Induced Traffic

Due to Increased or Decreased Transportation Accessibility

What is Induced Traffic?

Induced traffic results from changes to transportation supply that changes the travel time, cost, and accessibility to destinations. These increases in transportation supply will change the demand for travel. Induced traffic impacts are pronounced in locations where demand exceeds supply.

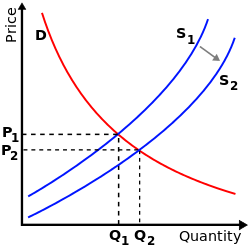
Transportation supply includes, but is not limited to, freeways, arterials, transit routes, bike paths & lanes, sidewalks, parking lots, bike racks, hiking paths, etc.

What is Reduced Traffic?

In a similar fashion as induced traffic, a reduction in transportation supply or an increase in travel time and cost with a resulting decrease in accessibility will reduce the demand for travel.

How is demand for travel induced?

Induced traffic manifests in changes in travel or land use where decreased travel time and cost change the travel accessibility. In economic supply and demand, a change in supply will cause a change in price and a change in the quantity consumed. Where you are on the demand curve is critical to determine how much change will occur from a shift in supply or cost. Where demand is high a small change in supply or price will cause a large change traffic. Where demand is low a change in supply or price will cause little or no change in traffic.



Travel behavioral shifts (short-run)

* Time of travel change
  + Shift departure time from, for example, 6:30am to 7:00am
* Travel mode change
  + Shift in travel mode, for example, from transit to auto
* Activity location change
  + Shift in location of where an activity will be made, for example, a person may travel to a farther shopping center that is now accessible in their available time or may change an activity from in home to a location that requires travel
* Change to daily activity schedule
  + Reduction of travel time results in more time to do another activity
  + Change of activity schedule to another day
* Change to number of tours or stops on a travel tour
  + A tour could be broken into multiple tours instead of having a long trip chain
  + An additional stop on a tour could be added due to additional time being available

Work & School location (mid-run)

* Work and school location choice changes

Land Use Changes (long-run)

* Residential & commercial development changes
* Commercial location changes

|  |  |  |  |
| --- | --- | --- | --- |
| Induced Travel Component | Timeframe of Change | Model Component | Qualitative Impact |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |