

Benefit Cost Analysis Results Summary Lower Hill District Area versus...

Net Annual Benefits (Time, Fuel, Emissions, Operating Costs, and Safety) at 3.0% Discount

	McCandless Township Area	Monroeville Area	Bethel Park Area	Lower Hill TIGER Project Costs	
				Nominal	3.0% Discount
2014	\$4,023,627	\$6,982,536	\$2,988,788	\$6,431,624	\$6,431,624
2015	\$3,881,844	\$6,734,225	\$2,883,183	\$20,244,423	\$19,654,779
2016	\$3,769,495	\$6,539,389	\$2,799,746	\$12,835,031	\$12,098,248
2017	\$3,660,398	\$6,350,190	\$2,718,724		
2018	\$3,554,458	\$6,166,464	\$2,640,046		
2019	\$3,451,584	\$5,988,053	\$2,563,645		
2020	\$3,098,709	\$4,518,619	\$2,845,041		
2021	\$3,009,581	\$4,388,466	\$2,763,137		
2022	\$2,922,705	\$4,261,840	\$2,683,367		
2023	\$2,838,228	\$4,138,702	\$2,605,802		
2024	\$2,756,298	\$4,019,282	\$2,530,574		
2025	\$2,456,910	\$2,778,337	\$2,770,943		
2026	\$2,386,467	\$2,698,675	\$2,691,316		
2027	\$2,317,494	\$2,620,707	\$2,613,511		
2028	\$2,250,601	\$2,545,093	\$2,538,050		
2029	\$2,185,554	\$2,471,561	\$2,464,676		
2030	\$1,931,544	\$1,424,062	\$2,669,740		
2031	\$1,876,205	\$1,383,415	\$2,592,974		
2032	\$1,821,983	\$1,343,455	\$2,518,005		
2033	\$1,769,396	\$1,304,702	\$2,445,293		
2034	\$1,769,808	\$1,305,025	\$2,445,831		
Total	\$57,732,890	\$79,962,796	\$55,772,392	\$39,511,078	\$38,184,651
Benefit-to-Cost Ratio	1.51	2.09	1.46		

Benefit-Cost Analysis Results Summary

Savings from 2014-2034 broken down by long-term outcome category at 3.0% discount

Long-Term Outcome:	Lower Hill versus...		
	McCandless Township	Monroeville Area	Bethel Park Area
Economic Competitiveness			
<i>Time</i>	\$ 35,908,712	\$ 48,279,021	\$ 35,034,608
<i>Fuel</i>	8,894,475	12,920,414	8,447,666
<i>Operating Costs</i>	3,193,688	4,639,259	3,033,255
Economic Competitiveness Total	\$ 47,996,875	\$ 65,838,693	\$ 46,515,529
Sustainability - Emissions	1,078,841	1,548,400	1,034,577
Safety	8,657,174	12,575,703	8,222,286
Long-Term Outcome Total	\$ 57,732,890	\$ 79,962,796	\$ 55,772,392
Benefit-to-Cost Ratio	1.51	2.09	1.46

Preliminary Schedule of Project Element Costs

Element	Project Cost	Start	Complete	Duration
I	\$ 10,848,697	Aug-14	Oct-15	15
II	\$ 6,187,482	Apr-15	May-16	15
III-a	\$ 9,168,755	Jun-15	Aug-16	15
III-b	\$ 1,896,697	Jun-14	Oct-14	5
IV	\$ 2,951,498	Jun-15	Aug-16	15
V-a	\$ 1,148,368	May-14	Feb-15	10
V-b	\$ 1,551,632	Mar-15	Nov-15	9
VI	\$ 5,757,949	Jun-15	Aug-16	15
TOTAL	\$ 39,511,078			

Element	I	II	III-a	III-b	IV	V-a	V-b	VI	
2014									
Apr									
May						114,837			
Jun				379,339		114,837			
Jul				379,339		114,837			
Aug	723,246			379,339		114,837			
Sep	723,246			379,339		114,837			
Oct	723,246			379,339		114,837			
Nov	723,246					114,837			
Dec	723,246					114,837			
									\$6,431,624 2014 Total Spending
2015									
Jan	723,246					114,837			
Feb	723,246					114,837			
Mar	723,246						172,404		
Apr	723,246						172,404		
May	723,246						172,404		
Jun	723,246	412,499	611,250		196,767		172,404	383,863	
Jul	723,246	412,499	611,250		196,767		172,404	383,863	
Aug	723,246	412,499	611,250		196,767		172,404	383,863	
Sep	723,246	412,499	611,250		196,767		172,404	383,863	
Oct	723,246	412,499	611,250		196,767		172,404	383,863	
Nov		412,499	611,250		196,767		172,404	383,863	
Dec		412,499	611,250		196,767			383,863	
									\$20,244,423 2015 Total Spending
2016									
Jan		412,499	611,250		196,767			383,863	
Feb		412,499	611,250		196,767			383,863	
Mar		412,499	611,250		196,767			383,863	
Apr		412,499	611,250		196,767			383,863	
May		412,499	611,250		196,767			383,863	
Jun		412,499	611,250		196,767			383,863	
Jul		412,499	611,250		196,767			383,863	
Aug		412,499	611,250		196,767			383,863	
Sep									
Oct									
Nov									
Dec									
									\$12,835,031 2016 Total Spending

Lower Hill District Redevelopment
Phasing Assumptions

0							
Development Type	2015	2020	2025	2030	2035	2040	Total
Manufacturing	0	0	0	0	0	0	0
Retail	0	250	250	250	0	0	750
Services	0	750	750	750	0	0	2,250
Other	0	0	0	0	0	0	0
Total Employment	0	1,000	1,000	1,000	0	0	3,000
Total Housing	0	400	400	400	0	0	1,200

Trips To/From Lower Hill Redevelopment Area and Selected Prototypical Communities

2014 Trip From Region To Area		PERSON TRIP ATTRACTIONS			AUTO TRIP ATTRACTIONS			TRANSIT PERSON TRIP ATTRACTIONS			MODE SHARE TRANSIT/TOTAL PERSON TRIP			AVERAGE AUTO OCCUPANCY (PERSON TRIP-TRANSIT TRIP)/AUTO TRIP		
AREA	WORK TRIPS	NON-WORK TRIPS	TOTAL TRIPS	WORK TRIPS	NON-WORK TRIPS	TOTAL TRIPS	WORK TRIPS	NON-WORK TRIPS	TOTAL TRIPS	WORK TRIPS	NON-WORK TRIPS	TOTAL TRIPS	WORK TRIPS	NON-WORK TRIPS	TOTAL TRIPS	
Lower Hill	4,657	3,904	8,561	3,076	2,443	5,519	1,128	274	1,402	24.22%	7.02%	16.38%	1.15	1.49	1.30	
McCandless Twp	23,664	84,558	108,222	21,869	55,931	77,800	181	81	262	0.76%	0.10%	0.24%	1.07	1.51	1.39	
Monroeville	38,186	156,525	194,711	35,080	103,762	138,842	425	714	1,139	1.11%	0.46%	0.58%	1.08	1.50	1.39	
Bethel Park	16,469	69,215	85,684	15,343	46,098	61,441	198	330	528	1.20%	0.48%	0.62%	1.06	1.49	1.39	
2014 Trip from Area to Region		PERSON TRIP PRODUCTIONS			AUTO TRIP PRODUCTIONS			TRANSIT PERSON TRIP PRODUCTIONS			MODE SHARE TRANSIT/TOTAL PERSON TRIP			AVERAGE AUTO OCCUPANCY (PERSON TRIP-TRANSIT TRIP)/AUTO TRIP		
AREA	WORK TRIPS	NON-WORK TRIPS	TOTAL TRIPS	WORK TRIPS	NON-WORK TRIPS	TOTAL TRIPS	WORK TRIPS	NON-WORK TRIPS	TOTAL TRIPS	WORK TRIPS	NON-WORK TRIPS	TOTAL TRIPS	WORK TRIPS	NON-WORK TRIPS	TOTAL TRIPS	
Lower Hill	388	2,788	3,176	260	1,809	2,069	99	241	340	25.52%	8.64%	10.71%	1.11	1.41	1.37	
McCandless Twp	22,300	71,326	93,626	20,350	47,631	67,981	523	34	557	2.35%	0.05%	0.59%	1.07	1.50	1.37	
Monroeville	21,231	87,139	108,370	19,220	59,959	79,179	553	122	675	2.60%	0.14%	0.62%	1.08	1.45	1.36	
Bethel Park	25,991	79,301	105,292	23,327	53,026	76,353	1,044	366	1,410	4.02%	0.46%	1.34%	1.07	1.49	1.36	
2025 Trip From Region To Area		PERSON TRIP ATTRACTIONS			AUTO TRIP ATTRACTIONS			TRANSIT PERSON TRIP ATTRACTIONS			MODE SHARE TRANSIT/TOTAL PERSON TRIP			AVERAGE AUTO OCCUPANCY (PERSON TRIP-TRANSIT TRIP)/AUTO TRIP		
AREA	WORK TRIPS	NON-WORK TRIPS	TOTAL TRIPS	WORK TRIPS	NON-WORK TRIPS	TOTAL TRIPS	WORK TRIPS	NON-WORK TRIPS	TOTAL TRIPS	WORK TRIPS	NON-WORK TRIPS	TOTAL TRIPS	WORK TRIPS	NON-WORK TRIPS	TOTAL TRIPS	
Lower Hill	5,067	4,269	9,336	3,342	2,648	5,990	1,203	308	1,511	23.74%	7.21%	16.18%	1.16	1.50	1.31	
McCandless Twp	28,409	98,470	126,879	26,321	65,090	91,411	212	97	309	0.75%	0.10%	0.24%	1.07	1.51	1.38	
Monroeville	41,605	165,510	207,115	38,263	109,767	148,030	428	731	1,159	1.03%	0.44%	0.56%	1.08	1.50	1.39	
Bethel Park	18,869	76,901	95,770	17,594	51,168	68,762	223	351	574	1.18%	0.46%	0.60%	1.06	1.50	1.38	
2025 Trip from Area to Region		PERSON TRIP PRODUCTIONS			AUTO TRIP PRODUCTIONS			TRANSIT PERSON TRIP PRODUCTIONS			MODE SHARE TRANSIT/TOTAL PERSON TRIP			AVERAGE AUTO OCCUPANCY (PERSON TRIP-TRANSIT TRIP)/AUTO TRIP		
AREA	WORK TRIPS	NON-WORK TRIPS	TOTAL TRIPS	WORK TRIPS	NON-WORK TRIPS	TOTAL TRIPS	WORK TRIPS	NON-WORK TRIPS	TOTAL TRIPS	WORK TRIPS	NON-WORK TRIPS	TOTAL TRIPS	WORK TRIPS	NON-WORK TRIPS	TOTAL TRIPS	
Lower Hill	526	3,499	4,025	355	2,254	2,609	131	297	428	24.90%	8.49%	10.63%	1.11	1.42	1.38	
McCandless Twp	24,998	80,132	105,130	22,912	53,541	76,453	546	36	582	2.18%	0.04%	0.55%	1.07	1.50	1.37	
Monroeville	23,188	93,359	116,547	21,028	64,227	85,255	597	130	727	2.57%	0.14%	0.62%	1.07	1.45	1.36	
Bethel Park	28,387	86,355	114,742	25,637	57,810	83,447	1,054	391	1,445	3.71%	0.45%	1.26%	1.07	1.49	1.36	

