the identified transportation improvements:

- State and/or Federal;
- Local and/or Other; and
- Cranberry Township Impact Fee.

Each project sheet summarizes the estimated cost of each project according to six quantities. The anticipated costs are documented as follows:

- Construction;
- Utility Relocation;
- Right-of-Way Acquisition;
- Engineering;
- Inspection; and
- Admin and Planning*.

*Admin and Planning cost estimates include legal and planning costs for impact fee eligible projects. Also includes consulting costs to secure State and Federal funding related to the nonimpact fee share of the projects.



Appendix A includes the project summary sheets and applicable improvement drawings for the projects that were selected for inclusion in the Township's CIP. Appendix B contains (for informational purposes only) other candidate projects from the *Roadway Sufficiency Analysis* that were not selected to be included in the CIP in table format. Appendix C has the project summary sheets and improvement drawings for the candidate projects.

V. Selected Projects of the Capital Improvement Plan

The *Roadway Sufficiency Analysis*, which was completed prior to the CIP, is a comprehensive planning study projecting traffic conditions over a 20-year horizon based on the Township's adopted Land Use Assumptions Report, as well as many other variables. The transportation recommendations developed in the Roadway Sufficiency Analysis were suggested as mitigations for projected deficiencies anticipated within the next 20-year period to provide a preferred operational Level of Service "D" for all intersections and roadway segments (as determined by Cranberry Township). Township Staff reviewed improvement projects during various work sessions to arrive at the list of 46 transportation projects that are incorporated into the CIP (15 of which are already completed, leaving 31 projects remaining). The Impact Fee Advisory Committee agreed with Township Staff's findings. Furthermore, as part of this process, projects were prioritized to arrive at the anticipated construction year for each, as well as adjustments made to the amount of participation by type of funding source. Suggested transportation projects not selected for the CIP are listed in Appendix B as "candidate projects" and include cost summary sheets with conceptual improvement sketches provided where applicable. Although these projects are not included in this CIP, these projects may be incorporated into future updates in accordance with Act 209 of 1990 and subsequent updates. The following projects were initially on the candidate projects list on the 2015 CIP but have been moved to the Capital Improvements list:

- S-23 Ehrman Road from Route 19 to Old Ehrman Road
- S-34 Executive Drive (T-936) and Thomson Park Drive (T-975) from Freedom Road to Rochester Road

A detailed summary of transportation improvement projects included as part of the CIP for Cranberry Township are shown in the table on the following pages. The improvements are sorted by district with the intersection or roadway segment location, project description, anticipated year of construction and total project cost with desired funding sources for each project.

The following list notes the information about the 31 selected transportation improvement projects:

- Fifteen (15) transportation projects involved improvements at various study intersections as a result of 2030 deficiencies.
- Nineteen (19) transportation projects involved improvements along various study segments as a result of 2030 deficiencies.
- One (1) transportation projects mitigate deficiencies as a result of existing traffic volumes.

Table 1 below summarizes the total construction cost, and the anticipated distribution of funding for each project.

Cranberry Township

n Dist I-10 I-19A	FICT The intersection of Franklin Road (SR 3021) and North Boundary Road (T-				(dollars)	(c
	The intersection of Franklin Read (SP 3021) and North Roundary Read (T					
I-19A	311).	Signalize the intersection and add a northbound left-turn lane on Franklin Road.	2035	2,398,156	1,654,728	
	Intersection of Marshall Road (T-305) and North Boundary Road (T-311).	Construct a roundabout.			Com	ple
I-20	The intersection of Marshall Road (T-305) and Rowan Road (SR 3018).	Signalize the intersection and add an eastbound left-turn lane, a southbound right-turn lane and a westbound right-turn lane.	2025	1,988,832	1,491,624	
I-42B	The intersection of Peters Road (T-307), Canterbury Trail (T-726) and Rowan Road (SR 3018).	Construct a roundabout.	2025	1,940,093	1,455,070	
S-D1		Construct 2 Lane Commercial Collector Roadway	2032	1,222,212	0	2
S-D4	Dutihl Road from Route 228 north to Brandt Drive.	Revise existing Dutihl Road to one way for portions in conjunction with construction of parallel 2 Lane Commercial Collector Roadway	2025	2,295,081	0	1,
S-H1	Route 228 to local road network north of Route 228 east of I-79.	Construct New loop ramp and flyover from Route 228 to local road network		I	Com	ple
S-H5	Local road network north of Route 228. North-South connection from	Construct 3 Lane Commercial Collector Roadway			Com	ple
I-12	The intersection of Franklin Road (SR 3021), Hope Road (T-309) and	Realign Rowan Road opposite of Hope Road. Signalize the intersection or roundabout	2032	2,272,209	0	1,
I-22	The intersection of US Route 19 (SR 0019), North Boundary Road (T-311)		2025	691,450	0	3
I-09A	The intersection of Franklin Road (SR 3021), Garvin Road (T-313) and Callery Road (SR 3014).	Realign Callery Road with Garvin Road to form a four-way "plus" intersection and construct a roundabout.	2025	3,595,121	0	2,4
I-40	The intersection of Franklin Road (SR 3021) and PA Route 228.	Add EBL, WBL, SB Dual Lefts, NBT.	2030	6,279,319	5,337,421	
S-20	North Boundary Road from Marshall Road to Franklin Road	Add left turn lanes at key intersections to maintain thru traffic flow.		L	Com	ple
S-23	Ehrman Road from Route 19 to Old Ehrman Road.	Add left turn lanes at key intersections to maintain thru traffic flow.	2030	3,205,635	160,282	1,0
S-25	Rowan Road (SR 3018) from Marshall Road to Peters Rd/Canterbury Trail.	Widen to five-lane Residential Collector.	2032	11,000,673	6,600,404	3,
S-27	Goehring Road (T-316) from Marshall Road to Franklin Road.	Widen and Realign to two-lane Residential Collector Standards.	2032	11,798,531	6,135,236	5,
S-40A	S.R. 228 from Route 19 to Franklin Road	Widen to 6 Lane Arterial	2035	26,748,745	13,374,372	12
S-43A	Franklin Road (SR 3021) from Route 228 to Old Mars Crider Road.	Widen to four-lane Residential Collector.	2035	7,668,378	5,904,651	
S-43B		Widen to four-lane Residential Collector.	2035	21,981,073	17,584,858	3,
S-D2	New connection from American Way to North Side of Existing Home Depot	Construct 2 Lane Commercial Collector Roadway	2030	2,009,683	0	1,
S-D3	New connection from South Side of Existing Home Depot Parcel to Near	Construct 2 Lane Commercial Collector Roadway	2030	3,518,338	0	2,
S-H6	Local road network south of Route 228. Connection from MSA thruway to	Construct 2 Lane Commercial Collector Roadway		1	Com	ple
	S-D1 S-D4 S-H1 S-H5 I-12 I-22 I-09A I-40 S-20 S-23 S-25 S-27 S-27 S-40A S-43A S-43A S-43A S-43B S-D2 S-D3 S-D3 S-H6	S-D1 New connection from Wisconsin Avenue to American Way S-D4 Dutihl Road from Route 228 north to Brandt Drive. S-H1 Route 228 to local road network north of Route 228 east of I-79. S-H5 Local road network north of Route 228. North-South connection from flyover to roundabout. I-12 The intersection of Franklin Road (SR 3021), Hope Road (T-309) and Rowan Road (SR 3018). I-22 The intersection of Franklin Road (SR 3021), Hope Road (T-309) and Rowan Road (SR 3018). I-23 The intersection of US Route 19 (SR 0019), North Boundary Road (T-311) and Glen Eden Road (SR 3024). I-09A The intersection of Franklin Road (SR 3021), Garvin Road (T-313) and Callery Road (SR 3014). I-40 The intersection of Franklin Road (SR 3021) and PA Route 228. S-20 North Boundary Road from Marshall Road to Franklin Road S-23 Ehrman Road from Route 19 to Old Ehrman Road. S-25 Rowan Road (SR 3018) from Marshall Road to Peters Rd/Canterbury Trail. S-27 Goehring Road (T-316) from Marshall Road to Franklin Road. S-40A S.R. 228 from Route 19 to Franklin Road S-43A Franklin Road (SR 3021) from Route 228 to Old Mars Crider Road. S-43B Franklin Road (SR 3021) from Old Mars Crider Road to Peters road. S-D2 New connection from American Way	Rowan Road (SR 3016). Construct 2 Lane Commercial Collector Roadway S-D1 New connection from Wisconsin Avenue to American Way Construct 2 Lane Commercial Collector Roadway S-D4 Dutihl Road from Route 228 north to Brandt Drive. Revise existing Dutihl Road to one way for portions in conjunction with construction of parallel 2 Lane Commercial Collector Roadway. S-H1 Route 228 to local road network north of Route 228 east of I-79. Construct New loop ramp and flyover from Route 228 to local road network north of Route 228. North-South connection from contauto: New connection of Franklin Road (SR 3021). Hope Road (T-309) and roundabout. Construct 3 Lane Commercial Collector Roadway I-12 Rowan Road (SR 3018). Construct New loop rowan Road opposite of Hope Road. Signalize the intersection or roundabout. Realign ROawan Road (SR 3018). I-22 The intersection of Franklin Road (SR 3021). Garvin Road (T-313) and Callery Road with Garvin Road to form a four-way "plus" intersection and construct a roundabout. Realign Callery Road with Garvin Road to form a four-way "plus" intersection of Franklin Road (SR 3021) and PA Route 228. Add EBL, WBL, SB Dual Lefts, NBT. S-20 North Boundary Road from Marshall Road to Franklin Road. Add left turn lanes at key intersections to maintain thru traffic flow. S-23 Ehrman Road (SR 3018) from Marshall Road to Peters Rd/Canterbury Trail. Widen to five-lane Residential Collector. S-24	Rowan Road (SR 3016). Row connection from Wisconsin Avenue to American Way Construct 2 Lane Commercial Collector Roadway 2032 S-D1 New connection from Wisconsin Avenue to American Way Construct 2 Lane Commercial Collector Roadway 2025 S-D4 Duthi Road from Route 228 not to Brandt Drive. Revise existing Duthi Road to one way for portions in conjunction with construction of parallel 2 Lane Commercial Collector Roadway 2025 S-H1 Route 228 to local road network north of Route 228 east of I-79. Construct 1 Lane Commercial Collector Roadway 2032 S-H5 Local road network north of Route 228. North-South connection from Roude SR 3019. Construct 3 Lane Commercial Collector Roadway 2032 1-12 The intersection of Franklin Road (SR 3021), Hope Road (T-310) and Read (SR 3018). Realign Rowan Road opposite of Hope Road. Signalize the intersection of Cas 3024. 2025 1-09A The intersection of Franklin Road (SR 3021), Garvin Road (T-313) and Callery Road with Garvin Road to form a four-way "plus" intersection and from Moute 19 (SR 3021) and PA Route 228. Add EBL, WBL, SB Dual Lefts, NBT. 2030 S-20 North Boundary Road from Marshall Road to Pranklin Road. Add left turn lanes at key intersections to maintain thru traffic flow. 2032 S-21 Goehring Road (T-316) from Marshall Road to Pranklin Road. Wid	Notwain Road (SR 3016).Construct 2 Lane Commercial Collector Roadway20321,222,212S-D1New connection from Wisconsin Avenue to American WayConstruct 2 Lane Commercial Collector Roadway20252,295,081S-D4Duthi Road from Route 228 north to Brandt Drive.Revise existing Duthi Road to one way for portions in conjunction with construction of parallel 2 Lane Commercial Collector Roadway20252,295,081S-H4Route 228 to local road network north of Route 228.Sonth-South connection from from Route 228 asd of 179.Construct 3 Lane Commercial Collector Roadway20322,272,209S-H5Local read network north of Route 228.Realign Rowan Road opposite of Hope Road. Signalize the intersection of roundabout.20322,272,209The intersection of US Route 19 (SR 0019). North Boundary Road (T-313) and Callery Road (SR 3024).Realign Collector Roadway2025691,450L020The intersection of Franklin Road (SR 3021). Garvin Road (T-313) and Road (SR 3014).Realign Callery Road with Garvin Road to form a four-way "plus" intersection and construct a roundabout.20303,505,121L40The intersection of Franklin Road (SR 3021). Garvin Road (T-313) and Road (SR 3014).Realign Callery Road with Garvin Road to form a four-way "plus" intersection and construct a roundabout.20303,205,635S-20North Boundary Road from Marshall Road to Franklin RoadAdd left turn lanes at key intersections to maintain thru traffic flow.203211,000,673S-23Ehrman Road from Route 19 to Old Ehrman Road.Add left turn lanes at key intersections to maintain thru traffic flow.	Towar Road (SR 301).Road RN 301).Road RN 301).Road RN 301).Revise existing Duthi Road to ne way for portions in conjunction with construction of parallel 2 Lane Commercial Collector Roadway20321.222.2120S-H4Route 228 to local road network north of Route 228 conth to Brandt Drive.Revise existing Duthi Road to one way for portions in conjunction with construction of parallel 2 Lane Commercial Collector Roadway20322.295,0810S-H4Route 228 to local road network north of Route 228 construct X Work Commercial Collector RoadwayConstruct X Work Commercial Collector RoadwayConstruct X Lane Commercial Collector RoadwayConstruct X Lane Commercial Collector RoadwayS-H5Local road network north of Route 228. North-South connection form Rowan Road (SR 3021). Hope Road (T-309) and randabout.Realign Rowan Road opposite of Hope Road. Signalize the intersection or roundabout.20322.272,2090L12The Intersection of Franklin Road (SR 3021). Garvin Road (T-313) and Callery Road (SR 3014).Realign Callery Road with Garvin Road to frank In Road (SR 3021) and PA Route 228.Add Lell, WBL, SB Dual Lefts, NBT.20303.205,635160,282S-228Ehrman Road from Route 19 to Old Ehrman Road.Add Lell, WBL, SB Dual Lefts, NBT.203211,000,6736,600,404S-224Coeffing Road (SR 3021) and PA Route 228.Add Lell turn lanes at key intersections to maintain thru traffic flow.203211,000,6736,600,404S-232Ehrman Road from Marshall Road to Franklin Road.Add Lell turn lanes at key intersections to maintain thru traffic flow.20333,205,635160,282<

*- This is desired funding Cranberry Township is Anticipating to be provided by the State or Federal Government. This project is not necessarily on any State or Federal Transportation Improvement Plan.

** - Other funding sources to be provided by Municipal revenue, developer contributions and other non state, federal or municipal sources.

*** - See Adjustment Table for Adjustments made to Impact Fee Program dollar and trip totals based on current balances and approved trips.

Total for Impact Fee Program By Distr
Adjusted Total of New Trip Ends***
Actual Fee Per Trip***

Transportation Impact Fee Update 2021

ict and Year) District Impact District Impact 0 0 743,428 East leted East 0 0 497,208 East 0 0 485,023 East 244,442 0 977,769 East 0 1,377,048 918,032 East leted East leted East 1,136,105 0 1,136,105 East 0 345,725 345,725 East 0 2,444,682 1,150,439 East 0 0 941,898 East leted East 1,602,817 0 1,442,536 East 3,850,236 0 550,034 East 0 5,073,368 589,927 East 12,304,423 0 1,069,950 East 0 0 617,304 East 3,297,161 0 1,099,054 East 0 1,406,778 602,905 East 2,990,587 0 527,751 East leted East 36,073,373 0 13,695,087 West East rict*** 10,918,837 16,758,375 6,066 9,306 1,800 1,800

Cranberry Township

		Table 1: Impact Fee Progr	ram - Candidate Capital Improvemer	nents L	ist (Sort	ed By Dist	tric
Map Number	Project Number	Intersection or Roadway Segment	Improvement Project Description	Construc- tion Year	Total Project Cost (dollars)	State/ Federal Funding* (dollars)	Fu (c
Share	d East	ern/ Western District (Route 19)				·	
23	I-23A	The intersection of US Route 19 (SR 0019) and Progress Avenue (T-651).	Signalize the Intersection (Existing Deficiency).	2025	563,872	0	5
23	I-23B	The intersection of US Route 19 (SR 0019) and Progress Avenue (T-651).	Construct an eastbound left-turn lane on Progress Avenue.	2025	493,331	0	2
S-44	S-44B	Route 19 (SR 0019) from Marshall Township to Route 228.	Adaptive Control System.		•	Com	nple
S-45	S-45C	Route 19 (SR 0019) from Route 228 to Ogle View/Rowan Roads.	Adaptive Control System.			Com	nple
36	I-36	The intersection of US Route 19 and Short Street/ Wal-Mart Driveway	Add an eastbound left turn lane, westbound right, southbound left and appropriate receiving lanes.	2025	4,557,050	4,101,345	
S-44	S-44A	Route 19 (SR 0019) from Marshall Township to Route 228.	Widen to six-lane Minor Arterial.	2030	18,180,907	17,453,671	
S-45	S-45A	Route 19 (SR 0019) from Route 228 to Ogle View/Rowan Roads.	Widen to six-lane Minor Arterial.	2030	30,684,228	29,150,017	
				Totals	54,479,388	50,705,032	8

*- This is desired funding Cranberry Township is Anticipating to be provided by the State or Federal Government. This project is not necessarily on any State or Federal Transportation Improvement Plan.

** - Other funding sources to be provided by Municipal revenue, developer contributions and other non state, federal or municipal sources.

*** - See Adjustment Table for Adjustments made to Impact Fee Program dollar and trip totals based on current balances and approved trips.

