



Interstate 80 Project *Cost to Commuters*

Northwest Workforce Investment Area

The *Interstate 80 Project: Cost to Commuters* examines the impact of tolling Interstate 80 on out-commuters living in Clarion, Crawford, and Venango Counties. Out-commuters are simply individuals who are employed in a county other than the county in which they live. Using 2000 Census commuting patterns and establishing several key assumptions, low, medium, and high impact costs were calculated. Total impact estimates are based on the assumed number of out-commuters that actually travel on Interstate 80, assuming a toll rate of **\$0.08/mile** in the first year of the tolling process with a 3% annual increase after that. The **low impact** is based on the assumption that **5%** of all out-commuters take I-80, the **medium impact** is related to a **15%** assumption, and the **high impact** is correlated to a **30%** assumption. One key assumption is that all out-commuters incur a toll of \$0.08/mile when commuting on the interstate, based on the undetermined tolling locations. Another vital assumption is that out-commuters travel the **shortest distance** possible while on the interstate. The assumptions are defined on the back of this page.

\$3,100 – Average Annual Trip (Commute) Cost – On average, a commute on Interstate 80 for out-commuters living in Clarion, Crawford, and Venango Counties to all possible destinations of interest could be approximately \$3,100 in the first year. This cost is based on the shortest possible distance assumption. This equates to 9.1% of the average annual earnings in the entire Northwest WIA (\$34,000). Please note, this average cost considers each trip (commute) from Clarion, Crawford, and Venango Counties to all possible destinations, including several Ohio Counties, where it is assumed out-commuters travel on I-80. Annual trip (commute) costs range from a minimum of about \$120 to a maximum of \$9,800.

Low Impact (5% of Commuters)
Estimated Number of Commuters
250
Estimated First Year Total Cost
\$132,000

First Year Total Costs by Origination County:

- **Clarion:** \$65,000 (150 commuters)
- **Crawford:** \$27,000 (20 commuters)
- **Erie:** Not Applicable
- **Forest:** Not Applicable
- **Venango:** \$40,000 (80 commuters)
- **Warren:** Not Applicable

Total (Low) Impact after:

- **5 years:** \$699,000
- **10 years:** \$1.5 million
- **15 years:** \$2.4 million

Medium Impact (15% of Commuters)
Estimated Number of Commuters
750
Estimated First Year Total Cost
\$395,000

First Year Total Costs by Origination County:

- **Clarion:** \$196,000 (450 commuters)
- **Crawford:** \$80,000 (60 commuters)
- **Erie:** Not Applicable
- **Forest:** Not Applicable
- **Venango:** \$119,000 (240 commuters)
- **Warren:** Not Applicable

Total (Low) Impact after:

- **5 years:** \$2.1 million
- **10 years:** \$4.5 million
- **15 years:** \$7.3 million

High Impact (30% of Commuters)
Estimated Number of Commuters
1,500
Estimated First Year Total Cost
\$790,000

First Year Total Costs by Origination County:

- **Clarion:** \$391,000 (890 commuters)
- **Crawford:** \$161,000 (120 commuters)
- **Erie:** Not Applicable
- **Forest:** Not Applicable
- **Venango:** \$238,000 (480 commuters)
- **Warren:** Not Applicable

Total (Low) Impact after:

- **5 years:** \$4.2 million
- **10 years:** \$9.1 million
- **15 years:** \$14.7 million

Assumptions

All calculations used to measure the impact of tolling Interstate 80 are based on several assumptions. These assumptions are held constant throughout the analysis:

1. The commuting patterns, based on 2000 Census results, have remained unchanged and will remain constant in the future.
2. Non-commuters (individuals who live and work in the same county) are not tolled for traveling on I-80, even if they in fact do travel I-80 to work.
3. Out-commuters living in the Clarion, Crawford, and Venango Counties commute to the following counties using Interstate 80: Armstrong, Butler, Carbon, Centre, Clarion, Clearfield, Clinton, Columbia, Crawford, Elk, Jefferson, Lackawanna, Lawrence, Luzerne, Lycoming, Mercer, Monroe, Montour, Northumberland, Schuylkill, Union, and Venango Counties.
4. This analysis also considers out-commuters commuting to several counties in Ohio. When commuting to OH counties, distances are based on exit 4, the western-most exit on I-80 in PA.
5. Certain exclusions apply to the counties of interest due to the relative location of the counties and Interstate 80. For example, it is assumed that Clarion County out-commuters do not take I-80 to Armstrong County, and Armstrong County out-commuters do not take I-80 to Clarion County. The specific commuting patterns between these (and other excluded) counties are not considered in calculating various cost estimates for this analysis. Commuting patterns to other counties, however, are included in the cost calculations.
6. Out-commuters always pay a toll for traveling on Interstate 80 (i.e., they do not avoid the tolling stations). This may cause some inflation of the estimated costs because data available on I-80 tolling suggests that there may be some opportunities to enter and exit I-80 without incurring a toll. ("With 59 existing interchanges, there will be, on average, one toll collection facility for every 5-6 interchanges, **allowing many local trips to remain free**" - <http://www.paturnpike.com>). According to the same website, toll rates on Interstate 80 will be \$0.08/mile in the first year of the tolling process with a 3% annual increase thereafter.
7. The same proportion of out-commuters travel I-80 to work each day/year/etc. in separate vehicles. Three proportions are used in this report to study the impact of tolling I-80 (low-5%, medium-15%, and high-30%).
8. Out-commuters travel the same distance on I-80 between counties (they get on at the same exit and off at the same exit), whether going to work or returning home. The distance (minimum, maximum, or average) is held constant in the cost calculations over a certain time period. This may cause some inflation of the estimated costs, especially if the maximum distance is considered. **All impact calculations presented in this summary are based on commuters traveling the shortest distance possible.**
9. Out-commuters are full-time workers who work **240** days a year (260 total work days, 5 holidays, 5 sick days, and 10 vacation days).
10. Certain commuting patterns are not considered for several origination county/destination county combinations:
 - It is the same county, and thus there are no out-commuters.
 - The county is excluded due to its location relative to I-80.
 - It is assumed that out-commuters do not travel I-80 between the origination/destination county.
 - No commuting pattern data is available from the Census for the origination/destination county.
11. The commuting patterns and impact calculations do not consider the cost on trucking/logistics companies; all costs are those associated with out-commuters from the counties of interest only.
12. This analysis only considers those traveling outside their county of residence for work, and does not include individuals traveling outside their county of residence for education and training.