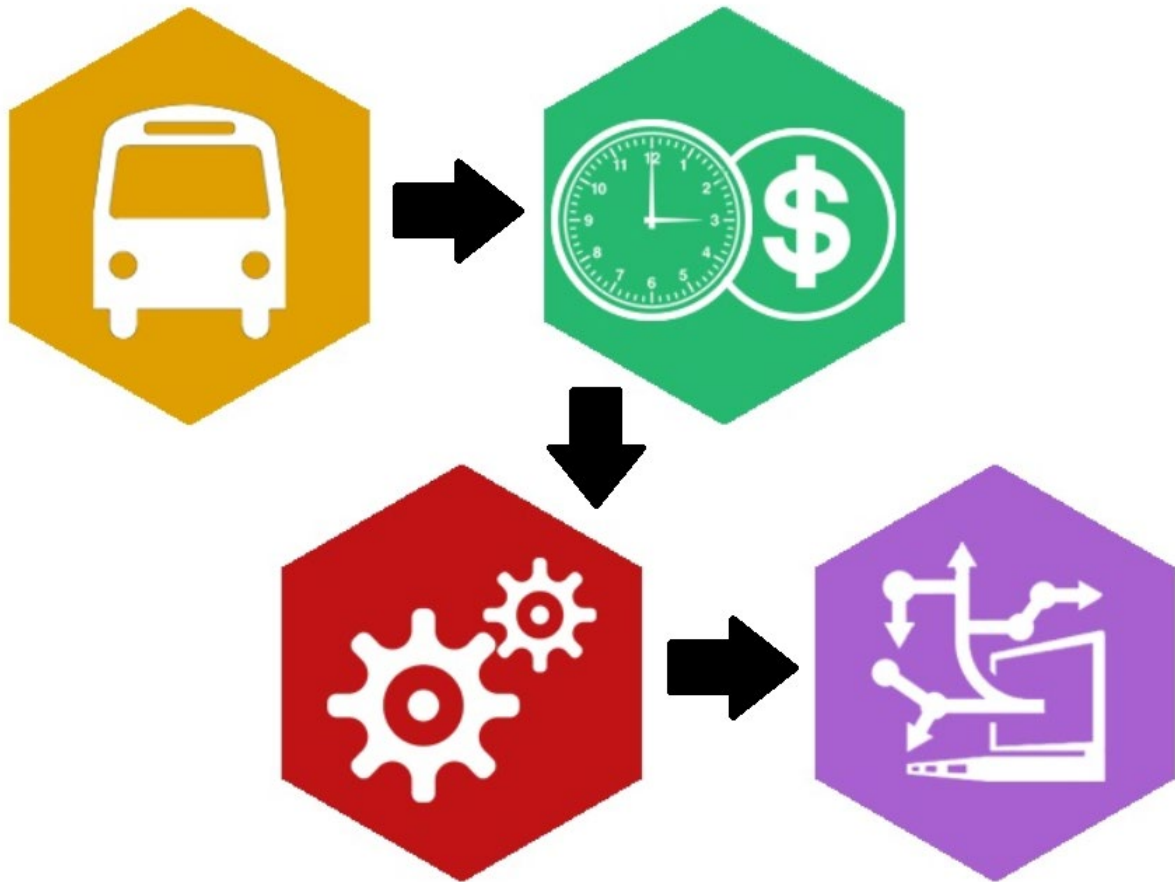


# National RTAP



This manual provides instructions and useful tips for allocating costs using the two-variable cost allocation calculator available from National RTAP.

Learn how to:

1. Use the two-variable methodology.
2. Input service, financial, and operational data.
3. Work with the Excel and Access versions of the Calculator.
4. Apply cost allocation results for further use.

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# 1. What’s New?

In January 2025, National RTAP, working with the Texas A&M Transportation Institute (TTI), updated in both the Excel and Access versions of the Cost Allocation Calculator with several new features. Here is a brief summary of what’s new with the Cost Allocation Calculator Version 4.1:

- Improvements and updates to expense codes.
- Glossary updates.
- Adding expense code definitions to the Excel Calculator.
- Other improvements to the Excel Calculator.
- Other improvements to the Access Calculator.

Details of each update is provided below.

## 1.1 Improvements and Updates to Expense Codes

The following changes in Table 1 were made to the table of Expense Codes contained in both the Excel and Access Calculators.

*Table 1: Manual Changes to the Expense Codes*

Change	Title	Code(s)	Justification
Added	Purchased Transportation Capital Leasing	5120.1 5120.2	A user can optionally include the capital leasing cost of a purchased transportation contract, which typically is not included in rural NTD reporting.
Added	Other Paid Absences	5014.1	To account for other paid absences to be attributable to vehicle operations.
Added	Interest Expenses: Administration	5210.6	Replaces other interest expense codes that differentiated by function. This is a reconciling expense.
Added	Operating Lease Expenses: Administration	5220.6	To allow for operating lease expenses to be assigned to the administrative function.
Added	Capital Leases: Administration	5230.6	To allow for capital lease expenses to be assigned to the administrative function.

Added	Related Parties Lease Agreements: Operations & Administration	5240.1 5240.6	To allow related parties lease expenses to be assigned to vehicle operations or administrative functions respectively.
Added	Depreciation: Administration	5260.6	To allow for depreciation expenses to be assigned to the administrative function.
Added	Amortization of Intangibles: Administration	5270.6	To allow for amortization of intangibles to be assigned to the administrative function.
Removed	ADA Expenses	5910.1: ADA Expenses – Operations 5910.2: ADA Expenses – Dispatch 5910.4: ADA Expenses – Vehicle Maintenance 5910.5: ADA Expenses – Facility Maintenance 5910.6: ADA Expenses – Administration 5920.1: ADA Related Reconciling Items – Operations 5920.2: ADA Related Reconciling Items – Dispatch 5920.3: ADA Related Reconciling Items – Fuel 5920.4: ADA Related Reconciling Items – Vehicle Maintenance 5920.5: ADA Related Reconciling Items – Facility Maintenance	These expenses are non-exclusive and actually duplicates expenses that should be reported elsewhere (e.g., in the operators’ salaries and wages object class).

		5920.6: ADA Related Reconciling Items – Administration	
Removed	All Dispatch subtitles	<p>5011.2: Operators’ Salaries and Wages</p> <p>5013.2: Other Salaries and Wages</p> <p>5014.2: Other Paid Absences</p> <p>5015.2: Fringe Benefits</p> <p>5020.2: Services</p> <p>5039.2: Other Materials and Supplies</p> <p>5060.2: Taxes</p> <p>5090.2: Miscellaneous Expenses</p> <p>5101.2: Purchased Transportation in Report</p> <p>5102.2: Purchased Transportation Filing Separate Report</p> <p>5250.2: Voluntary Non-Exchange Transactions</p> <p>5280.2: Extraordinary and Special Items</p> <p>5290.2: Other Reconciling Items</p>	Dispatch costs are part of the vehicle operations functions already and do not need to be disaggregated from other vehicle operations costs.
Removed	Miscellaneous Expenses: Fuel	5090.3	It is not possible for fuel to be a miscellaneous expense.

Removed	Interest Expenses: Operations, Vehicle Maintenance, Facility Maintenance	5210.1 5210.4 5210.5	Replaced by a new code for interest expenses. They are a reconciling item and general administrative expense only.
Changed	Materials and Supplies	5030	Updated the Code Group name from Materials and Services to Materials and Supplies.
Changed	Transit Function Column in the Expense Code List		To reflect the NTD function name that would be assigned to each code. This resulted in changing the Transit Function value for those codes that were for miles-based vehicle operations costs (e.g., fuel for revenue vehicles and tires and tubes for revenue vehicles) from <i>Fuel for Vehicle Operations</i> to <i>Vehicle Operations</i> . The calculators still use vehicle miles as the allocation basis for these codes.
Changed	Code definitions with different functions		Statements were added to code definitions to help the user differentiate between expense codes for the same object class but different functions.

## 1.2 Glossary Updates

Clarifying information was added to key terms to ensure differences are clear among the terms and to explain how the data elements are used in the calculator. Other updates improved readability and alignment between the Expense Code Table, the Uniform System of Accounts (USOA), and the National Transit Database (NTD) manual.

## 1.3 Updates to the Excel Calculator

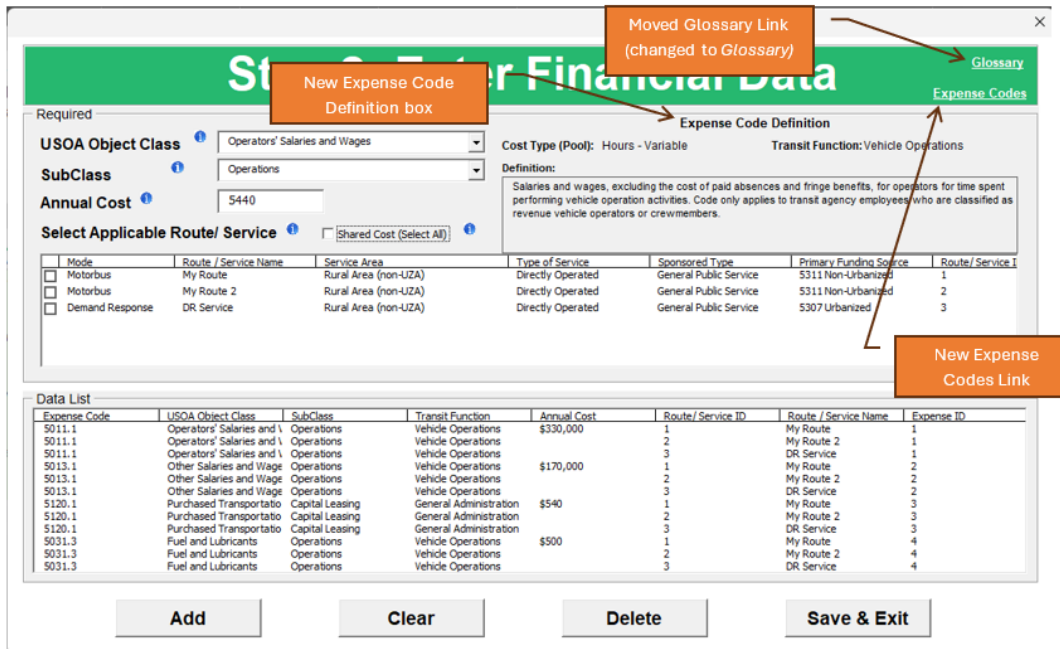
The Excel Calculator received several improvements, detailed below.

### Changes to Step 3: Enter Financial Data Page

- Added an Expense Code Definition box to Excel’s financial data page (see Figure 1). The contents of the Expense Code Definition box display the cost type, transit function, and definition of the expense code (USOA Object Class and SubClass dropdowns) selected by the user.

- Added an Expense Codes link to the financial data window (see Figure 1). Clicking on this button opens a filterable table of Expense Codes (see Figure 2).
- Changed “USOA SubClass” to “SubClass,” because the subclasses are for the calculator and are not directly from the USOA. (The same change was made to the Access Calculator.)

Figure 1: Excel Financial Data Page



## New Expense Code List

Figure 2 displays a screenshot of the full Expense Code List is shown if the user clicks *Expense Codes* from the financial data window. Users are able to filter the list of codes using drop downs for each column and an open-text search box to search through definitions for key words. Clicking on *Print Expense Code Report* generates a PDF of all expense codes.

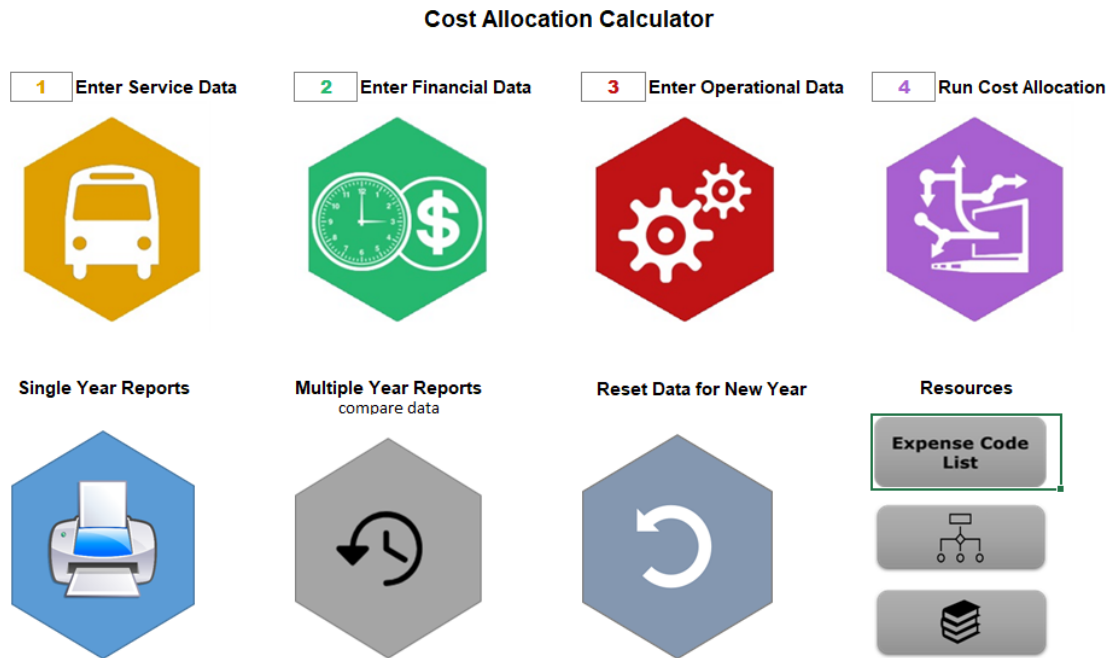
Figure 2: Expense Code List Filtered for 5040 - Utilities

AE	AF	AG	AH	AI	AJ	AK
<b>Expense Code List</b>						
- This form displays all expense codes used by the Cost Allocation Calculator						
- To filter the list of codes, use the boxes below the column labels. To remove the filter, click Clear Filters.						
<input type="button" value="Clear Filters"/>						
<b>USOA Cost Group</b>	<b>Expense Code</b>	<b>USOA Object Class</b>	<b>SubClass</b>	<b>Definition</b>	<b>Transit Function</b>	<b>Cost Type (Pool)</b>
5040 - Utilities						
5040 - Utilities	5040.1	Utilities	Operations	Expenses for electricity when used to power revenue vehicles. Other utilities should be classified under the General Utilities expense code.	Vehicle Operations	Miles - Variable
5040 - Utilities	5040.6	Utilities	General Utilities	Expenses for electricity, gas, water, telephone, heating oil, fuel for backup generators, and internet. Electricity used for revenue vehicles should be classified under the Operations subclass.	General Administration	Fixed

## New Button on Navigation Menu

Figure 3 shows an additional resource button was added on the Navigation Menu that opens the Expense Code List.

Figure 3: Navigation Menu Showing Added Expense Code List



## 1.4 Updates to the Access Calculator

In Version 4.1 of the Access Calculator, users can now export sponsored service operating data entries (passenger hours, miles, and trips data) from Step 4, Run Cost Allocation into an Excel workbook while generating the cost allocation summary reports shown in Figure 4, or from the Navigation Menu, Export button, Figure 5 which gives an option to Export Sponsored Service Operating Data, Figure 6.

Figure 4: Export Report by Sponsor

Generate Cost Allocation Summary Reports

Select Aggregation Type

By Sponsor

Select Results Output

View Report

Export Report (PDF)

View Results Table

Export Results Table (Excel)

View Results

Close Form

Figure 5: Main Navigation Menu Showing Export Data Button

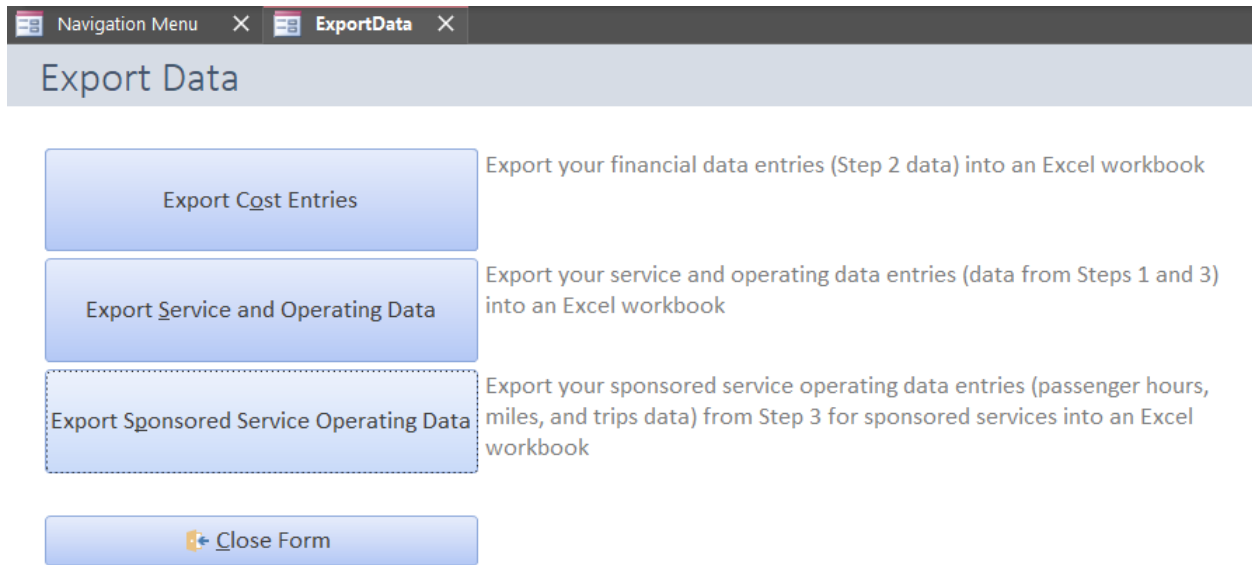
**Cost Allocation Calculator v4.1**
Active FY: 2021
Update Fiscal Year Label

<b>Active Fiscal Year Cost Allocation Steps</b>	Step	1	2	3	4
		Enter Service Data	Enter Financial Data	Enter Operational Data	Run Cost Allocation
	Status	10 service(s) entered	19 expense(s) entered Total value: \$1,448,400.00	10 service(s) have complete operational data	✓ Service and financial data exist

<b>Cost Allocation Reports</b>	Active Year Reports	Historical Year(s) Reports
	Status	Status
	Current cost allocation reports ready	2 years of historical cost allocation reports ready

<b>Database Management</b>	 Reference Data	Manage reference data: Service Areas, Funding Sources, and Sponsors.	 Calculator Helps	Open a list of helpful resources for using the Calculator.
	 Export Data	Export the data you entered into an Excel workbook.	 Calculator Flowcharts	View flowcharts that explain how the cost allocation calculator works.
	 Delete Data Batches	Delete batches of data (e.g., all Sponsors, all Routes or Services).		
	 Reset Data for a New Year's Allocation	Start a new fiscal year's cost allocation. Deletes financial and operational data. Services, Service Areas, and Sponsors stay unchanged.	 Exit	Exit the database

Figure 6: Export Sponsored Service Operating Data Button



## 2. Background

Texas A&M Transportation Institute (TTI) and RLS & Associates, Inc. worked together to develop Microsoft Access and Excel Calculators for the National Rural Technical Assistance Program (RTAP) that enable rural and tribal transit agencies to allocate expenses using a two-variable methodology. The Calculators guide user input of service, financial, and operational data to allocate expenses by routes, travel modes, jurisdictions, and other common transit designations. This instructional manual discusses the methodology used by the Calculator, data requirements for the user, step-by-step procedures for the Access and Excel versions, and ways to use the outputs from the Calculators.

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### *Looking for Instructions?*

If you would like to skip ahead to instructions past the overview and methodology of the Calculator, go to **page 33** for the Excel Calculator or **page 60** for the Access Calculator.

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### 2.1 Cost Allocation

Public transportation managers and finance officers encounter many situations on a day-to-day basis that may require the organization to allocate costs to a specific program, service, contract, or federal grant award. In many cases, the processes used to assign costs to a given program is relatively easy. The agency directly assigns the cost to the program in the general ledger.