Total for Impact Fee Program By District*** Adjusted Total of New Trip Ends*** Actual Fee Per Trip***

Transportation Impact Fee Update 2021

ict and Year) District Impact District Impact Fee (dollars) 563,872 0 0 East/West 286,132 186,479 20,720 East/West leted East/West leted East/West 0 318,993 136,711 East/West 0 363,618 363,618 East/West 0 767,106 767,106 East/West 1,288,155 850,004 1,636,196 West East 16,758,375 10,918,837

6,066

1,800

9,306

1,800

Cranberry Township

Map Number	Project Number	Intersection or Roadway Segment	Improvement Project Description	Construc- tion Year	Total Project Cost (dollars)	State/ Federal Funding* (dollars)	Other Funding** (dollars)	Western District Impact Fee (dollars)	Eastern District Impact Fee (dollars)	District
Neste	ern Dis	strict			1			<u> </u>		
6	I-06	The intersection of Unionville Road (T-328) and Ogle View Road (T-322).	Construct a roundabout.			Con	npleted			West
28	I-28	The intersection of Haine School Road (T-302), LaPorte Drive (T-652) and Freedom Road (SR 3020).	Add northbound left-turn lane on LaPorte Drive (Existing Deficiency).			Con	npleted			West
35	I-35	The intersection of US Poute 10, Dutibl Poad (T. 326) and Brandt Drive	Add an exclusive eastbound auxiliary turn lane on Brandt Drive.	2025	555,001	0	438,451	116,550	0	West
S-10	S-10	Ogle View Road (T-322) from Unionville Road to Route 19.	Widen to three-lane Commercial Collector Standards.	2025	1,608,180	0	1,495,608	112,573	0	West
S-30	S-30B	Freedom Road (SR 3020) from New Sewickly Township to Haine School Road.	Adaptive Control System.		<u>.</u>	Con	npleted	-		West
S-31	S-31B	Freedom Road (SR 3020) from Haine School Road to Commonwealth	Adaptive Control System.			Con	npleted			West
S-34	S-34	Executive Drive (T-936) and Thomson Park Drive (T-975) from Freedom Road to Rochester Road.	Widen to three-lane Commercial Collector Standards.	2035	10,621,320	5,310,660	4,992,020	318,640	0	West
S-37	S-37B	Rochester Road (SR 3022) from Graham School Road to western St.	Widen to four-lane Urban Collector with left-turn lanes (See Township Boulevard Design Standards).		L	Con	npleted			West
S-37	S-37C	Rochester Road (SR 3022) from western St. Ferdinand Church Driveway	Widen to four-lane Urban Collector with left-turn lanes (See Township Boulevard Design Standards).				West			
S-37	S-37D		Adaptive Control System Completed				West			
S-E1	S-E1	New connection Thomson Park Drive to Brandt Drive including widening of existing Brandt Drive.	Construct 2 Lane Commercial Collector Roadway	2025	2,209,568	0	1,612,985	596,583	0	West
S-E2	S-E2	Intersection improvements including roundabout associated with Brandt	Construct Roundabout at Thomson Park Drive to accommodate new connector Road.	2025	997,901	0	498,951	498,951	0	West
S-F1	S-F1	New nextly could connection from eviction Unionville Dood could to	north-south connection from existing Unionville Road south to				West			
2	I-02	The intersection of Unionville Road (T-328) and Glen Eden Road (SR	Signalize the intersection and add a northbound left-turn lane on Unionville Road/Roundabout.	2025	898,171	718,537	0	179,634	0	West
3	I-03A	The intersection of Unionville Road (T-328) and Graham School Road (T- 304).	Construct a roundabout.	2035	3,071,226	0	2,456,981	614,245	0	West
5	I-05A		Construct a roundabout.	2035	3,074,797	307,480	2,459,838	307,480	0	West
30	I-30	The intersection of Graham School Road (T-304) and Rochester Road (SR 3022).	Signalize the intersection and add a southbound right-turn lane and extend eastbound left-turn lane.	2025	1,093,521	874,817	0	218,704	0	West
46	I-46		Signalize new intersection. Add a southbound right-turn lane to Route 19.	2025	1,091,948	0	1,037,351	54,597	0	West
S-30	S-30A	Freedom Road (SR 3020) from New Sewickly Township to Haine School Road.	Widen to four-lane Minor Arterial from Powell to Haines School Road.	2030	20,220,130	7,077,045	9,301,260	3,639,623	0	West
S-31	S-31A	Freedom Road (SR 3020) from Haine School Road to Commonwealth Drive.	Widen to four-lane Minor Arterial with left-turn lanes.	2030	20,349,731	6,511,914	13,227,325	610,492	0	West
S-37	S-37A	Rochester Road (SR 3022) from Haines School Road to Graham School	Widen to four-lane Urban Collector with left-turn lanes (See Township Boulevard Design Standards).	2030	32,964,124	29,997,352	0	2,966,771	0	West
				Totals	98,755,618	50,797,805	37,520,769	10,234,844	0	ł
This is de	esired fundir	ng Cranberry Township is Anticipating to be provided by the State or Federal	Government. This project is not necessarily on any State or Federal Transp					West	East	
- Other fu	unding sourc	ces to be provided by Municipal revenue, developer contributions and other ne			Impact Fee Pi		strict***	10,918,837	16,758,375	1
* - See A	djustment T	able for Adjustments made to Impact Fee Program dollar and trip totals base		-	Total of New	Trip Ends***		6,066	9,306	1
* - See A	djustment T	able for Adjustments made to Impact Fee Program dollar and trip totals base		-	Total of New e Per Trip***	I rip Ends***		6,066 \$1,800	9,306 \$1,800	

Transportation Impact Fee Update 2021

VI. Transportation Impact Fee Calculations

The transportation impact fee was calculated by dividing the total cost attributable to impact fees for all identified CIP projects by the number of anticipated newly generated development trips for each of the transportation districts. The total number of development trips determined during the *Roadway Sufficiency Analysis* was based on the approved *Land Use Assumptions Report*. In addition, adjustments in the calculation of the fee for the updated CIP were necessary for trips from developments that have been approved but are not yet built. Those trips are locked into the impact fee rate that was in effect at the time of approval. Furthermore, the calculation of the fee must recognize the fees that have been collected but have not been appropriated for construction, which are currently in the impact fee accounts of the Township. This calculation is shown below in Table 2.

Table 2: Capital Improvements Plan Adjustments			
Transportation Service District:	WEST	EAST	
New Trip Ends (from RSA traffic model subtracting trips approved before 2015)	7,569	12,069	
Total Construction Cost Estimate (Removing Projects already Constructed)	\$11,876,162	\$14,977,349	
Total Loan Amount for MSA Thruway being paid through Impact Fees**	\$0	\$6,618,651	
Trips At Previous Fees (Collected and Approved but not Collected by June 1, 2021)*	1,503	2,763	
Dollar Value of Previously Approved Trips - fees not collected	\$784,212	\$1,469,698	
Current Impact Fee Account Balance (As of October 6, 2021)*	\$687,936	\$4,171,838	
Peliminary Adjusted Total Fee	\$10,404,014	\$15,954,464	
5% Contigency	\$520,201	\$797,723	
Subtotal	\$10,924,215	\$16,752,187	
Final Adjusted Trip Ends	6,066	9,306	
Adjusted Fee	\$1,800	\$1,800	

Note: The above adjustments are made to compensate for the existing impact fee account balance and site developments that the Township has already given approval for but have yet to be constructed.

*Provided by Cranberry Township

** 90% of the total amount of the loan (\$7,354,056.74) over a 7 year period

The adjustments calculations include a portion of funds that will be repaid over time for the completed MSA Thruway project connection Cranberry Springs and Cranberry Woods Drive with a grade separated tunnel under Route 228 and direct access ramp from Route 228. Although the project is completed, the Township was able to obtain a Butler county

Infrastructure Bank (BCIB) Loan that further leverages the Township infrastructure buying power through its low interest rate and will be paid back in installments over the next eight years concluding in the year 2028. The total loan amount is \$7,354,056.74 including interest. 90% of that amount will be paid by impact fees, the remaining 10% will be paid through other funding.

The following list represents each Transportation District along with the respective anticipated number of new trip ends over the 20-year horizon and the Impact Fee that was calculated per PM peak hour development trip:

- Eastern District: Anticipate 9,306 new PM peak hour trips at \$1,800 per trip.
- Western District: Anticipate 6,066 new PM peak hour trips at \$1,800 per trip.



APPENDIX A

SELECTED PROJECT COST SUMMARIES AND DRAWINGS



INTERSECTION NUMBER: 2

PROJECT NUMBER: I-02

LOCATION:

TRANSPORTATION DISTRICT: West

The intersection of Unionville Road (T-328) and Glen Eden Road (SR 3024).

DEFICIENCY:

The current one-way stop-controlled intersection is projected to become deficient with the forecast year 2030 traffic volumes.

PROPOSED IMPROVEMENTS:

Signalize the intersection and add a northbound left-turn lane on Unionville Road/Roundabout.

ESTIMATED COST SUMMARY: **PROPORTIONAL SPLIT OF FUTURE** (Current Year 2021 Dollars) PEAK HOUR TRAFFIC VOLUMES: Construction 533.468 New Pass Thru Traffic / **Utility Relocation** 5.000 Anticipated Traffic Growth = 23% **Right-of Way** 61,250 106,694 Engineering New Development Traffic / Inspection 53,347 Anticipated Traffic Growth = 77% Admin & Planning 8,002 TOTAL COST ATTRIBUTABLE TO: \$767,760 CONSTRUCTION YEAR AND PROJECTED COST: **New Pass Thru Trips** \$206,847 **New Development Trips** \$691,324 **Construction Year** 2025 **Projected Construction Cost** \$701,585 **Projected Soft Cost** \$196,586 **Projected Total Cost** \$898,171 **PROJECT SCHEDULE: PROPOSED FUNDING:** Year Secure Funding 2023 State/Federal 80% \$718,537 **Acquire ROW** 2023 Other 0% **Complete Engineering** 2024 \$0 **Begin Construction** Impact Fees 20% \$179,634 2025 **Transportation District Cost:** West District \$179,634 East District \$0 \$0 Southeast District

REMARKS:

See Improvement Drawing number 3 for a plan sketch of the proposed improvement.

INTERSECTION NUMBER: 3

PROJECT NUMBER: I-03A

LOCATION:

TRANSPORTATION DISTRICT: West

The intersection of Unionville Road (T-328) and Graham School Road (T-304).

DEFICIENCY:

The one-way stop controlled intersection is projected to be deficient with forecast year 2030 volumes.

PROPOSED IMPROVEMENTS:

Construct a roundabout.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	1,178,284
Utility Relocation	42,350
Right-of Way	87,500
Engineering	353,485
Inspection	94,263
Admin & Planning	17,674
TOTAL	\$1,773,556

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic /	
Anticipated Traffic Growth =	20%

New Development Traffic / Anticipated Traffic Growth = 80%

773,556 COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$614,245
New Development Trips	\$2,456,981

Construction Year	2035
Projected Construction Cost	\$2,265,265
Projected Soft Cost	\$805,961
Projected Total Cost	\$3,071,226

CONSTRUCTION YEAR AND PROJECTED COST:

PROJECT SCHEDULE:

	Year
Secure Funding	2034
Acquire ROW	2033
Complete Engineering	2035
Begin Construction	2035

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	80%	\$2,456,981
Impact Fees	20%	\$614,245
Transportation District	Cost:	

West District	\$614,245
East District	\$0
Southeast District	\$0

REMARKS:

See Improvement Drawing number 3 for a plan sketch of the proposed improvement.

INTERSECTION NUMBER: 5

PROJECT NUMBER: I-05A

LOCATION:

TRANSPORTATION DISTRICT: West

The intersection of Unionville Road (T-328) and Progress Avenue (T-651).

DEFICIENCY:

The current intersection is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Construct a roundabout.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	1,260,292
Utility Relocation	43,850
Right-of Way	137,500
Engineering	189,044
Inspection	126,029
Admin & Planning	18,904
TOTAL	\$1,775,619

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 17%

New Development Traffic / Anticipated Traffic Growth = 83%

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$522,716
New Development Trips	\$2,552,082

Construction Year	2035
Projected Construction Cost	\$2,496,457
Projected Soft Cost	\$578,341
Projected Total Cost	\$3,074,797

CONSTRUCTION YEAR AND PROJECTED COST:

PROPOSED FUNDING:

State/Federal	10%	\$307,480
Other	80%	\$2,459,838
Impact Fees	10%	\$307,480

Transportation District Cost:	
West District	\$307,480
East District	\$0
Southeast District	\$0

PROJECT SCHEDULE:

	Year
Secure Funding	2033
Acquire ROW	2033
Complete Engineering	2034
Begin Construction	2035

REMARKS:

INTERSECTION NUMBER: 9

PROJECT NUMBER: I-09A

LOCATION:

TRANSPORTATION DISTRICT: East

The intersection of Franklin Road (SR 3021), Garvin Road (T-313) and Callery Road (SR 3014).

DEFICIENCY:

The two offset intersections will not operate as safely or efficiently as a single realigned intersection as traffic volumes increase.

PROPOSED IMPROVEMENTS:

Realign Callery Road with Garvin Road to form a four-way "plus" intersection and construct a roundabout.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	1,294,707
Utility Relocation	40,850
Right-of Way	1,265,000
Engineering	323,677
Inspection	129,471
Admin & Planning	19,421
TOTAL	\$3,073,125

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 29%

New Development Traffic / Anticipated Traffic Growth = 71%

CONSTRUCTION YEAR AND PROJECTED COST:

New Deep Three Trins

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$1,042,585
New Development Trips	\$2,552,536

Construction Year	2025
Projected Construction Cost	\$3,042,283
Projected Soft Cost	\$552,838
Projected Total Cost	\$3,595,121

0%

68%

32%

PROJECT SCHEDULE:

	Year
Secure Funding	2023
Acquire ROW	2023
Complete Engineering	2024
Begin Construction	2025

Transportation District Cost:	
West District	
East District	

PROPOSED FUNDING:

State/Federal

Impact Fees

Southeast District

Other

REMARKS:

See Improvement Drawing number 13 for a plan sketch of the proposed improvement.

\$0

\$0

\$0

\$2,444,682 \$1,150,439

\$1,150,439

INTERSECTION NUMBER: 10

PROJECT NUMBER: I-10

LOCATION:

TRANSPORTATION DISTRICT: East

The intersection of Franklin Road (SR 3021) and North Boundary Road (T-311).

DEFICIENCY:

The current intersection is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Signalize the intersection and add a northbound left-turn lane on Franklin Road.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

	• • •				
	Construction		878,904	New Pass Thru Traffic /	
	Utility Relocation		54,000	Anticipated Traffic Growth = 3	88%
	Right-of Way		148,750		
	Engineering		219,726	New Development Traffic /	
	Inspection		70,312	Anticipated Traffic Growth = 6	62%
	Admin & Planning		13,184		
	TOTAL		\$1,384,875	COST ATTRIBUTABLE TO:	
С	ONSTRUCTION YEAR AN	D PROJ	ECTED COST:	New Pass Thru Trips	:
				New Development Trips	\$1
	Construction Year		2035		
	Projected Construction	Cost	\$1,873,074		
	Projected Soft Cost		\$525,082		
	Projected Total Cost		\$2,398,156	PROJECT SCHEDULE:	
P	ROPOSED FUNDING:				
				Secure Funding	
	State/Federal	69%	\$1,654,728	Acquire ROW	
	Other	0%	\$0	Complete Engineering	
	Impact Fees	31%	\$743,428	Begin Construction	

Transportation District Cost: West District East District \$743,428 Southeast District

REMARKS:

See Improvement Drawing number 10 for a plan sketch of the proposed improvement.

\$0

\$0

\$911,299 \$1,486,857

> Year 2033

> 2033

2034

2035

INTERSECTION NUMBER: 12 PROJECT NUMBER: I-12

LOCATION:

TRANSPORTATION DISTRICT: East

The intersection of Franklin Road (SR 3021), Hope Road (T-309) and Rowan Road (SR 3018).

DEFICIENCY:

The two offset intersections will not operate as safely as a single realigned intersection as traffic volumes increase.

PROPOSED IMPROVEMENTS:

ESTIMATED COST SUMMARY:

Realign Rowan Road opposite of Hope Road. Signalize the intersection or roundabout.

120,648

15,081

\$1,475,984

(Current Year 2021 Dollars	5)
Construction	1,005,404
Utility Relocation	10,000
Right-of Way	73,500
Engineering	251,351

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic /	
Anticipated Traffic Growth = 3	7%

New Development Traffic / Anticipated Traffic Growth = 63%

CONSTRUCTION YEAR AND PROJECTED COST:

New Pass	Thru Trips	i

New Development Trips

Construction Year	2032
Projected Construction Cost	\$1,676,317
Projected Soft Cost	\$595,892
Projected Total Cost	\$2,272,209

PROJECT SCHEDULE:

COST ATTRIBUTABLE TO:

	Year
Secure Funding	2030
Acquire ROW	2030
Complete Engineering	2031
Begin Construction	2032

PROPOSED FUNDING:	
-------------------	--

Inspection

TOTAL

Admin & Planning

State/Federal	0%	\$0
Other	50%	\$1,136,105
Impact Fees	50%	\$1,136,105
Transportation District	Cost:	
West District		SU 20

West District	\$0
East District	\$1,136,105
Southeast District	\$0

REMARKS:

See Improvement Drawing number 12 for a plan sketch of the proposed improvement.

\$840,717

\$1,431,492

INTERSECTION NUMBER: 20

PROJECT NUMBER: I-20

LOCATION:

TRANSPORTATION DISTRICT: East

The intersection of Marshall Road (T-305) and Rowan Road (SR 3018).

DEFICIENCY:

The current intersection is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Signalize the intersection and add an eastbound left-turn lane, a southbound right-turn lane and a westbound right-turn lane.

1,207,520

25,000

220,000

132,827

96,602

18,113

\$1,700,062

ESTIMATED COST SUMMARY:

Construction

Right-of Way

Engineering

Inspection

TOTAL

Utility Relocation

Admin & Planning

(Current Year 2021 Dollars)

PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic /	
Anticipated Traffic Growth =	26%

New Development Traffic / Anticipated Traffic Growth = 74%

CONSTRUCTION YEAR AND PROJECTED COST:

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$517,096
New Development Trips	\$1,471,736

Construction Year	2025
Projected Construction Cost	\$1,699,243
Projected Soft Cost	\$289,589
Projected Total Cost	\$1,988,832

PROJECT SCHEDULE:

	Year
Secure Funding	2023
Acquire ROW	2023
Complete Engineering	2024
Begin Construction	2025

PROPOSED FUNDING: State/Endoral

State/Federal	75%	\$1,491,624
Other	0%	\$0
Impact Fees	25%	\$497,208
Transportation District	Cost:	

\$0
\$497,208
\$0

REMARKS:

See Improvement Drawing number 20 for a plan sketch of the proposed improvement.

INTERSECTION NUMBER: 22

PROJECT NUMBER: I-22

LOCATION:

TRANSPORTATION DISTRICT: East

The intersection of US Route 19 (SR 0019), North Boundary Road (T-311) and Glen Eden Road (SR 3024).

DEFICIENCY:

The current intersection is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Add a westbound left-turn lane to create dual lefts on North Boundary Road.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

Construction	455,729	New Pass Thru Traffic /	
Utility Relocation	10,000	Anticipated Traffic Growth = 21	%
Right-of Way	0	·	
Engineering	82,031	New Development Traffic /	
Inspection	36,458	Anticipated Traffic Growth = 79	%
Admin & Planning	6,836	·	
TOTAL	\$591,055	COST ATTRIBUTABLE TO:	
CONSTRUCTION YEAR AND I	PROJECTED COST:	New Pass Thru Trips	\$145,205
		New Development Trips	\$546,246
Construction Year	2025		-
Projected Construction C	ost \$544,837		
Projected Soft Cost	\$146,613		
Projected Total Cost	\$691,450	PROJECT SCHEDULE:	
PROPOSED FUNDING:			Year
		Secure Funding	2023
State/Federal 0	% \$0	Acquire ROW	2023
Other 50	0% \$345,725	Complete Engineering	2024
Impact Fees 50	0% \$345,725	Begin Construction	2025
Transportation District Cost:			
West District	\$0		
East District	\$345,725		
Southeast District	\$0		

REMARKS:

See Improvement Drawing number 22 for a plan sketch of the proposed improvement.

