| Year | Project Year | Travel Time Saved (hr/year) | Total Value of Time Saved |  |  | Decreased Miles <br> Traveled (per year) | Auto Operating Cost Savings | Safety Benefits | Undiscounted Net Benefits | Discounted <br> Benefits at 7\% | Discounted <br> Benefits at 3\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Initial Project Cost | Fuel Savings Idling (per year) |  |  |  |  |  |  |
|  |  |  |  | \$54,481,131 |  |  |  |  |  |  |  |
| 2013 | 1 | 652,894 | \$11,752,091 |  | \$1,308,399 | 19,922,957 | \$11,654,930 | \$477,990 | \$25,193,410 | \$25,193,410 | \$25,193,410 |
| 2014 | 2 | 669,869 | \$12,057,645 |  | \$1,342,418 | 20,440,954 | \$11,957,958 | \$490,418 | \$25,848,439 | \$22,577,028 | \$24,364,633 |
| 2015 | 3 | 687,286 | \$12,371,144 |  | \$1,377,321 | 20,972,419 | \$12,268,865 | \$503,169 | \$26,520,499 | \$21,648,627 | \$24,270,013 |
| 2016 | 4 | 705,155 | \$12,692,794 |  | \$1,413,131 | 21,517,702 | \$12,587,856 | \$516,251 | \$27,210,032 | \$20,758,403 | \$24,175,761 |
| 2017 | 5 | 723,489 | \$13,022,807 |  | \$1,449,872 | 22,077,162 | \$12,915,140 | \$529,674 | \$27,917,492 | \$19,904,786 | \$24,081,874 |
| 2018 | 6 | 742,300 | \$13,361,400 |  | \$1,487,569 | 22,651,168 | \$13,250,933 | \$543,445 | \$28,643,347 | \$19,086,272 | \$23,988,352 |
| 2019 | 7 | 761,600 | \$13,708,796 |  | \$1,526,246 | 23,240,099 | \$13,595,458 | \$557,575 | \$29,388,074 | \$18,301,416 | \$23,895,194 |
| 2020 | 8 | 781,401 | \$14,065,225 |  | \$1,565,928 | 23,844,341 | \$13,948,940 | \$572,072 | \$30,152,164 | \$17,548,834 | \$23,802,397 |
| 2021 | 9 | 801,718 | \$14,430,921 |  | \$1,606,642 | 24,464,294 | \$14,311,612 | \$586,945 | \$30,936,120 | \$16,827,200 | \$23,709,960 |
| 2022 | 10 | 822,562 | \$14,806,124 |  | \$1,648,415 | 25,100,366 | \$14,683,714 | \$602,206 | \$31,740,460 | \$16,135,240 | \$23,617,883 |
| 2023 | 11 | 843,949 | \$15,191,084 |  | \$1,691,274 | 25,752,975 | \$15,065,490 | \$617,863 | \$32,565,711 | \$15,471,735 | \$23,526,163 |
| 2024 | 12 | 865,892 | \$15,586,052 |  | \$1,735,247 | 26,422,553 | \$15,457,193 | \$633,928 | \$33,412,420 | \$14,835,514 | \$23,434,799 |
| 2025 | 13 | 888,405 | \$15,991,289 |  | \$1,780,364 | 27,109,539 | \$15,859,080 | \$650,410 | \$34,281,143 | \$14,225,456 | \$23,343,790 |
| 2026 | 14 | 911,503 | \$16,407,063 |  | \$1,826,653 | 27,814,387 | \$16,271,416 | \$667,321 | \$35,172,453 | \$13,640,484 | \$23,253,135 |
| 2027 | 15 | 935,203 | \$16,833,646 |  | \$1,874,146 | 28,537,561 | \$16,694,473 | \$684,671 | \$36,086,936 | \$13,079,566 | \$23,162,831 |
| 2028 | 16 | 959,518 | \$17,271,321 |  | \$1,922,874 | 29,279,538 | \$17,128,529 | \$702,472 | \$37,025,197 | \$12,541,715 | \$23,072,879 |
| 2029 | 17 | 984,465 | \$17,720,376 |  | \$1,972,868 | 30,040,806 | \$17,573,871 | \$720,737 | \$37,987,852 | \$12,025,981 | \$22,983,275 |
| 2030 | 18 | 1,010,061 | \$18,181,105 |  | \$2,024,163 | 30,821,866 | \$18,030,792 | \$739,476 | \$38,975,536 | \$11,531,455 | \$22,894,020 |
| 2031 | 19 | 1,036,323 | \$18,653,814 |  | \$2,076,791 | 31,623,235 | \$18,499,592 | \$758,702 | \$39,988,900 | \$11,057,264 | \$22,805,111 |
| 2032 | 20 | 1,063,267 | \$19,138,813 |  | \$2,130,788 | 32,445,439 | \$18,980,582 | \$778,428 | \$41,028,611 | \$10,602,573 | \$22,716,547 |
| NPV |  |  |  |  |  |  |  |  |  | \$326,992,957 | \$472,292,027 |

## Benefit/Cost Ratio (7\% discount rate) $=\quad 6.00$ <br> Benefit/Cost Ratio (3\% discount rate) $=8.67$

## Notes/Assumptions:

1) $\$ 18.00 / \mathrm{hr}$ used for Values of Travel Time Savings for Intercity Travel - All Purposes. Source: TIGER Benefit-Cost Analysis Resource Guide.
2) Fuel Saving costs based on $\$ 3.79 /$ gallon - minus $\$ 0.45$ for state and fed. taxes $=\$ 3.34$, which is the $3 / 5 / 2012$ Weekly U.S. Retail Gasoline Prices, Regular Grade for the U.S. from the Energy Information Administration

- Assumed a burn rate of 0.6 gallons per hour for idling vehicles.
- This is based on passenger cars idling burn rates of 0.25 to 0.5 gallons per hour (http://fueleconomy.gov/feg/driveHabits.shtml) and 0.8 gallons per hour of idling diesel for
idling combination trucks ("Idle Reduction - A Glance at Clean Freight Strategies" (www.epa.gov)

3) Auto Operating Cost Savings of $\$ 0.585 /$ mile based on AAA's 2011 Edition of "Your Driving Costs" for Average Sedan for vehicles traveling 15,000 miles/year