In other cases, however, the assignment of costs may be more complicated, particularly if the expenditure benefits not one, but two or more programs or activities of the transit agency. When this occurs, it is necessary to use an allocation procedure to equitably assign the cost, on a proportionate basis, to each benefiting program. This process is referred to as **cost allocation**.

The term “cost allocation” may refer to any number of technical or accounting issues. Over time, transit providers have used this term to describe multiple scenarios; it is useful in our understanding of cost allocation issues to classify these allocation issues as either “financial-based” cost allocation issues or “service-based” cost allocation issues.

## Financial-Based Cost Allocation

Guidelines for addressing financial-based cost allocation issues are described in detail in federal guidance issued by OMB and updated in October 2025.<sup>1</sup> These issues are more commonly known as central service cost allocation plans or indirect cost allocation plans.

Financial-based cost allocation techniques generally apply organization-wide; they apply to all grants received by the organization and are generally not the responsibility of the transit program. An example would be a situation where a city transit program benefits from the services of other city departments (e.g., accounting, payroll, legal) and desires to claim costs incurred by these units under its various federal awards. The city will prepare a central service cost allocation plan.

Similarly, a nonprofit organization may provide multiple program services, including transit. Certain overhead and administrative costs incurred by the organization benefit all programs and services, including public transit. The organization seeks to recoup these costs in their billings to various federal agencies. The organization must have an approved indirect cost allocation plan in order for such costs to be reimbursable by the federal government.

Methods for preparing such plans are described in detail in appendices to 2 CFR § 200.

## Service-Based Cost Allocation

In the day-to-day operations of a public transit agency, there are other cost allocation issues that cannot readily be addressed or solved using the techniques in federal cost guidance. Some examples of service-based cost allocation issues include:

- A transit agency receives funding under both Federal Transit Administration’s (FTA) Section 5307 Urban Formula Program and Section 5311 Rural Formula Program. FTA expects the recipient or subrecipient to develop a reasonable basis for allocating operational costs between the two funding sources that is related to the service provided. The agency requires a cost allocation method to distribute costs to the two different, but related, programs.
- A transit agency provides charter service in accordance with 49 CFR part 604. Deficits from charter operations, however, are not eligible operating expenses under either the Section 5307 or Section 5311 programs. The transit agency must demonstrate that it is fully recovering the cost of charter service as part of the Triennial Review or other compliance oversight process in order to comply with FTA regulations. The agency requires a cost allocation method to verify that it is not unduly subsidizing charter expenses with FTA funds.

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<sup>1</sup> See *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*, issued by the Office of Management and Budget (OMB), codified at 2 CFR § 200 (Amended October 1, 2025).

- A transit agency coordinates service with various human service agencies in the area. The transit provider has a policy that public transit funds cannot be used to subsidize human service agency client transportation. The transit agency needs a cost allocation method to determine how to price contract services to ensure full cost recovery.
- A transit agency serves multiple local jurisdictions that are responsible for making financial contributions to the organization to support transit operations and capital acquisitions, as well as meeting the local share of project costs under various federal grants received by the transit agency. The participating local governments only wish to contribute based on the levels of service provided in their community. The agency requires a cost allocation method to equitably distribute service costs to the participating local governments.
- A transit agency provides fixed route service in its community. By law, the entity must also provide complementary paratransit for those individuals who cannot use the accessible fixed route system. Under National Transit Database (NTD) requirements, the agency must report fully allocated costs, *by mode*. The agency requires a cost allocation method to assign shared operating and administrative costs to both the fixed route and paratransit modes.
- A transit agency has been requested by the governing board to prepare a report on the costs and revenues generated by each fixed route in the agency's 12-route system. Each route has different service characteristics (in terms of daily revenue hours and revenue miles) and the agency requires a method to assign costs to each route. The agency needs a cost allocation method to perform this task.
- A transit agency in a growing community seeks to expand service. While consequential, transit management has determined that the expansion can be undertaken from existing facilities, personnel, and vehicles. Management recognizes that only variable expenses (not fixed expenses) will be impacted by the expansion. The agency needs a cost allocation method to estimate the variable expenses of this new service.

These scenarios are illustrative of range of circumstances that require a service-based cost allocation solution. Unlike financial-based cost allocation methods, where there is substantial guidance and methods promulgated by the federal government, there is little in the way of guidance for transit agencies in the preparation of service-based cost allocation.

## Goals of This Manual

The purpose of this document is to provide technical guidance to transit managers and finance directors in the service-based cost allocation techniques supported by the Cost Allocation Calculators. The Calculators provide enable transit managers to use consistent, equitable, and transparent techniques in their cost allocation practices.

### *Project Sponsors*

*National RTAP: Two-Variable Cost Allocation Calculator*

This Cost Allocation Calculator project is sponsored by National RTAP, which operates today under a cooperative agreement between the FTA and the Neponset Valley Transportation Management Association. National RTAP provides a comprehensive set of free technical assistance programs and resources including training materials, webinars, newsletters and technical briefs, peer resources, research, and innovative technology initiatives. The overarching mission of the organization is to address the training and technical assistance needs of rural and tribal transit operators across the nation, and to support the state RTAP programs. The goals of the RTAP program are to promote the safe and effective delivery of public transportation services in rural areas and to facilitate more efficient use of public transportation resources. To meet those goals, the program focuses on the following objectives:

- Improving the quality of training and technical assistance resources available to the rural transit industry
- Encouraging and assisting state, local, and peer networks to address training and technical assistance needs
- Promoting the coordination of transportation services
- Building a national database of information about the rural transit industry

### ***The Two-Variable Cost Allocation Calculator***

Recognizing a need in the industry to develop technical tools to assist transit agencies develop their own cost allocation tools, National RTAP contracted with TTI and subject matter expert Richard Garrity, of RLS & Associates, Inc., to develop the “Two-Variable Cost Allocation Calculator.” The Calculators are built on two readily available software platforms – Microsoft Excel and Microsoft Access and will be referred to in this manual Excel Calculator, Access Calculator or Calculators if discussing both. The Calculators perform similarly on both platforms, with some slight differences with input screens and features based on the software.

The Calculators require no special skills in either Excel or Access. A navigation menu and data input screens provide instructions for successfully using the Calculators. Moreover, the Calculators rely on data that should be readily available to every urban, small urban, rural, or tribal transit agency – meaning that no new data collection should be necessary to use the Calculators. The Calculator is designed to use one fiscal year of data to provide cost allocation results for that fiscal year.

Th Calculators can be used to address all of the service-based cost allocation issues identified earlier:

- The Calculators can be used to allocate costs to different federal grant programs that supports the transit agency.
- The Calculators can be used to compute the fully allocated cost of any service provided under contract to a human service agency.
- The Calculators can be used to allocate costs to different modes of service operated by the transit agency.
- The Calculators can be used to suballocate costs between different local sponsors on the same shared-ride demand responsive service.
- The Calculators can be used to develop costs of individual components of a service, such as a fixed route or a demand response run, thereby enabling the agency to conduct cost/benefit or breakeven analyses on individual service pieces.

## What is a Two-Variable Calculator?

Some costing techniques can be relatively simplistic, simply dividing total costs by a total unit of service. The result is the cost to the agency to deliver the service.

Consider the transit agency that has a total budget of \$1,250,378 and operates 19,225 revenue-hours of service and 230,839 revenue-miles of service. Many agencies simply compute their cost per revenue-hour or cost per revenue mile to allocate costs to different services. This agency assumes its fully allocated cost of service is \$64.04 per revenue hour or \$5.42 per revenue mile.

Consider the following examples:

- A route operates 12 revenue hours and 148 revenue-miles per day
- A route operates 12 revenue hours and 166 revenue-miles per day

Do these two routes cost the transit agency the same to operate?

If the transit agency uses a single variable cost allocation method assuming \$64.04 per revenue hour, both routes appear to cost the same: \$768.48 daily (\$64.04 per revenue hour multiplied by 12 revenue hours). However, most would agree that the second route costs the agency more to operate due to increased mileage.

Now consider the following examples:

- A route operates 11.25 revenue hours and 166 revenue miles per day
- A route operates 12.00 revenue hours and 166 revenue miles per day

Do these two routes cost the transit the same to operate?

If the transit agency uses a single variable cost allocation method assuming \$5.42 per revenue mile, both routes appear to cost the same: \$899.72 (\$5.42 per revenue mile multiplied by 166 revenue miles). Again, most would agree that the second route costs the agency more to operate due to increased time of operation.

These simplistic examples illustrate a core principle in cost allocation – the cost of transit service is based both on **time and distance**. Thus, any cost allocation tool must account for both time and distance if it is to accurately assess the cost of a service. This use of time (typically measured by total vehicle hours or revenue vehicle hours) and distance (typically measured by total vehicle miles or revenue vehicle miles) gives rise to the term “two-variable” cost allocation.

The Excel and Access Calculators use a two-variable cost allocation model.

## Outcomes of the Calculator

Using the Calculator provides agencies with the tools to better achieve:

- Consistent and robust documentation for federal grant reimbursement requests.
- Regular and consistent reporting of data to meet FTA requirements for NTD reporting and state reporting
- Consistent and transparent treatment of costs.
- Elimination of duplicative or misallocation of costs.
- More accurate and equitable cost by transit program, mode, service type, and jurisdiction.
- Reliable cost by transit function (i.e., vehicle operations, vehicle maintenance, facility maintenance, and general administration).
- Accurate reporting and evaluation of service performance.
- Basis for budgeting and projecting transit service.

The two-variable methodology used by the Calculators provides a mechanism to meet the NTD, FTA, and OMB reporting requirements and distributes transit agency operational costs to individual routes, service types, modes, sponsored services, and jurisdictions.

## Examples of Various Applications of the Calculators

To illustrate the potential uses of the Calculators, the following are actual documented uses of forerunners to the Calculator.

### *North Carolina Department of Transportation: Urban/Rural Grant Allocation*

North Carolina, as a state growing in population, saw many of its Section 5311 subrecipients transition to urbanized areas as a result of the 2010 Census. During a State Management Review

(SMR) conducted by FTA, the state was cited as deficient for not monitoring these entities with respect to the cost allocation requirement.

To resolve this compliance finding, the North Carolina Department of Transportation (DOT) developed a cost allocation model that was predicated on the ability to have financial data entered into the model consistent with the accounting practices of the majority of these dual recipients. The model enabled the transit provider to enter all direct costs attributable to urban and rural operation, respectively, and then assign “shared” costs (cost not readily assignable to one geographic area or the other) to a shared cost center. These costs were then allocated to the two respective grant programs using revenue hours and revenue miles. This model embraced the very principles at the heart of the National RTAP Two-Variable Cost Calculator.

More importantly, FTA, in reviewing the State’s remedial action to close this compliance finding, called together a team consisting of the FTA Regional Office, SMR consultants, and NTD specialists to evaluate the procedures used in the model and determine whether North Carolina DOT met its obligation to ensure that recipients or subrecipients has a reasonable basis for allocating costs. After demonstration and review, FTA determined that the model was an excellent example for both cost allocation among its programs and for NTD reporting.

### ***State Established Rate Models***

As noted in *TCRP Report 144*:

*Adopting fully allocated cost accounting practices strongly supports federal grants management goals. First, many federal programs contain regulatory or program guidance that indicates that for funds expended on third party contracts and vendors, due diligence must be exercised to ensure that the lowest cost service is obtained most appropriate to client needs. Second, in situations where an organization is purchasing service from a third party, the purchasing organization needs assurance that it is only paying for services rendered to its own clientele.<sup>2</sup>*

This second factor is particularly relevant when a human service organization opts to contract with a transportation provider that coordinates services in the local community. When such broad coordination occurs, purchasers need to be assured that they pay only their fair share of program costs.

Previously, Florida and North Carolina developed tools to assist transportation providers in accumulating data on the full cost of transportation services and translating this cost information into rates to charge to third parties who may be interested in purchasing service from the transit provider organization. Despite being developed independently, both cost allocation and rate-

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<sup>2</sup> Burkhardt, *op. cit.*, Volume II, p. 49.

setting models have commonalities. In addition to using simple and commonly understood computer spreadsheet software (e.g., Microsoft Excel), both models:

- Require the transportation provider to report all costs as part of the model’s input, using a standardized and comprehensive chart of accounts.
- Require the transportation provider to specify projected units of services to be consumed (i.e., vehicle miles and vehicle hours).

## 2.2 Foundational Concepts

### Key Terms

Here are a few terms that are important to understanding cost allocation. All of the terms are defined within the context of public transit service-based cost allocation.

- *Operational Cost*: transit costs that are consumed in the day-to-day operations of public transit service. Operational costs exclude capital costs (i.e., costs to purchase or rehabilitate capital assets). (Note: operational costs are labeled in the USOA as *Operating Expenses*, which includes all object classes in the 5000s.)
- *Cost Allocation*: the act of taking a sum of costs and distributing those costs to individual modes, routes, services, jurisdictions, and/or sponsors. (For purposes of the Cost Allocation Calculators, only operational costs are allocated—capital costs are excluded.)
- *Fully Allocated Cost*: the full cost of a transit route or service, including a share of all variable and fixed costs incurred by the transit agency. For example, the fully allocated operational cost of a single route will contain that route’s relative share of all agency operational costs, allocated to the route using a consistent methodology. (Note that capital costs are typically excluded from cost allocation.) For a contrary example, if a transit agency calculates the cost of a route using only average fuel consumption and driver wages, the cost estimate ignores other costs (e.g., administration, planning, maintenance, etc.) and therefore is NOT fully allocated.
- *Variable Costs*: operational costs that are mainly a function of the amount of service provided. For example, the cost of fuel, parts, and driver wages are variable costs. They change with the amount of service provided.
- *Fixed Costs*: operational costs that do not change with the amount of service provided (in the short run). For example, the cost of facility maintenance, administration salaries, or management computers do not change with the amount of service provided. There are two main types of fixed costs:
  - *Direct Fixed Costs*: direct fixed costs are those fixed costs associated with assets and functions owned by the transit agency. For example, a transit agency that has

its own human resources, IT, and facilities has direct fixed costs associated with these functions. The transit agency incurs and pays for these functions directly.

- *Indirect Fixed Costs*: indirect fixed costs are those fixed costs associated with functions or assets utilized (but not directly managed by) the transit agency. For example, a transit agency may be part of a city government and thus utilizes the city’s human resources, IT, and facilities. Because these resources are also used by other departments of city government, the costs to the transit agency are indirect (and it may be difficult to quantify the exact portion of city staff time spent on transit agency needs).

### Shared vs. Direct Costs

In cost allocation, costs must be classified as either shared or direct, depending on whether the cost is attributable to multiple transit services or only applies to a specific service.

*Shared costs* apply to multiple services and cannot reasonably be tracked and assigned to a single service without extensive or undue effort. Shared costs are either global, applying to all services operated by the transit agency, or specialized, applying to a subset of services (e.g., all fixed bus routes). *Direct costs* can be assigned directly to a specific service (e.g., to Route 1). Table 2 contains examples of these applicability categories for a single cost: operators’ salaries and wages at an example transit agency with several fixed routes and a demand-response service.

Table 2: Cost Applicability Categories and Examples

Cost Applicability Category	Example	Cost Applies to
Shared global	The same operators work interchangeably between fixed-route and demand-response services.	All Services
Shared specialized	Operators are dedicated to fixed routes and work interchangeably across all fixed routes.	Only fixed-route services
Direct	Some operators are dedicated to a single commuter bus route. They only work on this route.	Only the commuter bus route

## Summary of the Calculators’ Cost Allocation Methodology

The Calculators allocate operational costs to transit services using a two-variable cost allocation model. As discussed previously, the two variables are vehicle hours and vehicle miles. The set of steps below summarizes how the Calculators perform the cost allocation for a given fiscal year.

- A user enters a list of unique transit services the agency operates. A “service” represents the lowest level of cost allocation possible in the Calculator. (There is one exception to this rule: shared-ride demand-responsive service costs can be sub-allocated to sponsors when there are multiple sponsors paying for rides shared on a demand-responsive service.) For agencies with multiple transit modes (e.g., fixed route and demand response), users should enter at least one *service* for each mode. Typically, there are multiple services entered for a single mode (e.g., multiple fixed routes with each being a service).
- A user enters fiscal year vehicle hours and vehicle miles (the two allocation variables) for each transit service operated by the transit agency. A user also enters, if applicable, passenger hours and passenger miles data for sponsored services to allow for cost allocation to sponsors.
- A user enters operational cost data for the fiscal year (typically using the transit agency’s chart of accounts). A new cost entry is added to the Calculator for each unique cost. A unique cost means a unique combination of the following characteristics:
  - USOA object class (more details in Section 2.3).
  - Calculator SubClass (more details in Section 2.3).
  - Applicability (see Table 2 above).
- The Calculator groups costs into shared cost allocation pools based on the user-selected cost characteristics. Any costs direct to a service are not allocated but are instead assigned directly to the applicable service.
- The Calculator allocates variable costs in the shared cost allocation pools using service-based allocation variables. For example, costs with the SubClass *Vehicle Maintenance* are allocated to applicable services based on each service’s vehicle miles.
- The Calculator allocates fixed costs in the shared cost allocation pools using the allocated variable costs of each service.
- If requested by the user, the Calculator sub-allocates the costs of sponsored services to the services’ sponsors.

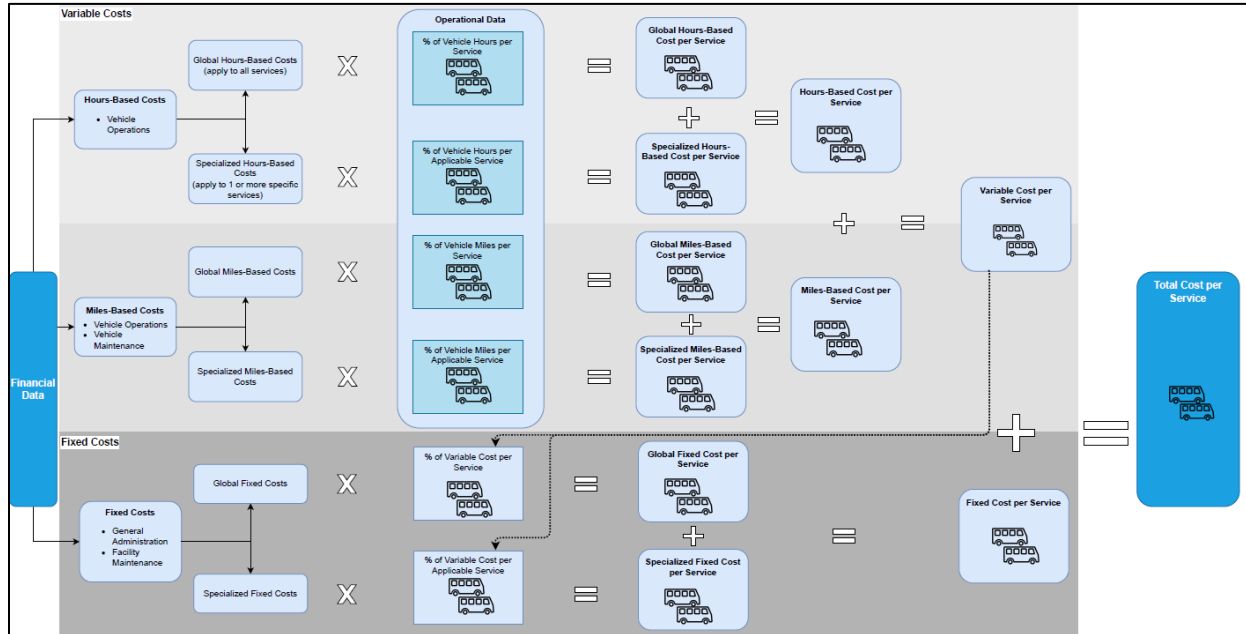
More details and diagrams that explain the inner workings of the Calculators including the process flowcharts can be found in Appendix C. Step-by-step instructions on using the Calculators can be found in Section 2.5, Section 3 (Excel), and Section 4 (Access).

### ***Global vs. Specialized Costs***

The Calculator also allows users to determine the applicability of costs as either shared between all routes/services or specialized to a specific service (or set of services) as demonstrated in

Figure 7. If any costs are characterized as not being globally shared between all services, the Calculator will separate out these specialized costs and allocate them between only the specific applicable services using the same variables of vehicle hours and vehicle miles for variable costs.

Figure 7: Schematic of Global vs. Specialized Costs

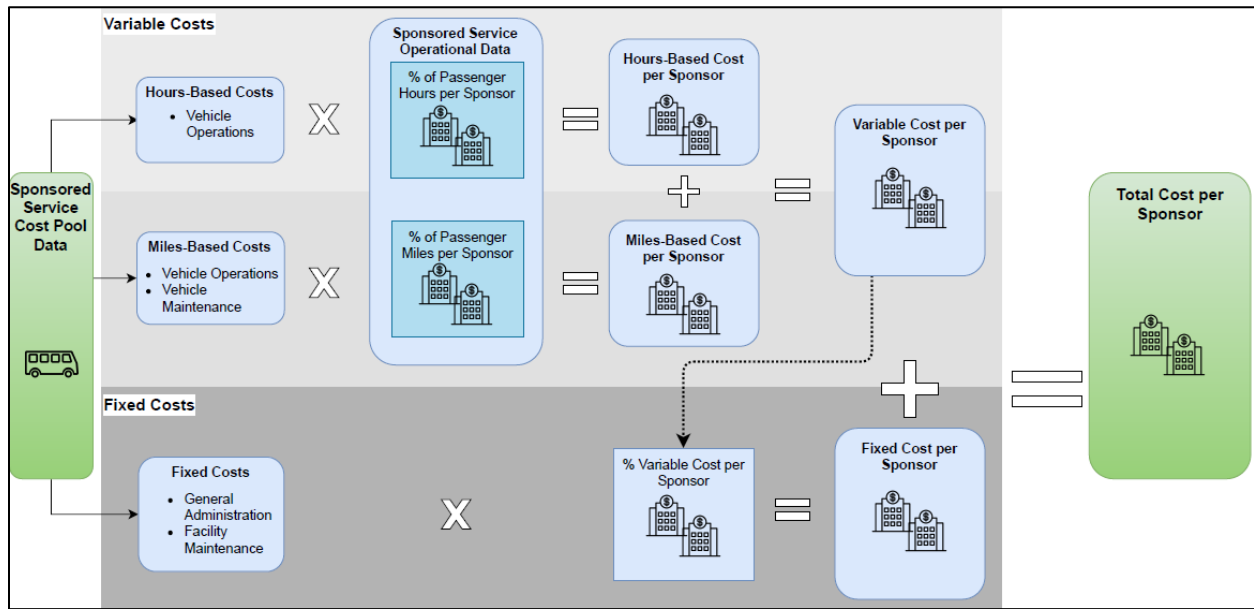


**Sponsors for Shared-Ride Services**

The Calculator additionally allows for suballocation of costs between local sponsors on shared-ride demand responsive services as shown in Figure 8. In the Calculator, if a service is characterized as “Sponsored” while inputting service data in Step 1, Enter Service Data, users can then enter data for each local sponsor on the service (including the name of the sponsor, passenger hours and passenger miles for sponsor trips, and the total number of sponsored passenger trips) on Step 3, Enter Operational Data.

After the total cost for each service is calculated, the Calculator will next calculate the hours-based costs and miles-based costs for each local sponsor within each sponsored service using passenger hours and passenger miles, respectively. The steps for suballocating costs to local sponsors follow the same basic steps as the main two-variable cost allocation process. In the Calculator, the main cost allocation process and the sponsored service suballocation process happen concurrently with one click of the Run Cost Allocation button.

Figure 8: Schematic of Sponsors for Shared-Ride Services



## 2.3 Transit Cost Classifications in USOA

The FTA maintains a reporting system for public transportation agencies called the NTD. The NTD uses uniform accounting categories to collect public transportation financial data and defines these in the Uniform System of Accounts (USOA). Generally, the transit cost classifications in the Calculator follow the classifications from the USOA to be consistent with federal reporting requirements. The USOA has four function categories: Vehicle Operations, Vehicle Maintenance, Facility Maintenance, and General Administration. The Calculator includes two additional categories within Vehicle Operations (hours-based and miles-based) to help with further separate some vehicle operations costs into those that vary as a function of vehicle hours (e.g., operator and dispatcher salaries) and those that vary as a function of vehicle miles (i.e., fuel for revenue vehicles, utilities for revenue vehicles, and tires and tubes for revenue vehicles). Within the Calculator, these categories of costs are called SubClasses in Step 2: Enter Financial Data.

The tables below are adapted from *Common Examples of Operating Expenses Reported by Function* Table 4 on page 35 of the USOA, providing examples of typical transit costs and how those costs would be assigned to USOA object classes and functions. For the Calculator, users need to be able to assign costs from their transit agency’s chart of accounts to the correct Object Class (such as Other Salaries and Wages for non-operator staff salaries) and correct SubClass (such as Vehicle Maintenance for vehicle mechanics’ salaries). The Calculator includes a helpful Glossary, Table 3 and Table 4 to assist with the correct classification of cost entries to USOA object classes and subclasses. The Glossary can be found from the Excel Navigation Menu or Glossary tab, or the Access Navigation Menu by clicking on the Calculator Helps button.

Table 3: Calculator Glossary by Vehicle Operations and Vehicle Maintenance Functions

Operating Expenses Object Classes	Operating Expenses Functions (or SubClasses)	
	Vehicle Operations (including Hours-based and Miles-Based)	Vehicle Maintenance
Operators’ Salaries and Wages (5011)	Operators’ driving time	Operators fueling vehicles
Operators’ Paid Absences (5012)	Operators’ vacation and sick leave (allocated among four functions)	Operators’ vacation and sick leave (allocated among four functions)
Other Salaries and Wages (5013)	Dispatching revenue vehicles	Mechanics repairing vehicles
Other Paid Absences (5014)	Police officers’ vacation	Tow truck drivers’ sick leave
Fringe Benefits (5015)	Schedulers’ health insurance	Shop supervisor’s pension
Services (5020)	Security guard service	Vehicle body work at an independent garage
Fuel and Lubricants (5031)	Fuel for revenue vehicles	Fuel for service vehicles
Tires and Tubes (5032)	Tires for revenue vehicles	Tires for revenue vehicles
Other Materials and Supplies (5039)	Fare cards	Vehicle parts
Utilities (5040)	Electricity used to propel a streetcar	Not applicable
Casualty and Liability Costs (5050)	Consolidated under General Administration function	Consolidated under General Administration function
Taxes (5060)	Revenue vehicle licensing	Fuel tax on fuel for service vehicles
Purchased Transportation – In Report (5101)	PT contractor’s employees driving vehicles	PT contractor’s employees repairing vehicles

Purchased Transportation – Filing Separate Report (5102)	PT contractor’s employees preparing schedules	PT contractor’s employees refueling vehicles
Miscellaneous Expenses (5090)	Highway tolls paid by revenue vehicles	Mechanics’ travel expenses going to training

*Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*, issued by the Office of Management and Budget (OMB), codified at 2 CFR § 200 (Amended October 1, 2025).

Table 4: Calculator Glossary by Facility Maintenance and General Administrative Functions

Operating Expenses Object Classes	Operating Expenses Functions (or SubClasses)	
	Facility Maintenance	General Administration
Operators’ Salaries and Wages (5011)	Operators cleaning a garage	Operators taking customer service calls
Operators’ Paid Absences (5012)	Operators’ vacation and sick leave (allocated among four functions)	Operators’ vacation and sick leave (allocated among four functions)
Other Salaries and Wages (5013)	Custodians cleaning offices	Accountants writing a budget
Other Paid Absences (5014)	Plumbers’ holiday leave	General manager’s maternity leave
Fringe Benefits (5015)	Track workers’ Social Security taxes	Customer service representative’s unemployment plan
Services (5020)	Independent electrician service of maintenance garage	Independent auditor
Fuel and Lubricants (5031)	Not applicable	Not applicable
Tires and Tubes (5032)	Not applicable	Not applicable
Other Materials and Supplies (5039)	Cleaning supplies	Office supplies
Utilities (5040)	Not applicable	Natural gas to heat buildings

Casualty and Liability Costs (5050)	Consolidated under General Administration function	Vehicle liability insurance
Taxes (5060)	Building permits	Property taxes
Purchased Transportation – In Report (5101.2)	PT contractor’s employees maintaining a garage	PT contractor’s employees doing human resources work
Purchased Transportation – Filing Separate Report (5102.2)	PT contractor’s employees maintaining office space	PT contractor’s employees negotiating contracts
Miscellaneous Expenses (5090)	Office building air conditioner repair staff’s travel expenses going to training	Dues for membership in professional organizations

*Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*, issued by the Office of Management and Budget (OMB), codified at 2 CFR § 200 (Amended October 1, 2025).

## 2.4 Data Needed for the Calculator

The Calculator performs all the cost allocation processes using the two-variable methodology at the push of a button. No calculations are performed by the user. However, the Calculator is reliant on service, financial, and operational data being prepared ahead of time so that it can be input into each of the Calculator steps. This section provides a checklist of data needed to use the Calculator.

- Fiscal year period for which you are allocating costs
- List of all routes/services operated by the transit agency (for costs to be allocated to a route/service, you must have the route or service in the list)
- Travel mode for each route/service
- Service area for each route/service
  - If any routes/services operate in multiple jurisdictions (e.g. an urbanized area and a non-urbanized area) and you want to allocate costs to each jurisdiction, then you must separate the miles, hours, and trips data for the route/service proportionally—one for each jurisdiction.
- Notations for which routes/services are purchased transportation
- Total and revenue vehicle hours for each route/service in the fiscal year
- Total and revenue vehicle miles for each route/service in the fiscal year
- Number of passenger trips for each route/service in the fiscal year
- List of sponsors for each route/service that is shared-ride demand responsive (the Calculator allows for suballocation to sponsors for the following modes: demand response, demand response taxi, vanpool, and volunteer driver program)

- Collect passenger miles, passenger hours, and passenger trips for each sponsor in the same one-year period
- Primary funding source for each route/service (such as a federal grant program, state grant program, or a local funding source). Typical options include the Section 5311, Section 5307, or Section 5310 grant programs.

Note that you can create your own list of funding sources; however, each route/service can only have a *single primary funding source*. If you have a route/service with multiple funding sources and you want to sub-allocate costs to those funding sources you have two options:

- For shared-ride demand responsive services: mark the route/service as *Sponsored* and then provide passenger hours, passenger miles, and passenger trip data for each sponsor.
- For all other services: add a route/service segment/portion for each funding source and provide the hours, miles, and passenger trips attributable to the funding source of the route/service segment/portion.
- Chart of accounts for all operational costs during the fiscal year, including:
  - USOA object class (type of cost) and subclass (transit function) for each cost entry in the chart of accounts (see Section 2.3)
  - Applicability of each cost entry (i.e., is the cost global shared, specialized shared, or direct to a specific routes/service?)

## 2.5 Four Steps of the Calculator

Both versions of the Calculator follow the same four-step process for inputting data and allocating costs.

### Step 1: Enter Service Data

In Step 1: Enter Service Data, users input all the routes/services their agency operates or oversees and wishes to allocate costs to. A route/service is the *smallest* unit of service to which costs can be allocated. (With one exception: costs allocated individual services can be suballocated to sponsors in the case of services that are shared-ride demand responsive.) The characteristics needed in the Service Data page include route/service name, mode, service area, type of service, sponsored type, and primary funding source. The Calculators provide dropdown lists with pre-defined options for the service characteristics. Options for service areas and primary funding sources can be customized to



allow for additional choices not already available in the Calculator. More information on definitions of service data as options for selection in the Calculator is available in Appendix A.

## Step 2: Enter Financial Data

In Step 2: Enter Financial Data, users input the agency’s operational expenses to be allocated or directly assigned to routes/services. Expenses must be entered by USOA object class and by “subclass” (subclasses roughly correspond to USOA and NTD transit functions). Selecting the appropriate object class and subclass for an expense is critical, because it determines how the Calculator will treat the cost during cost allocation.



The Calculators have included all of the USOA object classes applicable to transit operational expenses and have corresponding subclasses that align with NTD functions or that are necessary for consistent cost allocation. When entering financial data, the Calculator provides a definition based on the selected object class and subclass chosen. More information on definitions of USOA object classes and subclasses is available in Appendix B.

When entering financial data, users must also indicate to which services the cost applies and therefore should be allocated to. In the Excel Calculator, users either select *All* to indicate that the cost should be allocated to every service entered in Step 1: Enter Service Data or select the individual route(s)/service(s). In the Access Calculator, users have the option to indicate that costs apply to specific route(s)/service(s) or to groups of routes/services based on mode, service area, type of service, or primary funding source.

Be sure to input a full twelve-month period of all costs associated with transit to ensure all costs are represented. Your total entered expenses in the calculator should total to the sum of fiscal year operational expenses for your agency’s transit program. (There are some exceptions to this rule. For example, you may want to exclude expenses ineligible for grant reimbursement if you are using your cost allocation results for purposes of calculating reimbursements. As another example, you may want to exclude reconciling items [USOA object class 5200] if you are a 5311 subrecipient using the cost allocation results in your NTD reporting.)

### Step 3: Enter Operational Data

In Step 3: Enter Operational Data, users input vehicle hours, vehicle miles, revenue hours, revenue miles, and passenger trips for each route/service input previously in the Service Data page.

For sponsored transportation services with multiple sponsors, users will also have the option to input sponsor-specific data for any shared-ride demand responsive service that was classified as Sponsored in Step 1: Enter Service Data. (See the next section on Shared-Ride Demand Responsive Cost Allocation.)



#### ***Shared-Ride Demand Responsive Cost Allocation***

If your transit agency has customers from different sponsored programs sharing vehicles, then costs cannot be accurately allocated to sponsors using vehicle miles and hours because a single vehicle hour and mile may be shared by multiple sponsors' passengers. Within Step 3: Enter Operational Data, transit agencies can sub-allocate expenses to sponsors of shared-ride demand responsive services.

To sub-allocate expenses to sponsors, users must provide the passenger hours, passenger miles, and passenger trips associated with each individual sponsors' passengers. These data allow the Calculator to sub-allocate the shared-ride demand responsive service's cost to individual sponsors.

If your agency does not have a 100% data set of passenger hours and passenger miles per sponsor, you might need to follow sample-based method to estimate the average passenger trip length for each sponsor. More information on this sampling and estimation method can be found in the Cost Allocation module of the *Making Dollars and Sense of Transit Finance* course materials available online from TTI<sup>3</sup> and in Section 2.3 of National RTAP's *Advanced Topics in Financial Management for Rural Transit Providers*.

1. Take a sample of driver manifests to determine average trip duration and length by sponsor. For example, general public passenger trips may average 10 miles and veterans' passenger trips may average 20 miles.
2. Estimate total annual passenger hours and passenger miles per sponsor by multiplying total annual passenger trips for that sponsor by the average trip duration and length for that sponsor.

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<sup>3</sup> <https://groups.tti.tamu.edu/transit-mobility/resources/making-dollars-and-sense-of-transit-finance/>

3. Calculate the percent of passenger hours and passenger miles attributable to each sponsor.
4. Multiply the percent of passenger hours by the total hours-based cost of the shared-ride demand responsive service. Multiply the percent of passenger miles by the total miles-based cost of the shared-ride demand responsive service. Then allocate the fixed costs relative to the proportion of variable costs associated with each sponsor.

#### Step 4: Run Cost Allocation

In Step 4: Run Cost Allocation, the allocation process uses the data entered into the previous three steps to allocate variable and fixed costs by vehicle hours and miles data (or passenger hours and miles for shared-ride demand responsive service). The allocation process is performed for individual routes/ services, sponsors within shared-ride demand responsive services, as well as groups of routes/services (e.g., routes/services grouped by mode or primary funding program).



The Calculator then produces summary reports with the fully allocated costs for routes/services, along with costs by transit function and performance metrics calculated from the cost and operational data. Both Calculators allow users to print the summary reports in the PDF format. The Access version of the Calculator can also export data inputs and cost allocation outputs to Excel.

The Run Cost Allocation command allocates costs and produces reports for a single fiscal year. Version 4.1 of the Calculator stores data and produces reports for multiple fiscal years, allowing for comparison of total allocated costs and performance metrics across years. More information about the Active Year Reports (Access) and Single Year Reports (Excel) and Historical Reports (Access) or Multiple Year Reports (Excel) produced by the Calculator is discussed in the sections for the Excel and Access versions of the Calculator.

## 3. Directions for Excel Calculator

The Excel version of the Cost Allocation Calculator is available for download from the National RTAP website. The Calculator allows users to input annual data for their transit services and expenses and produces reports on fully allocated costs. The Calculator stores allocation data for a single year and stores allocation results for multiple years, allowing users to compare multiple years' results. For each fiscal year period you can reset the Calculator for a new year, which will clear all financial and operational data while keeping service data characteristics for your routes/services.

### 3.1 Downloading the Excel Calculator

#### Check Whether You Have Microsoft Excel

You'll need Microsoft Excel to use the Excel Calculator. Virtually all computers running Windows have Microsoft Excel. If you do not know whether you have Microsoft Excel on your computer, follow these steps for computers running the Windows operating system.

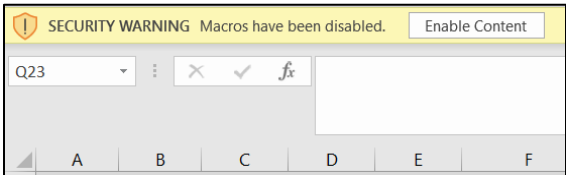
- Click on the *Windows* button on the bottom left corner of your computer screen to browse the programs on your computer.
- Find the search bar and type *Excel*. If you have Excel, the Excel icon should display.

If you do not have Excel, you will not be able to run the Excel Calculator. Consider [downloading the Access Version of the Cost Allocation Calculator](#).

#### Downloading and Saving the Excel Calculator the First Time

- Download the Excel Calculator from the National RTAP website.
- Save the Calculator to a folder on your computer. Preferably, this would be a trusted location. A trusted location is a folder or drive where you usually save and open workplace files. Do not simply leave the file in your downloads folder, because your downloads folder is not typically a trusted location, causing the Calculator to malfunction.
- Unblock protection for the Calculator file using your file window. To do this:
  - Find and right click on the file.
  - The file properties window should appear. Navigate to the *General* tab.
  - At the bottom of the *General* tab, locate the *Security* section that states: *This file came from another computer and might be blocked to help protect this computer.*
  - Check the *Unblock* checkbox and then click *OK*.

## Open the Excel Calculator File

- When you first open the Excel Calculator, you may see a security warning banner appear near the top of the window prompting you to “Enable Content”. Simply click the **Enable Content** button to enable the macros needed for the Calculator to run.
- 
- If, after you enable content, you still get a message saying that Microsoft has blocked macros from running, that means either:
    - You have not unblocked protection (see above), or
    - You may need to save the file to a trusted location (see below), or
    - There are additional company security measures that may need resolved. Visit this [site](#) for some tips or contact your IT Department.





## Find and Create Trusted Locations

One way to help reduce security issues preventing your use of the Calculator is to save the file to a trusted location. To find your computer’s trusted locations, follow the steps below and check out this [helpful Microsoft article](#).

- Open Excel and navigate to File > Options > Trust Center > Trust Center Settings.
- Click on Trusted Locations and view the list of trusted locations. Adding trusted locations is only possible if your organization’s security policies allow it.
- To add a trusted location, click on the Add New Location button.
- Then use the Browse button to find the folder you want to make a trusted location and click OK. In this case, you would be adding as a trusted location the folder where you want to store the Calculator. Ensure the Calculator is saved to the file you designated as trusted otherwise you will continue to get an error.
- Click OK to exit the Trust Center and any other windows.

## 3.2 Overview of Excel Functionality

The Excel Calculator has consistent features to go from page to page, save and update data, or delete unneeded items. Below is a list of basic features to understand while using the Calculator.

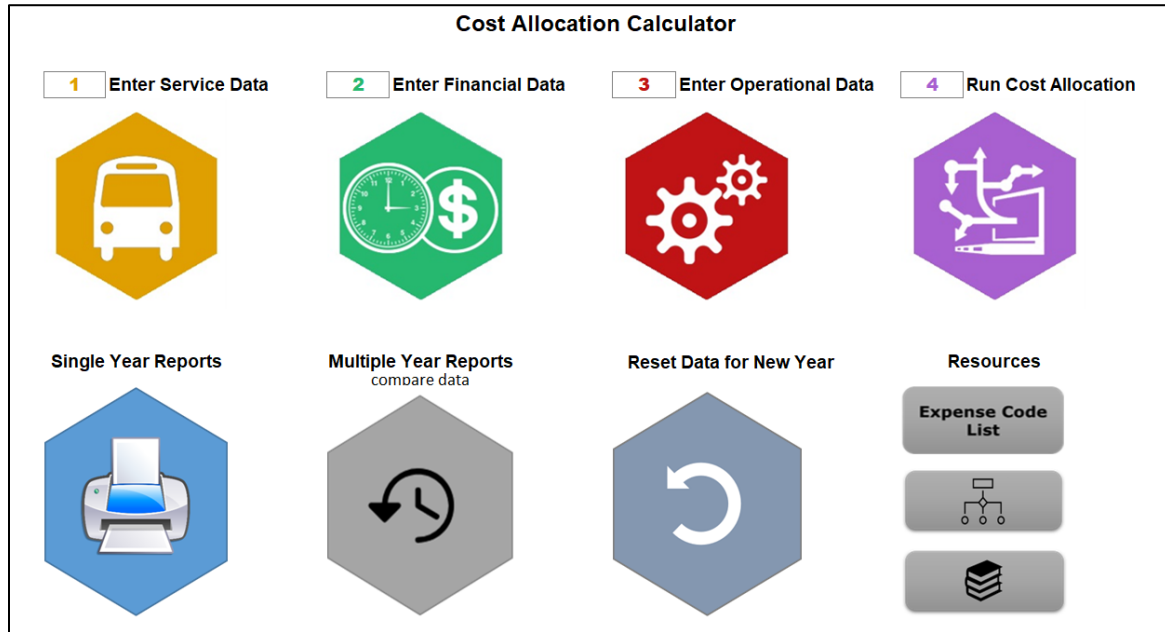
- **Navigation** – there are two ways to move from page to page. Either use the buttons on the Navigation Menu *or* click on the tab names at the bottom of the workbook tabs to go from page to page.
- **Saving Data** – The Calculator uses data entry windows for data input and actively saves your data each time you close a given menu. However, there is also no harm in manually saving your changes to your workbook if your computer is not automatically saving changes.
- **Data Entry Window** – Below are the common action buttons in each data entry window:
  - Add a data record to the data list by clicking **Add** button
  - Clear all data input cells by clicking the **Clear** button
  - Delete a data record by selecting it, then clicking the **Delete** button
  - Exit the data entry window once you are finished using the **Save & Exit** button
- **Help Text** – Within each data entry window, hover over the  icons to reveal helpful tips and definitions.
- **Deleting Data** – The Calculator also allows you to clear all records on the page by clicking the  button next to the data list.
- **Exporting Data** – The Calculator allows users to export data into PDF reports from each of the data entry pages by clicking the  button next to the data list.
- **Print** – The Calculator enables users to print reports of cost allocation results to a PDF file or a printer on your network by clicking on one of report option buttons to the right of the  icon near the top of the Summary Report tab(s).
- **Return to Start** – Click on the **Finish and Back to Menu** in each page to return to the Navigation Menu.

### 3.3 Navigation Menu

The Calculator opens on the Navigation Menu, Figure 9, which has two rows of icon buttons. The first row has four icon buttons linking to each step of the allocation process. You can either use the buttons on the Navigation Menu or the tabs at the bottom of the Excel workbook to go from page to page. The Calculator requires that Steps 1 through 3 be completed in order before allowing you to Run Cost Allocation in Step 4. The second row has buttons for different report

options, a master button for resetting the Calculator for a new fiscal year, and buttons linking to resources, including the Expense Code List, Process Flowcharts, and Glossary.

Figure 9: Cost Allocation Navigation Menu



- Clicking the yellow **Step 1: Enter Service Data** button takes you to the Step 1: Enter Service Data page
- Clicking the green **Step 2: Enter Financial Data** button takes you to the Step 2: Enter Financial Data page
- Clicking the red **Step 3: Enter Operational Data** button takes you to the Step 3: Enter Operational Data page
- Clicking the purple **Step 4: Run Cost Allocation** button takes you to the Step 4: Cost Allocation page
- Clicking the blue **Single Year Reports** button loads the window for Single Year Reports
- Clicking the grey **Multiple Year Reports** button loads the window for Multiple Year Reports
- Clicking the blue-grey **Reset Data for New Year** button clears all data entered in the Step 2: Enter Financial Data, Step 3: Enter Operational Data, and Step 4: Run Cost Allocation pages. Data entered in Step 1: Enter Service Data is not cleared.
- Clicking the first grey button under Resources (**Expense Code List**) takes you to the fully filterable Expense Code List.
- Clicking on the second grey button under Resources (with the process chart icon) takes you to the Process **Flowcharts** page.
- Clicking the third grey button under Resources (with the stack of books icon) takes you to the **Glossary** page.

### 3.4 Step 1: Enter Service Data



First, enter Service Data by either clicking the yellow button on the Navigation Menu *or* clicking on the Step 1: Enter Service Data tab in the workbook. When using the Calculator for the first time the page will appear like the image below. The data will populate in the columns of the page as you enter and save them in the data entry window.

1

Users are required to enter information for route/service name, mode, service area, type of service, sponsored type, and primary funding source. The mode, service area, type of service, sponsored type, and primary funding labels come from dropdown lists, while the route/service names are entirely user-defined. Users can overwrite prelisted options for service area names and primary funding sources by typing in the dropdown window. The information for each route/service name allows the application to produce subtotals of cost allocation results by the categories of information assigned to the routes/services, such as costs by mode, service area, or primary funding source.

Click to Enter Service Data

Finish and Back to Menu

	Required	Required	Required	Required	Required	Required	Tool Generated
	Mode	Route / Service Name	Service Area	Type of Service	Sponsored Type	Primary Funding Source	Route/ Service ID

Navigation Menu
Step 1 Enter Service Data
Step 2 Enter Financial Data
Step 3 Enter Operational Data
Step 4 Cost Allocation
Glossary
Process Flowcharts
+

### Enter Data

To start, click on the **Click to Enter Service Data** button at the top of the page. A window will pop up to input data. The data list in the menu shows the routes/services currently saved in the Calculator – it will appear blank the first time you use the Calculator.

## Step 1: Enter Service Data

[Glossary](#)

Required

**Route / Service Name** i

**Type of Service** i

**Mode** i

**Sponsored Type** i

**Service Area** i

(Select or type)

**Primary Funding Source** i

(Select or type)

Data List

Mode	Route / Service Name	Service Area	Type of Service	Sponsored Type	Primary Funding Source	Route/ Service ID


Add

Clear

Delete

Save & Exit

For each route/service, select or write in the information using the available blanks and dropdown windows, then click the **Add** button to add the route/service to the data list below. If

needed, hover over the  icons or click on the **Glossary** hyperlink to learn more about data terminology. Each of the following attributes must be completed to add the route/service to the data list in the Calculator.

- **Route / Service Name:** Write in the Route/Service Name
  - If you would like to allocate costs for a route that operates in two different areas, such as service connecting a rural area and an urbanized area, input the route name twice with an applicable sub-description. An example would be “Route 1 – Rural” and “Route 1 – Urban”.
 

Note: This method of naming your routes/services should only be used if you have already separated out hours, miles, and trips data for each portion of the single route/service.
  
- **Mode:** Select the NTD travel mode that fits the service definition. Options include Motorbus, Commuter Bus, Bus Rapid Transit, Trolleybus, Demand Response, Demand Response Taxi, Vanpool, Ferryboat, or Volunteer Driver Program. See Appendix A for a list of Travel Mode definitions adapted from the NTD glossary.
  
- **Service Area:** Enter the UZA, non-UZA, or other geographic area where the service operates. Prefilled options include Urbanized Area (UZA) and Rural Area (non-UZA).
  - There is also the option to write in a custom UZA or geographic name in this blank. Click within the window, then type in the name applicable to the route. This may be useful if you provide service in more than one UZA or would like to allocate costs for routes according to certain cities or counties.
  
- **Type of Service:** Select whether the service is operated by the agency or purchased from another public/private entity. Options include Directly Operated or Purchased Transportation.
  
- **Sponsored Type:** Select whether the service is available to the general public or supported through a sponsored service contract. Options include General Public Service or Sponsored.
  - Selecting “Sponsored” for the route/service will allow you to sub-allocate expenses in cases when passengers from multiple sponsored service contracts travel together on the same vehicle. The names of the sponsored services will be entered during Step 3: Enter Operational Data in the Calculator.
 

Note: For services with multiple local sponsors sharing rides on the same vehicles, you must select “Sponsored” as the type here in order to suballocate total costs of the service to each local sponsor.

- **Primary Funding Source:** Select the FTA funding source that is the primary source of funding (usually federal) or most represents the primary service area for the route/service. Prefilled options include 5307-Urbanized, 5311-Non-Urbanized, and 5310-Elderly & Disabled.
  - There is also the option to write in a custom funding source name in this blank. Click within the window, then type in the name of the main funding source for the route. This may be useful if the route is chiefly supported through a different FTA, state grant program, or local funding source than the available three options.



## Other Commands

- **Clear All Routes/Services** – To clear all entries in the selection blanks and dropdown windows, click the **Clear** button.
- **Delete a Route/Service** – To delete a route/service from the data list, click on the route/service to highlight it, then click the **Delete** button.

Note: Once you have added a route/service to the data list, if any of the service characteristics are incorrect you must delete the route from the data list and then re-enter the route with the correct information.

- **Finished with Data Entry** – Once you are finished editing and want to return to the page, click the **Save & Exit** button to exit the data entry window.
- **View Glossary Definitions** – To view the full glossary definitions for the terminology and data types in the data entry window, click on the **Glossary** hyperlink to jump to the Glossary.

## Main Service Data Page Options

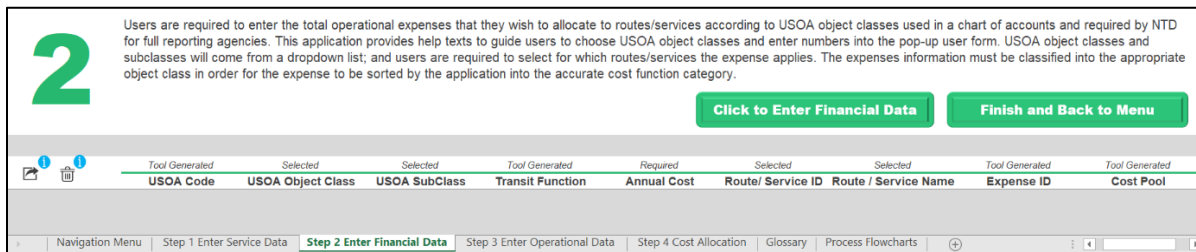
- **Deleting Data** – To delete all records on the page without launching the data entry window, click on the  **trash can** button next to the data list. As a warning, you will be prompted on whether you are sure you want to delete all records, as this action cannot be undone once executed.
- **Exporting Data** – To export a PDF report of all records on the page, click on the  **export** button next to the data list.
- **Navigation** – To return to the Navigation Menu, click the **Finish and Back to Menu** button.

### 3.5 Step 2: Enter Financial Data



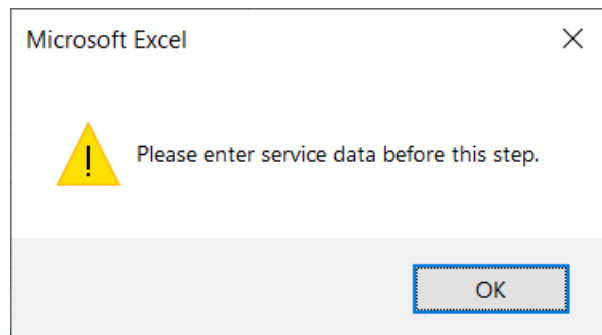
After completing your Service Data, the next step is to enter the total operational costs information into the Financial Data page. You should enter all allowable and unallowable cost information into the Calculator to produce accurate fully allocated cost information for your routes and services. The Calculator is intended to show calculated costs for an annual time period. Remember to use accrual accounting principles for entering expenses information applicable to the year you are using for your service data.

Enter Financial Data by either clicking the green button on the Navigation Menu or clicking to the Step 2: Enter Financial Data tab in the workbook. When using the Calculator for the first time the page will appear like the image below. The data will populate in the columns of the page as you enter and save them in the data entry page.



### **STOP!**

If you attempt to enter financial data into Step 2: Enter Financial Data *before* entering your routes/services data in Step 1: Enter Service Data, you will get a pop-up alert directing you to go back to the Service Data tab. The Excel Calculator requires that at least one route/service be entered in Step 1 to perform the cost allocation methodology. Once you have at least one route/service entered in the Calculator, you will be able to proceed with entering financial data.



### Enter Data

To start, click on the **Click to Enter Financial Data** button at the top of the page. A window will pop up to input data. The Data List in the menu shows the expenses currently saved in the Calculator – it will appear blank the first time you use the Calculator. The menu of

routes/services is automatically populated with the data entered during Step 1: Enter Service Data.

Step 2: Enter Financial Data
Glossary

Expense Codes

**Required**

**USOA Object Class** ⓘ Capital Leases

**SubClass** ⓘ Administration

**Annual Cost** ⓘ  

**Select Applicable Route/ Service** ⓘ  Shared Cost (Select All) ⓘ

Mode	Route / Service Name	Service Area	Type of Service	Sponsored Type	Primary Funding Source	Route/ Servic
<input type="checkbox"/>	Motorbus Route 1	Rural Area (non-UZA)	Directly Operated	General Public Service	5311 Non-Urbanized	2
<input type="checkbox"/>	Motorbus Route 2	Rural Area (non-UZA)	Directly Operated	General Public Service	5311 Non-Urbanized	3
<input type="checkbox"/>	Motorbus Route 3	Rural Area (non-UZA)	Directly Operated	General Public Service	5311 Non-Urbanized	4
<input type="checkbox"/>	Motorbus Route 10	UZA - Big City	Directly Operated	General Public Service	5307 Urbanized	5
<input type="checkbox"/>	Motorbus Route 11 - Country	Rural Area (non-UZA)	Directly Operated	General Public Service	5311 Non-Urbanized	6
<input type="checkbox"/>	Motorbus Route 11 - Big City	UZA - Big City	Directly Operated	General Public Service	5307 Urbanized	7
<input type="checkbox"/>	Motorbus Route 12 - Country	Rural Area (non-UZA)	Directly Operated	General Public Service	5311 Non-Urbanized	8

**Expense Code Definition**

**Cost Type (Pool):** Fixed      **Transit**      General Administration

**Definition:**

RECONCILING ITEM - IF YOU USE THIS CODE, THE EXPENSE WILL BE INCLUDED IN YOUR COST ALLOCATION RESULTS; HOWEVER, NTD OPERATING EXPENSES MAY NEED TO EXCLUDE THESE COSTS. CONSULT YOUR NTD ANALYST. Other than an operating lease, a transit agency may also have a capital lease. Expenses in this code should be attributable to the general administration function and will be allocated to services based on services' variable costs. A lease is considered a capital lease if it meets any of the following four criteria at its inception (the earlier of the date of the lease agreement

**Data List**

Expense Code	USOA Object Class	SubClass	Transit Function	Annual Cost	Route / Service ID	Route / Service Name	Expense ID
GenAdmin	Capital Leases	Administration		\$20	2	Route 1	1
GenAdmin	Capital Leases	Administration			3	Route 2	1
GenAdmin	Capital Leases	Administration			4	Route 3	1
GenAdmin	Capital Leases	Administration			5	Route 10	1
GenAdmin	Capital Leases	Administration			6	Route 11 - Country	1
GenAdmin	Capital Leases	Administration			7	Route 11 - Big City	1
GenAdmin	Capital Leases	Administration			8	Route 12 - Country	1
GenAdmin	Capital Leases	Administration			9	Route 12 - Small City	1
GenAdmin	Capital Leases	Administration			10	Route 15	1
GenAdmin	Capital Leases	Administration			11	Route 16	1
GenAdmin	Capital Leases	Administration			12	Route 17	1

Add

Clear

Delete

Save & Exit

For each expense, select or write in the information using the available blanks, dropdown windows, and check boxes, then click the **Add** button to add the expense to the Data List below. If needed, hover over the ⓘ icons or click on the **Glossary** hyperlink to learn more about data terminology. Each of the following attributes must be completed to add the expense to the Data List in the Calculator.

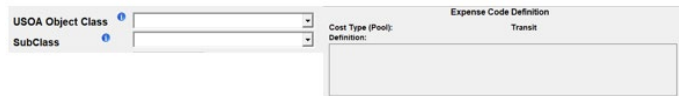
- **USOA Object Class:** Select the appropriate USOA Object Class for the expense from the available options. The Calculator requires expenses to be categorized into an object class category. Examples might be “Other Salaries and Wages” for labor expenses or “Fuel and Lubricants” for vehicle fuel. See Appendix B for a full list of definitions of USOA Object Classes in the Calculator.
- **SubClass:** Select the appropriate subclass for the expense according to the use of the expense by the transit agency. There are six total available subclasses: Operations, Dispatch, Fuel, Vehicle Maintenance, Facility Maintenance, and Administration. Some subclass names are not available for certain USOA Object Class categories. Once an USOA Object Class and SubClass is selected, the Expense Code Definition will populate in the upper right corner as well as the Cost Type (Pool) and Transit Function. See *Expense Code Definition* below for more information.

- **Annual Cost:** Write in the amount of the expense using numeric text only. No commas are necessary.
- **Select Applicable Route/Service:** Select the route/service or group of routes that the expense is applicable to.
  - Select the routes/services that the expense is applicable to by clicking the check box for each route:
    - i. If the expense is global in nature and thereby applicable to all routes use the **Shared Cost (Select All)** check box.
    - ii. If the expense is specialized and only applicable to a single route/service or group of routes, select the individual checkboxes to the left of each route/service.
  - To unselect a route/service, click the check box again to make the selection unchecked. To unselect all routes, click the **Shared Cost (Select All)** check box once again.

Note: You must click on at least one of the checkboxes (for either a Shared Cost to all routes or a Specialized Cost to a single route/set of routes) before clicking the Add button to save the expense entry to the data list.

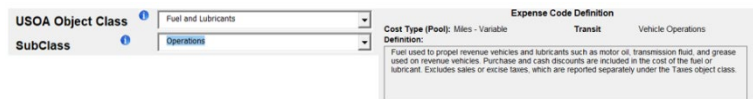
- **Expense Code Definition:** The Expense Code Definition box provides helpful information on the definition of the current USOA Object Class selected. The Cost Type, Transit Function, and USOA Definition information in the window will change automatically as you change the USOA Object Class and SubClass selections from the dropdown.

When an USOA Object Class and SubClass are selected from the



dropdown windows in the Financial Data tab, the associated Cost Type, Transit Function, and USOA Definition windows will automatically show the corresponding information associated with the selections.

Above the definition window, you can click on the Expense Codes button? to open the filterable Expense Code List.



## Other Commands



- **Clear All Expenses** – To clear all entries in the selection blanks and dropdown windows, click the **Clear** button.

- **Delete an Expense** – To delete an existing expense from the data list, click on the expense to highlight it, then click the **Delete** button. For expenses that apply to more than one route/service, you only need to click on a single expense record for the set of routes/services. Clicking the **Delete** button will delete all expense records associated with the highlighted row in the data list.

Note: Once you have added an expense entry to the data list, if any of the entry characteristics are incorrect you must delete the entry from the data list and then re-add the expense entry with the correct information.

- **Finished with Data Entry** – Once you are finished editing and want to return to the page, click the **Save & Exit** button to exit the data entry window.
- **View Glossary Definitions** – To view the full glossary definitions for the terminology and data types in the data entry window, click on the **Glossary** hyperlink to jump to the Glossary.
- **View Expense Codes** – To view a filterable table of Expense Codes, click on the Expense Code hyperlink to jump to the Expense Code List.

## Main Financial Data Page Options

- **Deleting Data** – To delete all records on the page without launching the data entry window, click on the  **trash can** button next to the data list. As a warning, you will be prompted on whether you are sure you want to delete all records, as this action cannot be undone once executed.
- **Exporting Data** – To export a PDF report of all records on the page, click on the  **export** button next to the data list.
- **Navigation** – To return to the Navigation Menu, click the **Finish and Back to Menu** button.

## 3.6 Step 3: Enter Operational Data

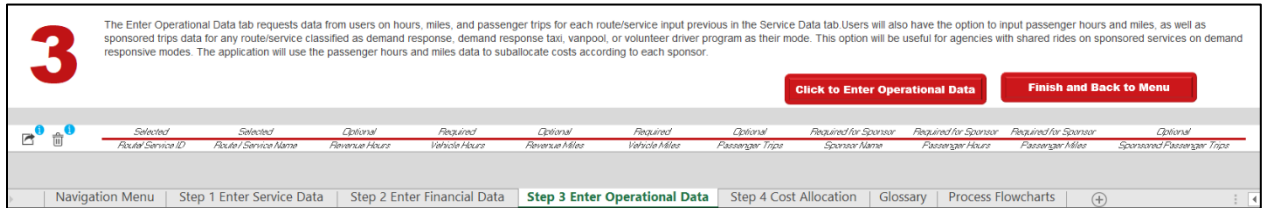


After completing entry of Financial Data, the third step is to enter operational data on hours, miles, and trips information into the Operational Data page. You should enter the total actual data for the annual period rather than scheduled service information.

The Operational Data page will also allow you to enter passenger hours and miles information for sponsored services within each shared-ride demand responsive route/service. Passenger miles and hours for the sponsored service should be estimated based on a consistent sampling method

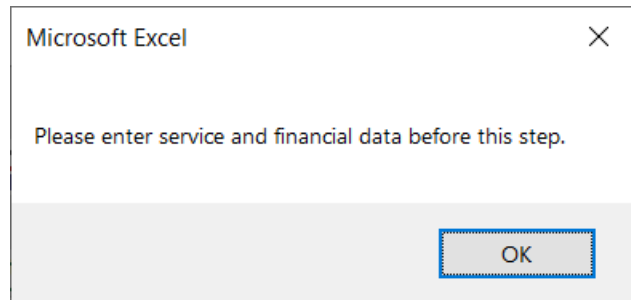
(as described in the Background section of this manual), while sponsored trips entered should be the total amount of trips for the route/service. The option to enter sponsored service data will only be available for routes/services categorized as Sponsored Service during Step 1.

Enter Operational Data by either clicking the red button on the Navigation Menu or clicking to the Step 3: Enter Operational Data tab in the workbook. When using the Calculator for the first time the page will appear like the image below. The data will populate in the columns of the page as you enter and save them in the data entry page.



**STOP!**

If you attempt to enter operational data in Step 3: Enter Operational Data *before* entering your routes/services data in Step 1 and financial data in Step 2, you will get a pop-up alert directing you to go back to the previous tabs. Once you have one or more route/services and at least one financial expense entered in the Calculator, you will be able to proceed with entering operational data.



**Enter Data**

To start, click on the **Click to Enter Operational Data** button at the top of the page. A window will pop up to input data. The applicable services window will be pre-loaded with the routes/services entered previously in Step 1. The data list in the window shows the routes/services with hours, miles, and trips currently saved in the Calculator – it will appear blank the first time you use the Calculator.

Step 3: Enter Operational Data

**Select Applicable Service:**

Mode	Route / Service Name	Service Area	Type of Service	Sponsored Type	Primary Funding Source	Route/ Service ID	
<input type="radio"/>	Motorbus	Route 1	Rural Area (non-UZA)	Directly Operated	General Public Service	5311 Non-Urbanized	1
<input type="radio"/>	Motorbus	Route 2	Rural Area (non-UZA)	Directly Operated	General Public Service	5311 Non-Urbanized	2
<input type="radio"/>	Motorbus	Route 3	Rural Area (non-UZA)	Directly Operated	General Public Service	5311 Non-Urbanized	3
<input type="radio"/>	Motorbus	Route 12 - Country	Rural Area (non-UZA)	Directly Operated	General Public Service	5311 Non-Urbanized	4
<input type="radio"/>	Motorbus	Route 12 - Small City	Small City	Directly Operated	General Public Service	5307 Urbanized	5
<input type="radio"/>	Motorbus	Route 15	Small City	Directly Operated	General Public Service	5307 Urbanized	6
<input type="radio"/>	Motorbus	Route 16	Small City	Directly Operated	General Public Service	5307 Urbanized	7

**Data List**

Selected	Optional	Required	Optional	Required	Optional	Required for Spons	Required for Spons	Required for Spons	Optional
Route / Service Name	Revenue Hours	Vehicle Hours	Revenue Miles	Vehicle Miles	Passenger Trips	Sponsor Name	Passenger Hours	Passenger Miles	Sponsored Passeng

Add

Clear

Delete

Save & Exit

Select the route/service in the applicable service window using the circular buttons in the left column of the menu. Data entry blanks will then appear for you to enter hours, miles and trips for the route/service selected. If needed, hover over the **i** icons or click on the **Glossary** hyperlink to learn more about data terminology.

Enter whole numbers without any commas for each data entry blank, then click the **Add** button to add the route/service to the data list below. Each of the following attributes must be completed to add the route/service to the data list in the Calculator.

Revenue Hours\* **i**

Revenue Miles\* **i**

Passenger Trips\* **i**

Vehicle Hours **i**

Vehicle Miles **i**

Does the service have one or more sponsors? If so, select the Yes checkbox to enter sponsor data BEFORE clicking the Add button below.  Yes [View Glossary](#)

\* Optional (used for performance measures only)

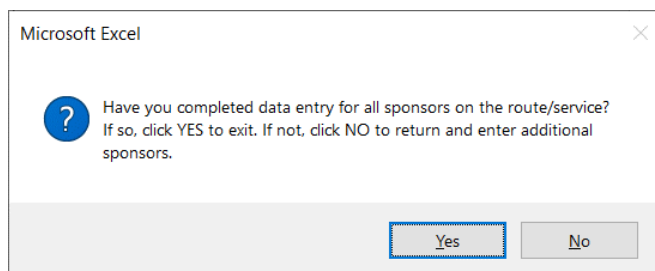
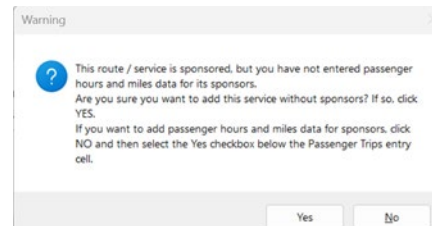
- **Revenue Hours:** Enter the number of revenue hours for the route/service. Revenue hours should not include deadhead hours. (Note: this field is optional and used only to calculate performance measures)
- **Vehicle Hours:** Enter the number of total vehicle hours for the route/service. Vehicle hours must be greater than or equal to the number of revenue hours for the route/service.

- **Revenue Miles:** Enter the number of revenue miles for the route/service. Revenue miles should not include deadhead miles. (Note: this field is optional and used only to calculate performance measures)
- **Vehicle Miles:** Enter the number of total vehicle miles for the route/service. Vehicle miles must be greater than or equal to the number of revenue miles for the route/service.
- **Passenger Trips:** Enter the number of passenger trips for the route/service. (Note: this field is optional and used only to calculate performance measures)

### *Entering Data for Local Sponsors*

If the route/service is characterized as a Sponsored in the Type of Service category, a check box will appear asking **Does the service have one or more sponsors? Is so, select the Yes checkbox to enter sponsor data BEFORE clicking the Add button below.** Follow these steps to enter local sponsors data for all sponsors within a single shared-ride demand responsive service.

1. Enter the data for hours, miles, and trips for overall route/service (as described in the previous section).
2. Click the **Yes** check box to the right of the question prompt.
3. Enter the sponsor name, passenger hours, passenger miles, and trips for each sponsor on the route.
  - Click the **Add** button within the Sponsor Data window after you have entered the data for a single sponsor.
    - A pop-up alert will appear if you do not first enter a sponsor. Click Yes if you want to add the service without sponsors. Click No and then select Yes checkbox below the Passenger Trips entry cell.
  - Continue entering data and clicking **Add** for each sponsor until you have entered all sponsor data for the route/service.
  - Click the **Exit** button within the Sponsor Data window once you have entered data for all sponsors.
    - A pop-up alert will appear asking whether you have completed data entry for all sponsors on the route/service. Click **No** to return to the



Sponsor Data window or click **Yes** to return to the main data entry window.

- Click the **Add** button on the data entry window to add the route/service to the data list. A line entry will appear for each sponsor you entered with the route/service.

Sponsor Data Window:



- **Sponsor Name:** Enter the name of the sponsored service.
- **Passenger Hours:** Enter the number of passenger hours for the sponsored service.
- **Passenger Miles:** Enter the number of passenger miles for the sponsored service.
- **Sponsored Trips:** Enter the number of passenger trips for the sponsored service. The sum of passenger trips for each sponsored service should equal the total number of passenger trips for the route/service. (Note: this field is optional and used only to calculate performance measures).

## Other Commands

- **Clear All Routes/Services** – To clear all entries in the selection blanks and dropdown windows, click the **Clear** button.
- **Delete a Route/Service** – To delete hours, miles, and trips information for a single route/service from the data list, click on the route/service to highlight it, then click the **Delete** button.
- **Finished with Data Entry** – Once you are finished editing and want to return to the page, click the **Save & Exit** button to exit the data entry window.
- **View Glossary Definitions** – To view the full glossary definitions for the terminology and data types in the data entry window, click on the **Glossary** hyperlink to jump to the Glossary.

Note: Once you have added operational data for the route/service to the data list, if any of the hours, miles, or trips numbers are incorrect you must delete the route/service from the data list and then re-enter the route/service with the correct numerical values.

## Main Operational Data Page Options

- Deleting Data** – To delete all records on the page without launching the data entry window, click on the  **trash can** button next to the data list. As a warning, you will be prompted on whether you are sure you want to delete all records, as this action cannot be undone once executed.
- Exporting Data** – To export a PDF report of all records on the page, click on the  **export** button next to the data list.
- Navigation** – To return to the Navigation Menu, click the **Finish and Back to Menu** button.

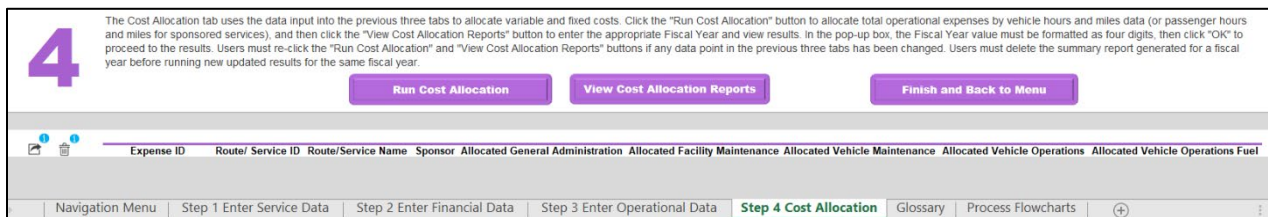
### 3.7 Step 4: Run Cost Allocation



Once you have completed all data entry in Steps 1 through 3, the final step is to allocate expenses entered for each route/service. The Calculator will calculate the fully allocated cost for every route/service and every local sponsor within each route/service according to the number of hours and miles associated with them.

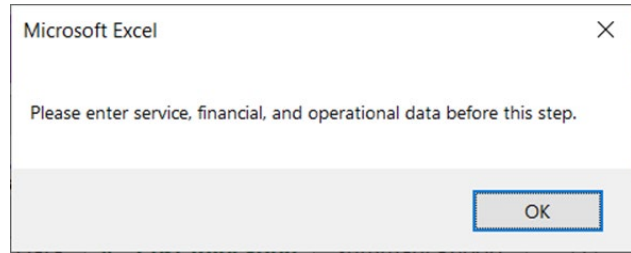
The Calculator will use the percentage of hours and miles for the route/service compared to total hours and miles to calculate the portion of variable costs under Operations, Operations-Fuel, and Vehicle Maintenance. Then the Calculator will calculate the portion of fixed costs under Facility Maintenance and Administration for each route/service according to portion of variable costs for each.

Allocate costs by either clicking the purple button on the Navigation Menu or clicking to the 4 – Cost Allocation tab in the workbook. When using the Calculator for the first time the page will appear like the image below. The data will populate in the columns of the page after you press the **Run Cost Allocation** button.



**STOP!**

If you attempt to use the **Run Cost Allocation** button on the Step 4: Run Cost Allocation page *before* entering your routes/services data in Step 1, financial data in Step 2, and operational data in Step 3, you will get a pop-up alert directing you to go back to the previous steps. Once you have one or more routes/services with operational data and at least one financial expense entered in the Calculator, you will be able to proceed with allocating costs.



**Allocate Costs**

To calculate fully allocated costs, click on the **Run Cost Allocation** button at the top of the page. After a few seconds the route attributes and allocated cost information will populate in the columns on the page. An example of populated cost allocation results after executing the button is shown below:

4 The Cost Allocation tab uses the data input into the previous three tabs to allocate variable and fixed costs. Click the "Run Cost Allocation" button to allocate total operational expenses by vehicle hours and miles data (or passenger hours and miles for sponsored services), and then click the "View Cost Allocation Reports" button to enter the appropriate Fiscal Year and view results. In the pop-up box, the Fiscal Year value must be formatted as four digits, then click "OK" to proceed to the results. Users must re-click the "Run Cost Allocation" and "View Cost Allocation Reports" buttons if any data point in the previous three tabs has been changed. Users must delete the summary report generated for a fiscal year before running new updated results for the same fiscal year.

Run Cost Allocation    View Cost Allocation Reports    Finish and Back to Menu

Expense ID	Route/ Service ID	Route/Service Name	Sponsor	Allocated General Administration	Allocated Facility Maintenance	Allocated Vehicle Maintenance	Allocated Vehicle Operations	Allocated Vehicle Operations Fuel
Fix#1	1	Route 1		\$38,424	\$9,214	\$25,916	\$77,686	\$15,439
Fix#1	2	Route 2		\$23,708	\$5,885	\$16,965	\$60,321	\$18,568
Fix#1	3	Route 3		\$27,394	\$6,641	\$14,866	\$61,321	\$19,524
Fix#1	4	Route 12 - County		\$22,122	\$5,363	\$15,340	\$43,086	\$15,762
Fix#1	5	Route 12 - Small City		\$14,442	\$3,501	\$11,923	\$25,062	\$7,689
Fix#1	6	Route 15		\$43,191	\$10,496	\$35,944	\$77,586	\$22,619
Fix#1	7	Route 16		\$50,855	\$12,811	\$38,539	\$94,289	\$28,524
Fix#1	8	Purple		\$67,747	\$16,424	\$35,180	\$61,321	\$18,667
Fix#1	9	Washington County		\$11,096	\$2,690	\$8,231	\$20,697	\$6,230
Fix#1	10	Adams County	Veterans	\$16,607	\$4,126	\$13,752	\$28,866	\$8,499
Fix#1	10	Adams County	Medicaid	\$4,626	\$1,131	\$3,463	\$8,790	\$2,737
Fix#2	10	Purple		-	-	-	\$70,000	-
Fix#3	1	Route 1		-	-	\$2,396	-	-
Fix#3	2	Route 2		-	-	\$2,465	-	-
Fix#3	3	Route 3		-	-	\$1,389	-	-
Fix#3	4	Route 12 - County		-	-	\$1,424	-	-
Fix#3	9	Washington County		-	-	\$764	-	-
Fix#3	10	Adams County	Veterans	-	-	\$1,239	-	-
Fix#3	10	Adams County	Medicaid	-	-	\$323	-	-

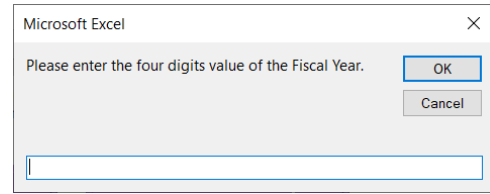
Navigation Menu | Step 1 Enter Service Data | Step 2 Enter Financial Data | Step 3 Enter Operational Data | **Step 4 Cost Allocation** | Glossary | Process Flowcharts

If you enter an additional route/service or expense after running the calculator, you will need to run the calculator again by clicking on the **Run Cost Allocation** button again. The Calculator will then recalculate the allocated cost information and update the table accordingly. The Calculator relies on a step-by-step process in order to assign global and specialized costs to the appropriate groups of routes/services.



If you need to add an additional route/service(s) to the fiscal year period you are working with in the Calculator, you will need to delete data in Steps 2 and 3, then start over in the Step 1: Enter Service Data to allocate costs accurately to all routes/services.

## Generating the Summary Report

Once you have allocated costs to the routes/services, click on the **View Cost Allocation Reports** button at the top of the page. A pop-up window will appear asking you to enter a four-digit value for the fiscal year you are working on in the Calculator currently – you must enter a four-digit value and click **OK** in order to proceed. Then, the Calculator will generate a Summary Report for the year you entered and navigate to that tab with the Single Year tables.



## Main Run Cost Allocation Page Options

- **Deleting Data** – To delete all records on the page, click on the  **trash can** button next to the data list. As a warning, you will be prompted on whether you are sure you want to delete all records, as this action cannot be undone once executed.
- **Exporting Data** – To export a PDF report of all records on the page, click on the  **export** button next to the data list.
- **Navigation** – To return to the Navigation Menu, click the **Finish and Back to Menu** button.

## 3.8 Summary Report

The Summary Report tab will show a summary table with costs allocated and performance measures calculated by 1) Route/service name, 2) mode, 3) service area, 4) type of service, 5) sponsored type, 6) primary funding source, and 7) sponsor.

Individual reports for each of these categories can be printed or copied and pasted to new Excel spreadsheet. A report for suballocated costs to local sponsors for any routes/services categorized as sponsored service is only available if sponsored services data is entered in Step 3: Enter Operational Data. An example of the Summary Report is shown below in Figure 10.

Figure 10: Summary Report

Finish and Back to Menu

Data in this Summary Report tab can be printed using the grey buttons below or saved as a separate Excel file by clicking on the green Export to Excel button.