INTERSECTION NUMBER: 23

PROJECT NUMBER: I-23A

LOCATION:

TRANSPORTATION DISTRICT: East/West

The intersection of US Route 19 (SR 0019) and Progress Avenue (T-651).

DEFICIENCY:

The intersection currently warrants a traffic signal.

PROPOSED IMPROVEMENTS:

Signalize the Intersection (Existing Deficiency).

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	400,000
Utility Relocation	8,000
Right-of Way	0
Engineering	48,000
Inspection	20,000
Admin & Planning	6,000
TOTAL	\$482,000

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 23%

New Development Traffic / Anticipated Traffic Growth = 77%

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$129,691
New Development Trips	\$434,181

Construction Year	2025
Projected Construction Cost	\$477,302
Projected Soft Cost	\$86,570

CONSTRUCTION YEAR AND PROJECTED COST:

PROJECT SCHEDULE:

	Year
Secure Funding	2023
Acquire ROW	2023
Complete Engineering	2024
Begin Construction	2025

PROPOSED FUNDING:

Projected Total Cost

State/Federal	0%	\$0
Other	100%	\$563,872
Impact Fees	0%	\$0
Transportation Distric	t Cost:	

West District	\$0
East District	\$0
Southeast District	\$0

REMARKS:

See Improvement Drawing number 23 for a plan sketch of the proposed improvement.

\$563,872

INTERSECTION NUMBER: 23

PROJECT NUMBER: I-23B

LOCATION:

TRANSPORTATION DISTRICT: East/West

The intersection of US Route 19 (SR 0019) and Progress Avenue (T-651).

DEFICIENCY:

Side Street Capacity becomes deficient.

PROPOSED IMPROVEMENTS:

Construct an eastbound left-turn lane on Progress Avenue.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

Construction	196,949	
Utility Relocation	28,500	
Right-of Way	148,000	
Engineering	35,451	
Inspection	9,847	
Admin & Planning	2,954	
TOTAL	\$421,702	COST A

New Pass Thru Traffic / Anticipated Traffic Growth = 23%

New Development Traffic / Anticipated Traffic Growth = 77%

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2025
Projected Construction Cost	\$436,883
Projected Soft Cost	\$56,449
Projected Total Cost	\$493,331

0%

58%

42%

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$113,466
New Development Trips	\$379,865

PROJECT SCHEDULE:

	Year
Secure Funding	2023
Acquire ROW	2023
Complete Engineering	2024
Begin Construction	2025

Transportation District Cost:	
West District	
East District	
Southeast District	

REMARKS:

PROPOSED FUNDING:

State/Federal

Impact Fees

Other

See Improvement Drawing number 23 for a plan sketch of the proposed improvement.

\$0 \$286,132

\$207,199

\$186,479 \$20,720 \$0

INTERSECTION NUMBER: 30

PROJECT NUMBER: I-30

LOCATION:

TRANSPORTATION DISTRICT: West

The intersection of Graham School Road (T-304) and Rochester Road (SR 3022).

DEFICIENCY:

The current intersection one-way stop control is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Signalize the intersection and add a southbound right-turn lane and extend eastbound left-turn lane.

ESTIMATED COST SU	MMARY:		PROPORTIONAL SPLIT OF FUTUR	E
(Current Year 2021	l Dollars)		PEAK HOUR TRAFFIC VOLUMES:	
Construction		666,477	New Pass Thru Traffic /	
Utility Relocation		10,000	Anticipated Traffic Growth = '	19%
Right-of Way		35,000		
Engineering		133,295	New Development Traffic /	
Inspection		79,977	Anticipated Traffic Growth = 8	31%
Admin & Planning		9,997		
TOTAL		\$934,746	COST ATTRIBUTABLE TO:	
CONSTRUCTION YEAI	R AND PROJ	ECTED COST:	New Pass Thru Trips	\$207,769
			New Development Trips	\$885,752
Construction Year		2025		
Projected Constru		\$832,327		
Projected Soft Cos	st	\$261,194		
Projected Total Co	ost	\$1,093,521	PROJECT SCHEDULE:	
PROPOSED FUNDING:				Year
			Secure Funding	2023
State/Federal	80%	\$874,817	Acquire ROW	2023
Other	0%	\$0	Complete Engineering	2024
Impact Fees	20%	\$218,704	Begin Construction	2025
Transportation Distric	t Cost:			
West District		\$218,704		
East District		\$0		
Southeast District		\$0		

REMARKS:

See Improvement Drawing number 30 for a plan sketch of the proposed improvement.

INTERSECTION NUMBER: 35

PROJECT NUMBER: I-35

LOCATION:

TRANSPORTATION DISTRICT: West

The intersection of US Route 19, Dutihl Road (T-326) and Brandt Drive (Private).

DEFICIENCY:

The current intersection geometry is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Add an exclusive eastbound auxiliary turn lane on Brandt Drive.

ESTIMATED COST SUMMARY:

Construction

Right-of Way Engineering

Inspection

TOTAL

Utility Relocation

Admin & Planning

PROPOSED FUNDING:

State/Federal

Southeast District

Other

(Current Year 2021 Dollars)

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pas	317,203
Anticipated 1	8,000
	71,500
New Develo	47,580
Anticipated T	25,376

4,758

\$0

\$0 \$0

\$438,451

\$474,417

New Pass Thru Traffic / nticipated Traffic Growth = 31%

New Development Traffic / Anticipated Traffic Growth = **69%**

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2025
Projected Construction Cost	\$464,086
Projected Soft Cost	\$90,915
Projected Total Cost	\$555,001

0%

79%

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$169,965
New Development Trips	\$385,036

PROJECT SCHEDULE:

	Year
Secure Funding	2023
Acquire ROW	2023
Complete Engineering	2024
Begin Construction	2025

Impact Fees	21%	\$116,550
Transportation Distric	t Cost:	
West District		\$116,550
East District		\$0

REMARKS:

See Improvement Drawing number 35 for a plan sketch of the proposed improvement.

INTERSECTION NUMBER: 36

PROJECT NUMBER: I-36

LOCATION:

TRANSPORTATION DISTRICT: East/West

The intersection of US Route 19 and Short Street/ Wal-Mart Driveway

DEFICIENCY:

The current intersection geometry is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Add an eastbound left turn lane, westbound right, southbound left and appropriate receiving lanes.

2,728,004

50,000

203,500 545,601

327,360

\$3,895,385

\$4,101,345

\$455,705

\$0

40,920

ESTIMATED COST SUMMARY:

Construction

Right-of Way

Engineering

PROPOSED FUNDING:

State/Federal

Impact Fees

Other

Inspection

TOTAL

Utility Relocation

Admin & Planning

(Current Year 2021 Dollars)

PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic /	
Anticipated Traffic Growth =	41%

New Development Traffic / Anticipated Traffic Growth = 59%

CONSTRUCTION YEAR AND PROJECTED COST:

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$1,850,037
New Development Trips	\$2,707,012

Construction Year	2025
Projected Construction Cost	\$3,487,938
Projected Soft Cost	\$1,069,112
Projected Total Cost	\$4,557,050

90%

0%

10%

PROJECT SCHEDULE:

	Year
Secure Funding	2023
Acquire ROW	2023
Complete Engineering	2024
Begin Construction	2025

Transmontation District Ocot	
Transportation District Cost:	
West District	\$318,993
East District	\$136,711
Southeast District	\$0

REMARKS:

See Improvement Drawing number 36 for a plan sketch of the proposed improvement.

INTERSECTION NUMBER: 40

PROJECT NUMBER: I-40

LOCATION:

TRANSPORTATION DISTRICT: East

The intersection of Franklin Road (SR 3021) and PA Route 228.

DEFICIENCY:

The current intersection geometry is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Add EBL, WBL, SB Dual Lefts, NBT.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	2,919,974
Utility Relocation	122,000
Right-of Way	450,000
Engineering	525,595
Inspection	350,397
Admin & Planning	43,800
TOTAL	\$4,411,766

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 55%

New Development Traffic / Anticipated Traffic Growth = 45%

CONSTRUCTION YEAR AND PROJECTED COST:

85%

New Pass Thru Trips	\$3,432,564
New Development Trips	\$2,846,756

Construction Year	2030
Projected Construction Cost	\$4,970,168
Projected Soft Cost	\$1,309,151
Projected Total Cost	\$6,279,319

PROJECT SCHEDULE:

COST ATTRIBUTABLE TO:

	Year
Secure Funding	2028
Acquire ROW	2028
Complete Engineering	2029
Begin Construction	2030

Other	0%
Impact Fees	15%

PROPOSED FUNDING:

State/Federal

Transportation District Cost:	
West District	\$0
East District	\$941,898
Southeast District	\$0

REMARKS:

See Improvement Drawing number 40 for a plan sketch of the proposed improvement.

\$5,337,421

\$0 \$941,898

INTERSECTION NUMBER: 42 PROJECT NUMBER: I-42B

LOCATION:

TRANSPORTATION DISTRICT: East

The intersection of Peters Road (T-307), Canterbury Trail (T-726) and Rowan Road (SR 3018).

DEFICIENCY:

The current intersection is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Construct a roundabout.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	1,095,735
Utility Relocation	42,350
Right-of Way	87,500
Engineering	328,720
Inspection	87,659
Admin & Planning	16,436
TOTAL	\$1,658,400

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 19%

New Development Traffic / Anticipated Traffic Growth = 81%

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$363,249
New Development Trips	\$1,576,844

Construction Year2025Projected Construction Cost\$1,433,761Projected Soft Cost\$506,332

75%

0%

CONSTRUCTION YEAR AND PROJECTED COST:

PROJECT SCHEDULE:

	Year
Secure Funding	2023
Acquire ROW	2023
Complete Engineering	2024
Begin Construction	2025

Impact Fees	25%
Transportation District Cos	st:

Projected Total Cost

PROPOSED FUNDING:

State/Federal

Other

West District	\$0
East District	\$485,023
Southeast District	\$0

REMARKS:

See Improvement Drawing number 42 for a plan sketch of the proposed improvement.

\$1,940,093

\$1,455,070

\$0 \$485.023

INTERSECTION NUMBER: 46

PROJECT NUMBER: I-46

LOCATION:

TRANSPORTATION DISTRICT: West

Heights Drive and Route 19.

DEFICIENCY:

The proposed unsignalized intersection is anticipated to be deficient with 2030 traffic volumes.

PROPOSED IMPROVEMENTS:

Signalize new intersection. Add a southbound right-turn lane to Route 19.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:

Construction	712,176
Utility Relocation	5,000
Right-of Way	27,500
Engineering	142,435
Inspection	35,609
Admin & Planning	10,683
TOTAL	\$933,402

New Pass Thru Traffic / Anticipated Traffic Growth = 23%

New Development Traffic / Anticipated Traffic Growth = 77%

CONSTRUCTION YEAR AND PROJECTED COST:

New Pass Thru Trips	\$251,148
New Development Trips	\$840,800
New Development rips	φ0+ 0,0

Construction Year	2025
Projected Construction Cost	\$871,165
Projected Soft Cost	\$220,783
Projected Total Cost	\$1,091,948

0%

95%

5%

PROJECT SCHEDULE:

COST ATTRIBUTABLE TO:

	Year
Secure Funding	2023
Acquire ROW	2023
Complete Engineering	2024
Begin Construction	2025

East District Southeast District

West District

PROPOSED FUNDING:

State/Federal

Impact Fees

Transportation District Cost:

Other

REMARKS:

See Improvement Drawing number 46 for a plan sketch of the proposed improvement.

\$54,597

\$0

\$0

\$0

\$1,037,351 \$54,597

SEGMENT NUMBER: S-10 PROJECT NUMBER: S-10

LOCATION:

TRANSPORTATION DISTRICT: West

Ogle View Road (T-322) from Unionville Road to Route 19.

DEFICIENCY:

Shoulders need to be widened. Drainage structures should be added.

PROPOSED IMPROVEMENTS:

Widen to three-lane Commercial Collector Standards.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	957,230
Utility Relocation	0
Right-of Way	192,500
Engineering	114,868
Inspection	95,723
Admin & Planning	14,358
TOTAL	\$1,374,679

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 11%

New Development Traffic / Anticipated Traffic Growth = 89%

CONSTRUCTION YEAR AND PROJECTED COST:

New Pass Thru Trips	\$176,900
New Development Trips	\$1,431,281

Construction Year	2025
Projected Construction Cost	\$1,345,022
Projected Soft Cost	\$263,159
Projected Total Cost	\$1,608,180

PROJECT SCHEDULE:

COST ATTRIBUTABLE TO:

	Year
Secure Funding	2023
Acquire ROW	2023
Complete Engineering	2024
Begin Construction	2025

PROPOSED FUNDING:	
Otata / Eastanal	

State/Federal	0%	\$0
Other	93%	\$1,495,608
Impact Fees	7%	\$112,573
Transportation District	Cost:	

West District	\$112,573
East District	\$0
Southeast District	\$0

REMARKS:

SEGMENT NUMBER: S-23 PROJECT NUMBER: S-23

LOCATION:

TRANSPORTATION DISTRICT: East

Ehrman Road from Route 19 to Old Ehrman Road.

DEFICIENCY:

The 2030 traffic projects are anticipated to be higher than the current roadway can accommodate.

PROPOSED IMPROVEMENTS:

Add left turn lanes at key intersections to maintain thru traffic flow.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	1,693,147
Utility Relocation	73,700
Right-of Way	87,500
Engineering	203,178
Inspection	169,315
Admin & Planning	25,397
TOTAL	\$2,252,236

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 21%

New Development Traffic / Anticipated Traffic Growth = 79%

CONSTRUCTION YEAR AND PROJECTED COST:

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$673,183
New Development Trips	\$2,532,451

Construction Year	2030
Projected Construction Cost	\$2,639,314
Projected Soft Cost	\$566,321
Projected Total Cost	\$3,205,635

5%

50%

45%

\$160,282

\$0

\$0

\$1,602,817 \$1,442,536

\$1,442,536

PROJECT SCHEDULE:

	Year
Secure Funding	2026
Acquire ROW	2027
Complete Engineering	2029
Begin Construction	2030

REMARKS:

PROPOSED FUNDING:

State/Federal

Impact Fees

West District

East District

Transportation District Cost:

Southeast District

SEGMENT NUMBER:	S-25	PROJECT NUMBER:	S-25

LOCATION:

TRANSPORTATION DISTRICT: East

Rowan Road (SR 3018) from Marshall Road to Peters Rd/Canterbury Trail.

DEFICIENCY:

An additional thru-lane in each direction is projected to be needed along this roadway segment.

PROPOSED IMPROVEMENTS:

Widen to five-lane Residential Collector.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	4,636,257
Utility Relocation	80,500
Right-of Way	1,525,000
Engineering	463,626
Inspection	370,901
Admin & Planning	69,544
TOTAL	\$7,145,827

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 60%

New Development Traffic / Anticipated Traffic Growth = 40%

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$6,600,404
New Development Trips	\$4,400,269

Construction Year	2032
Projected Construction Cost	\$9,608,898
Projected Soft Cost	\$1,391,774
Projected Total Cost	\$11,000,673

CONSTRUCTION YEAR AND PROJECTED COST:

PROPOSED FUNDING:

State/Federal	60%	\$6,600,404
Other	35%	\$3,850,236
Impact Fees	5%	\$550,034

Transportation District Cost: West District East District

Southeast District

PROJECT SCHEDULE:

	Year
Secure Funding	2030
Acquire ROW	2030
Complete Engineering	2031
Begin Construction	2032

REMARKS:

\$0

\$0

\$550,034

SEGMENT NUMBER:	S-27	PROJECT NUMBER:	C 27
SEGIVIENT NUIVIDER.	3-21	PROJECT NUMBER.	3-21

LOCATION:

TRANSPORTATION DISTRICT: East

Goehring Road (T-316) from Marshall Road to Franklin Road.

DEFICIENCY:

Roadway does not conform to the Township's Residential Collector Standards.

PROPOSED IMPROVEMENTS:

Widen and Realign to two-lane Residential Collector Standards.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	5,287,774
Utility Relocation	118,700
Right-of Way	1,015,000
Engineering	634,533
Inspection	528,777
Admin & Planning	79,317
TOTAL	\$7,664,101

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 47%

New Development Traffic / Anticipated Traffic Growth = 53%

CONSTRUCTION YEAR AND PROJECTED COST:

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$5,545,310
New Development Trips	\$6,253,222

Construction Year	2032
Projected Construction Cost	\$9,885,564
Projected Soft Cost	\$1,912,967
Projected Total Cost	\$11,798,531

52%

43%

5%

\$6,135,236

\$5,073,368 \$589,927

\$589,927

\$0

\$0

PROJECT SCHEDULE:

	Year
Secure Funding	2029
Acquire ROW	2030
Complete Engineering	2031
Begin Construction	2032

PROPOSED FUNDING:

State/Federal

Impact Fees

West District

East District

Transportation District Cost:

Southeast District

SEGMENT NUMBER:	S-30	PI

PROJECT NUMBER: S-30A

LOCATION:

TRANSPORTATION DISTRICT: West

Freedom Road (SR 3020) from New Sewickly Township to Haine School Road.

DEFICIENCY:

An additional travel lane should be added in each direction along Freedom Road east of Powell Road.

PROPOSED IMPROVEMENTS:

Widen to four-lane Minor Arterial from Powell to Haines School Road.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	8,434,733
Utility Relocation	214,500
Right-of Way	3,575,000
Engineering	1,012,168
Inspection	843,473
Admin & Planning	126,521
TOTAL	\$14,206,395

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = **39%**

New Development Traffic / Anticipated Traffic Growth = 61%

CONSTRUCTION YEAR AND PROJECTED COST:

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$7,852,561
New Development Trips	\$12,367,569

Construction Year	2030
Projected Construction Cost	\$17,398,895
Projected Soft Cost	\$2,821,235
Projected Total Cost	\$20,220,130

35%

46%

18%

\$7,077,045

\$9,301,260 \$3,639,623

\$3,639,623

\$0 \$0

PROJECT SCHEDULE:

	Year
Secure Funding	2027
Acquire ROW	2028
Complete Engineering	2029
Begin Construction	2030

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PROPOSED FUNDING:

State/Federal

Impact Fees

West District

East District

Transportation District Cost:

Southeast District

SEGMENT NUMBER: S-31

PROJECT NUMBER: S-31A

LOCATION:

TRANSPORTATION DISTRICT: West

Freedom Road (SR 3020) from Haine School Road to Commonwealth Drive.

DEFICIENCY:

At additional travel lane should be added in each direction along Freedom Road.

PROPOSED IMPROVEMENTS:

Widen to four-lane Minor Arterial with left-turn lanes.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	9,786,600
Utility Relocation	121,000
Right-of Way	2,090,000
Engineering	1,174,392
Inspection	978,660
Admin & Planning	146,799
TOTAL	\$14,297,451

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 27%

New Development Traffic / Anticipated Traffic Growth = 73%

CONSTRUCTION YEAR AND PROJECTED COST:

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$5,574,824
New Development Trips	\$14,774,907

Construction Year	2030
Projected Construction Cost	\$17,076,326
Projected Soft Cost	\$3,273,405
Projected Total Cost	\$20,349,731

32%

65%

3%

\$6,511,914

\$13,227,325 \$610,492

\$610,492

\$0 \$0

PROJECT SCHEDULE:

	Year
Secure Funding	2027
Acquire ROW	2028
Complete Engineering	2029
Begin Construction	2030

REMARKS	5	
	•	

PROPOSED FUNDING:

State/Federal

Impact Fees

West District East District

Transportation District Cost:

Southeast District

SEGMENT NUMBER: S-34 **PROJECT NUMBER:** S-34

LOCATION:

TRANSPORTATION DISTRICT: West

Executive Drive (T-936) and Thomson Park Drive (T-975) from Freedom Road to Rochester Road.

DEFICIENCY:

To maintain an acceptable Level of Service in the year 2020, the roadway segment should have an auxiliary left-turn lane along the entire length of the roadways.

4,300,443

272,500

550,000 516,053

430,044

\$6,133,548

\$8,871,281

\$1,750,040

\$10,621,320

\$5,310,660

\$4,992,020 \$318,640

64,507

2035

PROPOSED IMPROVEMENTS:

Widen to three-lane Commercial Collector Standards.

ESTIMATED COST SUMMARY:

Construction

Right-of Way

Engineering

Inspection

TOTAL

Utility Relocation

Admin & Planning

Construction Year

Projected Soft Cost

Projected Total Cost

PROPOSED FUNDING:

State/Federal

Impact Fees

Other

REMARKS:

Projected Construction Cost

(Current Year 2021 Dollars)

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 7%

New Development Traffic / Anticipated Traffic Growth = 93%

CONSTRUCTION YEAR AND PROJECTED COST:

50%

47%

3%

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$743,492
New Development Trips	\$9,877,828

PROJECT SCHEDULE:

	Year
Secure Funding	2033
Acquire ROW	2033
Complete Engineering	2034
Begin Construction	2035

Transportation District Cost:	
West District	\$318,640
East District	\$0
Southeast District	\$0

SEGMENT NUMBER: S-37 PROJECT NUMBER: S-37A

LOCATION:

TRANSPORTATION DISTRICT: West

Rochester Road (SR 3022) from Haines School Road to Graham School Road.

17,619,600

1,375,000 2,114,352

1,761,960

\$23,160,156

\$29,997,352

\$2,966,771

\$2,966,771

\$0

\$0 \$0

264,294

24,950

DEFICIENCY:

Additional thru lanes are anticipated to be needed by the year 2030.

PROPOSED IMPROVEMENTS:

Widen to four-lane Urban Collector with left-turn lanes (See Township Boulevard Design Standards).

ESTIMATED COST SUMMARY:

Construction

Right-of Way

Engineering

PROPOSED FUNDING:

State/Federal

Impact Fees

West District

East District

Transportation District Cost:

Southeast District

Other

Inspection

TOTAL

Utility Relocation

Admin & Planning

(Current Year 2021 Dollars)

PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 17%

New Development Traffic / Anticipated Traffic Growth = 83%

CONSTRUCTION YEAR AND PROJECTED COST:

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$5,549,392
New Development Trips	\$27,414,731

Construction Year	2030
Projected Construction Cost	\$27,070,750
Projected Soft Cost	\$5,893,373
Projected Total Cost	\$32,964,124

91%

0%

9%

PROJECT SCHEDULE:

	Year
Secure Funding	2027
Acquire ROW	2028
Complete Engineering	2029
Begin Construction	2030

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	AUV	Э.

SEGMENT NUMBER:	S-40
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PROJECT NUMBER: S-40A

LOCATION:

TRANSPORTATION DISTRICT: East

S.R. 228 from Route 19 to Franklin Road

DEFICIENCY:

The 2030 traffic projects are anticipated to be higher than the current roadway can accommodate.

PROPOSED IMPROVEMENTS:

Widen to 6 Lane Arterial

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	12,217,065
Utility Relocation	135,500
Right-of Way	467,500
Engineering	1,221,706
Inspection	1,221,706
Admin & Planning	183,256
TOTAL	\$15,446,734

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 33%

New Development Traffic / Anticipated Traffic Growth = 67%

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$8,853,967
New Development Trips	\$17,894,778

Construction Year	2035
Projected Construction Cost	\$22,200,204
Projected Soft Cost	\$4,548,541
Projected Total Cost	\$26,748,745

CONSTRUCTION YEAR AND PROJECTED COST:

PROPOSED FUNDING:

State/Federal	50%	\$13,374,372
Other	46%	\$12,304,423
Impact Fees	4%	\$1,069,950

Transportation District Cost: West District East District

Southeast District

PROJECT SCHEDULE:

	Year
Secure Funding	2033
Acquire ROW	2034
Complete Engineering	2034
Begin Construction	2035

REMARKS:

\$0

\$0

\$1,069,950

SEGMENT NUMBER: S-43 PROJECT NUMBER: S-43A

LOCATION:

TRANSPORTATION DISTRICT: East

Franklin Road (SR 3021) from Route 228 to Old Mars Crider Road.

DEFICIENCY:

Additional thru-lanes are anticipated to be needed by the year 2030 along this segment of Franklin Road to maintain an acceptable Level of Service.

PROPOSED IMPROVEMENTS:

Widen to four-lane Residential Collector.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	2,686,799
Utility Relocation	120,100
Right-of Way	990,000
Engineering	322,416
Inspection	268,680
Admin & Planning	40,302
TOTAL	\$4,428,297

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 45%

New Development Traffic / Anticipated Traffic Growth = 55%

CONSTRUCTION YEAR AND PROJECTED COST:

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$3,416,905
New Development Trips	\$4,251,473

Construction Year	2035
Projected Construction Cost	\$6,575,001
Projected Soft Cost	\$1,093,377
Projected Total Cost	\$7,668,378

PROPOSED FUNDING:

State/Federal	77%	\$5,904,651
Other	0%	\$0
Impact Fees	23%	\$1,763,727

Transportation District Cost:	
West District	\$0
East District	\$617,304
Southeast District	\$0

PROJECT SCHEDULE:

	Year
Secure Funding	2031
Acquire ROW	2032
Complete Engineering	2033
Begin Construction	2035

REMARKS:

SEGMENT NUMBER: S-43 PROJECT NUMBER: S-43B

LOCATION:

TRANSPORTATION DISTRICT: East

Franklin Road (SR 3021) from Old Mars Crider Road to Peters road.

DEFICIENCY:

Additional thru-lanes are anticipated to be needed by the year 2030 along this segment of Franklin Road to maintain an acceptable Level of Service.

PROPOSED IMPROVEMENTS:

Widen to four-lane Residential Collector.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	7,839,775
Utility Relocation	341,400
Right-of Way	2,670,000
Engineering	940,773
Inspection	783,977
Admin & Planning	117,597
TOTAL	\$12,693,522

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 45%

New Development Traffic / Anticipated Traffic Growth = 55%

CONSTRUCTION YEAR AND PROJECTED COST:

New Pass Thru Trips	\$9,794,409
New Development Trips	\$12,186,663

Construction Year	2035
Projected Construction Cost	\$18,790,724
Projected Soft Cost	\$3,190,349
Projected Total Cost	\$21,981,073

80%

15%

5%

\$17,584,858

\$3,297,161 \$1,099,054

\$1,099,054

\$0

\$0

PROJECT SCHEDULE:

COST ATTRIBUTABLE TO:

	Year
Secure Funding	2031
Acquire ROW	2032
Complete Engineering	2033
Begin Construction	2035

REMARKS :	

PROPOSED FUNDING:

State/Federal

Impact Fees

West District

East District

Transportation District Cost:

Southeast District

Other

SEGMENT NUMBER: S-44 PROJECT NUMBER: S-44A

LOCATION:

TRANSPORTATION DISTRICT: East/West

Route 19 (SR 0019) from Marshall Township to Route 228.

DEFICIENCY:

Thru lanes will need to be added to the roadway to maintain an acceptable Level of Service in the study year 2030.

PROPOSED IMPROVEMENTS:

Widen to six-lane Minor Arterial.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	9,112,279
Utility Relocation	420,000
Right-of Way	1,100,000
Engineering	1,093,473
Inspection	911,228
Admin & Planning	136,684
TOTAL	\$12,773,664

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 55%

New Development Traffic / Anticipated Traffic Growth = 45%

64 COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$10,082,814
New Development Trips	\$8,098,093

Construction Year	2030
Projected Construction Cost	\$15,133,048
Projected Soft Cost	\$3,047,859
Projected Total Cost	\$18,180,907

96%

0%

\$17,453,671

\$0

CONSTRUCTION YEAR AND PROJECTED COST:

7 PROJECT SCHEDULE:

	Year
Secure Funding	2025
Acquire ROW	2027
Complete Engineering	2028
Begin Construction	2030

State/Federal

Other

REMARKS:

PROPOSED FUNDING:

Impact Fees	4%	\$727,236
Transportation District	Cost:	
West District		\$363,618
East District		\$363,618
Southeast District		\$0

SEGMENT NUMBER:	S-45	PROJECT NUMBER:	S-45A
SEGIVIENT NUVIDER.	3-45	FRUJECI NUMBER.	3-43A

LOCATION:

TRANSPORTATION DISTRICT: East/West

Route 19 (SR 0019) from Route 228 to Ogle View/Rowan Roads.

DEFICIENCY:

Thru lanes will need to be added to the roadway to maintain an acceptable Level Of Service in the study year 2030.

PROPOSED IMPROVEMENTS:

Widen to six-lane Minor Arterial.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	15,484,479
Utility Relocation	620,000
Right-of Way	1,815,000
Engineering	1,858,138
Inspection	1,548,448
Admin & Planning	232,267
TOTAL	\$21,558,332

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 48%

New Development Traffic / Anticipated Traffic Growth = 52%

CONSTRUCTION YEAR AND PROJECTED COST:

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$14,805,231
New Development Trips	\$15,878,997

Construction Year	2030
Projected Construction Cost	\$25,505,006
Projected Soft Cost	\$5,179,222
Projected Total Cost	\$30,684,228

95%

0%

5%

PROJECT SCHEDULE:

	Year
Secure Funding	2025
Acquire ROW	2026
Complete Engineering	2028
Begin Construction	2030

REN	IΔR	KS.
		I (O.

PROPOSED FUNDING:

State/Federal

Impact Fees

West District

East District

Transportation District Cost:

Southeast District

Other

\$29,150,017

\$1,534,211

\$767,106

\$767,106

\$0

SEGMENT NUMBER: S-D1 PROJECT NUMBER: S-D1

LOCATION:

TRANSPORTATION DISTRICT: East

New connection from Wisconsin Avenue to American Way

DEFICIENCY:

A roadway network parallel to Route 19 should be constructed to allow for the efficient flow of traffic between adjacent developments without having to access Route 19.

PROPOSED IMPROVEMENTS:

Construct 2 Lane Commercial Collector Roadway

ESTIMATED COST SUMM	ARY:		PROPORTIONAL SPLIT OF FUTU	RE
(Current Year 2021 D	ollars)		PEAK HOUR TRAFFIC VOLUMES	:
Construction		476,482	New Pass Thru Traffic	/
Utility Relocation		5,000	Anticipated Traffic Growth =	: 0%
Right-of Way		210,000		
Engineering		57,178	New Development Traffic	/
Inspection		38,119	Anticipated Traffic Growth =	: 100%
Admin & Planning		7,147		
TOTAL		\$793,925	COST ATTRIBUTABLE TO:	
CONSTRUCTION YEAR A		ECTED COST:	New Pass Thru Trips	
			New Development Trips	\$1,
Construction Year		2032		
Projected Construction	on Cost	\$1,064,505		
Projected Soft Cost		\$157,707		
Projected Total Cost		\$1,222,212	PROJECT SCHEDULE:	
PROPOSED FUNDING:				
			Secure Funding	
State/Federal	0%	\$0	Acquire ROW	
Other	20%	\$244,442	Complete Engineering	

Transportation District Cost:	
West District	
East District	

80%

	Year
Secure Funding	2029
Acquire ROW	2030
Complete Engineering	2031
Begin Construction	2032

REMARKS:

Impact Fees

Southeast District

See Improvement Drawing number S-D for a plan sketch of the proposed improvement.

\$977,769

\$0 \$977,769

\$0

\$0

\$1,222,212

SEGMENT NUMBER: S-D2

PROJECT NUMBER: S-D2

LOCATION:

TRANSPORTATION DISTRICT: East

New connection from American Way to North Side of Existing Home Depot Parcel.

DEFICIENCY:

A roadway network parallel to Route 19 should be constructed to allow for the efficient flow of traffic between adjacent developments without having to access Route 19.

PROPOSED IMPROVEMENTS:

Construct 2 Lane Commercial Collector Roadway

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	913,788
Utility Relocation	5,000
Right-of Way	315,000
Engineering	91,379
Inspection	73,103
Admin & Planning	13,707
TOTAL	\$1,411,976

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 0%

New Development Traffic / Anticipated Traffic Growth = 100%

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2030
Projected Construction Cost	\$1,756,065
Projected Soft Cost	\$253,618
Projected Total Cost	\$2,009,683

0%

70%

30%

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$0
New Development Trips	\$2,009,683

PROJECT SCHEDULE:

	Year
Secure Funding	2027
Acquire ROW	2028
Complete Engineering	2029
Begin Construction	2030

Transportation District Cost: West District East District

Southeast District

PROPOSED FUNDING:

State/Federal

Impact Fees

Other

REMARKS:

See Improvement Drawing number S-D for a plan sketch of the proposed improvement.

\$0

\$0

\$0

\$1,406,778

\$602,905

\$602,905

SEGMENT NUMBER: S-D3

PROJECT NUMBER: S-D3

LOCATION:

TRANSPORTATION DISTRICT: East

New connection from South Side of Existing Home Depot Parcel to Near 228.

DEFICIENCY:

A roadway network parallel to Route 19 should be constructed to allow for the efficient flow of traffic between adjacent developments without having to access Route 19.

PROPOSED IMPROVEMENTS:

Construct 2 Lane Commercial Collector Roadway

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	1,461,872
Utility Relocation	25,000
Right-of Way	700,000
Engineering	146,187
Inspection	116,950
Admin & Planning	21,928
TOTAL	\$2,471,938

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 0%

New Development Traffic / Anticipated Traffic Growth = 100%

CONSTRUCTION YEAR AND PROJECTED COST: New

New Pass Thru Trips	\$0
New Development Trips	\$3,518,338

Construction Year	2030
Projected Construction Cost	\$3,112,601
Projected Soft Cost	\$405,737
Projected Total Cost	\$3,518,338

PROJECT SCHEDULE:

COST ATTRIBUTABLE TO:

	Year
Secure Funding	2027
Acquire ROW	2028
Complete Engineering	2029
Begin Construction	2030

PROPOSED FUNDING:

State/Federal	0%	\$0	
Other	85%	\$2,990,587	
Impact Fees	15%	\$527,751	
Transportation District Cost:			

West District	\$0
East District	\$527,751
Southeast District	\$0

REMARKS:

See Improvement Drawing number S-D for a plan sketch of the proposed improvement.

SEGMENT NUMBER:	S-D4	PROJECT NUMBER:	S-D4
SEGIVIENT NUMBER.	3-04	FROJECT NUMBER.	3-04

LOCATION:

TRANSPORTATION DISTRICT: East

Dutihl Road from Route 228 north to Brandt Drive.

DEFICIENCY:

Insufficient north-south roadway capacity within the Township.

PROPOSED IMPROVEMENTS:

Revise existing Dutihl Road to one way for portions in conjunction with construction of parallel 2 Lane Commercial Collector Roadway

ESTIMATED COST SU	MMARY:		PROPORTIONAL SPLIT OF FUTU	IRE
(Current Year 2021 Dollars) PEAK HOUR TRAFFIC		PEAK HOUR TRAFFIC VOLUMES	:	
Construction		1,524,974	New Pass Thru Traffic	/
Utility Relocation		10,000	Anticipated Traffic Growth =	= 20%
Right-of Way		129,500		
Engineering		152,497	New Development Traffic	/
Inspection		121,998	Anticipated Traffic Growth =	= 80%
Admin & Planning		22,875		
TOTAL		\$1,961,844	COST ATTRIBUTABLE TO:	
CONSTRUCTION YEAI	R AND PROJ	ECTED COST:	New Pass Thru Trips	\$459,016
			New Development Trips	\$1,836,064
Construction Year	,	2025		
Projected Constru	ction Cost	\$1,947,200		
Projected Soft Cos	st	\$347,881		
Projected Total Co	ost	\$2,295,081	PROJECT SCHEDULE:	
PROPOSED FUNDING:				Year
			Secure Funding	2022
State/Federal	0%	\$0	Acquire ROW	2023
Other	60%	\$1,377,048	Complete Engineering	2024
Impact Fees	40%	\$918,032	Begin Construction	2025
Transportation Distric	t Cost:			
West District		\$0		
East District		\$918,032		
Southeast District		\$0		

REMARKS:

See Improvement Drawing number S-D for a plan sketch of the proposed improvement.

SEGMENT NUMBER: S-E1 PROJECT NUMBER: S-E1

LOCATION:

TRANSPORTATION DISTRICT: West

New connection Thomson Park Drive to Brandt Drive including widening of existing Brandt Drive.

DEFICIENCY:

Insufficient east-west roadway capacity within the Township.