Trips To/From Lower Hill Redevelopment Area and Selected Prototypical Communities

Average Trip Time and Distance

2014 Trip From Region To Area	WORK TRIPS				OTHER TRIPS			
	AUTO TRIPS		PERSON TRIPS		AUTO TRIPS		PERSON TRIPS	
	AVE TRIP TIME (IN HOURS)	AVE TRIP DIST (IN MILES)	AVE TRIP TIME (IN HOURS)	AVE TRIP DIST (IN MILES)	AVE TRIP TIME (IN HOURS)	AVE TRIP DIST (IN MILES)	AVE TRIP TIME (IN HOURS)	AVE TRIP DIST (IN MILES)
AREA								
Lower Hill	0.64	20.97	0.65	21.47	0.54	21.17	0.54	21.05
McCandless Twp	0.81	25.95	0.82	26.30	0.73	25.97	0.73	25.97
Monroeville	0.74	25.15	0.77	26.33	0.66	26.28	0.66	26.28
Bethel Park	0.82	24.91	0.83	25.49	0.66	24.72	0.66	24.77
2014 Trip from Area to Region	WORK TRIPS				OTHER TRIPS			
	AUTO TRIPS		PERSON TRIPS		AUTO TRIPS		PERSON TRIPS	
	AVE TRIP TIME (IN HOURS)	AVE TRIP DIST (IN MILES)	AVE TRIP TIME (IN HOURS)	AVE TRIP DIST (IN MILES)	AVE TRIP TIME (IN HOURS)	AVE TRIP DIST (IN MILES)	AVE TRIP TIME (IN HOURS)	AVE TRIP DIST (IN MILES)
AREA								
Lower Hill	0.19	4.53	0.26	6.36	0.50	20.49	0.50	19.73
McCandless Twp	0.69	20.28	0.77	24.91	0.70	24.75	0.70	24.72
Monroeville	0.77	24.94	0.78	25.71	0.66	26.59	0.66	26.70
Bethel Park	0.82	22.97	0.82	24.54	0.65	24.51	0.65	24.47

2025 Trip From Region To Area	WORK TRIPS				OTHER TRIPS			
	AUTO TRIPS		PERSON TRIPS		AUTO TRIPS		PERSON TRIPS	
	AVE TRIP TIME (IN HOURS)	AVE TRIP DIST (IN MILES)	AVE TRIP TIME (IN HOURS)	AVE TRIP DIST (IN MILES)	AVE TRIP TIME (IN HOURS)	AVE TRIP DIST (IN MILES)	AVE TRIP TIME (IN HOURS)	AVE TRIP DIST (IN MILES)
AREA								
Lower Hill	0.66	21.29	0.67	21.69	0.54	21.33	0.53	21.06
McCandless Twp	0.83	25.84	0.83	26.31	0.74	25.99	0.74	25.93
Monroeville	0.78	25.58	0.79	26.24	0.66	26.31	0.66	26.28
Bethel Park	0.85	24.99	0.86	25.34	0.66	24.81	0.66	24.85
2025 Trip from Area to Region	WORK TRIPS				OTHER TRIPS			
	AUTO TRIPS		PERSON TRIPS		AUTO TRIPS		PERSON TRIPS	
	AVE TRIP TIME (IN HOURS)	AVE TRIP DIST (IN MILES)	AVE TRIP TIME (IN HOURS)	AVE TRIP DIST (IN MILES)	AVE TRIP TIME (IN HOURS)	AVE TRIP DIST (IN MILES)	AVE TRIP TIME (IN HOURS)	AVE TRIP DIST (IN MILES)
AREA								
Lower Hill	0.25	6.17	0.25	6.25	0.49	19.72	0.49	19.55
McCandless Twp	0.77	24.26	0.78	24.41	0.69	24.67	0.69	24.74
Monroeville	0.73	22.96	0.80	25.87	0.66	26.83	0.66	26.73
Bethel Park	0.85	24.53	0.85	24.77	0.65	24.57	0.65	24.61

Trips To/From Lower Hill Redevelopment Area and Selected Prototypical Communities
Average Trip Times and Distances for Transit Trips

2014						
Trip From Region To Area	Peak Period			Off Peak Period		
AREA	No. of Transit Trips	Ave Time (in Hours)	Ave Distance (in Miles)	No. of Transit Trips	Ave Time (in Hours)	Ave Distance (in Miles)
Lower Hill Redev Site	1,128	0.76	6.37	274	0.59	3.56
McCandless Township	181	0.92	10.24	81	1.11	9.09
Monroeville	425	0.96	9.77	714	1.08	9.13
Bethel Park	198	0.76	8.12	330	0.79	7.26
2014						
Trip from Area to Region	Peak Period			Off Peak Period		
AREA	No. of Transit Trips	Ave Time (in Hours)	Ave Distance (in Miles)	No. of Transit Trips	Ave Time (in Hours)	Ave Distance (in Miles)
Lower Hill Redev Site	99	0.46	3.04	241	0.52	3.78
McCandless Township	523	1.03	10.80	34	1.34	6.74
Monroeville	553	1.19	13.36	122	1.07	8.26
Bethel Park	1,044	0.40	9.64	366	0.58	6.59

2025						
Trip From Region To Area	Peak Period			Off Peak Period		
AREA	No. of Transit Trips	Ave Time (in Hours)	Ave Distance (in Miles)	No. of Transit Trips	Ave Time (in Hours)	Ave Distance (in Miles)
Lower Hill Redev Site	1,203	0.77	6.21	308	0.61	3.73
McCandless Township	212	0.87	10.98	97	1.02	10.02
Monroeville	428	0.96	9.94	731	1.06	9.27
Bethel Park	223	0.76	7.88	351	0.79	6.70
2025						
Trip from Area to Region	Peak Period			Off Peak Period		
AREA	No. of Transit Trips	Ave Time (in Hours)	Ave Distance (in Miles)	No. of Transit Trips	Ave Time (in Hours)	Ave Distance (in Miles)
Lower Hill Redev Site	131	0.45	2.86	297	0.53	3.73
McCandless Township	546	1.04	10.75	36	1.32	6.60
Monroeville	597	1.19	13.30	130	1.09	8.30
Bethel Park	1,054	0.40	9.39	391	0.56	6.32

Lower Hill District Redevelopment Area
Total Auto and Person Trips from Region to Area and from Area to Region

	WORK TRIPS				OTHER TRIPS			
	AUTO TRIPS		PERSON TRIPS		AUTO TRIPS		PERSON TRIPS	
	Total Time	Total Distance	Total Time	Total Distance	Total Time	Total Distance	Total Time	Total Distance
2014	2,024	65,669	3,124	102,437	2,228	88,799	3,491	137,181
2015	2,024	65,669	3,124	102,437	2,228	88,799	3,491	137,181
2016	2,024	65,669	3,124	102,437	2,228	88,799	3,491	137,181
2017	2,024	65,669	3,124	102,437	2,228	88,799	3,491	137,181
2018	2,024	65,669	3,124	102,437	2,228	88,799	3,491	137,181
2019	2,024	65,669	3,124	102,437	2,228	88,799	3,491	137,181
2020	2,165	69,453	3,329	107,799	2,377	94,948	3,737	147,766
2021	2,165	69,453	3,329	107,799	2,377	94,948	3,737	147,766
2022	2,165	69,453	3,329	107,799	2,377	94,948	3,737	147,766
2023	2,165	69,453	3,329	107,799	2,377	94,948	3,737	147,766
2024	2,165	69,453	3,329	107,799	2,377	94,948	3,737	147,766
2025	2,311	73,357	3,537	113,199	2,522	100,942	3,977	158,288
2026	2,311	73,357	3,537	113,199	2,522	100,942	3,977	158,288
2027	2,311	73,357	3,537	113,199	2,522	100,942	3,977	158,288
2028	2,311	73,357	3,537	113,199	2,522	100,942	3,977	158,288
2029	2,311	73,357	3,537	113,199	2,522	100,942	3,977	158,288
2030	2,462	77,384	3,749	118,638	2,663	106,781	4,212	168,745
2031	2,462	77,384	3,749	118,638	2,663	106,781	4,212	168,745
2032	2,462	77,384	3,749	118,638	2,663	106,781	4,212	168,745
2033	2,462	77,384	3,749	118,638	2,663	106,781	4,212	168,745
2034	2,462	77,384	3,749	118,638	2,663	106,781	4,212	168,745

