

Magnitude of Changes to Divert Commuters to Transit

$$E_p = -\frac{\% \text{ Transit Trips}}{\% \text{ Price of Transit}}$$

$$-0.33 = \frac{20\%}{x} \quad (x) - \text{percent reduction in transit price}$$

$$-0.33x = 20\%$$

$$x = -60.6\%$$

$$E_L = -\frac{\% \text{ Transit Trips}}{\% \text{ Line-Haul Time}}$$

$$-0.39 = \frac{20\%}{x} \quad (x) - \text{percent reduction in line-haul time}$$

$$-0.39x = 20\%$$

$$x = -51.3\%$$

$$E_A = -\frac{\% \text{ Transit Trips}}{\% \text{ Access Time}}$$

$$-0.71 = \frac{20\%}{x} \quad (x) - \text{percent reduction in access time}$$

$$-0.71x = 20\%$$

$$x = -28.2\%$$

Thus diversion of commuters to transit requires relatively large reductions in line haul time and price and a relatively small reduction in access time.