PROPOSED IMPROVEMENTS:

Construct 2 Lane Commercial Collector Roadway

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	1,059,236
Utility Relocation	10,000
Right-of Way	560,000
Engineering	158,885
Inspection	84,739
Admin & Planning	15,889
TOTAL	\$1,888,748

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 0%

New Development Traffic / Anticipated Traffic Growth = 100%

CONSTRUCTION YEAR AND PROJECTED COST: New

New Pass Thru Trips	\$0
New Development Trips	\$2,209,568

Construction Year	2025
Projected Construction Cost	\$1,905,975
Projected Soft Cost	\$303,593
Projected Total Cost	\$2,209,568

PROJECT SCHEDULE:

COST ATTRIBUTABLE TO:

	Year
Secure Funding	2022
Acquire ROW	2023
Complete Engineering	2024
Begin Construction	2025

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	73%	\$1,612,985
Impact Fees	27%	\$596,583

Transportation District Cost:	
West District	\$596,583
East District	\$0
Southeast District	\$0

REMARKS:

See Improvement Drawing number S-E for a plan sketch of the proposed improvement.

SEGMENT NUMBER: S-E2 PROJECT NUMBER: S-E2

LOCATION:

TRANSPORTATION DISTRICT: West

Intersection improvements including roundabout associated with Brandt Drive at Thomson Park Drive.

DEFICIENCY:

Insufficient east-west roadway capacity within the Township.

PROPOSED IMPROVEMENTS:

Construct Roundabout at Thomson Park Drive to accommodate new connector Road.

ESTIMATED COST SU	MMARY:		PROPORTIONAL SPLIT OF FUTUR	E
(Current Year 2021	l Dollars)		PEAK HOUR TRAFFIC VOLUMES:	
Construction		662,971	New Pass Thru Traffic /	
Utility Relocation		5,000	Anticipated Traffic Growth = (0%
Right-of Way		42,500		
Engineering		79,557	New Development Traffic /	
Inspection		53,038	Anticipated Traffic Growth = 1	100%
Admin & Planning	ļ	9,945		
TOTAL		\$853,010	COST ATTRIBUTABLE TO:	
CONSTRUCTION YEA	R AND PROJE	CTED COST:	New Pass Thru Trips	\$0
			New Development Trips	\$997,901
Construction Year	,	2025		
Projected Constru	ction Cost	\$831,151		
Projected Soft Cos	st	\$166,750		
Projected Total Co	ost	\$997,901	PROJECT SCHEDULE:	
PROPOSED FUNDING				Year
			Secure Funding	2022
State/Federal	0%	\$0	Acquire ROW	2023
Other	50%	\$498,951	Complete Engineering	2024
Impact Fees	50%	\$498,951	Begin Construction	2025
Transportation Distric	t Cost:			
West District		\$498,951		
East District		\$0		
Southeast District		\$0		

REMARKS:

See Improvement Drawing number S-E for a plan sketch of the proposed improvement.



APPENDIX B

UNSELECTED CANDIDATE PROJECT LIST



Map Number	Project Number	Intersection or Roadway Segment	Improvement Project Description
3	I-03B	The intersection of Unionville Road (T-328) and Graham School Road (T- 304).	Signalize the intersection and add an eastbound right-turn lane on Unionville Road.
5	I-05B	The intersection of Unionville Road (T-328) and Progress Avenue (T-651).	Signalize the intersection and add a southbound left, and an eastbound and westbound right.
9	I-09B	The intersection of Franklin Road (SR 3021), Garvin Road (T-313) and Callery Road (SR 3014).	Realign Callery Road with Garvin Road to form a four-way "plus" intersection and instal traffic signal.
13	I-13	The intersection of Franklin Road (SR 3021) and Peters Road (T-307).	Add a westbound left turn lane on Peters Road.
19	I-19B	Intersection of Marshall Road (T-305) and North Boundary Road (T-311).	Signalize the intersection and add a westbound left-turn lane on North Boundary Road.
24	I-24A	The intersection of US Route 19, Ogle View Road (T-322) and Rowan Road (SR 3018).	Add EBL, EBT, EBR, WBL, WBT, SBR. Add NB and SB left to form dual lefts.
24	I-24B	The intersection of US Route 19, Ogle View Road (T-322) and Rowan Road (SR 3018).	Add a westbound left turn lane to form triple lefts along Rowan Road.
29	I-29	The intersection of Robinhood Drive (T-330) and Rochester Road (SR 3022).	Signalize the intersection.
31	I-31B	The intersection of Norman Drive (T-830), Thomson Park Drive (T-830) and Rochester Road (SR 3022).	Completed
34	I-34	The intersection of Rolling Road and Freedom Road.	Install traffic signal.
37	I-37	The intersection of US Route 19 and St. Francis Way/ Mall Driveway	The current intersection geometry is projected to become deficient with 2030 forecast traffic volumes.
38	I-38	The intersection of Franklin Road (SR 3021) and Burke Road (T-320).	Signalize the intersection. Add a southbound left-turn lane on Franklin Road.
42	I-42A	The intersection of Peters Road (T-307), Canterbury Trail (T-726) and Rowan Road (SR 3018).	Signalize the intersection and add an eastbound left-turn lane and a channelized southbound right-turn lane on Rowan Road.
S-3	S-03	Glen Eden Road (SR 3024) from Freshcorn Road to Route 19.	Widen and realign to two-lane Residential Collector Standards.
S-6	S-06	Unionville Road from Route 19 to Ogle View Road	Add left turn lanes at key intersections to maintain thru traffic flow.
S-7	S-07	Unionville Road from Ogle View Road to Kensinger Drive.	Widen to three lane commercial collector standards.
S-8	S-08	Unionville Road (T-328) from Kensinger Drive to Glen Eden Road.	Widen and Realign to two-lane Residential Collector Standards west of Aberdeen Driv
S-12	S-12	Old Route 19 (T-310) from Glen Eden Road to Route 19.	Widen to two-lane Residential Collector Standards.
S-13	S-13	Route 19 (SR 0019) from Ogle View Road to Glen Eden Road.	Widen to a six-lane Minor Arterial to North of Ogle View Road.
S-15	S-15	Franklin Road (SR 3021) from Peters Road to Garvin Road.	Widen and Realign to two-lane Residential Collector Standards.
S-17	S-17	Marshall Road (T-305) from Rowan Road to North Boundary Road.	Widen to three-lane Commercial Collector Standards.
S-19	S-19	North Boundary Road (T-311) from Route 19 to Marshall Road.	Widen to three-lane Residential Collector Standards.
S-22	S-22	Garvin Road (T-313) from New Connection to Franklin Road.	Widen to two-lane Residential Collector Standards
S-24	S-24	Rowan Road (SR 3018) from Route 19 to Marshall Road.	Widen to five-lane Commercial Collector Roadway Standards.
S-26	S-26	Peters Road from Rowan Road to Franklin Road	Add left turn lanes at key intersections to maintain thru traffic flow.
S-29	S-29	Powell Road from Freedom Road to Rochester Road	Add left turn lanes at key intersections to maintain thru traffic flow.
S-32	S-32	Freedom Road (SR 3020) from Commonwealth Dr to Turnpike Bridge.	Widen to five-lane Minor Arterial with left-turn lanes.
S-33	S-33	Freedom Road (SR 3020) from Turnpike Bridge to Route 19.	Completed
S-38	S-38	Haine School Road from Freedom Road to Rochester Road	Add left turn lanes at key intersections to maintain thru traffic flow.
S-40	S-40B	S.R. 228 from Route 19 to Franklin Road	Widen to 8 Lane Arterial
S-41	S-41	S.R. 228 from Franklin Road to Seven Fields Borough.	Widen to 4 Lane Arterial Roadway.
S-42	S-42	Franklin Road (SR 3021) from Seven Fields Borough to Route 228.	Widen and Realign to two-lane Residential Collector Standards.
S-45	S-45B	Route 19 (SR 0019) from Route 228 to Ogle View/Rowan Roads.	Widen to eight-lane Minor Arterial.
S-F2	S-F2	New connection from proposed Unionville North-South Road east to Route 19.	Construct 3 Lane Commercial Collector Roadway
S-H2	S-H2	Local road network north of Route 228. North-South segment (New McElroy) opposite of Cranberry Woods Drive.	Construct 5 Lane Commercial Collector Roadway
S-Int	S-Int	I-79 Interchange at location to be determined north of Route 228.	Provide additional interchange to alleviate thru traffic on Route 19.

Unselected Candidate Capital Improvemements Plan Projects Summary



APPENDIX C

UNSELECTED CANDIDATE PROJECT COST SUMMARIES AND DRAWINGS



INTERSECTION NUMBER: 3

PROJECT NUMBER: I-03B

LOCATION:

TRANSPORTATION DISTRICT: West

The intersection of Unionville Road (T-328) and Graham School Road (T-304).

DEFICIENCY:

The one-way stop controlled intersection is projected to be deficient with forecast year 2030 volumes.

PROPOSED IMPROVEMENTS:

Signalize the intersection and add an eastbound right-turn lane on Unionville Road.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	520,243
Utility Relocation	5,000
Right-of Way	91,000
Engineering	104,049
Inspection	41,619
Admin & Planning	7,804
TOTAL	\$769,714

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 20%

New Development Traffic / Anticipated Traffic Growth = 80%

CONSTRUCTION YEAR AND PROJECTED COST:

New Pass Thru Trips \$3,280,651 New Development Trips \$13,122,606

Construction Year	2099
Projected Construction Cost	\$13,132,649
Projected Soft Cost	\$3,270,608
Projected Total Cost	\$16,403,257

PROJECT SCHEDULE:

COST ATTRIBUTABLE TO:

	Year
Secure Funding	2098
Acquire ROW	2097
Complete Engineering	2099
Begin Construction	2099

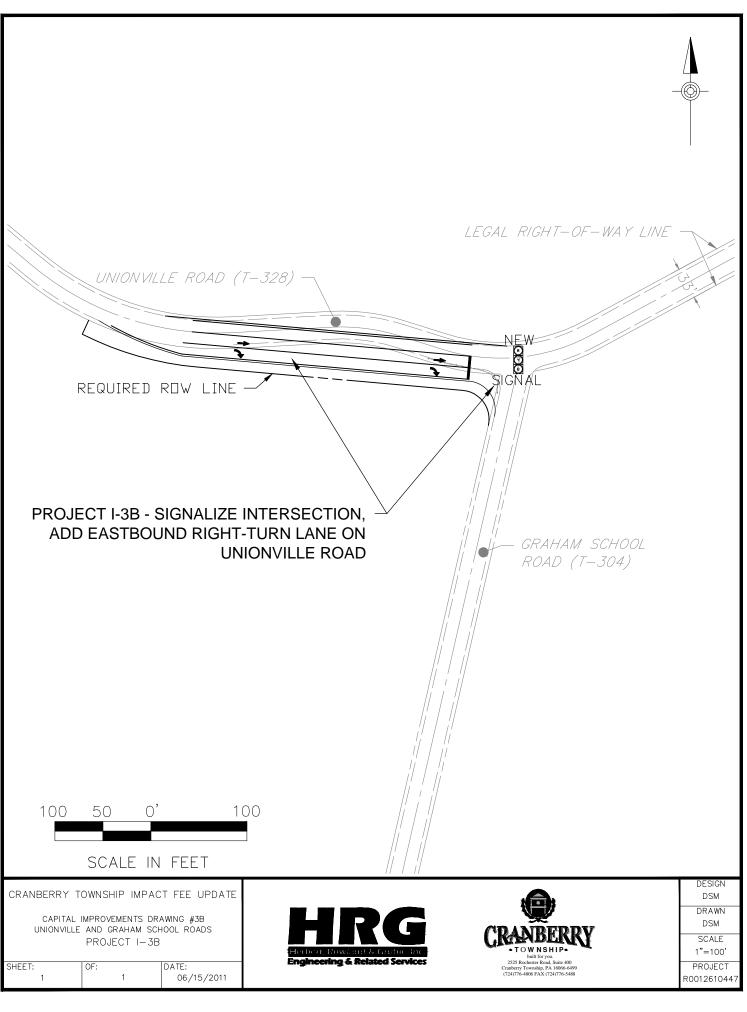
PROPOSED FUNDING:

Southeast District

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0
Transportation District	Cost:	
West District		\$0
East District		\$0

REMARKS:

See Improvement Drawing number 3 for a plan sketch of the proposed improvement.



INTERSECTION NUMBER: 5

PROJECT NUMBER: I-05B

LOCATION:

TRANSPORTATION DISTRICT: West

The intersection of Unionville Road (T-328) and Progress Avenue (T-651).

DEFICIENCY:

The current intersection is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Signalize the intersection and add a southbound left, and an eastbound and westbound right.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	1,258,840
Utility Relocation	24,000
Right-of Way	137,500
Engineering	188,826
Inspection	125,884
Admin & Planning	18,883
TOTAL	\$1,753,933

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 17%

New Development Traffic / Anticipated Traffic Growth = 83%

CONSTRUCTION YEAR AND PROJECTED COST:

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$6,354,221
New Development Trips	\$31,023,548

2099
\$30,268,631
\$7,109,137
\$37,377,768

PROJECT SCHEDULE:

	Year
Secure Funding	2097
Acquire ROW	2097
Complete Engineering	2098
Begin Construction	2099

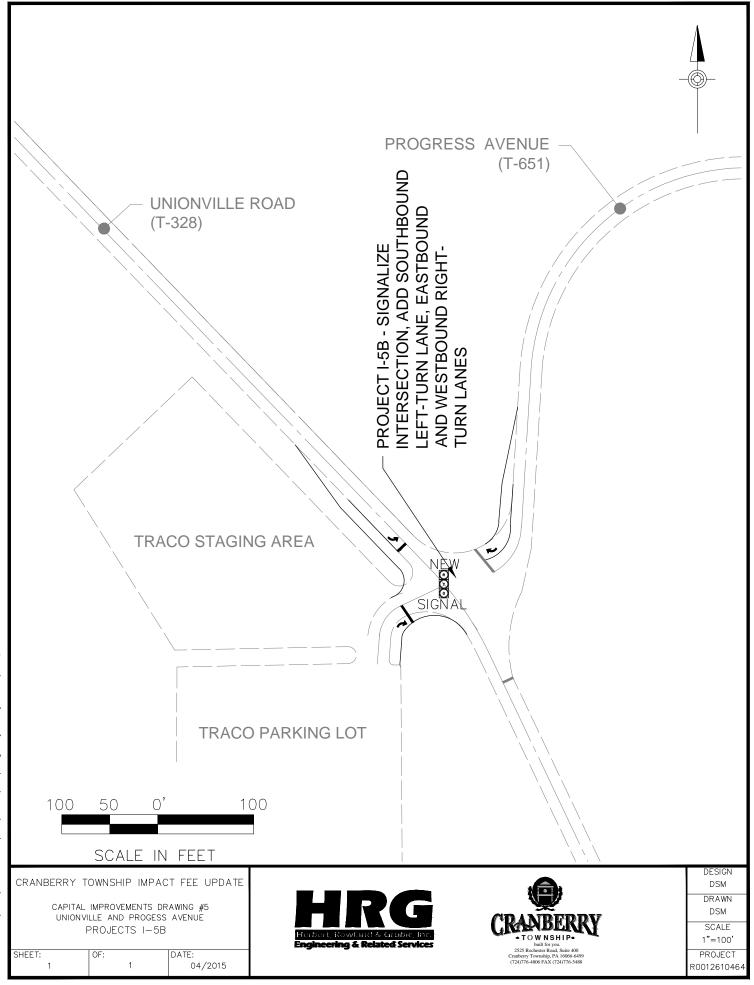
PROPOSED FUNDING:
State / Endoral

REMARKS:

0%	\$0
0%	\$0
0%	\$0
	0%

Transportation District Cost:	
West District	
East District	
Southeast District	

\$0 \$0 \$0



INTERSECTION NUMBER: 9 PROJECT NUMBER: I-09B

LOCATION:

TRANSPORTATION DISTRICT: East

The intersection of Franklin Road (SR 3021), Garvin Road (T-313) and Callery Road (SR 3014).

DEFICIENCY:

The current intersection is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Realign Callery Road with Garvin Road to form a four-way "plus" intersection and install a traffic signal.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	1,153,738
Utility Relocation	16,000
Right-of Way	224,000
Engineering	173,061
Inspection	92,299
Admin & Planning	17,306
TOTAL	\$1,676,404

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 33%

New Development Traffic / Anticipated Traffic Growth = 67%

CONSTRUCTION YEAR AND PROJECTED COST:

New Pass Thru Trips\$11,947,885New Development Trips\$23,777,678

Construction Year	2099
Projected Construction Cost	\$29,701,720
Projected Soft Cost	\$6,023,844
Projected Total Cost	\$35,725,564

0%

0%

0%

PROJECT SCHEDULE:

COST ATTRIBUTABLE TO:

	Year
Secure Funding	2099
Acquire ROW	2099
Complete Engineering	2099
Begin Construction	2099

DEI		RKS	
	VIAI	NNO	

PROPOSED FUNDING:

State/Federal

Impact Fees

West District

East District

Transportation District Cost:

Southeast District

Other

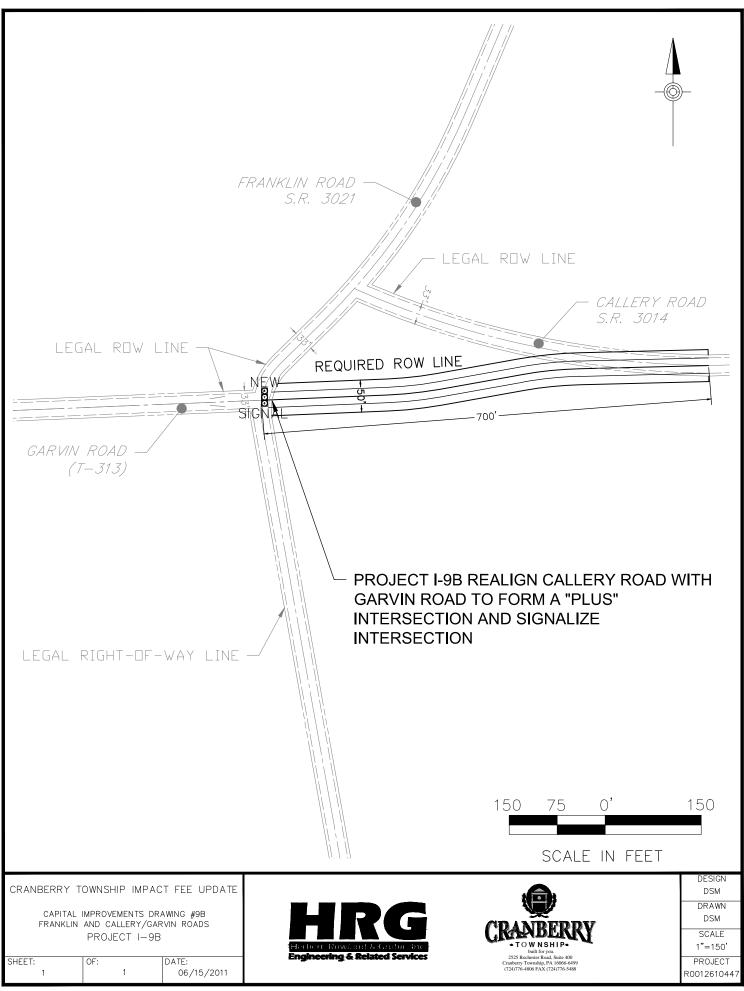
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\$0

\$0

\$0

\$0



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INTERSECTION NUMBER: 13

PROJECT NUMBER: I-13

LOCATION:

TRANSPORTATION DISTRICT: East

The intersection of Franklin Road (SR 3021) and Peters Road (T-307).

