

Iowa State Transit Assistance Formula Allocation

Regional System Allocation

$$\begin{array}{l}
 \text{Regional Revenue Miles} \\
 \text{Sum of Regional and Urban Revenue Miles}
 \end{array}
 =
 \begin{array}{l}
 \text{Total Regional Systems Allocation} \\
 \times
 \end{array}
 \left[
 \begin{array}{l}
 \left[\frac{\text{System LDI}}{\text{Total Regional LDI}} \right] \\
 + .25 \times \left[\frac{\text{System Pass to OpExp ratio}}{\text{Sum of Regional Pass to OpExp ratios}} \right] \\
 + .25 \times \left[\frac{\text{System RevMi to OpeExp ratio}}{\text{Sum of Regional RevMi to OpExp ratios}} \right]
 \end{array}
 \right]
 =
 \begin{array}{l}
 \text{Individual Regional System Formula Allocation}
 \end{array}$$

Urban System Allocation

$$\begin{array}{l}
 \text{Urban Revenue Miles} \\
 \text{Sum of Regional and Urban Revenue Miles}
 \end{array}
 =
 \begin{array}{l}
 \text{Total Urban Allocation} \\
 \times
 \end{array}
 \left[
 \begin{array}{l}
 \left[\frac{\text{System LDI}}{\text{Total Urban LDI}} \right] \\
 + .25 \times \left[\frac{\text{System Pass to OpExp ratio}}{\text{Sum of Urban Pass to OpExp ratios}} \right] \\
 + .25 \times \left[\frac{\text{System RevMi to OpeExp ratio}}{\text{Sum of Urban RevMi to OpExp ratios}} \right]
 \end{array}
 \right]
 =
 \begin{array}{l}
 \text{Individual Urban System Formula Allocation}
 \end{array}$$

RevMi - Revenue miles driven while providing service to clients/public or en route between clients.

LDI - Locally Determined Income: Annual transit system revenue used for operating expenses, excluding FTA formula funds and STA funds.

Pass - Passenger: A person counted each time a person boards and is transported. (Passengers and rides are synonymous in this formula).

OpExp - Operating Expenses: Costs involved in the actual operation and administration of the system.

STA Allocation Example

This example demonstrates how the formula distributes funding to a regional and an urban system using a one month allocation of \$800,000. This is an example only.

FY2010 Transit Statistics

Transit System	Ridership	Revenue Miles	Operating Expense	System Locally Determined Income (LDI)	System Passenger to Operating Expense Ratio	System Revenue Miles to Operating Expense Ratio
Total Regional	3,443,676	12,912,385	28,687,384	17,079,172	1.97148826	7.25788704
Total Urban	22,764,777	15,732,735	70,832,877	45,649,312	6.05059803	4.68354611
Statewide Total	26,208,453	28,645,120	99,520,261	62,728,484		
Region 1	180,974	1,149,957	2,273,971	1,473,847	0.07958501	0.50570434
Ames	5,377,155	1,152,680	7,038,481	5,002,218	0.76396526	0.16376829

Regional System Allocation Example

Regional Revenue Miles/Sum of Regional and Urban Revenue Miles = Total Regional Systems Allocation

$$12,912,385/28,645,120 = 0.4507708$$

Total Regional Systems Allocation x [(.5(System Locally Determined Income/Total Regional Locally Determined Income)) + (.25(System Passenger to Operating Expense ratio/Sum of Regional Passenger to Operating Expense Ratios)) + (.25(System Revenue Miles to Operating Expense Ratio/Sum of Regional Revenue Miles to Operating Expense Ratios))] = Individual Regional System STA Formula Allocation

$$= 0.4507708 \times [(.5 \times (1,473,847/17,079,172)) + (.25 \times (0.07958501/1.97148826)) + (.25 \times (0.50570434/7.25788704))] = 0.4507708 \times [(.5 \times 0.0862950) + (.25 \times 0.0403680) + (.25 \times 0.0696765)]$$

$$= 0.4507708 \times (0.0431475 + 0.010092 + 0.017419125)$$

$$= 0.4507708 \times 0.0706586$$

$$= 0.0318508$$

$$= 3.19\% \times \$800,000 = \$25,040$$

Individual Regional System STA Formula Allocation = \$25,520

Urban System Allocation Example

Urban Revenue Miles/Sum of Regional and Urban Revenue Miles = Total Urban Allocation

$$15,732,735/28,645,120 = 0.5492292$$

Total Urban Allocation x [(.5(System Locally Determined Income/Total Urban Locally Determined Income)) + (.25(System Passenger to Operating Expense ratio/Sum of Urban Passenger to Operating Expense Ratios)) + (.25(System Revenue Miles to Operating Expense Ratio/Sum of Urban Revenue Miles to Operating Expense Ratios))] = Individual Urban System STA Formula Allocation

$$= 0.5492292 \times [(.5 \times (5,002,218/45,649,312)) + (.25 \times (0.76396526/6.05059803)) + (.25 \times (0.16376829/4.68354611))]$$

$$= 0.5492292 \times [(.5 \times 0.1095793) + (.25 \times 0.1262628) + (.25 \times 0.0349667)]$$

$$= 0.5492292 \times (0.0547897 + 0.0315657 + 0.0087417)$$

$$= 0.5492292 \times 0.0950971$$

$$= 0.0522301$$

$$= 5.22\% \times \$800,000 = \$41,760.00$$

Individual Urban System STA Formula Allocation = \$41,760.00