Mass Transit Elasticities

Own Price: $\frac{\text{Percent Change in Transit Trips}}{\text{Percent Change in Transit Price}} = -0.33$

Line-Haul Time: $\frac{\text{Percent Change in Transit Trips}}{\text{Percent Change in Line-Haul Time}} = -0.39$

Access Time: $\frac{\text{Percent Change in Transit Trips}}{\text{Percent Change in Access Time}} = -0.71$

Implications of the Elasticities

1. An increase in mass transit fares will increase total fare revenue

2. A simultaneous decrease in line-haul and access time and an increase in transit price (of equal percentage) will increase transit ridership because people are more sensitive to time cost than fares

3. A decrease in access time (caused by more frequent service and shorter distances between stops) will cause a greater increase in ridership than an equal percentage decrease in line-haul time because people are more sensitive to access time than line-haul time

Commuting Trip Phases

Collection Phase - Travel from the home to the main travel vehicle

Line-haul Phase - The part of the trip spent on the main travel vehicle

Distribution Phase - Travel from the end of the trip to the workplace