DEFICIENCY:

The intersection is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Add a westbound left turn lane on Peters Road.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	329,965
Utility Relocation	68,000
Right-of Way	52,500
Engineering	65,993
Inspection	32,996
Admin & Planning	4,949
TOTAL	\$554,404

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 24%

New Development Traffic / Anticipated Traffic Growth = 76%

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2025
Projected Construction Cost	\$526,980
Projected Soft Cost	\$121,594
Projected Total Cost	\$648,574

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$155,327
New Development Trips	\$493,247

PROJECT SCHEDULE:

	Year
Secure Funding	2023
Acquire ROW	2023
Complete Engineering	2024
Begin Construction	2025

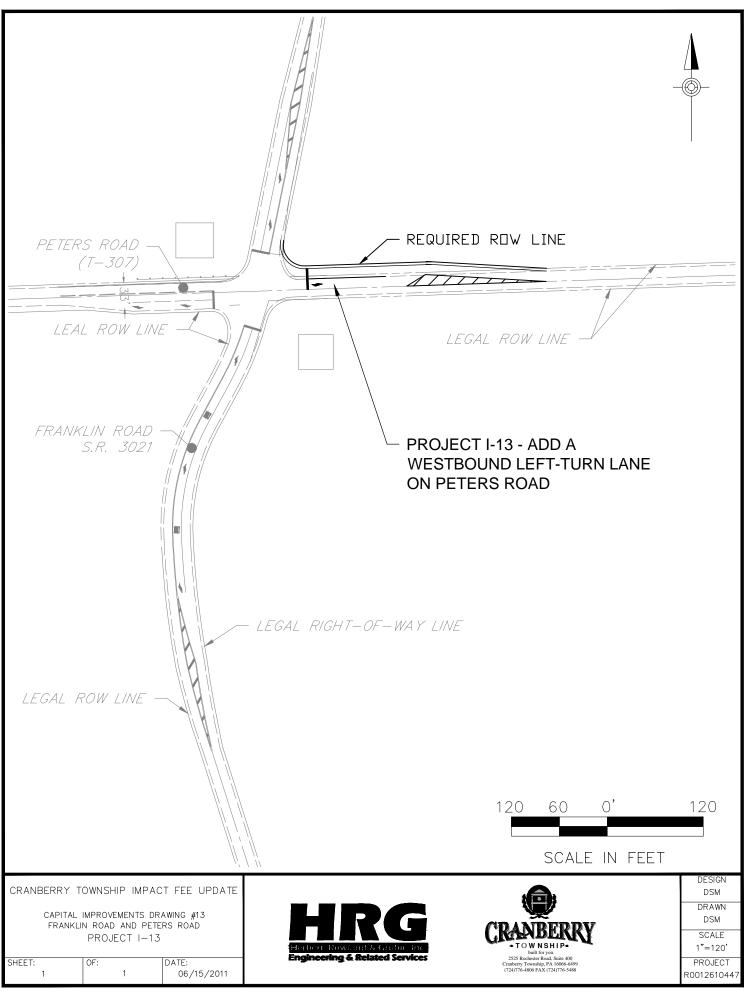
PROPOSED FUNDING:

Southeast District

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0
Transportation District	Cost:	
West District		\$0
East District		\$0

REMARKS:

See Improvement Drawing number 13 for a plan sketch of the proposed improvement.



INTERSECTION NUMBER: 19

PROJECT NUMBER: I-19B

LOCATION:

TRANSPORTATION DISTRICT: East

Intersection of Marshall Road (T-305) and North Boundary Road (T-311).

DEFICIENCY:

The current intersection geometry is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Signalize the intersection and add a westbound left-turn lane on North Boundary Road.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	774,471
Utility Relocation	5,000
Right-of Way	70,000
Engineering	89,064
Inspection	61,958
Admin & Planning	11,617
TOTAL	\$1,012,110

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 26%

New Development Traffic / Anticipated Traffic Growth = 74%

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year2099Projected Construction Cost\$18,102,942Projected Soft Cost\$3,465,972Projected Total Cost\$21,568,914

0%

0%

0%

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$5,607,918
New Development Trips	\$15,960,997

PROJECT SCHEDULE:

	Year
Secure Funding	2097
Acquire ROW	2097
Complete Engineering	2098
Begin Construction	2099

Other Impact Fees

PROPOSED FUNDING:

State/Federal

Transportation District Cost:	
West District	
East District	
Southeast District	

REMARKS:

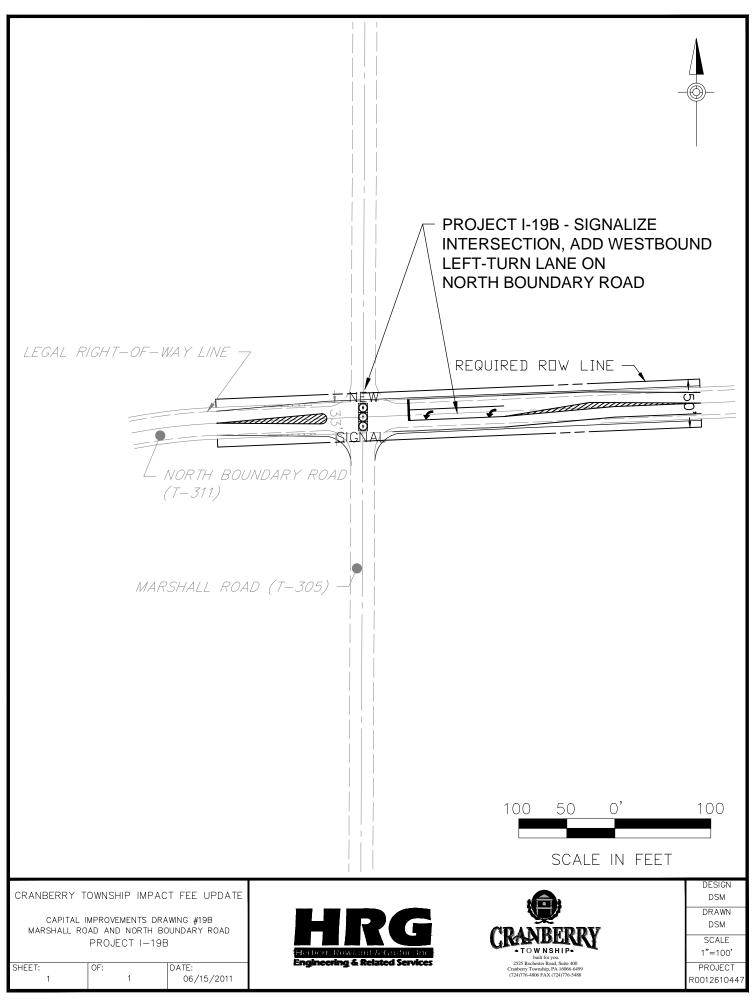
See Improvement Drawing number 19 for a plan sketch of the proposed improvement.

\$0

\$0

\$0

\$0 \$0 \$0



INTERSECTION NUMBER: 24 F

PROJECT NUMBER: I-24A

LOCATION:

TRANSPORTATION DISTRICT: East/West

The intersection of US Route 19, Ogle View Road (T-322) and Rowan Road (SR 3018).

DEFICIENCY:

The current intersection is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Add EBL, EBT, EBR, WBL, WBT, SBR. Add NB and SB left to form dual lefts.

3,544,275

1,520,000 637,970

257,600

425,313

\$6,438,322

53,164

ESTIMATED COST SUMMARY:

Construction

Right-of Way

Engineering

Inspection

TOTAL

Utility Relocation

Admin & Planning

(Current Year 2021 Dollars)

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 30%

New Development Traffic / Anticipated Traffic Growth = 70%

CONSTRUCTION YEAR AND PROJECTED COST:

New Pass Thru Trips\$2,749,122New Development Trips\$6,414,617

Construction Year	2030
Projected Construction Cost	\$7,574,688
Projected Soft Cost	\$1,589,052
Projected Total Cost	\$9,163,739

PROJECT SCHEDULE:

COST ATTRIBUTABLE TO:

	Year
Secure Funding	2028
Acquire ROW	2028
Complete Engineering	2029
Begin Construction	2030

PROPOSED FUNDING:

Southeast District

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0
Transportation District	Cost:	
West District		\$0
East District		\$0

REMARKS:

See Improvement Drawing number 24 for a plan sketch of the proposed improvement.

\$0

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INTERSECTION NUMBER: 24 PROJECT NUMBER: I-24B

LOCATION:

TRANSPORTATION DISTRICT: East

The intersection of US Route 19, Ogle View Road (T-322) and Rowan Road (SR 3018).

DEFICIENCY:

The current intersection is projected to become deficient with 2030 forecast traffic volumes.

134,770

16,846

\$2,183,164

PROPOSED IMPROVEMENTS:

Add a westbound left turn lane to form triple lefts along Rowan Road.

ESTIMATED COST SUMMARY:

Construction

Right-of Way Engineering

Inspection

TOTAL

Utility Relocation

Admin & Planning

(Current Year 2021 Dollars)

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

1,123,085	New Pass Thru Traffic /
20,000	Anticipated Traffic Growth = 30%
720,000	
168,463	New Development Traffic /

New Development Traffic / Anticipated Traffic Growth = 70%

CONSTRUCTION YEAR AND PROJECTED COST:

New Pass Thru Trips	\$13,957,514
New Development Trips	\$32,567,533

Construction Year	2099
Projected Construction Cost	\$39,703,893
Projected Soft Cost	\$6,821,154
Projected Total Cost	\$46,525,047

PROJECT SCHEDULE:

COST ATTRIBUTABLE TO:

	Year
Secure Funding	2097
Acquire ROW	2097
Complete Engineering	2098
Begin Construction	2099

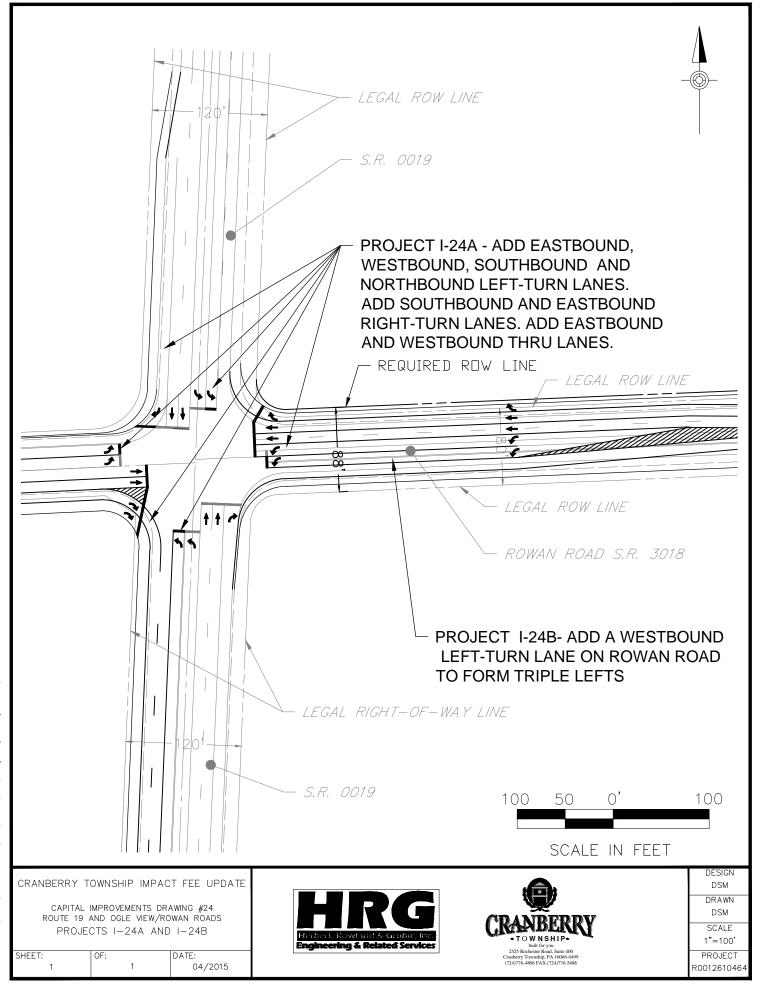
PROPOSED FUNDING:

Southeast District

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0
Transportation District	Cost:	
West District		\$0
East District		\$0

REMARKS:

See Improvement Drawing number 24 for a plan sketch of the proposed improvement.



INTERSECTION NUMBER: 29

PROJECT NUMBER: I-29

LOCATION:

TRANSPORTATION DISTRICT: West

The intersection of Robinhood Drive (T-330) and Rochester Road (SR 3022).

DEFICIENCY:

The current intersection geometry is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Signalize the intersection.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	302,500
Utility Relocation	0
Right-of Way	0
Engineering	45,375
Inspection	24,200
Admin & Planning	4,538
TOTAL	\$376,613

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic /
Anticipated Traffic Growth = 16%
New Development Traffic /
Anticipated Traffic Growth = 84%

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$6,446,528
Projected Soft Cost	\$1,579,399
Projected Total Cost	\$8,025,927

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$1,277,230
New Development Trips	\$6,748,697

PROJECT SCHEDULE:

	Year
Secure Funding	2097
Acquire ROW	2097
Complete Engineering	2098
Begin Construction	2099

PROPOSED FU	INDING:
-------------	---------

REMARKS:

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0

Transportation District Cost:	
West District	
East District	
Southeast District	

\$0 \$0 \$0

INTERSECTION NUMBER: 34

PROJECT NUMBER: I-34

LOCATION:

TRANSPORTATION DISTRICT: West

The intersection of Rolling Road and Freedom Road.

DEFICIENCY:

The intersection is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Install traffic signal.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	309,045
Utility Relocation	5,000
Right-of Way	0
Engineering	55,628
Inspection	15,452
Admin & Planning	4,636
TOTAL	\$389,761

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic /	
Anticipated Traffic Growth = 3	2%

New Development Traffic / Anticipated Traffic Growth = 68%

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$135,603
New Development Trips	\$285,962

PROJECT SCHEDULE:

	Year
Secure Funding	2021
Acquire ROW	2021
Complete Engineering	2022
Begin Construction	2023

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2023
Projected Construction Cost	\$339,671
Projected Soft Cost	\$81,894
Projected Total Cost	\$421,566

PROPOSED FUNDING:

REMARKS:

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0

Transportation District Cost: West District East District Southeast District

\$0

\$0

INTERSECTION NUMBER: 37

PROJECT NUMBER: I-37

LOCATION:

TRANSPORTATION DISTRICT: East/West

The intersection of US Route 19 and St. Francis Way/ Mall Driveway

DEFICIENCY:

The current intersection geometry is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Add an Eastbound Left Turn Lane and receiving lane on Mall Drive, Add NB Left to form Dual Lefts on 19 and add a WB right turn lane on St. Francis Way.

ESTIMATED COST SUMMARY:

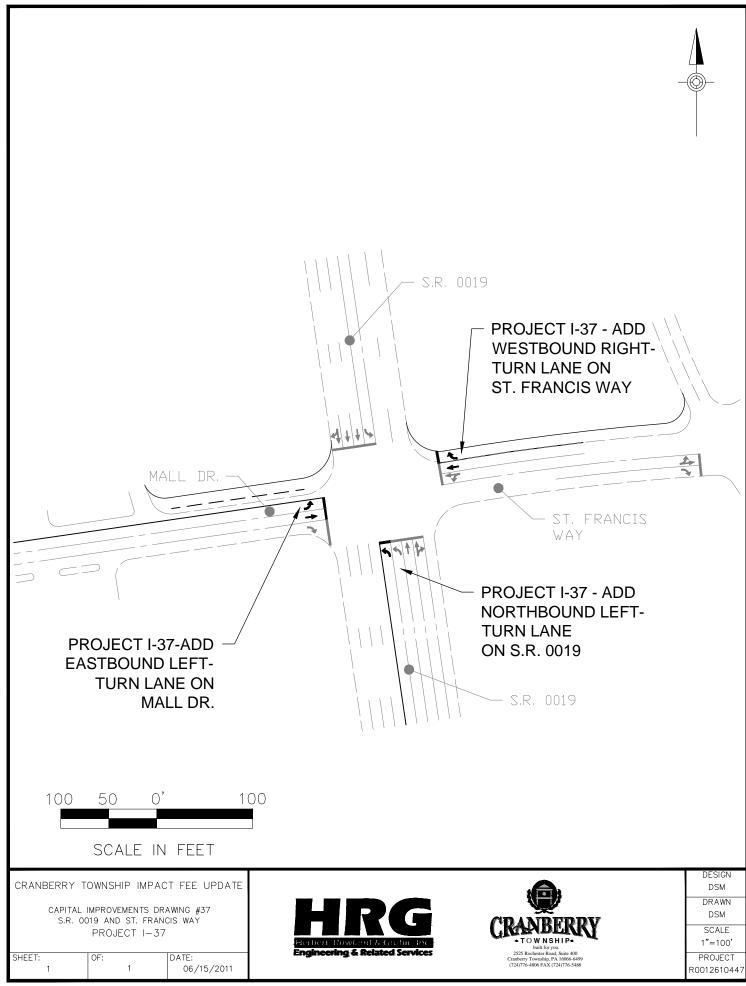
(Current Year 2021 Dollars)

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

Construction		2,734,239	New Pass Thru Traffic	/
Utility Relocation		0	Anticipated Traffic Growth =	= 37%
Right-of Way		1,220,000		
Engineering		546,848	New Development Traffic	/
Inspection		328,109	Anticipated Traffic Growth =	= 63%
Admin & Planning		41,014		
TOTAL		\$4,870,209	COST ATTRIBUTABLE TO:	
CONSTRUCTION YEAR		ECTED COST:	New Pass Thru Trips	\$2,098,251
			New Development Trips	\$3,599,205
Construction Year		2025		
Projected Construc	ction Cost	\$4,625,901		
Projected Soft Cos	t	\$1,071,555		
Projected Total Co	st	\$5,697,456	PROJECT SCHEDULE:	
PROPOSED FUNDING:				Year
			Secure Funding	2023
State/Federal	0%	\$0	Acquire ROW	2023
Other	0%	\$0	Complete Engineering	2024
Impact Fees	0%	\$0	Begin Construction	2025
Transportation District	Cost:			
West District		\$0		
East District		\$0		
Southeast District		\$0		

REMARKS:

See Improvement Drawing number 37 for a plan sketch of the proposed improvement.



