

Regional Paratransit Trip Pilots Cost Estimate Methodology

Pilot costs are based on the incremental costs for providing one-seat rides instead of traditional transfer trips for the term of one year. MTC will provide a baseline allocation for all pilot costs. If the actual pilot costs exceed the estimated pilot costs, MTC may allocate additional funds to ensure each agency is made whole for the incremental cost in providing one-seat ride pilot service. Pilot costs are the estimated incremental increase in cost for providing one-seat rides for one year (represented as Future cost) instead of a traditional transfer trip (represented as Current cost).

$$\text{Pilot cost} = \text{Future cost} - \text{Current cost}$$

Current costs are calculated by multiplying the operator's cost per hour by the cost of travel time (including pick-up and drop-off) for round trips between locations in that operator's service area and the transfer point. These are trips by each operator's customers going to and returning from the other operator's service area, as well as trips by the other operator's customers coming from and returning to that operator's service area.

$$\text{Current cost} = \text{Cost per hour (time between a pick-up or drop-off location and the transfer point, including dwell time)}$$

Future costs are calculated by multiplying the operator's cost per hour by the total vehicle time required to deliver a one-seat ride and adjusted to account for potential additional ridership. Total vehicle time includes (1) the current travel time from pick-up location to the transfer point, plus (2) twice the current travel time from the transfer point to the destination in the adjoining service area. The second trip segment is doubled to represent both the outbound trip to the rider's destination and deadhead back to the transfer point. Finally, the resulting vehicle time is multiplied by a factor of 1.5 to reflect potential additional ridership. While ridership is not expected to grow, this estimate provides a reasonable buffer to offset potential incremental ridership that may result from introducing one-seat ride service.

$$\text{Future Cost} = \text{Cost per hour} \times 1.5 [(\text{Current time from origin to transfer point}) + (2 \text{ Current time from transfer point to destination})]$$

If actual pilot costs exceed the estimated pilot costs during the one-year pilot term, MTC may allocate additional funding (subject to availability of funding) for the incremental cost in providing one-seat ride pilot service for the one-year pilot term.