Summary Table

By Route/Service Name

By Mode

By Service Area

By Type of Service

Export to Excel

By Sponsored Type

By Primary Funding Source


By Sponsor

Cost Allocation Results - FY 2021

Route / Service Name	Cost Allocation					Total Allocated Cost	Performance Measures						
	Operational Cost by Transit Function						Service Effectiveness Measures		Cost Efficiency Measures			Cost Effectiveness Measure	
	General Administration	Facility Maintenance	Vehicle Maintenance	Vehicle Operations: Hours-Based	Vehicle Operations: Miles-Based		Pass. per Revenue Hour	Pass. per Revenue Mile	Cost per Revenue Hour	Cost per Revenue Mile	Cost per Total Vehicle Hour		Cost per Total Vehicle Mile
Adams County	\$0	\$0	\$0	\$0	\$0	\$0	0.00	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Purple	\$40,855	\$3,904	\$30,150	\$81,938	\$18,352	\$181,200	3.00	0.13	\$60.40	\$2.63	\$51.77	\$2.59	\$20.13
Route 1	\$47,371	\$11,629	\$23,719	\$105,349	\$18,090	\$212,759	9.00	0.65	\$53.19	\$3.87	\$47.28	\$3.08	\$5.31
Route 12 - Country	\$17,944	\$4,350	\$13,783	\$35,116	\$8,390	\$79,582	2.00	0.08	\$79.58	\$3.32	\$53.05	\$2.49	\$33.79
Route 12 - Small City	\$17,944	\$4,350	\$13,783	\$35,116	\$8,390	\$79,582	2.00	0.08	\$79.58	\$3.32	\$53.05	\$2.49	\$33.79
Route 15	\$53,614	\$12,997	\$40,318	\$105,349	\$24,906	\$237,784	7.25	0.34	\$59.45	\$2.80	\$52.84	\$2.50	\$8.20
Route 16	\$62,682	\$15,196	\$44,363	\$128,760	\$27,004	\$278,005	8.00	0.33	\$69.50	\$2.90	\$50.55	\$2.70	\$8.69
Route 2	\$41,072	\$3,357	\$30,581	\$81,938	\$18,614	\$182,163	5.33	0.25	\$60.72	\$2.89	\$52.05	\$2.57	\$11.39
Route 3	\$34,945	\$8,326	\$17,228	\$81,938	\$10,487	\$152,325	13.33	1.54	\$50.77	\$5.86	\$43.52	\$3.81	\$3.81
Washington County	\$13,574	\$3,291	\$3,476	\$28,093	\$5,768	\$80,201	0.80	0.05	\$80.20	\$3.76	\$50.17	\$2.74	\$75.25
<b>Total</b>	<b>\$330,000</b>	<b>\$80,000</b>	<b>\$230,000</b>	<b>\$683,600</b>	<b>\$140,000</b>	<b>\$1,463,600</b>	<b>6.95</b>	<b>0.36</b>	<b>\$60.98</b>	<b>\$3.20</b>	<b>\$50.12</b>	<b>\$2.74</b>	<b>\$8.77</b>
<b>Mode</b>													
Commuter Bus	\$40,855	\$3,904	\$30,150	\$81,938	\$18,352	\$181,200	3.00	0.13	\$60.40	\$2.63	\$51.77	\$2.59	\$20.13
Demand Response	\$13,574	\$3,291	\$3,476	\$28,093	\$5,768	\$80,201	0.80	0.05	\$80.20	\$3.76	\$50.17	\$2.74	\$75.25
Motorbus	\$275,571	\$68,805	\$190,375	\$573,568	\$115,880	\$1,222,199	7.85	0.42	\$61.11	\$3.28	\$49.89	\$2.77	\$10.78
<b>Total</b>	<b>\$330,000</b>	<b>\$80,000</b>	<b>\$230,000</b>	<b>\$683,600</b>	<b>\$140,000</b>	<b>\$1,463,600</b>	<b>6.95</b>	<b>0.36</b>	<b>\$60.98</b>	<b>\$3.20</b>	<b>\$50.12</b>	<b>\$2.74</b>	<b>\$8.77</b>
<b>Service Area</b>													
Rural Area (non-UZA)	\$154,905	\$37,553	\$100,787	\$332,436	\$61,348	\$687,029	7.90	0.52	\$57.25	\$3.73	\$48.38	\$2.94	\$7.25
Urbanized Area (UZA)	\$175,095	\$42,447	\$129,213	\$351,164	\$78,652	\$776,571	6.00	0.26	\$64.71	\$2.83	\$51.77	\$2.59	\$10.79
<b>Total</b>	<b>\$330,000</b>	<b>\$80,000</b>	<b>\$230,000</b>	<b>\$683,600</b>	<b>\$140,000</b>	<b>\$1,463,600</b>	<b>6.95</b>	<b>0.36</b>	<b>\$60.98</b>	<b>\$3.20</b>	<b>\$50.12</b>	<b>\$2.74</b>	<b>\$8.77</b>
<b>Type of Service</b>													
Directly Operated	\$283,145	\$70,096	\$199,850	\$601,662	\$121,648	\$1,282,400	7.51	0.41	\$61.07	\$3.30	\$49.90	\$2.76	\$8.13
Purchased Transportation	\$40,855	\$3,904	\$30,150	\$81,938	\$18,352	\$181,200	3.00	0.13	\$60.40	\$2.63	\$51.77	\$2.59	\$20.13
<b>Total</b>	<b>\$330,000</b>	<b>\$80,000</b>	<b>\$230,000</b>	<b>\$683,600</b>	<b>\$140,000</b>	<b>\$1,463,600</b>	<b>6.95</b>	<b>0.36</b>	<b>\$60.98</b>	<b>\$3.20</b>	<b>\$50.12</b>	<b>\$2.74</b>	<b>\$8.77</b>

> Navigation Menu
Step 1 Enter Service Data
Step 2 Enter Financial Data
Step 3 Enter Operational Data
Step 4 Cost Allocation
Expense Code List
Glossary
Summary Report (2021)

## Printing and Exporting Options

- **Print** – To print a report to a PDF file or a printer on your network, click on one of the buttons to the right of the  icon near the top of the Summary Reports page.
  - **Summary Table** – Prints all summary report tables for all service data groups (as shown on the Summary Report page)
  - **By Route/Service Name** – Prints a report of costs allocated by individual routes/services
  - **By Mode** – Prints a report of costs allocated by NTD travel modes
  - **By Service Area** – Prints a report of costs allocated by NTD jurisdiction or other geographic areas
  - **By Type of Service** – Prints a report of costs allocated by directly operated or purchased transportation service
  - **By Sponsored Type** – Prints a report of costs allocated by general public or sponsored service

- **By Primary Funding Source** – Prints a report of costs allocated by specified federal, state, or local primary funding programs
- **By Sponsor** – Prints a report for suballocated costs for routes/services categorized as sponsored service according to sponsor names (*Note: This report option appears only if sponsored services data is entered in Step 3: Enter Operational Data*)
- **Export to Excel** – To export the data from each individual report in the Summary Report

tab into a separate Excel workbook, click on the green **Export to Excel** button. A prompt will appear asking where you would like to save the new workbook.



### Main Summary Report Page Options

- **Navigation** – To return to the Navigation Menu, click the **Finish and Back to Menu** button.

### 3.9 Single Year Reports



Once you have generated at least one Summary Report for a given fiscal year period, you can navigate to Summary Reports for different years or delete a Summary Report for a single year.

On the Navigation Menu, click on the blue button with the printer icon to load the Single Year Reports window:

Single Year Reports

Required

**Select Report Action**

Single Year

Delete a Report

**Select the FY(s)**

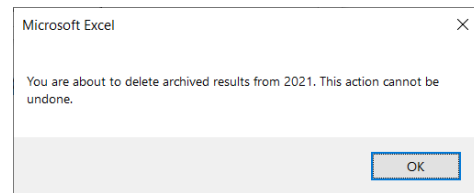
Run

## Select Report Action and Fiscal Year

There are two possible options in the window to choose from before clicking the **Run** button:

- **Single Year** – this selection will navigate you to the Summary Report tab for the selected fiscal year in the dropdown list after you click the **Run** button.
- **Delete a Report** – this selection will delete the Summary Report tab for the selected fiscal year in the dropdown list after you click the **Run** button. Deleting a Summary Report is useful if you need to redo the allocation results and data inputs for the fiscal year you have saved.

A warning prompt will come up saying you are about to delete archived results for the given fiscal year. Click **OK** to acknowledge the message, then click either **Delete** to delete the report, or click **Cancel** to go back and exit out of the selection without deleting the report.



- **Select the FY(s)** – this dropdown will list the available fiscal years for which you have generated a Summary Report in the Calculator. Select the year for the report you wish to either view or delete the report.
- Click the **Run** button to execute either the Single Year or Delete a Report command for the fiscal year selected. Alternatively, click the **X** and the top left of the window to return to the Navigation Menu without running the report.

## 3.10 Multiple Year Reports



Once you have generated at least two Summary Reports for separate fiscal year periods, you can generate a new Excel workbook with separate tabs for Historical Cost Allocation Results reports or Operations Data reports.

On the Navigation Menu, click on the grey button with the clockface and backwards arrow to the load the Multiple Year Reports window:

## Select the Starting and Ending Fiscal Years

There are two dropdown lists so you can choose the range of years you want generated for the Historical Cost Allocation Reports before clicking the **Run** button:

- **Starting FY** – this dropdown will list the available fiscal years for which you have generated a Summary Report in the Calculator. Select the year you desire to begin the range of Historical Cost Allocation reports in the new workbook.
- **Ending FY** – this dropdown will list the available fiscal years for which you have generated a Summary Report in the Calculator. Select the year you desire to end the range of Historical Cost Allocation reports in the new workbook.

Click the **Run** button to generate the Historical Cost Allocation Reports workbook as a new Excel file. This may take some time on your computer depending on available memory for the Calculator to run. Note: You will receive a warning prompt asking you to fix the selection if the Starting FY for the report range is not before the Ending FY. Alternatively, click the **X** and the top left of the window to return to the Navigation Menu without running the report.

After you click run to generate and save the new workbook, the Historical Cost Allocation Reports workbook will have separate tabs of reports for the following groups of routes/services:

- **By Mode** – report for allocated costs and operational data according to NTD travel modes
- **By Primary Funding Source** – report for allocated costs and operational data according to specified federal, state, or local primary funding programs
- **By Route/Service Name** – report for allocated costs and operational data according to individual routes/services
- **By Service Area** – report for allocated costs and operational data according to NTD jurisdiction or other geographic areas
- **By Sponsor** – Report for suballocated costs and operational data for routes/services categorized as sponsored service according to sponsor names (*Note: This report option appears only if sponsored services data was saved for at least one of the selected fiscal years*)
- **By Sponsored Type** – report for allocated costs and operational data according to general public or sponsored service
- **By Type of Service** – report for allocated costs and operational data according to directly operated or purchased transportation service

## Cost Allocation Results

The Cost Allocation Results by Mode report in Figure 11 shows the results for operational cost by transit function, total allocated cost, service effectiveness measures, cost efficiency measures, and cost effectiveness measure for the given group of routes/services. Percentage changes are calculated for the most recent and second most recent year, as well as the most recent year to the earliest year.

Figure 11: Cost Allocation Results by Mode Report Example

Funding Program & Year	Cost Allocation						Performance Measures							
	Operational Cost by Transit Function					Total Allocated Cost	Service Effectiveness Measures		Cost Efficiency Measures				Cost Effectiveness Measure Cost per Pass. Trip	
	General Administration	Facility Maintenance	Vehicle Maintenance	Vehicle Operations: Hours-Based	Vehicle Operations: Miles-Based		Pass. per Revenue Hour	Pass. per Revenue Mile	Cost per Revenue Hour	Cost per Revenue Mile	Cost per Total Vehicle Hour	Cost per Total Vehicle Mile		
<b>Commuter Bus</b>														
2021	\$ 40,855	\$ 9,904	\$ 30,150	\$ 81,938	\$ 18,352	\$ 181,200	3.00	0.13	\$ 60.40	\$ 2.63	\$ 51.77	\$ 2.59	\$ 20.13	
2022	\$ 36,933	\$ 16,788	\$ 26,786	\$ 72,204	\$ 16,667	\$ 169,377	3.00	0.13	\$ 56.46	\$ 2.45	\$ 48.39	\$ 2.42	\$ 18.82	
% change (2 most recent)	-10%	69%	-11%	-12%	-9%	-7%	0%	0%	-7%	-7%	-7%	-7%	-7%	
% change 2021-2022	-10%	69%	-11%	-12%	-9%	-7%	0%	0%	-7%	-7%	-7%	-7%	-7%	
<b>Demand Response</b>														
2021	\$ 13,574	\$ 3,291	\$ 9,476	\$ 28,093	\$ 5,768	\$ 60,201	0.80	0.05	\$ 60.20	\$ 3.76	\$ 50.17	\$ 2.74	\$ 75.25	
2022	\$ 35,679	\$ 16,218	\$ 25,638	\$ 70,141	\$ 15,952	\$ 163,628	0.57	0.03	\$ 54.54	\$ 3.27	\$ 48.13	\$ 2.44	\$ 96.25	
% change (2 most recent)	163%	393%	171%	150%	177%	172%	-29%	-32%	-9%	-13%	-4%	-11%	28%	
% change 2021-2022	163%	393%	171%	150%	177%	172%	-29%	-32%	-9%	-13%	-4%	-11%	28%	
<b>Motorbus</b>														
2021	\$ 275,571	\$ 66,805	\$ 190,375	\$ 573,568	\$ 115,880	\$ 1,222,199	7.85	0.42	\$ 61.11	\$ 3.28	\$ 49.89	\$ 2.77	\$ 7.78	
2022	\$ 257,388	\$ 116,994	\$ 172,577	\$ 526,056	\$ 107,381	\$ 1,180,395	7.86	0.43	\$ 56.21	\$ 3.10	\$ 46.29	\$ 2.62	\$ 7.15	
% change (2 most recent)	-7%	75%	-9%	-8%	-7%	-3%	0%	3%	-8%	-5%	-7%	-5%	-8%	
% change 2021-2022	-7%	75%	-9%	-8%	-7%	-3%	0%	3%	-8%	-5%	-7%	-5%	-8%	
<b>Total</b>														
2021	\$ 330,000	\$ 80,000	\$ 230,000	\$ 683,600	\$ 140,000	\$ 1,463,600	6.95	0.36	\$ 60.98	\$ 3.20	\$ 50.12	\$ 2.74	\$ 8.77	
2022	\$ 330,000	\$ 150,000	\$ 225,000	\$ 668,400	\$ 140,000	\$ 1,513,400	6.51	0.35	\$ 56.05	\$ 3.03	\$ 46.71	\$ 2.57	\$ 8.61	
% change (2 most recent)	0%	88%	-2%	-2%	0%	3%	-6%	-4%	-8%	-5%	-7%	-6%	-2%	
% change 2021-2022	0%	88%	-2%	-2%	0%	3%	-6%	-4%	-8%	-5%	-7%	-6%	-2%	

## Operational Data Only

The Historical Operational Data by Mode report in Figure 12 shows the data saved for hours, miles and trips as well as service effectiveness measures for the given group of routes/services. Percentage changes are calculated for the most recent and second most recent year, as well as the most recent year to the earliest year.

Figure 12: Historical Operational Data by Mode Report Example

Funding Program & Year	Operations Data					Performance Measures	
	Revenue Hours	Revenue Miles	Vehicle Hours	Vehicle Miles	Pass. Trips	Service Effectiveness	
						Pass. per Revenue Hour	Pass. per Revenue Mile
<b>Commuter Bus</b>							
2021	3,000.00	69,000.00	3,500.00	70,000.00	9,000	3.00	0.13
2022	3,000.00	69,000.00	3,500.00	70,000.00	9,000	3.00	0.13
% change (2 most recent)	0%	0%	0%	0%	0%	0%	0%
% change 2021-2022	0%	0%	0%	0%	0%	0%	0%
<b>Demand Response</b>							
2021	1,000.00	16,000.00	1,200.00	22,000.00	800	0.80	0.05
2022	3,000.00	50,000.00	3,400.00	67,000.00	1,700	0.57	0.03
% change (2 most recent)	200%	213%	183%	205%	113%	-29%	-32%
% change 2021-2022	200%	213%	183%	205%	113%	-29%	-32%
<b>Motorbus</b>							
2021	20,000.00	373,000.00	24,500.00	442,000.00	157,000	7.85	0.42
2022	21,000.00	381,000.00	25,500.00	451,000.00	165,000	7.86	0.43
% change (2 most recent)	5%	2%	4%	2%	5%	0%	3%
% change 2021-2022	5%	2%	4%	2%	5%	0%	3%
<b>Total</b>							
2021	24,000.00	458,000.00	29,200.00	534,000.00	166,800	6.95	0.36
2022	27,000.00	500,000.00	32,400.00	588,000.00	175,700	6.51	0.35
% change (2 most recent)	13%	9%	11%	10%	5%	-6%	-4%
% change 2021-2022	13%	9%	11%	10%	5%	-6%	-4%

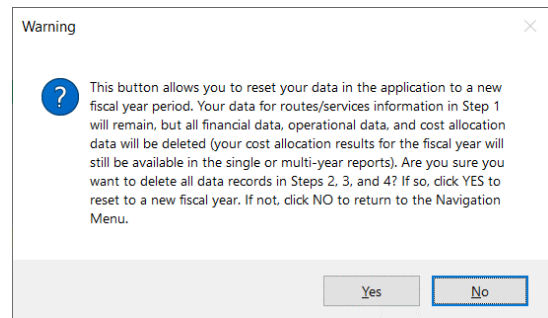
### 3.11 Reset Data for New Year



To use the Calculator across multiple fiscal years, the bluish-gray **Reset Data for New Year** button is available on the Navigation Menu to reset the Calculator for a new fiscal year. This button clears all financial data and operational data in Steps 2 and 3 as well as the results data in Step 4 while keeping the Summary Report you generated with the previous fiscal year's data. Clicking this button will maintain the service characteristics data saved in Step 1: Enter Service Data, allowing you to use the same set of routes or services for the new fiscal year without starting from scratch.

#### **STOP!**

The Reset Data for New Year function should only be used once you have generated a Summary Report with your data for that fiscal year and you are satisfied with the data accuracy from your data inputs in Steps 1, 2, and 3. Once you reset the Calculator, you will not be able to get back any financial data or operational data previously entered in Steps 2 and 3, respectively.

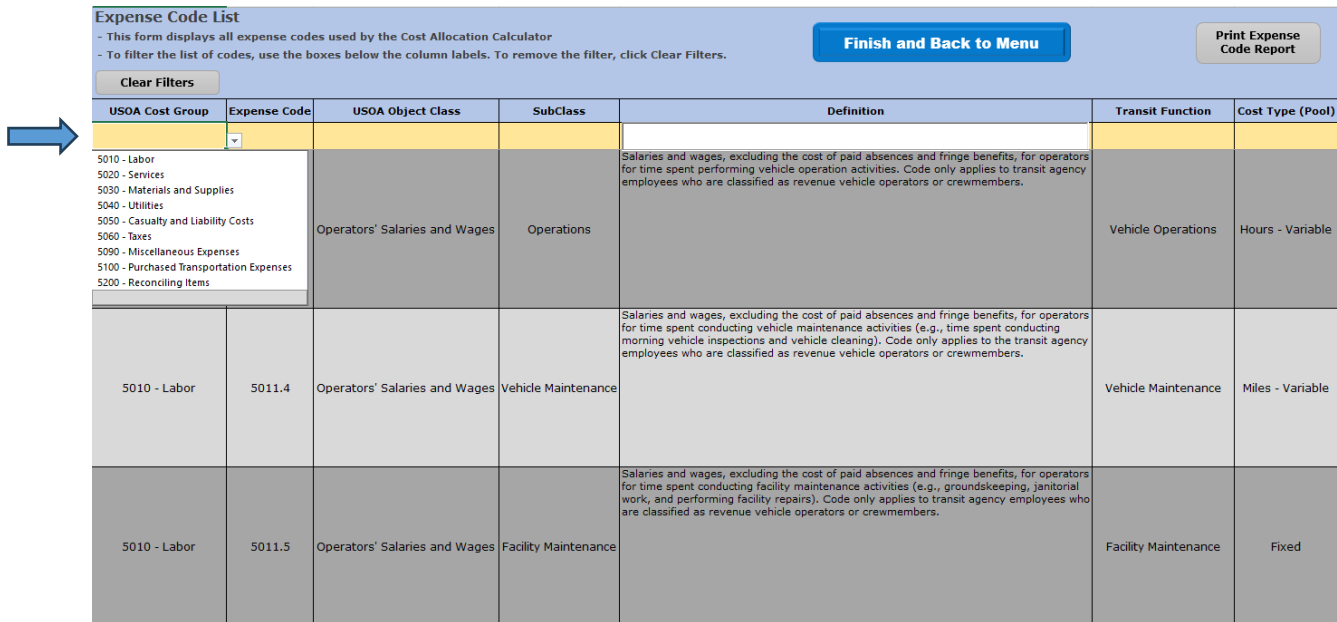


After clicking the Reset Data for New Year button, the pop-up alert shown above will appear. Click **Yes** to reset the Calculator for a new fiscal year, or click **No** to return to the Navigation Menu.

### 3.12 Expense Code List

The Expense Code List page provides a filterable list of all expense codes used by the Cost Allocation Calculator as shown in Figure 13. This page includes USOA Cost Group, Expense Code, USOA Object Class, SubClass, Definition, Transit Function and Cost Type (Pool). By clicking in the yellow cell under any of the columns, a dropdown arrow will appear. Each column, except Definition, can be filtered using the dropdown menu. Click on the grey icon, Clear Filters, to remove the filters.

Figure 13: Expense Code List

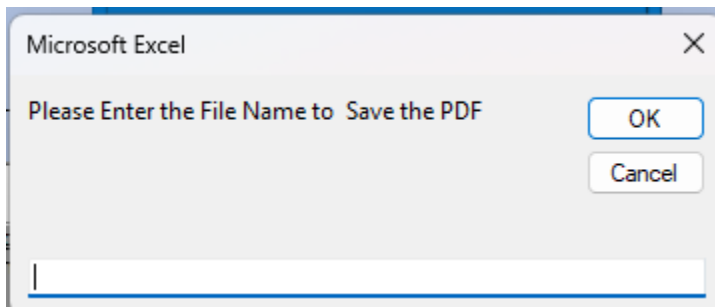


**Expense Code List**  
 - This form displays all expense codes used by the Cost Allocation Calculator  
 - To filter the list of codes, use the boxes below the column labels. To remove the filter, click Clear Filters.

[Clear Filters](#) [Finish and Back to Menu](#) [Print Expense Code Report](#)

USOA Cost Group	Expense Code	USOA Object Class	SubClass	Definition	Transit Function	Cost Type (Pool)
5010 - Labor 5020 - Services 5030 - Materials and Supplies 5040 - Utilities 5050 - Casualty and Liability Costs 5060 - Taxes 5090 - Miscellaneous Expenses 5100 - Purchased Transportation Expenses 5200 - Reconciling Items		Operators' Salaries and Wages	Operations	Salaries and wages, excluding the cost of paid absences and fringe benefits, for operators for time spent performing vehicle operation activities. Code only applies to transit agency employees who are classified as revenue vehicle operators or crewmembers.	Vehicle Operations	Hours - Variable
5010 - Labor	5011.4	Operators' Salaries and Wages	Vehicle Maintenance	Salaries and wages, excluding the cost of paid absences and fringe benefits, for operators for time spent conducting vehicle maintenance activities (e.g., time spent conducting morning vehicle inspections and vehicle cleaning). Code only applies to the transit agency employees who are classified as revenue vehicle operators or crewmembers.	Vehicle Maintenance	Miles - Variable
5010 - Labor	5011.5	Operators' Salaries and Wages	Facility Maintenance	Salaries and wages, excluding the cost of paid absences and fringe benefits, for operators for time spent conducting facility maintenance activities (e.g., groundskeeping, janitorial work, and performing facility repairs). Code only applies to transit agency employees who are classified as revenue vehicle operators or crewmembers.	Facility Maintenance	Fixed

The Expense Code List can be printed by clicking on the grey icon in the upper right corner that says Print Expense Code Report. A pop-up window will appear asking you to enter a file name to save the PDF. Type in your desired file name and click OK. The report will save and the location of the file will appear on your screen. Click OK to exit.



Navigate to the Expense Code List by clicking the **grey button that says Expense Code List** on the Navigation Menu under Resources or clicking to the Expense Code List in the workbook.

The option to navigate to the Expense Code List is also found in Step 2: Enter Financial Data in the upper right corner, **Expense Codes**. Clicking on this hyperlink will open the Expense Cost List behind the data entry window.

**Step 2: Enter Financial Data** [Glossary](#)  
[Expense Codes](#)

### 3.13 Glossary



The Glossary provides definitions of the terminology used in the Calculator. The Glossary includes definitions organized by section for the Service Data, Financial Data, Operational Data, and Sponsored Service data found in Steps 1, 2, and 3 and shown in Figure 14. The terms are organized alphabetically within each section. The buttons at the top of the page, detailed below, allow you to filter the terms according to the data section selected.

- **All Terms** – Removes filters on the page to show the terms and definitions for all sections
- **Service Data** – Activates the filter to show only Service Data terms and definitions
- **Financial Data** – Activates the filter to show only Financial Data terms and definitions
- **Operational Data** – Activates the filter to show only Operational Data terms and definitions
- **Sponsored Service** – Activates the filter to show only Sponsored Service terms and definitions
- **Finish and Back to Menu** – Returns you to the Navigation Menu

Navigate to the Glossary either by clicking the **grey button with the stack of books icon** on the Navigation Menu or clicking to the Glossary tab in the workbook.

Figure 14: Glossary Page

All Terms		Service Data	Financial Data	Operational Data	Sponsored Service	Finish and Back to Menu
ReferenceForm	Term	Definition				
Service Data	5307 - Urbanized Formula	A Primary Funding Source: The Federal Transit Administration formula funding program that makes federal funds available to urbanized areas and to governors for transit capital and operating assistance in urbanized areas and for transportation-related planning.				
Service Data	5310 - Mobility for Seniors and Individuals with Disabilities	A Primary Funding Source: The Federal Transit Administration formula funding program that makes federal funds available to states for the purpose of assisting private nonprofit groups in meeting transportation needs of the elderly and persons with disabilities.				
Service Data	5311 - Rural Formula	A Primary Funding Source: The Federal Transit Administration grant program which provides capital, planning, and operating assistance to states to support public transportation in rural areas with populations less than 50,000.				
Service Data	Bus Rapid Transit	guideway. These systems also have defined passenger stations, traffic signal priority or preemption, short headway bidirectional services for a substantial part of weekdays and weekend days, low-floor vehicles or level-platform boarding, and separate branding of the service.				
Service Data	Commuter Bus	central city. Characterized by a motorcoach (aka over-the-road bus), multiple trip tickets, multiple stops in outlying areas, limited stops in the central city, and at least five miles of closed-door service.				
Service Data	Demand Response	An NTD Mode: Transit mode comprised of passenger cars, vans or small buses operating in response to calls from passengers or their agents to the transit operator, who then dispatches a vehicle to pick up the passengers and transport them to their destinations.				
Service Data	Demand Response Taxi	An NTD Mode: A special form of the demand response mode operated through taxicab providers. This mode is always a purchased transportation type of service.				
Service Data	Directly Operated	employees to supply the necessary labor to operate the revenue vehicles. This includes instances where an agency's employees provide purchased transportation services to the agency through a contractual agreement.				
Service Data	Ferryboat	An NTD Mode: A transit mode comprised of vessels carrying passengers over a body of water. Predominantly commuter service means that for any given trip segment (i.e., distance between any two piers).				
Service Data	General Public Service	A Sponsored Type: Transport of passengers on either fixed routes or demand response buses that is open to the general public at large, typically charging a posted fee for each trip.				
Service Data	Motor Bus	An NTD Mode: Standard bus service comprised of rubber-tired passenger vehicles operating on fixed routes and schedules over roadways. Vehicles are powered by diesel, gasoline, battery, or alternative fuel engines contained within the vehicle.				
Service Data	Service Area	The UZA, non-UZA, or other geographic area where the route operates. The Census Bureau delineates urban areas after each decennial census by applying specified criteria to decennial census and other data.				
Service Data	Mode	Description of mode of service operated with subcategories for bus (can be conventional bus fixed route service, bus deviated fixed route service, or intercity bus service) and demand response (usual service or subscription) modes.				
Service Data	Primary Funding Source	paying the costs of providing transit services. Only one primary funding source can be selected for a single route or service. If there are multiple significant funding sources for a shared-ride demand response service, the user can allocate costs to each funding source by setting the Sponsored Type value to Sponsored Transportation in Step 1 and then entering the passenger hours and miles for each sponsor in Step 3.				

### 3.14 Flowcharts




Three process flowcharts are available which illustrate the methodology and steps used by the Calculator to allocate costs to routes or services, make suballocations to local sponsors, and separately allocate shared vs. specialized costs.

Navigate to the Process Flowcharts either by clicking the **grey button with the process chart icon** on the Navigation Menu or clicking to the Process Flowcharts tab in the workbook. The tab will appear as shown in Figure 15 below.

Figure 15: Process Flowcharts



- **Flowchart 1** – Click on the **Flowchart 1** button to generate the Cost Allocation Process Summary flowchart image. This flowchart shows the process of how financial data is separated into cost pools for variable or fixed costs, then allocated based on vehicle hours or miles data.
- **Flowchart 2** – Click on the **Flowchart 2** button to generate the Sponsored Route or Service Cost Allocation Process flowchart image. This flowchart shows the process of suballocating the total cost data for a sponsored service to local sponsors using cost pools with passenger hours and miles data to determine the total cost per sponsor.
- **Flowchart 3** – Click on the **Flowchart 3** button to generate the Cost Allocation Details for Shared and Specialized Costs flowchart image. This flowchart goes into further detail from Flowchart 1 to show how shared and specialized costs are separated from the five cost pools in order to assign costs specifically applicable to each route or service.
- **Print a Flowchart** – Click on the  printer icon when a flowchart is showing to print a PDF file of the image.
- **Finish and Back to Menu** – Returns you to the Navigation Menu

See Appendix C of this manual for the full flowchart on the Calculator processes.

## 4. Directions for Access Calculator

The Access version of the Calculator is available for download from the National RTAP website. The Calculator allows users to input annual data for their transit services and expenses and produces reports on fully allocated costs. The Calculator stores allocation data for a single year and stores allocation results for multiple years, allowing users to compare multiple years' results. For each fiscal year period you can reset the Calculator for a new year, which will clear all financial and operational data while keeping service data characteristics for your routes/services.

### 4.1 Downloading the Access Calculator

#### Check Whether you have Microsoft Access

If you do not know whether you have Microsoft Access on your computer, follow these steps (steps are for computers running the Windows operating system):

- Click on the *Windows* button on the bottom left corner of your computer screen to browse the programs on your computer.
- Find the search bar and type *Access*. If you have Access, the Access icon should display.

If you have Access, then, you can skip to Section 3 below.

#### If You Don't Have Access, Install the Access Runtime Extension

The Access Calculator can be used by users who do not have a current software license for the program by downloading the free Microsoft extension that allows you to run Access files even if you do not have Access on your computer.

If you do not have administrative privileges on your computer, or you don't feel comfortable downloading and installing Calculators, seek assistance from your information technology staff.

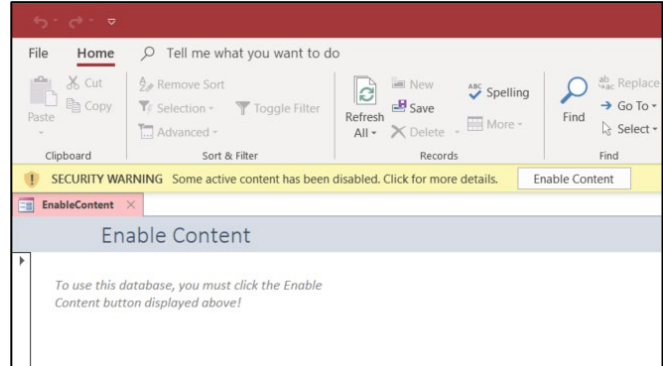
- Find out what version of Microsoft Office you are running using this [What Version of Office am I using? link](#).
- If you have Office 365, follow the directions on this [Microsoft 365 Access Runtime link](#) to download and install the extension.
- If you have an older version of Office (e.g., Office 2016), follow the directions on this [Microsoft Access Runtime link](#) to download and install the extension.

## Downloading and Saving the Access Calculator the First Time

- Download the Access Calculator. The downloaded file will be a .zip file. Make sure you remember the file location of the downloaded .zip file.
- Find the downloaded .zip file and open it.
- To extract the Calculator file, locate the *Extract all* button in your file window.
- Click the Browse button and select the folder to which the Calculator file should be extracted and saved. Preferably, this would be a trusted location. A trusted location is a folder or drive where you usually save and open workplace files.
- Unblock protection for the Calculator file using your file window. To do this:
  - Find and right click on the extracted Calculator file in your file window.
  - The file properties window should appear. Navigate to the *General* tab.
  - At the bottom of the *General* tab, locate the *Security* section that states: *This file came from another computer and might be blocked to help protect this computer.*
  - Check the *Unblock* checkbox and then click *OK*.

## Open the Access Calculator

- When you first open the Access Calculator, a security warning banner may appear near the top of the window prompting you to “Enable Content”. Simply click the **Enable Content** button to enable the active content needed for the Calculator to run.
- If, after you enable content, you still get a message saying that Microsoft has blocked macros from running, that means either:
  - You have not unblocked protection (see above), or
  - You may need to save the file to a trusted location (see below), or
  - There are additional company security measures that may need resolved. Visit this [Microsoft macro support site](#) for some tips or contact your IT Department.






## Find and create Trusted Locations

One way to help reduce security issues preventing your use of the Allocation Calculator is to save the file to a trusted location. To find your computer's trusted locations, follow the steps below and check out this [helpful Microsoft article](#).

- Open Access and navigate to Home > Options > Trust Center > Trust Center Settings.
- Click on Trusted Locations and view the list of trusted locations. Adding trusted locations is only possible if your organization's security policies allow it.
- To add a trusted location, click on the Add New Location button.
- Then use the Browse button to find the folder you want to make a trusted location and click OK. In this case, you would be adding as a trusted location the folder where you stored the Calculator file.
- Click OK to exit the Trust Center and any other windows.

## 4.2 Overview of Access Functionality

The Access Calculator has consistent features to go from tab to tab, save and update data, or delete unneeded items. Below is a list of basic features to understand while using the Calculator.

- **Navigation** – The steps in the cost allocation calculator are accessible through the main Navigation Menu. Use the buttons on the menu to open the step you need to view in a new tab.
- **Saving Data** – The Calculator is an active database that saves data as you enter it. The save buttons on each tab will also save the Calculator as currently updated.
- **Status** – The status column on the Navigation Menu will show you the total number of data points entered in Steps 1 through 3.
- **Data Selection** – there are multiple ways to select and edit data within Steps 1 through 3.
  - Move between selections using the  **left arrow** and  **right arrow** buttons
  - Click on a selection in the data list in each tab
- **Deleting Data** – There are multiple methods to delete data in the Calculator.
  - Delete a data record by selecting it and clicking the  **Delete** button

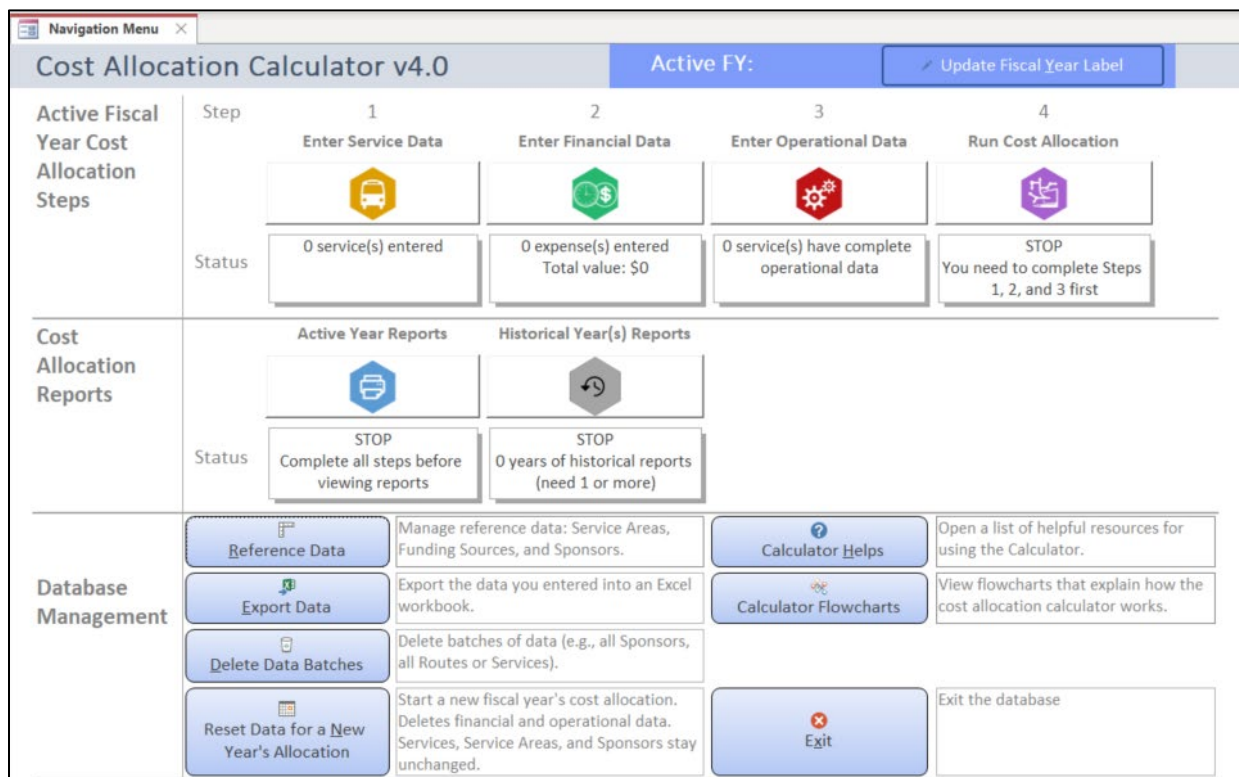
- Clear all records within the Calculator by clicking the **Reset Data for a New Year’s Allocation** button on the Navigation Menu
- Clear select batches of records within the Calculator by clicking the **Delete Data Batches** button on the Navigation Menu to open a new **Delete Batches of Data** tab
- **Return to Start** – Click the **Close Form** button to return to the Navigation Menu

### 4.3 Navigation Menu

The Calculator opens on the Navigation Menu, which has buttons linking to each step of the allocation process. The buttons on the Navigation Menu are used to open a tab for each step in the Access Calculator.

The Calculator opens on the Navigation Menu, Figure 16, which has buttons alongside guiding icons linking to each step of the allocation process. Use the buttons on the Navigation Menu to open a tab for your current allocation step. The Calculator requires that Steps 1 through 3 be completed in order to allocate costs in Step 4.

Figure 16: Navigation Menu



- Clicking the **Step 1: Enter Service Data** button opens to the Step 1: Enter Service Data tab

- Clicking the **Step 2: Enter Financial Data** button opens to the Step 2: Enter Financial Data tab
- Clicking the **Step 3: Enter Operational Data** button opens to the Step 3: Enter Operational Data tab
- Clicking the **Step 4: Run Cost Allocation** button runs the cost allocation calculations and opens to the Allocation Results tab
- Clicking the **Active Year Reports** button opens the Active Year Reports tab
- Clicking the **Historical Year Reports** button opens the Historical Year Reports tab
- Clicking the **Update Fiscal Year Label** button allows you to update the active fiscal year for the data entered in Steps 1, 2, and 3 of the Calculator

## Database Management

- Clicking the **Reference Data** button opens the Reference Data tab
- Clicking the **Export Data** button opens the Export Data tab
- Clicking the **Delete Data Batches** button opens the Delete Data Batches tab
- Clicking the **Reset Data for a New Year’s Allocation** button clears the Financial data (Step 2) and Operational data (Step 3), and sponsored service operational data (part of Step 3) in the Calculator. Service data (Step 1), service area, and sponsors will not be deleted.
- Clicking the **Calculator Helps** button opens the Help tab
- Clicking the **Calculator Flowcharts** button opens the Flowcharts tab
- Clicking the **Exit** button closes the Calculator

## Calculator Status

The Status window feature on the Navigation Menu allows you to quickly see how many data records were entered in Steps 1 and 3 and the total expenses entered in Step 2 without having to open and review each tab. The Status windows also show where data entry is sufficient to Run Cost Allocation in Step 4 and the availability of reports in the Calculator. If the data entry is insufficient for any of the steps, the status windows, shown in Figure 17 below, for that step will list how many incomplete records need to be corrected.

Figure 17: Status Windows Showing Data Entered

Status	0 service(s) entered	0 expense(s) entered Total value: \$0	0 service(s) have complete operational data	STOP You need to complete Steps 1, 2, and 3 first
Status	STOP Complete all steps before viewing reports	STOP 0 years of historical reports (need 1 or more)		

The data shown in the status window will update automatically as you edit records in each tab.

The status window for Step 4 will state whether you can “GO IF READY” to allocate cost information or “STOP” and go back to complete data entry in the previous steps. Similarly, the status window for Active Year Reports will show if the reports are ready to view or if you need to go back and allocate costs in Step 4, while the status window for Historical Year(s) Reports will show how many years of historical reports are currently saved in the Calculator.

## 4.4 Step 1: Enter Service Data



First, enter service data by clicking the **Step 1: Enter Service Data** button on the Navigation Menu. When using the Calculator for the first time the page will appear like image below. The data will populate in the columns of the page as you enter and save them in the tab.