INTERSECTION NUMBER: 38

PROJECT NUMBER: I-38

LOCATION:

TRANSPORTATION DISTRICT: East

The intersection of Franklin Road (SR 3021) and Burke Road (T-320).

DEFICIENCY:

The intersection control and geometry is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Signalize the intersection. Add a southbound left-turn lane on Franklin Road.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	616,868
Utility Relocation	24,000
Right-of Way	110,000
Engineering	92,530
Inspection	49,349
Admin & Planning	9,253
TOTAL	\$902,001

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 29%

New Development Traffic / Anticipated Traffic Growth = 71%

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year2099Projected Construction Cost\$16,001,630Projected Soft Cost\$3,220,765Projected Total Cost\$19,222,395

0%

0%

0%

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$5,658,237
New Development Trips	\$13,564,158

PROJECT SCHEDULE:

Year
2097
2097
2098
2099

Transportation District Cost: West District East District

Southeast District

PROPOSED FUNDING:

State/Federal

Impact Fees

Other

See Improvement Drawing number 38 for a plan sketch of the proposed improvement.

\$0

\$0

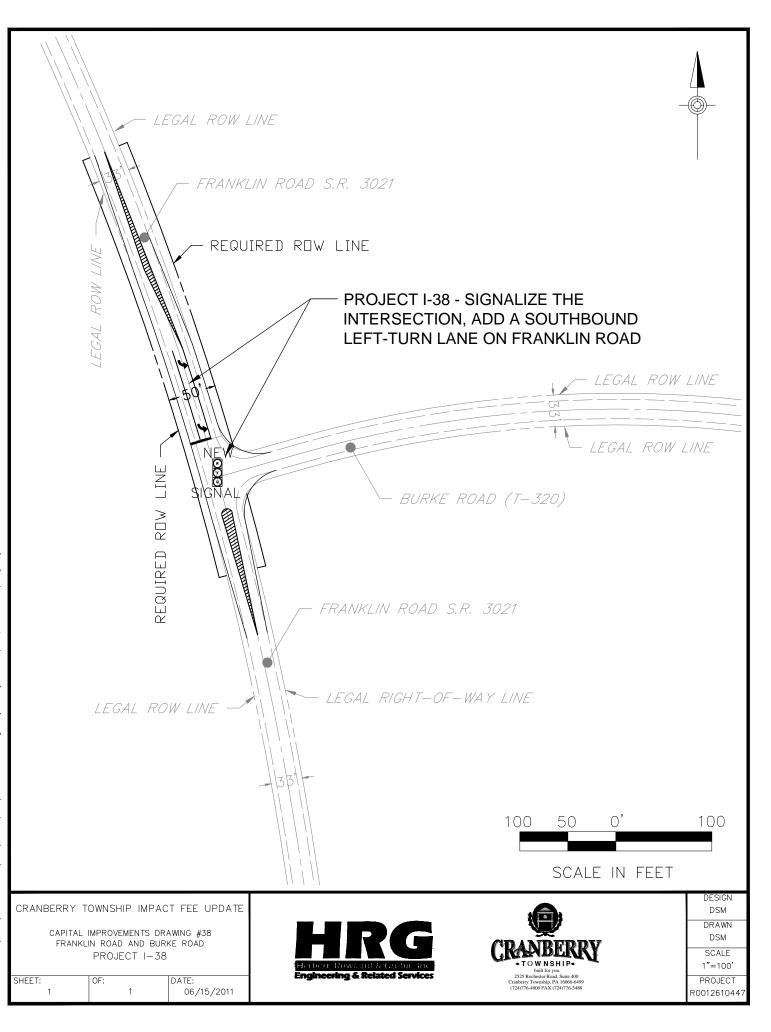
\$0

\$0

\$0

\$0

×7



INTERSECTION NUMBER: PROJECT NUMBER: I-42A 42

LOCATION:

TRANSPORTATION DISTRICT: East

The intersection of Peters Road (T-307), Canterbury Trail (T-726) and Rowan Road (SR 3018).

DEFICIENCY:

The current intersection is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Signalize the intersection and add an eastbound left-turn lane and a channelized southbound right-turn lane on Rowan Road.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	970,833
Utility Relocation	50,500
Right-of Way	126,000
Engineering	145,625
Inspection	77,667
Admin & Planning	14,562
TOTAL	\$1,385,187

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 19%

New Development Traffic / Anticipated Traffic Growth = 81%

CONSTRUCTION YEAR AND PROJECTED COST:

New Pass Thru Trips \$5,527,011 **New Development Trips** \$23,992,488

Construction Year	2099
Projected Construction Cost	\$24,450,629
Projected Soft Cost	\$5,068,870
Projected Total Cost	\$29,519,499

0%

0%

0%

PROJECT SCHEDULE:

COST ATTRIBUTABLE TO:

	Year
Secure Funding	2097
Acquire ROW	2097
Complete Engineering	2098
Begin Construction	2099

State/Federal

Impact Fees

Other

PROPOSED FUNDING:

Transportation District Cost:	
West District	
East District	
Southeast District	

REMARKS:

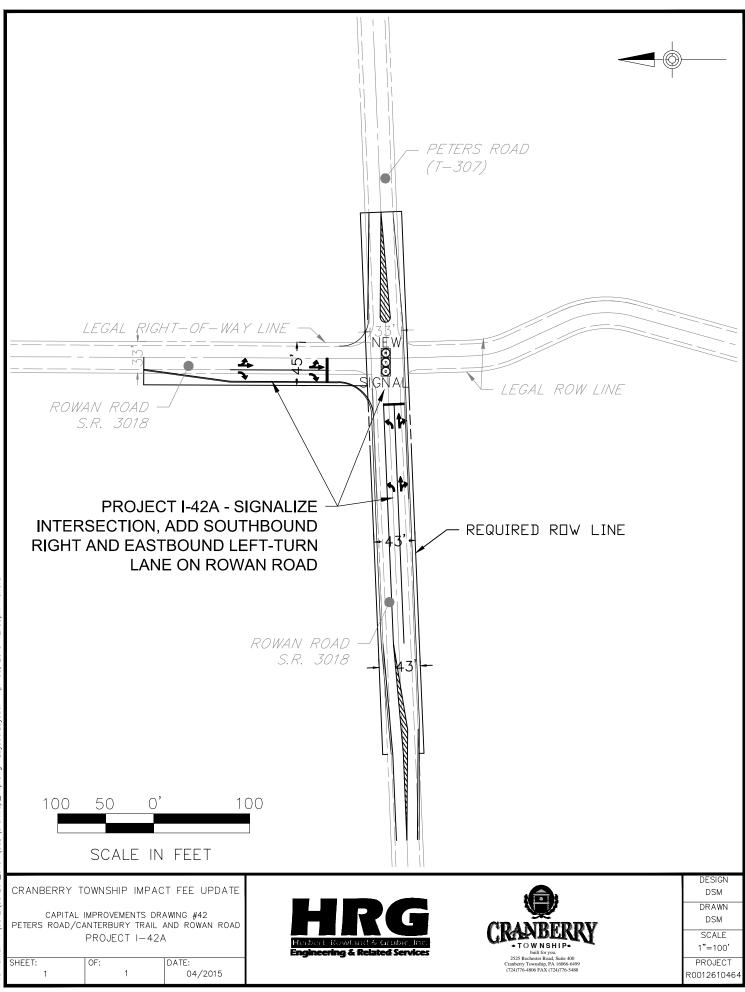
See Improvement Drawing number 42 for a plan sketch of the proposed improvement.

\$0

\$0

\$0

\$0 \$0 \$0 ×7



OF OMENIT NUMBER.	C 2		0 00
SEGMENT NUMBER:	3-3	PROJECT NUMBER:	3-03

LOCATION:

TRANSPORTATION DISTRICT: West

Glen Eden Road (SR 3024) from Freshcorn Road to Route 19.

DEFICIENCY:

There are currently several areas of poor horizontal/vertical geometry.

PROPOSED IMPROVEMENTS:

Widen and realign to two-lane Residential Collector Standards.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	6,884,232
Utility Relocation	286,750
Right-of Way	700,000
Engineering	826,108
Inspection	688,423
Admin & Planning	103,263
TOTAL	\$9,488,777

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 21%

New Development Traffic / Anticipated Traffic Growth = 79%

CONSTRUCTION YEAR AND PROJECTED COST:

Projected Construction Cost \$167,737,198

0%

0%

0%

New Pass Thru Trips	\$42,464,888
New Development Trips	\$159,748,863

P	ROJECT	SCHED	ULE:

2099

\$0

\$0

\$0

\$0 \$0 \$0

\$34,476,552

\$202,213,750

COST ATTRIBUTABLE TO:

	Year
Secure Funding	2095
Acquire ROW	2096
Complete Engineering	2098
Begin Construction	2099

Impact Fees

Other

REMARKS:

PROPOSED FUNDING:

Construction Year

Projected Soft Cost

Projected Total Cost

Transportation District Cost:	
West District	
East District	
Southeast District	

SEGMENT NUMBER: S-6

PROJECT NUMBER: S-06

LOCATION:

TRANSPORTATION DISTRICT: West

Unionville Road from Route 19 to Ogle View Road

DEFICIENCY:

The 2030 traffic projects are anticipated to be higher than the current roadway can accommodate.

2099

\$0

\$0

\$0

\$0

\$0

\$0

\$24,233,703

\$5,725,610

\$29,959,313

PROPOSED IMPROVEMENTS:

Add left turn lanes at key intersections to maintain thru traffic flow.

ESTIMATED COST SUMMARY:

Construction Year

Projected Soft Cost

Projected Total Cost

Transportation District Cost:

Southeast District

PROPOSED FUNDING:

State/Federal

Impact Fees

West District

East District

Other

Projected Construction Cost

(Current Year 2021 Dollars)

Construction	1,013,854
Utility Relocation	35,800
Right-of Way	87,500
Engineering	152,078
Inspection	101,385
Admin & Planning	15,208
TOTAL	\$1,405,825

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 21%

New Development Traffic / Anticipated Traffic Growth = 79%

CONSTRUCTION YEAR AND PROJECTED COST:

0%

0%

0%

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$6,291,456
New Development Trips	\$23,667,857

PROJECT SCHEDULE:

	Year
Secure Funding	2098
Acquire ROW	2098
Complete Engineering	2098
Begin Construction	2099

REMARKS:	

SEGMENT NUMBER: S-7 PROJECT NUMBER: S-07

LOCATION:

TRANSPORTATION DISTRICT: West

Unionville Road from Ogle View Road to Kensinger Drive.

DEFICIENCY:

The 2030 traffic projects are anticipated to be higher than the current roadway can accommodate.

PROPOSED IMPROVEMENTS:

Widen to three lane commercial collector standards.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	1,213,763
Utility Relocation	0
Right-of Way	105,000
Engineering	145,652
Inspection	121,376
Admin & Planning	18,206
TOTAL	\$1,603,997

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 24%

New Development Traffic / Anticipated Traffic Growth = 76%

CONSTRUCTION YEAR AND PROJECTED COST:

2099
\$28,103,934
\$6,078,580
\$34,182,513

0%

0%

0%

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$8,205,453
New Development Trips	\$25,977,061

PROJECT SCHEDULE:

	Year
Secure Funding	2097
Acquire ROW	2098
Complete Engineering	2098
Begin Construction	2099

REMARKS:

PROPOSED FUNDING:

State/Federal

Impact Fees

West District

East District

Transportation District Cost:

Southeast District

Other

\$0

\$0

\$0

\$0

\$0

PROJECT NUMBER:

TRANSPORTATION DISTRICT:

DEFICIENCY: The northern section of the road	dway does not confc	orm to the Township's roadway design standards.
PROPOSED IMPROVEMENTS: Widen and Realign to two-lane	Residential Collecto	or Standards west of Aberdeen Drive.
ESTIMATED COST SUMMARY: (Current Year 2021 Dollars)		PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:
Construction Utility Relocation	2,398,782 80,700	New Pass Thru Traffic / Anticipated Traffic Growth = 17%

105,000 239,878

191,903

\$3,052,244

35,982

\$0

\$0

\$0

\$0 \$0 \$0 New Development Traffic / Anticipated Traffic Growth = 83%

S-08

West

CONSTRUCTION YEAR AND PROJECTED COST:

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$11,057,798
New Development Trips	\$53,988,072

Construction Year	2099
Projected Construction Cost	\$55,077,462
Projected Soft Cost	\$9,968,408
Projected Total Cost	\$65,045,869

0%

0%

0%

S-8

Unionville Road (T-328) from Kensinger Drive to Glen Eden Road.

PROJECT SCHEDULE:

	Year
Secure Funding	2096
Acquire ROW	2097
Complete Engineering	2098
Begin Construction	2099

Transportation District Cost: West District

Other

SEGMENT NUMBER:

Right-of Way

Engineering

PROPOSED FUNDING:

State/Federal

Impact Fees

Admin & Planning

Inspection

TOTAL

LOCATION:

	East District
9	Southeast District

REMARKS:

SEGMENT NUMBER:	S-12	PROJECT NUMBER:	C 12
JEGIVIENT NUIVIDER.	3-12	FRUJECI NUMBER.	3-12

LOCATION:

TRANSPORTATION DISTRICT: West

Old Route 19 (T-310) from Glen Eden Road to Route 19.

DEFICIENCY:

Roadway does not conform to the Township's Residential Collector Standards.

PROPOSED IMPROVEMENTS:

Widen to two-lane Residential Collector Standards.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	2,983,560
Utility Relocation	6,900
Right-of Way	350,000
Engineering	358,027
Inspection	298,356
Admin & Planning	44,753
TOTAL	\$4,041,597

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 14%

New Development Traffic / Anticipated Traffic Growth = 86%

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$71,187,992
Projected Soft Cost	\$14,941,806
Projected Total Cost	\$86,129,798

0%

0%

0%

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$12,058,172
New Development Trips	\$74,071,626

PROJECT SCHEDULE:

	Year
Secure Funding	2097
Acquire ROW	2097
Complete Engineering	2098
Begin Construction	2099

REMA	סעפי
	\NJ.

PROPOSED FUNDING:

State/Federal

Impact Fees

West District

East District

Transportation District Cost:

Southeast District

Other

\$0

\$0

\$0

\$0

\$0

SEGMENT NUMBER:	S-13	PROJECT NUMBER:	S-13

LOCATION:

TRANSPORTATION DISTRICT: East/West

Route 19 (SR 0019) from Ogle View Road to Glen Eden Road.

DEFICIENCY:

The 2030 traffic projects are anticipated to be higher than the current roadway can accommodate.

PROPOSED IMPROVEMENTS:

Widen to a six-lane Minor Arterial to North of Ogle View Road.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	14,751,998
Utility Relocation	290,250
Right-of Way	2,750,000
Engineering	1,770,240
Inspection	1,475,200
Admin & Planning	221,280
TOTAL	\$21,258,968

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 37%

3

New Development Traffic / Anticipated Traffic Growth = 63%

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year2099Projected Construction Cost\$379,167,669Projected Soft Cost\$73,878,690Projected Total Cost\$453,046,359

0%

0%

0%

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$167,518,442
New Development Trips	\$285,527,916

PROJECT SCHEDULE:

	Year
Secure Funding	2095
Acquire ROW	2096
Complete Engineering	2098
Begin Construction	2099

Transportation District Cost:	
West District	
East District	

PROPOSED FUNDING:

State/Federal

Impact Fees

Other

East District	
Southeast District	

REMARKS:

\$0

\$0

\$0

\$0

\$0 \$0

SEGMENT NUMBER: S-15 PROJECT NUMBER: S-15

LOCATION:

TRANSPORTATION DISTRICT: East

Franklin Road (SR 3021) from Peters Road to Garvin Road.

DEFICIENCY:

The roadway horizontal/vertical geometry and cross section is substandard for a two-lane urban collector.

PROPOSED IMPROVEMENTS:

Widen and Realign to two-lane Residential Collector Standards.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	10,953,657
Utility Relocation	668,950
Right-of Way	2,318,750
Engineering	1,314,439
Inspection	1,095,366
Admin & Planning	164,305
TOTAL	\$16,515,467

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 29%

New Development Traffic / Anticipated Traffic Growth = 71%

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year2099Projected Construction Cost\$297,101,967Projected Soft Cost\$54,856,422Projected Total Cost\$351,958,389

0%

0%

0%

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$103,517,173
New Development Trips	\$248,441,216

PROJECT SCHEDULE:

	Year
Secure Funding	2095
Acquire ROW	2096
Complete Engineering	2098
Begin Construction	2099

West District	
East District	

Transportation District Cost:

PROPOSED FUNDING:

State/Federal

Impact Fees

Other

Southeast District

REMARKS:

\$0

\$0

\$0

\$0 \$0

SEGMENT NUMBER: S-17 PROJECT NUMBER: S-17

LOCATION:

TRANSPORTATION DISTRICT: East

Marshall Road (T-305) from Rowan Road to North Boundary Road.

DEFICIENCY:

Shoulders need to be widened to conform to Township Standards.

PROPOSED IMPROVEMENTS:

Widen to three-lane Commercial Collector Standards.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	4,480,586
Utility Relocation	6,000
Right-of Way	1,015,000
Engineering	537,670
Inspection	448,059
Admin & Planning	67,209
TOTAL	\$6,554,524

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 26%

New Development Traffic / Anticipated Traffic Growth = 74%

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$117,243,388
Projected Soft Cost	\$22,438,981
Projected Total Cost	\$139,682,369

0%

0%

0%

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$36,317,416
New Development Trips	\$103,364,953

PROJECT SCHEDULE:

	Year
Secure Funding	2097
Acquire ROW	2097
Complete Engineering	2098
Begin Construction	2099

	-	-		-	-	-	
Ea	15	st	Dis	st	ric	t	

Other

PROPOSED FUNDING:

State/Federal

Impact Fees

West District

Transportation District Cost:

Southeast District

REMARKS:

\$0

\$0

\$0

\$0 \$0

SEGMENT NUMBER: S-19 PROJECT NUMBER: S-19

LOCATION:

TRANSPORTATION DISTRICT: East

North Boundary Road (T-311) from Route 19 to Marshall Road.

