Cost Allocation Webinar

Co-sponsored by:
National Center for Mobility Management
National Rural Transit Assistance Program

March 25, 2020
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  **Attendee Access Code:** 169-161-747

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Participating in the Webinar

- You can share comments and questions by typing into the Questions box.
Documents and Recordings

- These slides are available for download under Handouts.
- The recording will be posted within one week at: nationalRtap.org/Webinar#PreviousWebinars
- A webinar transcript can be provided by emailing info@nationalRtap.org.
Agenda

• Welcome
  – Robin Phillips, Executive Director, National RTAP

• NCMM Cost Allocation e-Learning Module
  – Amy Conrick, Executive Director, NCMM
  – Richard Garrity, Senior Associate, RLS & Associates

• National RTAP Cost Allocation Calculator
  – Nancy Doherty, Analyst, National RTAP
  – Todd Hansen, Assistant Research Scientist, Texas A&M Transportation Institute (TTI)

• Questions
Promoting Customer-Centered Mobility Strategies

that advance good health, economic vitality, self-sufficiency, and community

Quick Links

Announcements  2018 Mobility  Upcoming Events
National Center for Mobility Management (NCMM)
“Cost Allocation Techniques for Community Transportation”
Cost Allocation Techniques for Community Transportation
Cost Allocation Techniques for Community Transportation: 5 modules

- Module 1: How to determine the full cost of delivering any transportation service
- Module 2: What is meant by a “service-based cost allocation” method
- Module 3: Techniques for building a two-variable cost allocation model
- Module 4: The difference between the cost charged and price of transportation service
- Module 5: Real-world issues that may arise when using the cost allocation model
These 5 modules . . .

- Provide common sense illustrations and concepts of how a cost allocation model works.

- Break down the process so the user can gain a fundamental understanding of the complex topics involved in developing a cost allocation model.

- Designed to go hand-in-hand with the RTAP Cost Allocation Calculator.
Basic concepts . . .

- Develop full cost of service delivery = Full Cost Accounting
- Three types of costs
- Two types of cost allocation
- “Two-Variable” cost allocation model
Full Cost Accounting = Full Cost of Service Delivery

- Recognize all cost factors involved in the delivery of transit service including
  - Direct Costs
  - Indirect Costs
  - Donations and Contributions

Failure to practice full cost accounting means the transit system is underreporting its costs.
Three Types of Costs

1. Direct Costs - those costs incurred by the transit agency that 100% benefit only the transit program

2. Indirect Costs – those costs incurred by the entity that benefits transit as well as other programs, departments or grant awards
   - The cost is not readily assignable to the benefiting department without effort disproportionate to the results achieved
Three Types of Costs (cont.)

3. Donations and contributions
   - Not reimbursable under federal awards
   - Yet, may play a critical role in service delivery
   - The value of donations and contributions should be recognized under full cost accounting

Uniform administrative requirements, cost principles, and audit requirements for federal awards (2 CFR § 200) provide guidance on direct and indirect costs, as well as the valuation of contributions and donations.
Cost Allocation

The term “cost allocation” is used in community transit to describe a wide range of accounting, service, and reporting strategies for transit agencies.
Two basic types of cost allocation

- Financial-based cost allocation
- Service-based cost allocation
Financial-Based Cost Allocation

- Central Services Cost Allocation Plans
- Indirect Cost Allocation Plans
  - Large, organization-wide plans that take into account all departments/programs of the entity
  - Typically not in scope of responsibilities of transit program manager

Procedures for developing central services cost allocation plans and indirect cost allocation plan can be found in the appendices to 2 CFR § 200
Service-Based Cost Allocation

- Determine “break-even” point for negotiating a price to provide service under contract to human service agency
- Allocate “shared” direct costs to different modes of service (e.g., fixed route and complementary paratransit)
- Allocate operating costs for services that span urbanized/nonurbanized areas where the provider receives both Section 5307 and Section 5311 funding
- Demonstrate, when providing an allowable charter, that the entity if fully recovering costs and not charging charter deficits to transit grants (unallowable)
Why Use a Service-Based Cost Allocation Method?

Why Not Simply Calculate a Unit Rate, Such as Cost Per Mile:

\[
\text{Fully Allocated Costs} = \frac{\text{Total Expense}}{\text{Total Vehicle – Miles}}
\]
Consider this example:

Passenger A’s trip takes 10 minutes and Passenger B’s trip takes 20 minutes.
Do These Trips Cost the Same?

The distance from Passenger C’s origin to destination is 13 miles; The distance from Passenger D’s origin to destination is 10 miles.
“Two-Variable” Cost Allocation Model

The trips in the two proceeding slides do not cost the transit agency the same. This gives rise to a fundamental principle in cost allocation: Transportation costs are driven by two factors

1. Time (vehicle- or revenue-hours)
2. Distance (vehicle- or revenue-miles)
Cost Allocation Techniques for Community Transportation: 5 modules

- Module 1: How to determine the full cost of delivering any transportation service
- Module 2: What is meant by a “service-based cost allocation” method
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Welcome to your NCMM learning dashboard.