Lower Hill District Redevelopment Area
Total Transit Trips from Region to Area and from Area to Region

	WORK TRIPS		OTHER TRIPS	
	Total Time	Total Distance	Total Time	Total Distance
	2014	905	7,486	287
2015	905	7,486	287	1,888
2016	905	7,486	287	1,888
2017	905	7,486	287	1,888
2018	905	7,486	287	1,888
2019	905	7,486	287	1,888
2020	944	7,668	316	2,072
2021	944	7,668	316	2,072
2022	944	7,668	316	2,072
2023	944	7,668	316	2,072
2024	944	7,668	316	2,072
2025	983	7,850	345	2,256
2026	983	7,850	345	2,256
2027	983	7,850	345	2,256
2028	983	7,850	345	2,256
2029	983	7,850	345	2,256
2030	1,022	8,031	374	2,441
2031	1,022	8,031	374	2,441
2032	1,022	8,031	374	2,441
2033	1,022	8,031	374	2,441
2034	1,022	8,031	374	2,441

McCandless Township Area - Development Alternative

Total Trips from Region to Area and from Area to Region

	WORK TRIPS				OTHER TRIPS			
	AUTO TRIPS		PERSON TRIPS		AUTO TRIPS		PERSON TRIPS	
	Total Time	Total Distance	Total Time	Total Distance	Total Time	Total Distance	Total Time	Total Distance
2014	35,807	1,101,469	37,219	1,330,134	86,531	3,063,457	130,932	4,629,978
2015	35,807	1,101,469	37,219	1,330,134	86,531	3,063,457	130,932	4,629,978
2016	35,807	1,101,469	37,219	1,330,134	86,531	3,063,457	130,932	4,629,978
2017	35,807	1,101,469	37,219	1,330,134	86,531	3,063,457	130,932	4,629,978
2018	35,807	1,101,469	37,219	1,330,134	86,531	3,063,457	130,932	4,629,978
2019	35,807	1,101,469	37,219	1,330,134	86,531	3,063,457	130,932	4,629,978
2020	35,208	1,094,945	35,481	1,263,164	79,349	2,811,011	119,507	4,231,100
2021	35,208	1,094,945	35,481	1,263,164	79,349	2,811,011	119,507	4,231,100
2022	35,208	1,094,945	35,481	1,263,164	79,349	2,811,011	119,507	4,231,100
2023	35,208	1,094,945	35,481	1,263,164	79,349	2,811,011	119,507	4,231,100
2024	35,208	1,094,945	35,481	1,263,164	79,349	2,811,011	119,507	4,231,100
2025	34,455	1,081,728	33,750	1,197,039	72,190	2,558,928	108,114	3,832,259
2026	34,455	1,081,728	33,750	1,197,039	72,190	2,558,928	108,114	3,832,259
2027	34,455	1,081,728	33,750	1,197,039	72,190	2,558,928	108,114	3,832,259
2028	34,455	1,081,728	33,750	1,197,039	72,190	2,558,928	108,114	3,832,259
2029	34,455	1,081,728	33,750	1,197,039	72,190	2,558,928	108,114	3,832,259
2030	33,549	1,061,817	32,028	1,131,757	65,053	2,307,207	96,755	3,433,454
2031	33,549	1,061,817	32,028	1,131,757	65,053	2,307,207	96,755	3,433,454
2032	33,549	1,061,817	32,028	1,131,757	65,053	2,307,207	96,755	3,433,454
2033	33,549	1,061,817	32,028	1,131,757	65,053	2,307,207	96,755	3,433,454
2034	33,549	1,061,817	32,028	1,131,757	65,053	2,307,207	96,755	3,433,454

McCandless Township Area - Development Alternative

Total Transit Trips from Region to Area and from Area to Region

	WORK TRIPS		OTHER TRIPS	
	Total Time	Total Distance	Total Time	Total Distance
	2014	706	7,502	136
2015	706	7,502	136	965
2016	706	7,502	136	965
2017	706	7,502	136	965
2018	706	7,502	136	965
2019	706	7,502	136	965
2020	706	7,502	136	965
2021	730	7,848	141	1,087
2022	730	7,848	141	1,087
2023	730	7,848	141	1,087
2024	730	7,848	141	1,087
2025	730	7,848	141	1,087
2026	754	8,194	146	1,209
2027	754	8,194	146	1,209
2028	754	8,194	146	1,209
2029	754	8,194	146	1,209
2030	754	8,194	146	1,209
2031	778	8,540	152	1,332
2032	778	8,540	152	1,332
2033	778	8,540	152	1,332
2034	778	8,540	152	1,332

Monroeville Area - Development Alternative
Total Trips from Region to Area and from Area to Region

	WORK TRIPS				OTHER TRIPS			
	AUTO TRIPS		PERSON TRIPS		AUTO TRIPS		PERSON TRIPS	
	Total Time	Total Distance	Total Time	Total Distance	Total Time	Total Distance	Total Time	Total Distance
2014	55,420	1,836,676	61,833	2,074,837	141,083	5,646,405	212,922	8,532,534
2015	55,420	1,836,676	61,833	2,074,837	141,083	5,646,405	212,922	8,532,534
2016	55,420	1,836,676	61,833	2,074,837	141,083	5,646,405	212,922	8,532,534
2017	55,420	1,836,676	61,833	2,074,837	141,083	5,646,405	212,922	8,532,534
2018	55,420	1,836,676	61,833	2,074,837	141,083	5,646,405	212,922	8,532,534
2019	55,420	1,836,676	61,833	2,074,837	141,083	5,646,405	212,922	8,532,534
2020	42,837	1,398,798	48,829	1,616,231	111,715	4,476,420	166,159	6,659,324
2021	42,837	1,398,798	48,829	1,616,231	111,715	4,476,420	166,159	6,659,324
2022	42,837	1,398,798	48,829	1,616,231	111,715	4,476,420	166,159	6,659,324
2023	42,837	1,398,798	48,829	1,616,231	111,715	4,476,420	166,159	6,659,324
2024	42,837	1,398,798	48,829	1,616,231	111,715	4,476,420	166,159	6,659,324
2025	30,299	974,559	35,426	1,156,890	82,270	3,300,553	119,380	4,785,155
2026	30,299	974,559	35,426	1,156,890	82,270	3,300,553	119,380	4,785,155
2027	30,299	974,559	35,426	1,156,890	82,270	3,300,553	119,380	4,785,155
2028	30,299	974,559	35,426	1,156,890	82,270	3,300,553	119,380	4,785,155
2029	30,299	974,559	35,426	1,156,890	82,270	3,300,553	119,380	4,785,155
2030	17,805	563,958	21,623	696,814	52,747	2,118,805	72,588	2,910,026
2031	17,805	563,958	21,623	696,814	52,747	2,118,805	72,588	2,910,026
2032	17,805	563,958	21,623	696,814	52,747	2,118,805	72,588	2,910,026
2033	17,805	563,958	21,623	696,814	52,747	2,118,805	72,588	2,910,026
2034	17,805	563,958	21,623	696,814	52,747	2,118,805	72,588	2,910,026

Monroeville Area - Development Alternative
Total Transit Trips from Region to Area and from Area to Region

	WORK TRIPS		OTHER TRIPS	
	Total Time	Total Distance	Total Time	Total Distance
	2014	1,070	11,536	905
2015	1,070	11,536	905	7,524
2016	1,070	11,536	905	7,524
2017	1,070	11,536	905	7,524
2018	1,070	11,536	905	7,524
2019	1,070	11,536	905	7,524
2020	1,070	11,536	905	7,524
2021	1,096	11,866	910	7,689
2022	1,096	11,866	910	7,689
2023	1,096	11,866	910	7,689
2024	1,096	11,866	910	7,689
2025	1,096	11,866	910	7,689
2026	1,122	12,197	915	7,854
2027	1,122	12,197	915	7,854
2028	1,122	12,197	915	7,854
2029	1,122	12,197	915	7,854
2030	1,122	12,197	915	7,854
2031	1,147	12,528	920	8,019
2032	1,147	12,528	920	8,019
2033	1,147	12,528	920	8,019
2034	1,147	12,528	920	8,019

Bethel Park Area - Development Alternative
Total Trips from Region to Area and from Area to Region

	WORK TRIPS				OTHER TRIPS			
	AUTO TRIPS		PERSON TRIPS		AUTO TRIPS		PERSON TRIPS	
	Total Time	Total Distance	Total Time	Total Distance	Total Time	Total Distance	Total Time	Total Distance
2014	26,915	786,215	29,254	882,837	63,559	2,394,091	95,310	3,596,243
2015	26,915	786,215	29,254	882,837	63,559	2,394,091	95,310	3,596,243
2016	26,915	786,215	29,254	882,837	63,559	2,394,091	95,310	3,596,243
2017	26,915	786,215	29,254	882,837	63,559	2,394,091	95,310	3,596,243
2018	26,915	786,215	29,254	882,837	63,559	2,394,091	95,310	3,596,243
2019	26,915	786,215	29,254	882,837	63,559	2,394,091	95,310	3,596,243
2020	34,122	995,765	37,732	1,122,065	67,868	2,564,827	101,654	3,845,598
2021	34,122	995,765	37,732	1,122,065	67,868	2,564,827	101,654	3,845,598
2022	34,122	995,765	37,732	1,122,065	67,868	2,564,827	101,654	3,845,598
2023	34,122	995,765	37,732	1,122,065	67,868	2,564,827	101,654	3,845,598
2024	34,122	995,765	37,732	1,122,065	67,868	2,564,827	101,654	3,845,598
2025	41,588	1,211,959	46,463	1,361,657	72,161	2,736,051	107,994	4,096,029
2026	41,588	1,211,959	46,463	1,361,657	72,161	2,736,051	107,994	4,096,029
2027	41,588	1,211,959	46,463	1,361,657	72,161	2,736,051	107,994	4,096,029
2028	41,588	1,211,959	46,463	1,361,657	72,161	2,736,051	107,994	4,096,029
2029	41,588	1,211,959	46,463	1,361,657	72,161	2,736,051	107,994	4,096,029
2030	49,311	1,434,797	55,446	1,601,613	76,438	2,907,762	114,329	4,347,536
2031	49,311	1,434,797	55,446	1,601,613	76,438	2,907,762	114,329	4,347,536
2032	49,311	1,434,797	55,446	1,601,613	76,438	2,907,762	114,329	4,347,536
2033	49,311	1,434,797	55,446	1,601,613	76,438	2,907,762	114,329	4,347,536
2034	49,311	1,434,797	55,446	1,601,613	76,438	2,907,762	114,329	4,347,536

Bethel Park Area - Development Alternative
Total Transit Trips from Region to Area and from Area to Region

	WORK TRIPS		OTHER TRIPS	
	Total Time	Total Distance	Total Time	Total Distance
	2014	563	11,675	471
2015	563	11,675	471	4,809
2016	563	11,675	471	4,809
2017	563	11,675	471	4,809
2018	563	11,675	471	4,809
2019	563	11,675	471	4,809
2020	563	11,675	471	4,809
2021	578	11,667	484	4,816
2022	578	11,667	484	4,816
2023	578	11,667	484	4,816
2024	578	11,667	484	4,816
2025	578	11,667	484	4,816
2026	593	11,659	496	4,823
2027	593	11,659	496	4,823
2028	593	11,659	496	4,823
2029	593	11,659	496	4,823
2030	593	11,659	496	4,823
2031	608	11,651	509	4,830
2032	608	11,651	509	4,830
2033	608	11,651	509	4,830
2034	608	11,651	509	4,830

Time Summary

Lower Hill Development Area Value of Time Savings versus...

	McCandless Township Area			Monroeville Area			Bethel Park Area		
	Nominal	3.0% Discount	7.0% Discount	Nominal	3.0% Discount	7.0% Discount	Nominal	3.0% Discount	7.0% Discount
2014	\$2,507,401	\$2,507,401	\$2,507,401	\$4,211,821	\$4,211,821	\$4,211,821	\$1,844,816	\$1,844,816	\$1,844,816
2015	\$2,507,401	\$2,434,370	\$2,343,365	\$4,211,821	\$4,089,146	\$3,936,281	\$1,844,816	\$1,791,083	\$1,724,127
2016	\$2,507,401	\$2,363,466	\$2,190,061	\$4,211,821	\$3,970,045	\$3,678,767	\$1,844,816	\$1,738,916	\$1,611,333
2017	\$2,507,401	\$2,294,627	\$2,046,786	\$4,211,821	\$3,854,413	\$3,438,100	\$1,844,816	\$1,688,268	\$1,505,919
2018	\$2,507,401	\$2,227,793	\$1,912,884	\$4,211,821	\$3,742,148	\$3,213,178	\$1,844,816	\$1,639,095	\$1,407,401
2019	\$2,507,401	\$2,162,906	\$1,787,742	\$4,211,821	\$3,633,153	\$3,002,970	\$1,844,816	\$1,591,354	\$1,315,328
2020	\$2,305,550	\$1,930,862	\$1,536,285	\$3,267,057	\$2,736,108	\$2,176,978	\$2,131,373	\$1,784,992	\$1,420,224
2021	\$2,306,226	\$1,875,173	\$1,436,202	\$3,267,769	\$2,656,995	\$2,035,002	\$2,131,914	\$1,733,441	\$1,327,649
2022	\$2,306,226	\$1,820,556	\$1,342,245	\$3,267,769	\$2,579,607	\$1,901,871	\$2,131,914	\$1,682,953	\$1,240,794
2023	\$2,306,226	\$1,767,531	\$1,254,434	\$3,267,769	\$2,504,473	\$1,777,450	\$2,131,914	\$1,633,935	\$1,159,620
2024	\$2,306,226	\$1,716,049	\$1,172,369	\$3,267,769	\$2,431,527	\$1,661,168	\$2,131,914	\$1,586,344	\$1,083,757
2025	\$2,104,969	\$1,520,674	\$1,000,056	\$2,312,695	\$1,670,740	\$1,098,745	\$2,424,754	\$1,751,694	\$1,151,983
2026	\$2,105,646	\$1,476,858	\$934,932	\$2,313,408	\$1,622,578	\$1,027,181	\$2,425,295	\$1,701,053	\$1,076,860
2027	\$2,105,646	\$1,433,842	\$873,768	\$2,313,408	\$1,575,318	\$959,982	\$2,425,295	\$1,651,508	\$1,006,411
2028	\$2,105,646	\$1,392,080	\$816,606	\$2,313,408	\$1,529,435	\$897,179	\$2,425,295	\$1,603,406	\$940,571
2029	\$2,105,646	\$1,351,534	\$763,183	\$2,313,408	\$1,484,888	\$838,485	\$2,425,295	\$1,556,705	\$879,039
2030	\$1,904,982	\$1,187,122	\$645,283	\$1,348,025	\$840,044	\$456,623	\$2,724,417	\$1,697,766	\$922,854
2031	\$1,905,659	\$1,152,955	\$603,283	\$1,348,737	\$816,008	\$426,976	\$2,724,958	\$1,648,644	\$862,652
2032	\$1,905,659	\$1,119,374	\$563,816	\$1,348,737	\$792,241	\$399,043	\$2,724,958	\$1,600,625	\$806,217
2033	\$1,905,659	\$1,086,771	\$526,931	\$1,348,737	\$769,166	\$372,937	\$2,724,958	\$1,554,005	\$753,474
2034	\$1,905,659	\$1,086,771	\$526,931	\$1,348,737	\$769,166	\$372,937	\$2,724,958	\$1,554,005	\$753,474
Total	\$46,630,029	\$35,908,712	\$26,784,561	\$59,918,356	\$48,279,021	\$37,883,673	\$47,478,106	\$35,034,608	\$24,794,502

**McCandless Township Area less Lower Hill District
Value of Time Savings**

	WORK TRIPS		OTHER TRIPS	
	PERSON TRIPS		PERSON TRIPS	
	Total Time Saved (Hours)	Total Time Savings @ \$25.23 /hour	Total Time Saved (Hours)	Total Time Savings @ \$12.98/hour
2014	33,895	\$855,173	127,290	\$1,652,228
2015	33,895	\$855,173	127,290	\$1,652,228
2016	33,895	\$855,173	127,290	\$1,652,228
2017	33,895	\$855,173	127,290	\$1,652,228
2018	33,895	\$855,173	127,290	\$1,652,228
2019	33,895	\$855,173	127,290	\$1,652,228
2020	31,914	\$805,189	115,590	\$1,500,361
2021	31,938	\$805,796	115,596	\$1,500,431
2022	31,938	\$805,796	115,596	\$1,500,431
2023	31,938	\$805,796	115,596	\$1,500,431
2024	31,938	\$805,796	115,596	\$1,500,431
2025	29,961	\$755,908	103,934	\$1,349,061
2026	29,985	\$756,515	103,939	\$1,349,131
2027	29,985	\$756,515	103,939	\$1,349,131
2028	29,985	\$756,515	103,939	\$1,349,131
2029	29,985	\$756,515	103,939	\$1,349,131
2030	28,011	\$706,723	92,316	\$1,198,260
2031	28,035	\$707,329	92,321	\$1,198,330
2032	28,035	\$707,329	92,321	\$1,198,330
2033	28,035	\$707,329	92,321	\$1,198,330
2034	28,035	\$707,329	92,321	\$1,198,330

**Monroeville Area less Lower Hill District
Value of Time Savings**

	WORK TRIPS		OTHER TRIPS	
	PERSON TRIPS		PERSON TRIPS	
	Total Time Saved (Hours)	Total Time Savings @ \$25.23 /hour	Total Time Saved (Hours)	Total Time Savings @ \$12.98/hour
2014	58,873	\$1,485,372	210,050	\$2,726,449
2015	58,873	\$1,485,372	210,050	\$2,726,449
2016	58,873	\$1,485,372	210,050	\$2,726,449
2017	58,873	\$1,485,372	210,050	\$2,726,449
2018	58,873	\$1,485,372	210,050	\$2,726,449
2019	58,873	\$1,485,372	210,050	\$2,726,449
2020	45,627	\$1,151,167	163,012	\$2,115,890
2021	45,653	\$1,151,815	163,016	\$2,115,954
2022	45,653	\$1,151,815	163,016	\$2,115,954
2023	45,653	\$1,151,815	163,016	\$2,115,954
2024	45,653	\$1,151,815	163,016	\$2,115,954
2025	32,002	\$807,419	115,969	\$1,505,276
2026	32,028	\$808,067	115,974	\$1,505,340
2027	32,028	\$808,067	115,974	\$1,505,340
2028	32,028	\$808,067	115,974	\$1,505,340
2029	32,028	\$808,067	115,974	\$1,505,340
2030	17,974	\$453,481	68,917	\$894,544
2031	18,000	\$454,129	68,922	\$894,609
2032	18,000	\$454,129	68,922	\$894,609
2033	18,000	\$454,129	68,922	\$894,609
2034	18,000	\$454,129	68,922	\$894,609

Bethel Park Area less Lower Hill District
Value of Time Savings

	WORK TRIPS		OTHER TRIPS	
	PERSON TRIPS		PERSON TRIPS	
	Total Time Saved (Hours)	Total Time Savings @ \$25.23 /hour	Total Time Saved (Hours)	Total Time Savings @ \$12.98/hour
2014	25,787	\$650,611	92,003	\$1,194,204
2015	25,787	\$650,611	92,003	\$1,194,204
2016	25,787	\$650,611	92,003	\$1,194,204
2017	25,787	\$650,611	92,003	\$1,194,204
2018	25,787	\$650,611	92,003	\$1,194,204
2019	25,787	\$650,611	92,003	\$1,194,204
2020	34,023	\$858,389	98,073	\$1,272,985
2021	34,038	\$858,766	98,085	\$1,273,148
2022	34,038	\$858,766	98,085	\$1,273,148
2023	34,038	\$858,766	98,085	\$1,273,148
2024	34,038	\$858,766	98,085	\$1,273,148
2025	42,521	\$1,072,811	104,156	\$1,351,942
2026	42,536	\$1,073,189	104,168	\$1,352,106
2027	42,536	\$1,073,189	104,168	\$1,352,106
2028	42,536	\$1,073,189	104,168	\$1,352,106
2029	42,536	\$1,073,189	104,168	\$1,352,106
2030	51,268	\$1,293,502	110,240	\$1,430,915
2031	51,283	\$1,293,880	110,253	\$1,431,078
2032	51,283	\$1,293,880	110,253	\$1,431,078
2033	51,283	\$1,293,880	110,253	\$1,431,078
2034	51,283	\$1,293,880	110,253	\$1,431,078

Fuel Summary

Lower Hill Development Area Fuel Savings versus...

	McCandless Township Area			Monroeville Area			Bethel Park Area		
	Nominal	3.0% Discount	7.0% Discount	Nominal	3.0% Discount	7.0% Discount	Nominal	3.0% Discount	7.0% Discount
2014	\$610,955	\$610,955	\$610,955	\$1,116,444	\$1,116,444	\$1,116,444	\$460,957	\$460,957	\$460,957
2015	\$610,955	\$593,160	\$570,986	\$1,116,444	\$1,083,926	\$1,043,406	\$460,957	\$447,531	\$430,801
2016	\$610,955	\$575,883	\$533,632	\$1,116,444	\$1,052,356	\$975,145	\$460,957	\$434,496	\$402,618
2017	\$610,955	\$559,110	\$498,721	\$1,116,444	\$1,021,704	\$911,351	\$460,957	\$421,841	\$376,278
2018	\$610,955	\$542,825	\$466,094	\$1,116,444	\$991,946	\$851,730	\$460,957	\$409,555	\$351,662
2019	\$610,955	\$527,015	\$435,602	\$1,116,444	\$963,054	\$796,009	\$460,957	\$397,626	\$328,656
2020	\$569,990	\$477,358	\$379,809	\$869,988	\$728,601	\$579,710	\$517,377	\$433,295	\$344,750
2021	\$569,990	\$463,454	\$354,961	\$869,988	\$707,380	\$541,785	\$517,377	\$420,675	\$322,197
2022	\$569,990	\$449,956	\$331,740	\$869,988	\$686,777	\$506,341	\$517,377	\$408,422	\$301,118
2023	\$569,990	\$436,850	\$310,037	\$869,988	\$666,774	\$473,216	\$517,377	\$396,527	\$281,419
2024	\$569,990	\$424,126	\$289,754	\$869,988	\$647,353	\$442,258	\$517,377	\$384,977	\$263,008
2025	\$528,066	\$381,486	\$250,880	\$624,719	\$451,311	\$296,800	\$574,889	\$415,312	\$273,125
2026	\$528,066	\$370,375	\$234,468	\$624,719	\$438,166	\$277,383	\$574,889	\$403,215	\$255,257
2027	\$528,066	\$359,587	\$219,129	\$624,719	\$425,404	\$259,236	\$574,889	\$391,471	\$238,558
2028	\$528,066	\$349,114	\$204,793	\$624,719	\$413,013	\$242,277	\$574,889	\$380,069	\$222,952
2029	\$528,066	\$338,946	\$191,396	\$624,719	\$400,984	\$226,427	\$574,889	\$368,999	\$208,366
2030	\$485,183	\$302,350	\$164,348	\$380,638	\$237,201	\$128,935	\$633,492	\$394,771	\$214,586
2031	\$485,183	\$293,544	\$153,596	\$380,638	\$230,292	\$120,500	\$633,492	\$383,273	\$200,547
2032	\$485,183	\$284,994	\$143,548	\$380,638	\$223,584	\$112,617	\$633,492	\$372,110	\$187,427
2033	\$485,183	\$276,693	\$134,157	\$380,638	\$217,072	\$105,249	\$633,492	\$361,271	\$175,166
2034	\$485,183	\$276,693	\$134,157	\$380,638	\$217,072	\$105,249	\$633,492	\$361,271	\$175,166
Total	\$11,581,926	\$8,894,475	\$6,612,763	\$16,075,390	\$12,920,414	\$10,112,069	\$11,394,531	\$8,447,666	\$6,014,616

**McCandless Township Area less Lower Hill District
Fuel Savings**

	Total Distance Saved (miles)	Fuel Used at 23.5 miles/gallon (gallons)	Per Gallon Cost	Fuel Saved
2014	4,010,457	170,658	\$3.58	\$610,955
2015	4,010,457	170,658	\$3.58	\$610,955
2016	4,010,457	170,658	\$3.58	\$610,955
2017	4,010,457	170,658	\$3.58	\$610,955
2018	4,010,457	170,658	\$3.58	\$610,955
2019	4,010,457	170,658	\$3.58	\$610,955
2020	3,741,556	159,215	\$3.58	\$569,990
2021	3,741,556	159,215	\$3.58	\$569,990
2022	3,741,556	159,215	\$3.58	\$569,990
2023	3,741,556	159,215	\$3.58	\$569,990
2024	3,741,556	159,215	\$3.58	\$569,990
2025	3,466,357	147,505	\$3.58	\$528,066
2026	3,466,357	147,505	\$3.58	\$528,066
2027	3,466,357	147,505	\$3.58	\$528,066
2028	3,466,357	147,505	\$3.58	\$528,066
2029	3,466,357	147,505	\$3.58	\$528,066
2030	3,184,860	135,526	\$3.58	\$485,183
2031	3,184,860	135,526	\$3.58	\$485,183
2032	3,184,860	135,526	\$3.58	\$485,183
2033	3,184,860	135,526	\$3.58	\$485,183
2034	3,184,860	135,526	\$3.58	\$485,183

**Monroeville Area less Lower Hill District
Fuel Savings**

	Total Distance Saved (miles)	Fuel Used at 23.5 miles/gallon (gallons)	Per Gallon Cost	Fuel Saved
2014	7,328,613	311,856	\$3.58	\$1,116,444
2015	7,328,613	311,856	\$3.58	\$1,116,444
2016	7,328,613	311,856	\$3.58	\$1,116,444
2017	7,328,613	311,856	\$3.58	\$1,116,444
2018	7,328,613	311,856	\$3.58	\$1,116,444
2019	7,328,613	311,856	\$3.58	\$1,116,444
2020	5,710,817	243,013	\$3.58	\$869,988
2021	5,710,817	243,013	\$3.58	\$869,988
2022	5,710,817	243,013	\$3.58	\$869,988
2023	5,710,817	243,013	\$3.58	\$869,988
2024	5,710,817	243,013	\$3.58	\$869,988
2025	4,100,812	174,503	\$3.58	\$624,719
2026	4,100,812	174,503	\$3.58	\$624,719
2027	4,100,812	174,503	\$3.58	\$624,719
2028	4,100,812	174,503	\$3.58	\$624,719
2029	4,100,812	174,503	\$3.58	\$624,719
2030	2,498,599	106,323	\$3.58	\$380,638
2031	2,498,599	106,323	\$3.58	\$380,638
2032	2,498,599	106,323	\$3.58	\$380,638
2033	2,498,599	106,323	\$3.58	\$380,638
2034	2,498,599	106,323	\$3.58	\$380,638

**Bethel Park Area less Lower Hill District
Fuel Savings**

	Total Distance Saved (miles)	Fuel Used at 23.5 miles/gallon (gallons)	Per Gallon Cost	Fuel Saved
2014	3,025,837	128,759	\$3.58	\$460,957
2015	3,025,837	128,759	\$3.58	\$460,957
2016	3,025,837	128,759	\$3.58	\$460,957
2017	3,025,837	128,759	\$3.58	\$460,957
2018	3,025,837	128,759	\$3.58	\$460,957
2019	3,025,837	128,759	\$3.58	\$460,957
2020	3,396,191	144,519	\$3.58	\$517,377
2021	3,396,191	144,519	\$3.58	\$517,377
2022	3,396,191	144,519	\$3.58	\$517,377
2023	3,396,191	144,519	\$3.58	\$517,377
2024	3,396,191	144,519	\$3.58	\$517,377
2025	3,773,710	160,583	\$3.58	\$574,889
2026	3,773,710	160,583	\$3.58	\$574,889
2027	3,773,710	160,583	\$3.58	\$574,889
2028	3,773,710	160,583	\$3.58	\$574,889
2029	3,773,710	160,583	\$3.58	\$574,889
2030	4,158,394	176,953	\$3.58	\$633,492
2031	4,158,394	176,953	\$3.58	\$633,492
2032	4,158,394	176,953	\$3.58	\$633,492
2033	4,158,394	176,953	\$3.58	\$633,492
2034	4,158,394	176,953	\$3.58	\$633,492

Emissions Summary

Lower Hill Development Area Emissions Savings versus...

	McCandless Township Area			Monroeville Area			Bethel Park Area		
	Nominal	3.0% Discount	7.0% Discount	Nominal	3.0% Discount	7.0% Discount	Nominal	3.0% Discount	7.0% Discount
2014	\$91,245	\$91,245	\$91,245	\$166,738	\$166,738	\$166,738	\$68,843	\$68,843	\$68,843
2015	\$65,917	\$63,997	\$61,604	\$120,455	\$116,946	\$112,574	\$49,733	\$48,285	\$46,480
2016	\$66,675	\$62,848	\$58,237	\$121,840	\$114,846	\$106,420	\$50,305	\$47,418	\$43,939
2017	\$67,433	\$61,711	\$55,046	\$123,226	\$112,769	\$100,589	\$50,878	\$46,560	\$41,531
2018	\$68,192	\$60,587	\$52,023	\$124,612	\$110,716	\$95,066	\$51,450	\$45,712	\$39,251
2019	\$68,950	\$59,477	\$49,160	\$125,998	\$108,687	\$89,835	\$52,022	\$44,875	\$37,091
2020	\$65,034	\$54,465	\$43,335	\$99,263	\$83,132	\$66,143	\$59,031	\$49,438	\$39,335
2021	\$65,742	\$53,454	\$40,941	\$100,343	\$81,588	\$62,489	\$59,674	\$48,520	\$37,162
2022	\$66,732	\$52,679	\$38,839	\$101,855	\$80,405	\$59,281	\$60,573	\$47,817	\$35,254
2023	\$67,581	\$51,795	\$36,760	\$103,151	\$79,056	\$56,107	\$61,343	\$47,014	\$33,367
2024	\$68,572	\$51,024	\$34,858	\$104,663	\$77,879	\$53,205	\$62,242	\$46,314	\$31,641
2025	\$64,315	\$46,462	\$30,555	\$76,086	\$54,966	\$36,148	\$70,017	\$50,582	\$33,265
2026	\$65,232	\$45,753	\$28,964	\$77,172	\$54,127	\$34,265	\$71,016	\$49,809	\$31,532
2027	\$66,019	\$44,956	\$27,395	\$78,102	\$53,184	\$32,410	\$71,873	\$48,942	\$29,825
2028	\$66,936	\$44,253	\$25,959	\$79,188	\$52,353	\$30,710	\$72,872	\$48,177	\$28,261
2029	\$67,723	\$43,469	\$24,546	\$80,118	\$51,425	\$29,039	\$73,728	\$47,323	\$26,722
2030	\$62,946	\$39,226	\$21,322	\$49,383	\$30,774	\$16,728	\$82,187	\$51,216	\$27,840
2031	\$63,789	\$38,593	\$20,194	\$50,044	\$30,277	\$15,843	\$83,288	\$50,390	\$26,367
2032	\$64,512	\$37,894	\$19,087	\$50,611	\$29,729	\$14,974	\$84,231	\$49,477	\$24,921
2033	\$65,355	\$37,271	\$18,071	\$51,272	\$29,240	\$14,177	\$85,332	\$48,664	\$23,595
2034	\$66,077	\$37,683	\$18,271	\$51,839	\$29,563	\$14,334	\$86,276	\$49,202	\$23,856
Total	\$1,414,977	\$1,078,841	\$796,412	\$1,935,960	\$1,548,400	\$1,207,075	\$1,406,913	\$1,034,577	\$730,075

McCandless Township Area less Lower Hill District
Emissions Savings

	Total Fuel Saved (gallons)	Annual CO2 Emissions Reduction (metric tons)	CO2 Value / Metric Ton (\$)	Annual CO2 Emission Savings Value (\$)	Annual VOC Emissions Reduction (metric tons)	Annual VOC Emission Savings Value (\$)	Annual NOX Emissions Reduction (metric tons)	Annual NOX Emission Savings Value (\$)
2014	170,658	1,516.64	\$40.00	\$60,665	4.20	\$8,399	2.82	\$22,180
2015	170,658	1,516.64	\$42.00	\$35,338	4.20	\$8,399	2.82	\$22,180
2016	170,658	1,516.64	\$43.00	\$36,096	4.20	\$8,399	2.82	\$22,180
2017	170,658	1,516.64	\$44.00	\$36,854	4.20	\$8,399	2.82	\$22,180
2018	170,658	1,516.64	\$45.00	\$37,613	4.20	\$8,399	2.82	\$22,180
2019	170,658	1,516.64	\$46.00	\$38,371	4.20	\$8,399	2.82	\$22,180
2020	159,215	1,414.95	\$47.00	\$36,506	3.92	\$7,836	2.63	\$20,693
2021	159,215	1,414.95	\$48.00	\$37,213	3.92	\$7,836	2.63	\$20,693
2022	159,215	1,414.95	\$49.00	\$38,204	3.92	\$7,836	2.63	\$20,693
2023	159,215	1,414.95	\$50.00	\$39,052	3.92	\$7,836	2.63	\$20,693
2024	159,215	1,414.95	\$51.00	\$40,043	3.92	\$7,836	2.63	\$20,693
2025	147,505	1,310.87	\$53.00	\$37,884	3.63	\$7,259	2.43	\$19,171
2026	147,505	1,310.87	\$53.00	\$38,802	3.63	\$7,259	2.43	\$19,171
2027	147,505	1,310.87	\$54.00	\$39,588	3.63	\$7,259	2.43	\$19,171
2028	147,505	1,310.87	\$55.00	\$40,506	3.63	\$7,259	2.43	\$19,171
2029	147,505	1,310.87	\$56.00	\$41,292	3.63	\$7,259	2.43	\$19,171
2030	135,526	1,204.42	\$57.00	\$38,662	3.34	\$6,670	2.24	\$17,614
2031	135,526	1,204.42	\$58.00	\$39,505	3.34	\$6,670	2.24	\$17,614
2032	135,526	1,204.42	\$59.00	\$40,228	3.34	\$6,670	2.24	\$17,614
2033	135,526	1,204.42	\$60.00	\$41,071	3.34	\$6,670	2.24	\$17,614
2034	135,526	1,204.42	\$61.00	\$41,793	3.34	\$6,670	2.24	\$17,614

Monroeville Area less Lower Hill District

Emissions Savings

	Total Fuel Saved (gallons)	Annual CO2 Emissions Reduction (metric tons)	CO2 Value / Metric Ton (\$)	Annual CO2 Emission Savings Value (\$)	Annual VOC Emissions Reduction (metric tons)	Annual VOC Emission Savings Value (\$)	Annual NOX Emissions Reduction (metric tons)	Annual NOX Emission Savings Value (\$)
2014	311,856	2,771.46	\$40.00	\$110,859	7.68	\$15,348	5.15	\$40,532
2015	311,856	2,771.46	\$42.00	\$64,575	7.68	\$15,348	5.15	\$40,532
2016	311,856	2,771.46	\$43.00	\$65,961	7.68	\$15,348	5.15	\$40,532
2017	311,856	2,771.46	\$44.00	\$67,347	7.68	\$15,348	5.15	\$40,532
2018	311,856	2,771.46	\$45.00	\$68,732	7.68	\$15,348	5.15	\$40,532
2019	311,856	2,771.46	\$46.00	\$70,118	7.68	\$15,348	5.15	\$40,532
2020	243,013	2,159.66	\$47.00	\$55,719	5.98	\$11,960	4.01	\$31,585
2021	243,013	2,159.66	\$48.00	\$56,799	5.98	\$11,960	4.01	\$31,585
2022	243,013	2,159.66	\$49.00	\$58,311	5.98	\$11,960	4.01	\$31,585
2023	243,013	2,159.66	\$50.00	\$59,607	5.98	\$11,960	4.01	\$31,585
2024	243,013	2,159.66	\$51.00	\$61,118	5.98	\$11,960	4.01	\$31,585
2025	174,503	1,550.80	\$53.00	\$44,818	4.30	\$8,588	2.88	\$22,680
2026	174,503	1,550.80	\$53.00	\$45,904	4.30	\$8,588	2.88	\$22,680
2027	174,503	1,550.80	\$54.00	\$46,834	4.30	\$8,588	2.88	\$22,680
2028	174,503	1,550.80	\$55.00	\$47,920	4.30	\$8,588	2.88	\$22,680
2029	174,503	1,550.80	\$56.00	\$48,850	4.30	\$8,588	2.88	\$22,680
2030	106,323	944.90	\$57.00	\$30,331	2.62	\$5,233	1.75	\$13,819
2031	106,323	944.90	\$58.00	\$30,993	2.62	\$5,233	1.75	\$13,819
2032	106,323	944.90	\$59.00	\$31,560	2.62	\$5,233	1.75	\$13,819
2033	106,323	944.90	\$60.00	\$32,221	2.62	\$5,233	1.75	\$13,819
2034	106,323	944.90	\$61.00	\$32,788	2.62	\$5,233	1.75	\$13,819