DEFICIENCY:

The year 2020 forecast traffic demands are anticipated to warrant an additional travel lane in each direction along this segment of North Boundary Road.

PROPOSED IMPROVEMENTS:

Widen to three-lane Residential Collector Standards.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	1,208,020
Utility Relocation	71,800
Right-of Way	262,500
Engineering	144,962
Inspection	120,802
Admin & Planning	18,120
TOTAL	\$1,826,205

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 21%

New Development Traffic / Anticipated Traffic Growth = 79%

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$32,868,125
Projected Soft Cost	\$6,049,819
Projected Total Cost	\$38,917,944

0%

0%

0%

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$8,172,768
New Development Trips	\$30,745,176

PROJECT SCHEDULE:

	Year
Secure Funding	2095
Acquire ROW	2096
Complete Engineering	2098
Begin Construction	2099

RE	MAR	RKS:	

PROPOSED FUNDING:

State/Federal

Impact Fees

West District

East District

Transportation District Cost:

Southeast District

Other

\$0

\$0

\$0

\$0

\$0

PROJECT NUMBER: S-22

TRANSPORTATION DISTRICT:

East

SEGMENT NUMBER:

LOCATION:

DEFICIENCY:

S-22

Garvin Road (T-313) from New Connection to Franklin Road.

Roadway does not conform to the Township's Residential Collector Standards.

PROPOSED IMPROVEI Widen to two-lane F		ollector Standards	5	
ESTIMATED COST SU				
(Current Year 202 ⁴	Dollars)		PEAK HOUR TRAFFIC VOLUMES	5:
Construction		2,639,991	New Pass Thru Traffic	:/
Utility Relocation		34,950	Anticipated Traffic Growth	= 18%
Right-of Way		507,500		
Engineering		316,799	New Development Traffic	:/
Inspection		263,999	Anticipated Traffic Growth	= 82%
Admin & Planning	l	39,600		
TOTAL		\$3,802,838	COST ATTRIBUTABLE TO:	
CONSTRUCTION YEA	R AND PRO	IECTED COST:	New Pass Thru Trips New Development Trips	\$14,587,49 \$66,454,16
Construction Year		2099		<i>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</i>
Projected Constru		\$67,820,466		
Projected Soft Cos		\$13,221,195		
Projected Total Co		\$81,041,661	PROJECT SCHEDULE:	
PROPOSED FUNDING				Yea
	1		Secure Funding	209
State/Federal	0%	\$0	Acquire ROW	209
Other	0%	\$0	Complete Engineering	209
Impact Fees	0%	\$0	Begin Construction	209
Transportation Distric	t Cost:			
West District		\$0		
East District		\$0		
		\$0		

SEGMENT NUMBER: S-24 PROJECT NUMBER: S-24

LOCATION:

TRANSPORTATION DISTRICT: East

Rowan Road (SR 3018) from Route 19 to Marshall Road.

DEFICIENCY:

Traffic is projected to more than double by the year 2020. The current roadway will not accommodate this volume of traffic with only one travel lane in each direction, at an acceptable Level Of Service.

PROPOSED IMPROVEMENTS:

Widen to five-lane Commercial Collector Roadway Standards.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	8,371,918
Utility Relocation	30,700
Right-of Way	825,000
Engineering	1,255,788
Inspection	837,192
Admin & Planning	125,579
TOTAL	\$11,446,176

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 11%

New Development Traffic / Anticipated Traffic Growth = 89%

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year2099Projected Construction Cost\$196,648,236Projected Soft Cost\$47,279,327Projected Total Cost\$243,927,562

0%

0%

0%

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$27,070,190
New Development Trips	\$216,857,372

PROJECT SCHEDULE:

	Year
Secure Funding	2096
Acquire ROW	2097
Complete Engineering	2098
Begin Construction	2099

East District		
	Southeast District	

West District

PROPOSED FUNDING:

State/Federal

Impact Fees

Transportation District Cost:

Other

REMARKS:

\$0

\$0

\$0

\$0

\$0

SEGMENT NUMBER: S-26

PROJECT NUMBER: S-26

LOCATION:

TRANSPORTATION DISTRICT: East

Peters Road from Rowan Road to Franklin Road

DEFICIENCY:

The 2030 traffic projects are anticipated to be higher than the current roadway can accommodate.

PROPOSED IMPROVEMENTS:

Add left turn lanes at key intersections to maintain thru traffic flow.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	1,693,147
Utility Relocation	74,700
Right-of Way	405,000
Engineering	203,178
Inspection	169,315
Admin & Planning	25,397
TOTAL	\$2,570,736

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 28%

New Development Traffic / Anticipated Traffic Growth = 72%

CONSTRUCTION YEAR AND PROJECTED COST:

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$15,335,540
New Development Trips	\$39,448,997

Construction Year	2099
Projected Construction Cost	\$46,305,180
Projected Soft Cost	\$8,479,357
Projected Total Cost	\$54,784,537

0%

0%

0%

PROJECT SCHEDULE:

	Year
Secure Funding	2095
Acquire ROW	2096
Complete Engineering	2098
Begin Construction	2099

REMARKS:

PROPOSED FUNDING:

State/Federal

Impact Fees

West District

East District

Transportation District Cost:

Southeast District

Other

\$0

\$0

\$0

\$0

\$0

SEGMENT NUMBER:	S-29	PROJECT NUMBER:	S-29
	5-25	FROJECT NOMBER.	0-23

LOCATION:

TRANSPORTATION DISTRICT: West

Powell Road from Freedom Road to Rochester Road

DEFICIENCY:

The 2030 traffic projects are anticipated to be higher than the current roadway can accommodate.

2099

\$0

\$0

\$0

\$0 \$0 \$0

\$89,427,501

\$16,529,756

\$105,957,256

PROPOSED IMPROVEMENTS:

Add left turn lanes at key intersections to maintain thru traffic flow.

ESTIMATED COST SUMMARY:

Construction Year

Projected Soft Cost

Projected Total Cost

PROPOSED FUNDING:

State/Federal

Impact Fees

Other

REMARKS:

(Current Year 2021 Dollars)

Construction	3,300,640
Utility Relocation	140,700
Right-of Way	755,000
Engineering	396,077
Inspection	330,064
Admin & Planning	49,510
TOTAL	\$4,971,990

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 21%

New Development Traffic / Anticipated Traffic Growth = 79%

CONSTRUCTION YEAR AND PROJECTED COST:

0%

0%

0%

Projected Construction Cost

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$22,251,024
New Development Trips	\$83,706,232

PROJECT SCHEDULE:

	Year
Secure Funding	2095
Acquire ROW	2096
Complete Engineering	2098
Begin Construction	2099

Transportation District Cost:	
West District	
East District	
Southeast District	

SEGMENT NUMBER:	S-32	PROJECT NUMBER:	S-32
	•••		

LOCATION:

TRANSPORTATION DISTRICT: West

Freedom Road (SR 3020) from Commonwealth Dr to Turnpike Bridge.

DEFICIENCY:

At additional travel lane should be added in each direction along Freedom Road.

PROPOSED IMPROVEMENTS:

Widen to five-lane Minor Arterial with left-turn lanes.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	2,610,444
Utility Relocation	272,500
Right-of Way	1,825,000
Engineering	313,253
Inspection	261,044
Admin & Planning	39,157
TOTAL	\$5,321,398

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 32%

New Development Traffic / Anticipated Traffic Growth = 68%

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$100,330,217
Projected Soft Cost	\$13,073,224
Projected Total Cost	\$113,403,442

0%

0%

0%

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$36,289,101
New Development Trips	\$77,114,340

PROJECT SCHEDULE:

	Year
Secure Funding	2096
Acquire ROW	2097
Complete Engineering	2098
Begin Construction	2099

•
Impact Fees

PROPOSED FUNDING:

State/Federal

Other

Transportation District Cost:	
West District	\$0
East District	\$0
Southeast District	\$0

REMARKS:

\$0

\$0

SEGMENT NUMBER: S-38 PROJECT NUMBER: S-38

LOCATION:

TRANSPORTATION DISTRICT: West

Haine School Road from Freedom Road to Rochester Road

DEFICIENCY:

The 2030 traffic projects are anticipated to be higher than the current roadway can accommodate.

2099

\$0

\$0

\$0

\$0 \$0

\$0

\$96,233,503

\$18,710,100

\$114,943,602

PROPOSED IMPROVEMENTS:

Add left turn lanes at key intersections to maintain thru traffic flow.

ESTIMATED COST SUMMARY:

Construction Year

Projected Soft Cost

Projected Total Cost

PROPOSED FUNDING:

State/Federal

Impact Fees

Southeast District

Other

(Current Year 2021 Dollars)

Construction	3,736,008
Utility Relocation	124,700
Right-of Way	655,000
Engineering	448,321
Inspection	373,601
Admin & Planning	56,040
TOTAL	\$5,393,670

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 21%

New Development Traffic / Anticipated Traffic Growth = 79%

CONSTRUCTION YEAR AND PROJECTED COST:

0%

0%

0%

Projected Construction Cost

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$24,150,654
New Development Trips	\$90,792,948

PROJ	ECT	SCH	EDUL	E:

	Year
Secure Funding	2097
Acquire ROW	2098
Complete Engineering	2098
Begin Construction	2099

Transportation District Cost:	
West District	
East District	

SEGMENT NUMBER:	S-40
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PROJECT NUMBER: S-40B

LOCATION:

TRANSPORTATION DISTRICT: East

S.R. 228 from Route 19 to Franklin Road

DEFICIENCY:

The 2030 traffic projects are anticipated to be higher than the current roadway can accommodate.

PROPOSED IMPROVEMENTS:

Widen to 8 Lane Arterial

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	16,675,301
Utility Relocation	135,500
Right-of Way	3,410,000
Engineering	1,667,530
Inspection	1,667,530
Admin & Planning	250,130
TOTAL	\$23,805,991

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 33%

New Development Traffic / Anticipated Traffic Growth = 67%

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$167,927,266
New Development Trips	\$339,398,283

PROJECT SCHEDULE:

	Year
Secure Funding	2097
Acquire ROW	2098
Complete Engineering	2098
Begin Construction	2099

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$430,922,160
Projected Soft Cost	\$76,403,388
Projected Total Cost	\$507,325,548

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0

Transportation District Cost: West District

East District Southeast District

REMARKS:

\$0

\$0

SEGMENT NUMBER: S-41 PROJECT NUMBER: S-41

LOCATION:

TRANSPORTATION DISTRICT: East

S.R. 228 from Franklin Road to Seven Fields Borough.

DEFICIENCY:

The 2030 traffic projects are anticipated to be higher than the current roadway can accommodate.

PROPOSED IMPROVEMENTS:

Widen to 4 Lane Arterial Roadway.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	5,383,420
Utility Relocation	49,200
Right-of Way	0
Engineering	538,342
Inspection	538,342
Admin & Planning	80,751
TOTAL	\$6,590,055

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 57%

New Development Traffic / Anticipated Traffic Growth = 43%

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$115,773,665
Projected Soft Cost	\$24,665,912
Projected Total Cost	\$140,439,577

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$79,770,829
New Development Trips	\$60,668,748

PROJECT SCHEDULE:

	Year
Secure Funding	2096
Acquire ROW	2097
Complete Engineering	2098
Begin Construction	2099

PROPOSED FUNDING:	
Otata /E a da na l	

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0

Transportation District Cost: West District East District

Southeast District

REMARKS:

\$0

\$0

PROJECT NUMBER: S-42

TRANSPORTATION DISTRICT: East

PROPOSED IMPROVEM Widen and Realign to	-	esidential Collect	or Standards.	
ESTIMATED COST SUN	IMARY:		PROPORTIONAL SPLIT OF FUTU	JRE
(Current Year 2021	Dollars)		PEAK HOUR TRAFFIC VOLUMES	S:
Construction		1,525,765	New Pass Thru Traffic	1
Utility Relocation		88,800	Anticipated Traffic Growth	= 58%
Right-of Way		385,000		
Engineering		183,092	New Development Traffic	/
Inspection		152,576	Anticipated Traffic Growth	= 42%
Admin & Planning		22,886		
TOTAL		\$2,358,120	COST ATTRIBUTABLE TO:	
CONSTRUCTION YEAR	AND PROJ	ECTED COST:	New Pass Thru Trips New Development Trips	\$29,357,620 \$20,895,878
Construction Year		2099		
Projected Construc	tion Cost	\$42,612,397		
Projected Soft Cost	t	\$7,641,101		
Projected Total Cos	st	\$50,253,498	PROJECT SCHEDULE:	
PROPOSED FUNDING:			Secure Funding	Year 2096
State/Federal	0%	\$0	Acquire ROW	2097
Other	0%	\$0	Complete Engineering	2098
Impact Fees	0%	\$0	Begin Construction	2099
Transportation District West District	Cost:	\$0		
East District		\$0 \$0		
Southeast District		\$0 \$0		
		-		

REMARKS:

SEGMENT NUMBER:

LOCATION:

DEFICIENCY:

S-42

Shoulders and drainage structures are substandard.

Franklin Road (SR 3021) from Seven Fields Borough to Route 228.

SEGMENT NUMBER:	S-45	PROJECT NUMBER:	S-45B
	0-40		3-430

LOCATION:

TRANSPORTATION DISTRICT: East/West

Route 19 (SR 0019) from Route 228 to Ogle View/Rowan Roads.

DEFICIENCY:

Thru lanes will need to be added to the roadway to maintain an acceptable Level Of Service in the study year 2030.

PROPOSED IMPROVEMENTS:

Widen to eight-lane Minor Arterial.

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	18,859,373
Utility Relocation	4,045,000
Right-of Way	5,190,000
Engineering	2,263,125
Inspection	1,885,937
Admin & Planning	282,891
TOTAL	\$32,526,325

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

COST ATTRIBUTABLE TO:

New Pass Thru Trips

New Development Trips

New Pass Thru Traffic / Anticipated Traffic Growth = 48%

New Development Traffic / Anticipated Traffic Growth = 52%

\$334,453,276

\$358,709,875

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$598,714,540
Projected Soft Cost	\$94,448,610
Projected Total Cost	\$693,163,151

163,151 PROJECT SCHEDULE:

\$0 \$0

\$0

	Year
Secure Funding	2094
Acquire ROW	2095
Complete Engineering	2097
Begin Construction	2099

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0

Transportation District Cost:	
West District	
East District	

Southeast District

REMARKS:

SEGMENT NUMBER: S-F2 PROJECT NUMBER: S-F2

LOCATION:

TRANSPORTATION DISTRICT: West

New connection from proposed Unionville North-South Road east to Route 19.

DEFICIENCY:

Lack of Roadway network capacity from I-79 to north of Route 228.

PROPOSED IMPROVEMENTS:

Construct 3 Lane Commercial Collector Roadway

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	561,481
Utility Relocation	0
Right-of Way	280,000
Engineering	56,148
Inspection	44,919
Admin & Planning	8,422
TOTAL	\$950,970

PROPORTIONAL SPLIT OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

New Pass Thru Traffic / Anticipated Traffic Growth = 0%

New Development Traffic / Anticipated Traffic Growth = 100%

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$0
New Development Trips	\$1,028,570

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2023
Projected Construction Cost	\$910,146
Projected Soft Cost	\$118,423
Projected Total Cost	\$1,028,570

PROJECT SCHEDULE:

	Year
Secure Funding	2020
Acquire ROW	2021
Complete Engineering	2022
Begin Construction	2023

PROPOSED FUNDING:

Southeast District

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0
Transportation District	Cost:	
West District		\$0
East District		\$0

REMARKS:

See Improvement Drawing number S-F for a plan sketch of the proposed improvement.

SEGMENT NUMBER: S-H2

PROJECT NUMBER: S-H2

LOCATION:

TRANSPORTATION DISTRICT: East

Local road network north of Route 228. North-South segment (New McElroy) opposite of Cranberry Woods Drive.

DEFICIENCY:

Lack of Roadway network capacity from I-79 to north of Route 228.

PROPOSED IMPROVEMENTS:

Construct 5 Lane Commercial Collector Roadway

ESTIMATED COST SUMMARY:

(Current Year 2021 Dollars)

Construction	2,474,627
Utility Relocation	0
Right-of Way	0
Engineering	247,463
Inspection	197,970
Admin & Planning	37,119
TOTAL	\$2,957,180

CONSTRUCTION YEAR AND PROJECTED COST:

New Pass Thru Traffic / Anticipated Traffic Growth = 5%

New Development Traffic / Anticipated Traffic Growth = 95%

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$3,150,613
New Development Trips	\$59,869,354

PROJECT SCHEDULE:

	Year
Secure Funding	2097
Acquire ROW	2097
Complete Engineering	2098
Begin Construction	2099

PROPOSED FUNDING:

East District

Southeast District

Construction Year

Projected Soft Cost

Projected Total Cost

Projected Construction Cost

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0
Transportation District	Cost:	
West District		\$0

REMARKS:

See Improvement Drawing number S-H for a plan sketch of the proposed improvement.

\$0

\$0

2099

\$52,736,375

\$10,283,593

\$63,019,968

PROJECT NUMBER: S-Int

TRANSPORTATION DISTRICT: East/West

DEFICIENCY: U.S. Route 19 projecte	d to be o	ver capacity.		
PROPOSED IMPROVEME Provide additional inter		o alleviate thru traff	ic on Route 19.	
ESTIMATED COST SUMMARY:		PROPORTIONAL SPLIT OF FUTURE		
(Current Year 2021 D	ent Year 2021 Dollars) PEAK HOUR TRAFFIC VOLUMES:		S:	
Construction	Construction 12,194,280		New Pass Thru Traffic /	
Utility Relocation		125,000	Anticipated Traffic Growth = 50%	
Right-of Way		1,650,000	•	
Engineering		1,829,142	New Development Traffic /	
Inspection		1,219,428	Anticipated Traffic Growth = 50%	
Admin & Planning		182,914		
TOTAL		\$17,200,764	COST ATTRIBUTABLE TO:	
CONSTRUCTION YEAR AND PROJECTED COST:		New Pass Thru Trips	\$183,281,323	
			New Development Trips	\$183,281,323
Construction Year		2099		
Projected Construction Cost \$29		\$297,697,020		
Projected Soft Cost		\$68,865,626		
Projected Total Cost		\$366,562,647	PROJECT SCHEDULE:	
PROPOSED FUNDING:				Year
			Secure Funding	2096
State/Federal	0%	\$0	Acquire ROW	2097
Other	0%	\$0	Complete Engineering	2098
Impact Fees	0%	\$0	Begin Construction	2099
Transportation District C	ost:			
West District		\$0		
East District		\$0		

REMARKS:

Southeast District

SEGMENT NUMBER:

LOCATION:

S-Int

I-79 Interchange at location to be determined north of Route 228.

\$0