Module in progress:

Creating Innovative Transportation Solutions
Resume module
88 Minutes
Status: In Progress
Your Score: 0

Your courses:

Understanding the Complete Trip
View Course Info
17 Minutes Modules: 1

The Role for Advocacy in Mobility Management
View Course Info
11 Minutes Modules: 1

Meetings with Purpose and Results
View Course Info
17 Minutes Modules: 1
National Rural Transit Assistance Program (NRTAP) Cost Allocation Calculator
What is the Cost Allocation Calculator?

- Application tool to help agencies accurately allocate costs
- Built on both MS Excel and Access, with the same functionality
- Requires no special skills needed to use the calculator tool
- Relies on standard transit data – no new data collection is necessary
- Used to allocate cost to individual or groups of routes/services
Tools Available on National RTAP Website

- Must have an RTAP Cloud Login (free to sign up)

  - Excel application
  - Access application

  - Instruction manual
  - Instructional webinars
  - Frequently asked questions
  - Related links
Application Methodology – Four-Step Process

1. Service Data
2. Financial Data
3. Operational Data
4. Allocate Costs

Steps 1 through 3 must be completed in order before allocating costs in Step 4.

Each data entry page is accessible from the Navigation Menu page.
Results and Outcomes

• Create a consistent, equitable, transparent allocation process
• Report data to NTD / prepare data for State reporting
• Know cost of services and measure performance
• Use for planning and pricing services, costs by funding source
• Prepare information for requests for reimbursements
• Automating accounting and financial reporting processes
• Budget future operating expenses and funding need
## Know Costs, Measure Performance, and Make Decisions

<table>
<thead>
<tr>
<th>Service</th>
<th>Total Cost</th>
<th>Passenger Trips per Vehicle Hour</th>
<th>Cost per Total Vehicle Hour</th>
<th>Cost per Total Vehicle Mile</th>
<th>Cost per Passenger Trip</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>$3,500,000</td>
<td>2.31</td>
<td>$43.75</td>
<td>$3.50</td>
<td>$18.92</td>
</tr>
<tr>
<td>Fixed-Route</td>
<td>$1,477,801</td>
<td>3.13</td>
<td>$36.95</td>
<td>$4.93</td>
<td>$11.82</td>
</tr>
<tr>
<td>Demand Response</td>
<td>$2,022,199</td>
<td>1.50</td>
<td>$50.55</td>
<td>$2.89</td>
<td>$33.70</td>
</tr>
</tbody>
</table>

**Demand Response Service Allocation**

<table>
<thead>
<tr>
<th>Service</th>
<th>Total Cost</th>
<th>Cost per Pass. Hour</th>
<th>Cost per Pass. Mile</th>
<th>Cost per Pass. Trip</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Public</td>
<td>$1,617,759</td>
<td>$40.44</td>
<td>$2.02</td>
<td>$40.44</td>
</tr>
<tr>
<td>Adult Day Care</td>
<td>$404,440</td>
<td>$40.44</td>
<td>$2.02</td>
<td>$20.22</td>
</tr>
</tbody>
</table>
Allocating Costs in the Calculator

- After Steps 1 through 3 are completed, click on the **Click to Allocate Costs** or **Run Cost Allocation** button to run Step 4.

- Click on the **Generate Summary Report** or **View Reports** button to navigate to the summary report tab and view the cost allocation tables.

- Tables on results and performance measures for each route/service, as well as the service characteristics entered in Step 1.
Demonstration of Reports from the Calculator
Types of Results and Reports

- Costs and metrics by different service types
  - Individual routes and sponsored services
  - NTD travel modes (Ex. Fixed Route and Demand Response)
  - UZA or geography (Ex. Urban and rural areas, municipalities, counties)
  - Directly operated or purchased transportation

- PDF reports
  - From both Access and Excel applications

- Excel exports
  - From Access application
Customizing Route Characteristics

- Allocation by funding source
  - Customizable for each route in Step 1
  - Can classify under any FTA, state, or local funding source

- Allocation by geography
  - Customizable for each route in Step 1
  - Divide a route split between two geographies (if desired)

- Sub-allocation for shared-ride demand-response
  - Available by classifying the route as a sponsored service during Step 1, then naming the sponsors in Step 3
  - Passenger miles and Passenger hours as two variables
Common Questions

• How do I obtain data for the Calculator?
• How do I learn the definitions of the data labels?
• Can I use the Calculator if I only have one route/service?
• How do I change data if I enter it incorrectly the first time?
• How does this work for 5310 programs?
Demonstration of Common Questions on the Calculator
Your Questions

Cost Allocation Techniques For Community Transportation

COST ALLOCATION CALCULATOR

National Center for Mobility Management

National Transit Assistance Program

U.S. Department of Transportation Federal Transit Administration
Contact Information and Survey

Take the eLearning Course
866.846.6400
info@nc4mm.org

Download the Calculator
888.589.6821
Info@nationalrtap.org

Please take a brief survey about this webinar
https://app.keysurvey.com/f/41483328/2a0e/
Download Cost Allocation Calculator

1. Go to nationalrtap.org
2. Click on Cloud Signup or Cloud Login
Download Cost Allocation Calculator

1. Click on Cost Allocation Calculator
2. Click on Dashboard

3. Click on either Excel Version or Access Version