Bethel Park Area less Lower Hill District

Emissions Savings

	Total Fuel Saved (gallons)	Annual CO2 Emissions Reduction (metric tons)	CO2 Value / Metric Ton (\$)	Annual CO2 Emission Savings Value (\$)	Annual VOC Emissions Reduction (metric tons)	Annual VOC Emission Savings Value (\$)	Annual NOX Emissions Reduction (metric tons)	Annual NOX Emission Savings Value (\$)
2014	128,759	1,144.28	\$40.00	\$45,771	3.17	\$6,337	2.12	\$16,735
2015	128,759	1,144.28	\$42.00	\$26,662	3.17	\$6,337	2.12	\$16,735
2016	128,759	1,144.28	\$43.00	\$27,234	3.17	\$6,337	2.12	\$16,735
2017	128,759	1,144.28	\$44.00	\$27,806	3.17	\$6,337	2.12	\$16,735
2018	128,759	1,144.28	\$45.00	\$28,378	3.17	\$6,337	2.12	\$16,735
2019	128,759	1,144.28	\$46.00	\$28,950	3.17	\$6,337	2.12	\$16,735
2020	144,519	1,284.34	\$47.00	\$33,136	3.56	\$7,112	2.38	\$18,783
2021	144,519	1,284.34	\$48.00	\$33,778	3.56	\$7,112	2.38	\$18,783
2022	144,519	1,284.34	\$49.00	\$34,677	3.56	\$7,112	2.38	\$18,783
2023	144,519	1,284.34	\$50.00	\$35,448	3.56	\$7,112	2.38	\$18,783
2024	144,519	1,284.34	\$51.00	\$36,347	3.56	\$7,112	2.38	\$18,783
2025	160,583	1,427.10	\$53.00	\$41,243	3.95	\$7,903	2.65	\$20,871
2026	160,583	1,427.10	\$53.00	\$42,242	3.95	\$7,903	2.65	\$20,871
2027	160,583	1,427.10	\$54.00	\$43,099	3.95	\$7,903	2.65	\$20,871
2028	160,583	1,427.10	\$55.00	\$44,098	3.95	\$7,903	2.65	\$20,871
2029	160,583	1,427.10	\$56.00	\$44,954	3.95	\$7,903	2.65	\$20,871
2030	176,953	1,572.58	\$57.00	\$50,480	4.36	\$8,708	2.92	\$22,999
2031	176,953	1,572.58	\$58.00	\$51,581	4.36	\$8,708	2.92	\$22,999
2032	176,953	1,572.58	\$59.00	\$52,524	4.36	\$8,708	2.92	\$22,999
2033	176,953	1,572.58	\$60.00	\$53,625	4.36	\$8,708	2.92	\$22,999
2034	176,953	1,572.58	\$61.00	\$54,569	4.36	\$8,708	2.92	\$22,999

Operating Costs Summary

Lower Hill Development Area Operating Costs Savings versus...

	McCandless Township Area			Monroeville Area			Bethel Park Area		
	Nominal	3.0% Discount	7.0% Discount	Nominal	3.0% Discount	7.0% Discount	Nominal	3.0% Discount	7.0% Discount
2014	\$219,372	\$219,372	\$219,372	\$400,875	\$400,875	\$400,875	\$165,513	\$165,513	\$165,513
2015	\$219,372	\$212,983	\$205,021	\$400,875	\$389,199	\$374,650	\$165,513	\$160,693	\$154,685
2016	\$219,372	\$206,779	\$191,608	\$400,875	\$377,863	\$350,140	\$165,513	\$156,012	\$144,566
2017	\$219,372	\$200,756	\$179,073	\$400,875	\$366,858	\$327,233	\$165,513	\$151,468	\$135,108
2018	\$219,372	\$194,909	\$167,358	\$400,875	\$356,172	\$305,826	\$165,513	\$147,056	\$126,269
2019	\$219,372	\$189,232	\$156,409	\$400,875	\$345,798	\$285,818	\$165,513	\$142,773	\$118,009
2020	\$204,663	\$171,402	\$136,376	\$312,382	\$261,615	\$208,153	\$185,772	\$155,581	\$123,788
2021	\$204,663	\$166,410	\$127,454	\$312,382	\$253,995	\$194,536	\$185,772	\$151,049	\$115,689
2022	\$204,663	\$161,563	\$119,116	\$312,382	\$246,597	\$181,809	\$185,772	\$146,650	\$108,121
2023	\$204,663	\$156,857	\$111,323	\$312,382	\$239,415	\$169,915	\$185,772	\$142,379	\$101,047
2024	\$204,663	\$152,289	\$104,040	\$312,382	\$232,441	\$158,799	\$185,772	\$138,232	\$94,437
2025	\$189,610	\$136,978	\$90,082	\$224,314	\$162,050	\$106,570	\$206,422	\$149,124	\$98,070
2026	\$189,610	\$132,988	\$84,189	\$224,314	\$157,330	\$99,598	\$206,422	\$144,780	\$91,654
2027	\$189,610	\$129,115	\$78,681	\$224,314	\$152,747	\$93,083	\$206,422	\$140,563	\$85,658
2028	\$189,610	\$125,354	\$73,534	\$224,314	\$148,298	\$86,993	\$206,422	\$136,469	\$80,054
2029	\$189,610	\$121,703	\$68,723	\$224,314	\$143,979	\$81,302	\$206,422	\$132,494	\$74,817
2030	\$174,212	\$108,563	\$59,012	\$136,673	\$85,170	\$46,296	\$227,464	\$141,748	\$77,050
2031	\$174,212	\$105,401	\$55,151	\$136,673	\$82,690	\$43,267	\$227,464	\$137,620	\$72,009
2032	\$174,212	\$102,331	\$51,543	\$136,673	\$80,281	\$40,437	\$227,464	\$133,611	\$67,298
2033	\$174,212	\$99,351	\$48,171	\$136,673	\$77,943	\$37,791	\$227,464	\$129,720	\$62,896
2034	\$174,212	\$99,351	\$48,171	\$136,673	\$77,943	\$37,791	\$227,464	\$129,720	\$62,896
Total	\$4,158,655	\$3,193,688	\$2,374,407	\$5,772,098	\$4,639,259	\$3,630,882	\$4,091,369	\$3,033,255	\$2,159,634

**McCandless Township Area less Lower Hill District
Operating Cost Savings**

	Total Distance Saved (miles)	Operating Costs per Mile	Total Operating Costs Saved
2014	4,010,457	\$0.05	\$219,372
2015	4,010,457	\$0.05	\$219,372
2016	4,010,457	\$0.05	\$219,372
2017	4,010,457	\$0.05	\$219,372
2018	4,010,457	\$0.05	\$219,372
2019	4,010,457	\$0.05	\$219,372
2020	3,741,556	\$0.05	\$204,663
2021	3,741,556	\$0.05	\$204,663
2022	3,741,556	\$0.05	\$204,663
2023	3,741,556	\$0.05	\$204,663
2024	3,741,556	\$0.05	\$204,663
2025	3,466,357	\$0.05	\$189,610
2026	3,466,357	\$0.05	\$189,610
2027	3,466,357	\$0.05	\$189,610
2028	3,466,357	\$0.05	\$189,610
2029	3,466,357	\$0.05	\$189,610
2030	3,184,860	\$0.05	\$174,212
2031	3,184,860	\$0.05	\$174,212
2032	3,184,860	\$0.05	\$174,212
2033	3,184,860	\$0.05	\$174,212
2034	3,184,860	\$0.05	\$174,212

**Monroeville Area less Lower Hill District
Operating Cost Savings**

	Total Distance Saved (miles)	Operating Costs per Mile	Total Operating Costs Saved
2014	7,328,613	\$0.05	\$400,875
2015	7,328,613	\$0.05	\$400,875
2016	7,328,613	\$0.05	\$400,875
2017	7,328,613	\$0.05	\$400,875
2018	7,328,613	\$0.05	\$400,875
2019	7,328,613	\$0.05	\$400,875
2020	5,710,817	\$0.05	\$312,382
2021	5,710,817	\$0.05	\$312,382
2022	5,710,817	\$0.05	\$312,382
2023	5,710,817	\$0.05	\$312,382
2024	5,710,817	\$0.05	\$312,382
2025	4,100,812	\$0.05	\$224,314
2026	4,100,812	\$0.05	\$224,314
2027	4,100,812	\$0.05	\$224,314
2028	4,100,812	\$0.05	\$224,314
2029	4,100,812	\$0.05	\$224,314
2030	2,498,599	\$0.05	\$136,673
2031	2,498,599	\$0.05	\$136,673
2032	2,498,599	\$0.05	\$136,673
2033	2,498,599	\$0.05	\$136,673
2034	2,498,599	\$0.05	\$136,673

**Bethel Park Area less Lower Hill District
Operating Cost Savings**

	Total Distance Saved (miles)	Operating Costs per Mile	Total Operating Costs Saved
2014	3,025,837	\$0.05	\$165,513
2015	3,025,837	\$0.05	\$165,513
2016	3,025,837	\$0.05	\$165,513
2017	3,025,837	\$0.05	\$165,513
2018	3,025,837	\$0.05	\$165,513
2019	3,025,837	\$0.05	\$165,513
2020	3,396,191	\$0.05	\$185,772
2021	3,396,191	\$0.05	\$185,772
2022	3,396,191	\$0.05	\$185,772
2023	3,396,191	\$0.05	\$185,772
2024	3,396,191	\$0.05	\$185,772
2025	3,773,710	\$0.05	\$206,422
2026	3,773,710	\$0.05	\$206,422
2027	3,773,710	\$0.05	\$206,422
2028	3,773,710	\$0.05	\$206,422
2029	3,773,710	\$0.05	\$206,422
2030	4,158,394	\$0.05	\$227,464
2031	4,158,394	\$0.05	\$227,464
2032	4,158,394	\$0.05	\$227,464
2033	4,158,394	\$0.05	\$227,464
2034	4,158,394	\$0.05	\$227,464

Safety Costs Summary

Lower Hill Development Area Safety Costs Savings versus...

	McCandless Township Area			Monroeville Area			Bethel Park Area		
	Nominal	3.0% Discount	7.0% Discount	Nominal	3.0% Discount	7.0% Discount	Nominal	3.0% Discount	7.0% Discount
2014	\$594,655	\$594,655	\$594,655	\$1,086,658	\$1,086,658	\$1,086,658	\$448,659	\$448,659	\$448,659
2015	\$594,655	\$577,335	\$555,752	\$1,086,658	\$1,055,008	\$1,015,568	\$448,659	\$435,591	\$419,308
2016	\$594,655	\$560,519	\$519,395	\$1,086,658	\$1,024,279	\$949,129	\$448,659	\$422,904	\$391,876
2017	\$594,655	\$544,193	\$485,415	\$1,086,658	\$994,446	\$887,036	\$448,659	\$410,587	\$366,240
2018	\$594,655	\$528,343	\$453,659	\$1,086,658	\$965,481	\$829,006	\$448,659	\$398,628	\$342,280
2019	\$594,655	\$512,954	\$423,981	\$1,086,658	\$937,361	\$774,772	\$448,659	\$387,017	\$319,888
2020	\$554,783	\$464,622	\$369,675	\$846,777	\$709,163	\$564,243	\$503,574	\$421,735	\$335,553
2021	\$554,783	\$451,089	\$345,491	\$846,777	\$688,507	\$527,330	\$503,574	\$409,452	\$313,600
2022	\$554,783	\$437,951	\$322,889	\$846,777	\$668,454	\$492,832	\$503,574	\$397,526	\$293,085
2023	\$554,783	\$425,195	\$301,765	\$846,777	\$648,984	\$460,591	\$503,574	\$385,947	\$273,911
2024	\$554,783	\$412,811	\$282,024	\$846,777	\$630,082	\$430,459	\$503,574	\$374,706	\$255,991
2025	\$513,978	\$371,308	\$244,187	\$608,052	\$439,270	\$288,881	\$559,551	\$404,231	\$265,839
2026	\$513,978	\$360,494	\$228,212	\$608,052	\$426,476	\$269,982	\$559,551	\$392,458	\$248,447
2027	\$513,978	\$349,994	\$213,282	\$608,052	\$414,054	\$252,320	\$559,551	\$381,027	\$232,194
2028	\$513,978	\$339,800	\$199,329	\$608,052	\$401,994	\$235,813	\$559,551	\$369,929	\$217,003
2029	\$513,978	\$329,903	\$186,289	\$608,052	\$390,286	\$220,386	\$559,551	\$359,154	\$202,807
2030	\$472,238	\$294,283	\$159,963	\$370,482	\$230,872	\$125,495	\$616,590	\$384,239	\$208,860
2031	\$472,238	\$285,712	\$149,499	\$370,482	\$224,148	\$117,285	\$616,590	\$373,047	\$195,197
2032	\$472,238	\$277,390	\$139,718	\$370,482	\$217,619	\$109,612	\$616,590	\$362,182	\$182,427
2033	\$472,238	\$269,311	\$130,578	\$370,482	\$211,281	\$102,441	\$616,590	\$351,633	\$170,492
2034	\$472,238	\$269,311	\$130,578	\$370,482	\$211,281	\$102,441	\$616,590	\$351,633	\$170,492
Total	\$11,272,925	\$8,657,174	\$6,436,338	\$15,646,506	\$12,575,703	\$9,842,283	\$11,090,530	\$8,222,286	\$5,854,149

**McCandless Township Area less Lower Hill District
Safety Cost Savings (includes Death, Injury, and Property Damage)**

	Total Distance Saved (miles)	Safety Cost (Death, Injury, and Property) per Mile	Total Safety Costs Saved
2014	4,010,457	\$0.15	\$594,655
2015	4,010,457	\$0.15	\$594,655
2016	4,010,457	\$0.15	\$594,655
2017	4,010,457	\$0.15	\$594,655
2018	4,010,457	\$0.15	\$594,655
2019	4,010,457	\$0.15	\$594,655
2020	3,741,556	\$0.15	\$554,783
2021	3,741,556	\$0.15	\$554,783
2022	3,741,556	\$0.15	\$554,783
2023	3,741,556	\$0.15	\$554,783
2024	3,741,556	\$0.15	\$554,783
2025	3,466,357	\$0.15	\$513,978
2026	3,466,357	\$0.15	\$513,978
2027	3,466,357	\$0.15	\$513,978
2028	3,466,357	\$0.15	\$513,978
2029	3,466,357	\$0.15	\$513,978
2030	3,184,860	\$0.15	\$472,238
2031	3,184,860	\$0.15	\$472,238
2032	3,184,860	\$0.15	\$472,238
2033	3,184,860	\$0.15	\$472,238
2034	3,184,860	\$0.15	\$472,238

Monroeville Area less Lower Hill District
Safety Cost Savings (includes Death, Injury, and Property Damage)

	Total Distance Saved (miles)	Safety Cost (Death, Injury, and Property) per Mile	Total Safety Costs Saved
2014	7,328,613	\$0.15	\$1,086,658
2015	7,328,613	\$0.15	\$1,086,658
2016	7,328,613	\$0.15	\$1,086,658
2017	7,328,613	\$0.15	\$1,086,658
2018	7,328,613	\$0.15	\$1,086,658
2019	7,328,613	\$0.15	\$1,086,658
2020	5,710,817	\$0.15	\$846,777
2021	5,710,817	\$0.15	\$846,777
2022	5,710,817	\$0.15	\$846,777
2023	5,710,817	\$0.15	\$846,777
2024	5,710,817	\$0.15	\$846,777
2025	4,100,812	\$0.15	\$608,052
2026	4,100,812	\$0.15	\$608,052
2027	4,100,812	\$0.15	\$608,052
2028	4,100,812	\$0.15	\$608,052
2029	4,100,812	\$0.15	\$608,052
2030	2,498,599	\$0.15	\$370,482
2031	2,498,599	\$0.15	\$370,482
2032	2,498,599	\$0.15	\$370,482
2033	2,498,599	\$0.15	\$370,482
2034	2,498,599	\$0.15	\$370,482

Bethel Park Area less Lower Hill District
Safety Cost Savings (includes Death, Injury, and Property Damage)

	Total Distance Saved (miles)	Safety Cost (Death, Injury, and Property) per Mile	Total Safety Costs Saved
2014	3,025,837	\$0.15	\$448,659
2015	3,025,837	\$0.15	\$448,659
2016	3,025,837	\$0.15	\$448,659
2017	3,025,837	\$0.15	\$448,659
2018	3,025,837	\$0.15	\$448,659
2019	3,025,837	\$0.15	\$448,659
2020	3,396,191	\$0.15	\$503,574
2021	3,396,191	\$0.15	\$503,574
2022	3,396,191	\$0.15	\$503,574
2023	3,396,191	\$0.15	\$503,574
2024	3,396,191	\$0.15	\$503,574
2025	3,773,710	\$0.15	\$559,551
2026	3,773,710	\$0.15	\$559,551
2027	3,773,710	\$0.15	\$559,551
2028	3,773,710	\$0.15	\$559,551
2029	3,773,710	\$0.15	\$559,551
2030	4,158,394	\$0.15	\$616,590
2031	4,158,394	\$0.15	\$616,590
2032	4,158,394	\$0.15	\$616,590
2033	4,158,394	\$0.15	\$616,590
2034	4,158,394	\$0.15	\$616,590

**2012 Pennsylvania Crash Facts and Statistics
Pennsylvania Department of Transportation**

Severity	Total	Average Cost	Estimated Total Cost
Deaths	1,310	\$6,258,621	\$8,198,793,104
Major Injuries	3,458	\$1,369,921	\$4,737,187,060
Moderate Injuries	13,519	\$91,545	\$1,237,601,587
Minor Injuries	43,441	\$7,260	\$315,381,660
Property Damage Only	60,754	\$2,904	\$176,429,616
Unknown Injuries	26,428	\$7,260	\$191,867,280
TOTAL			\$14,857,260,307
Statewide Total Vehicle Miles			100,200,000,000
Average Value of Death, Injuries, and Property Damage per Vehicle Mile			\$0.15

Used Pennsylvania averages since these are more conservative than the recommended BCA values.

Construction Employment Impact

Element	Cost	Employment Value		Estimated Total Employment 2/
		Employment Factor 1/	Total Value	
I	\$ 10,848,697	1.148079	12,455,161.20	162
II	\$ 6,187,482	1.148079	7,103,718.15	92
III-a	\$ 9,168,755	1.148079	10,526,455.07	137
III-b	\$ 1,896,697	1.148079	2,177,558.00	28
IV	\$ 2,951,498	1.148079	3,388,552.87	44
V-a	\$ 1,148,368	1.148079	1,318,417.19	17
V-b	\$ 1,551,632	1.148079	1,781,396.11	23
VI	\$ 5,757,949	1.148079	6,610,580.22	86
TOTAL	\$ 39,511,078		\$ 45,361,839	590
1/ If a project does not include a substantial ROW purchase in the cost, FHWA recommends a multiplier of 1.148079.				
2/ Based USDOT estimate of 13,000 short-term job years created per one billion dollars of government investment, or \$76,900 per job-year.				