Route / Service Name	Mode	Service Area	Type of Service	Sponsored Type	Primary Funding Source
*					

### Enter Data

To start, begin entering information about each route/service into the available blanks and dropdown boxes. Click the **Save & Add a New Service** button to save the route/service and enter in the next route/service, simultaneously clearing the data entry blanks. The data list in the menu shows the routes/services currently saved in the Calculator – it will appear blank the first time you use the Calculator.

Each of the following must be completed to add the route/service to the data list in the Calculator.

- **Route / Service Name:** Type in the Route/Service Name

If you would like to allocate costs for a route that operates in two different areas, such as service connecting a rural area and an urbanized area, input the route name twice with an applicable description. An example would be “Route 1 – Rural” and “Route 1 – Urban”.

Note: This method of naming your routes/services should only be used if you have already separated out hours, miles, and trips data for each portion of the single route/service.

- **Mode:** Select the NTD travel mode that fits the service definition. Options include Motorbus, Commuter Bus, Bus Rapid Transit, Trolleybus, Demand Response, Demand Response Taxi, Vanpool, Ferryboat, or Volunteer Driver Program. See Appendix A for a list of NTD Travel Mode definitions.
- **Service Area:** Select the NTD jurisdiction or geographic area for the route/service from the available options in the dropdown.

To edit the NTD jurisdictions available, click on the View / Edit Areas button to open the Service Areas tab (see instructions for entering new service areas in the Service Area section below).

- **Type of Service:** Select whether the service is operated by the agency or purchased from another public/private entity. Options include Directly Operated or Purchased Transportation.
- **Sponsored Type:** Select whether the service is available to the general public or supported through a sponsored service contract. Options include General Public Service or Sponsored.

Selecting “Sponsored” for the route/service will allow you to sub-allocate expenses in cases when passengers from multiple sponsored service contracts travel together on the same vehicle. The names of the sponsored services will be entered during Step 3: Enter Operational Data, in the Calculator.

Note: For services with multiple local sponsors sharing rides on the same vehicles, you must select “Sponsored” as the type in order to suballocate total costs of the service to each local sponsor.


- **Primary Funding Source:** Select the FTA funding source that is the primary source of funding or most represents the primary service area for the route/service. Prefilled options include 5307-Urbanized, 5311-Non-Urbanized, and 5310-Elderly & Disabled.

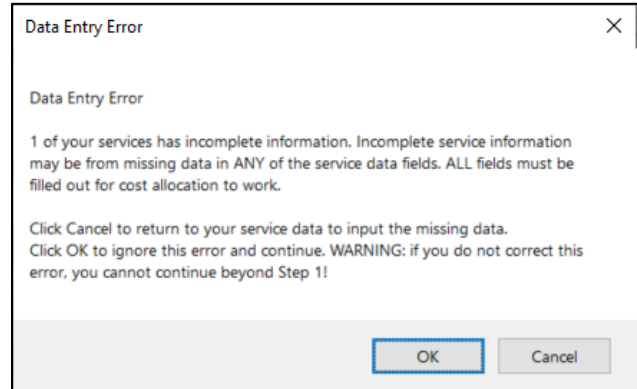
There is also the option to select a custom funding source name in this blank. Click the **View / Edit Funding Sources** button to open the Funding Sources tab (see instructions for entering new funding sources in the Funding Source section below). This may be

useful if the route is chiefly supported through a different FTA program, state grant program, or local funding source than the prefilled available options.





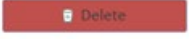
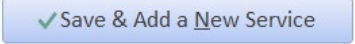
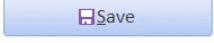
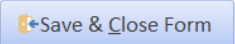
### Incomplete Data

All six fields for each route/service entered in Step 1: Enter Service Data must be completed in order to enter financial data in Step 2: Enter Financial Data. If there are any data for a route/service that do not have all six fields completed, a pop-up alert will appear when you

click on the  Save & Close Form button to return to the Navigation Menu. You can either correct and complete the empty data fields immediately by clicking “Cancel” or return to the Navigation Menu by clicking “OK” without correcting the error.



### Other Commands


- **Edit A Route/Service** – To edit a route/service in the data list, navigate to the record using the  **left arrow** and  **right arrow** buttons *or* click on the route/service to highlight it, then change as needed.
- **Delete A Route/Service** – To delete a route/service from the data list, navigate to the record using the  **left arrow** and  **right arrow** buttons *or* click on the route/service to highlight it, then click the  **Delete** button.
- **Saving Records** – Each time you complete data entry for a route/service, click the  **Save & Add a New Service** button to save the route/service and reset the data entry blanks for the next entry.
  - You can also click the  **Save** button at any time.
- **Finished with Data Entry** – Once you are finished editing, click the  **Save & Close Form** button to return to the Navigation Menu.

**Service Areas**


Within the Service Areas tab, you can save and edit the available service areas available to categorize each route/service.

The default Rural Area (non-UZA) and Urban Area (UZA) choices are automatically available in the Calculator. Other service areas may be specifically named urbanized areas (UZAs), cities, counties, or other geographic areas that can be specified according to the areas you operate.



To add a service area, click on the  **Save & Add a New Service Area** button, then enter the UZA/geography name in the **Area Name** blank. You can optionally add a description of the area in the **Area Description** blank.

- **Area Name:** Name of the UZA or non-UZA according to NTD. Users can also choose to enter a geography name here.
- **Area Description:** Optional description

Click the  **red trash can** button to delete an available service area name.

Click the  **Save & Close Form** button once you have completed entering information on service areas.


*Note:* The information for service areas can also be edited by clicking on the **Reference Data** button in the Navigation Menu. See the Database Management section of this Manual for more details.

**Funding Sources**

Within the Funding Sources tab, you can save and edit the available funding sources available to categorize for each route/service. The default options, 5307-Urbanized Formula, 5310-Mobility for Seniors and Individuals with Disabilities, and 5311-Rural Formula, are automatically available in the Calculator. Other funding sources your transit agency may use include additional types of federal/state funding programs or direct service contracts.

Program Code (must be unique)	Funding Source Title	Delete
5307	5307 - Urbanized Formula	
5310	5310 - Mobility for Seniors and Individuals with Disabilities	
5311	5311 - Rural Formula	

Buttons: Save, Save & Add a New Funding Source, Save and Close Form


To add a new funding source, click on the  **Save & Add a New Funding Source button**, then enter a unique number in the Program Code blank and add a name or description of the funding source in the Funding Source Title blank. Each funding program code must be unique from the other codes in the column. You can either use an existing funding code number (such as codes for other FTA programs) or make up a number that you see fit.

Once you have finished adding and naming the new funding source, an additional row will appear below allowing the entry of more funding sources. You can also click the



**Save** button at the bottom to save your progress.

- **Program Code:** Number associated with the funding program. Can either correspond with an FTA program or be made up by the user.
- **Funding Source Title:** Name of the funding program or local funding source.

Click the  **red trash can** button to delete an available funding source name.

*Note:* The information for funding sources can also be edited by clicking on the **Reference Data** button in the Navigation Menu. See the Database Management section of this Manual for more details.

Click the  **Save & Close Form** button once you have completed entering information on funding sources.

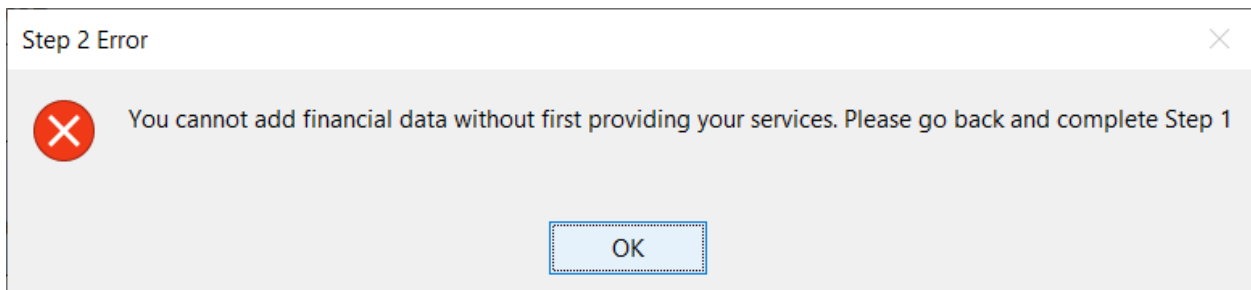
## 4.5 Step 2: Financial Data



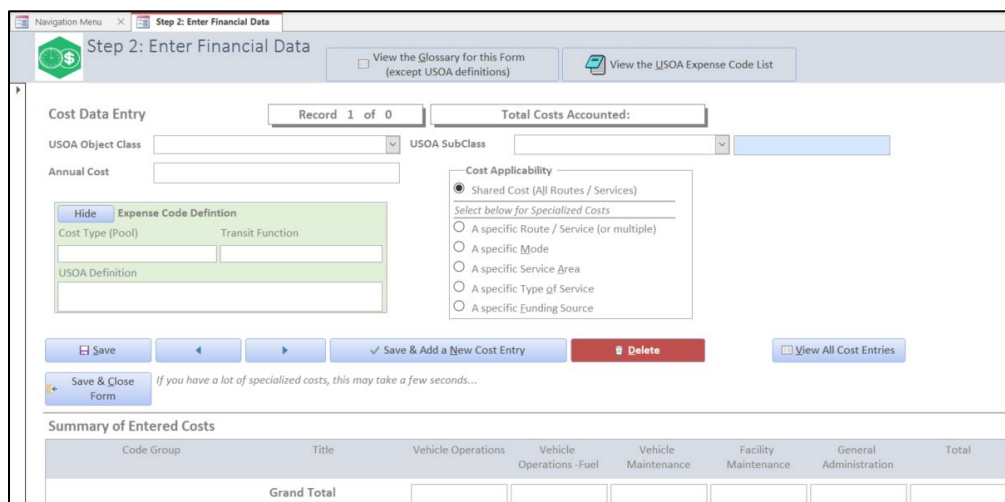
After entering your service data, the next step is to enter the total operational costs information into **Step 2: Enter Financial Data** tab. You should enter all allowable and unallowable cost information into the Calculator in order to produce accurate fully allocated cost information for your routes and services. The Calculator is intended to show calculated costs for a fiscal year. Remember to use accrual accounting principles for entering expense information applicable to the year you are using for your service data.

### **STOP!**

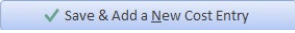
If you attempt to enter financial data in Step 2 before entering your routes/services data in Step 1, you will get a pop-up alert directing you to go back to Step 1. Once you have at least one route/service entered in the Calculator, you will be able to proceed with entering financial data.



Enter Financial Data by clicking the **Step 2: Enter Financial Data** button on the Navigation Menu. When using the Calculator for the first time, the page will appear like the image below. The data will populate in the columns of the page as you enter and save them.



## Enter Data

To start, begin entering information about each expense into the available blanks or by using the dropdown boxes. Click the  **Save & Add a New Cost Entry** button to save the record and enter the next expense, simultaneously clearing the data entry blanks. The data list shows the cost entries currently saved in the Calculator – it will appear blank the first time you use the Calculator.

For each expense, select or write in the information using the available blanks and dropdown list, then click the **Add** button to add the expense to the data list below. Each of the following blanks must be completed to add the expense to the data list in the Calculator.

- **USOA Object Class:** Select the appropriate USOA Object Class for the expense from the available options. The Calculator requires expenses to be categorized into an object class category. Examples might be “Salaries and Wages” for labor expenses or “Fuel and Lubricants” for vehicle fuel. See Appendix B for a full list of definitions of USOA Object Classes in the Calculator.
- **SubClass:** Select the appropriate subclass for the expense according to the use of the expense by the transit agency. There are nine total available subclasses: Administration, Capital Leasing, Facility Maintenance, Fuel, General Utilities, Operations, Operator, Public Liability/Risk Mgmt, Vehicle Maintenance. Some subclass names are not available for certain USOA Object Class categories.
- **Annual Cost:** Write in the amount of the expense using numeric text only. No commas are necessary.
- **Cost Applicability:** Select the routes/services that the expense is applicable to by clicking the button or buttons in the Cost Applicability box that corresponds with the service.

If the expense is applicable to all routes, use the “**Shared Cost (All Routes/Services)**” default choice. Instructions for other options are found in the Cost Applicability section below.



### *Cost Applicability*

For each cost entry, you must determine whether the cost is a globally shared cost between all routes/services, or it is a specialized cost applicable to a specific route or group of routes/service.

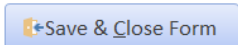
If the expense is global in nature and thereby applicable to all routes, keep the selection for Shared Cost (All Routes/Services) in the Cost Applicability window.

If the expense is specialized and only applicable to a single route/service or group of routes, select from an option below Specialized Costs in the Cost Applicability window. For each selection, an additional dropdown will appear to the right; highlight the option in the dropdown to which expense should be specifically assigned.

- If the expense is applicable only to certain individual services, select “**A specific Route/Service (or multiple)**” and choose the service(s) in the dropdown. You can select one single service or multiple services as needed using the checkboxes.
- If the expense is applicable only to a certain mode, select “**A specific Mode**” and choose the mode using the checkboxes in the dropdown window.
- If the expense is applicable only to a certain geographic area or NTD jurisdiction, select “**A specific Service Area**” and select the area using the checkboxes in the dropdown window.
- If the expense is applicable only to a specific operation types, select “**A specific Type of Service**” and select the operation type; either Directed Operated or Purchased Transportation using the checkboxes in the dropdown.
- If the expense is applicable only to a certain funding source, select “**A specific Funding Source**” and choose the funding source using the checkboxes in the dropdown.

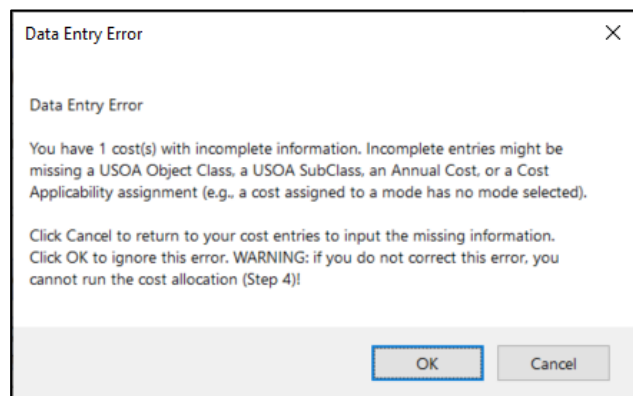
***Incomplete Data***

All three fields for each expense entered in Step 2 must be completed to execute the cost allocation processes in Step 4. If there are any records for an expense that do not have all three fields completed, a pop-up alert will appear when you click on the



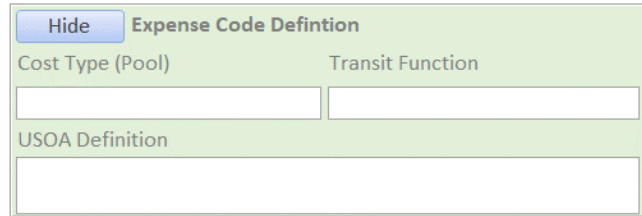
Save & Close Form button

to return to the Navigation Menu. You can either correct and complete the empty data fields immediately by clicking “Cancel” or return to the Navigation Menu by clicking “OK” without correcting the error.

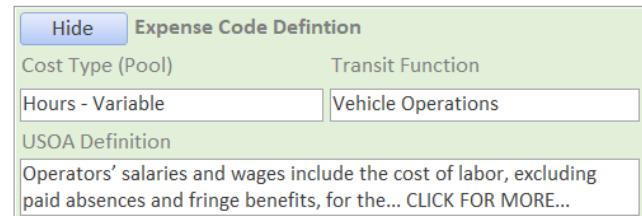


### Expense Code Definition

The Expense Code Definition window provides helpful information on the definition of the current USOA Object Class selected. The Cost Type, Transit Function, and USOA Definition information in the window will change automatically as you change the USOA Object Class and SubClass selections from the dropdown. To hide the Expense Code Definition window, click the **Hide** button. To subsequently unhide the window, click the **Unhide** button.

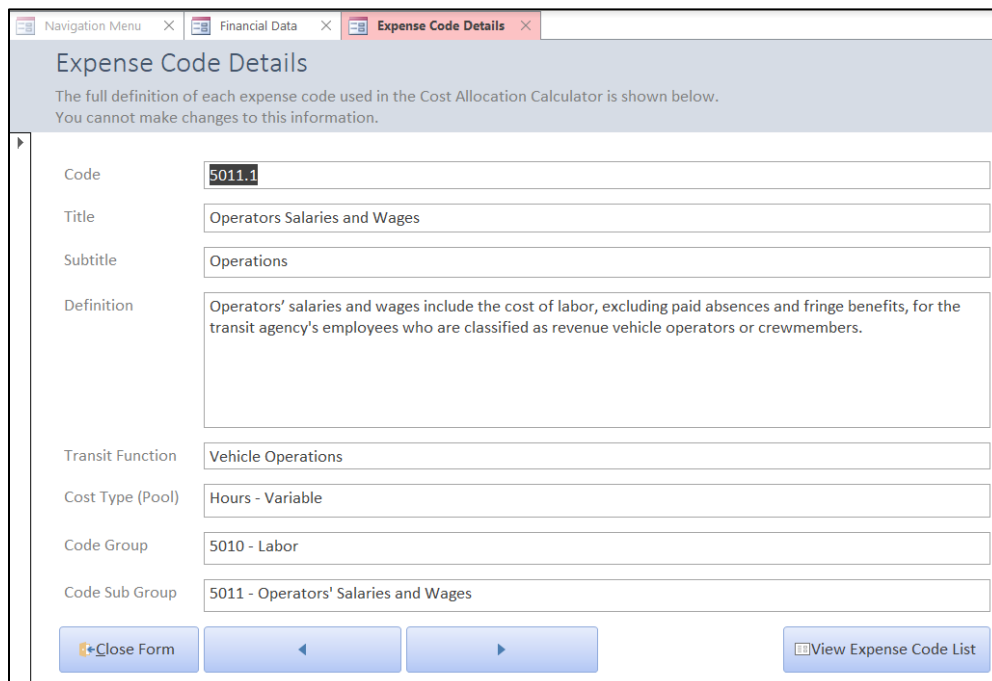




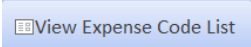
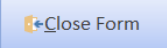
When an USOA Object Class and SubClass are selected from the dropdown in Step 2: Enter Financial Data, the associated Cost Type, Transit Function, and USOA Definition will automatically show the corresponding information associated with the selections. In the definition, you can click on the cell to see the remaining text in the definition in the Expense Code Details tab.



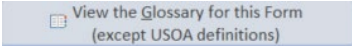





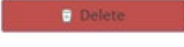
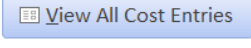
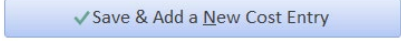
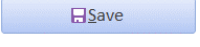
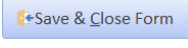
### Expense Code Details

The Expense Code Details tab shows the corresponding details for the current selection in Step 2: Enter Financial Data, including the cost code number, title, subtitle, definition, transit function as well as the assigned cost type, group, and subgroup in the Calculator. Users can also navigate between different cost entries already entered in Step 2 to review the differences in cost code definitions and assignments.



- To navigate between cost entries, click on the  **left arrow** or  **right arrow** buttons.
- To view the full list of USOA Expense Codes, click on the  **View Expense Code List** **View Expense Code List** button to open the Expense Code List.
- When you are finished, click the  **Close Form** **Close Form** button at the bottom to return to the Step 2: Enter Financial Data tab.

## Other Commands

- **View Glossary for Financial Terms** – At any point you can click on the  **View the Glossary for this Form (except USOA definitions)** **View Glossary for this Form** button to open a window with terms and definitions for financial terms. See more information on the Calculator Glossary within Calculator Helps in the Database Management section of this manual.
- **View USOA Expense Codes** – At any point you can click on the  **View the USOA Expense Code List** **View the USOA Expense Code List** button to open a window with the list of expense codes. See more information about the Expense Code List within Calculator Helps in the Database Management section of this manual.
- **Edit A Cost Entry** – To edit a cost entry in the data list, navigate to the record using the  **left arrow** and  **right arrow** buttons *or* click on the cost entry to highlight it, then change it as needed.
- **Delete A Cost Entry** – To delete a cost entry from the data list, navigate to the record using the  **left arrow** and  **right arrow** buttons *or* click on the route/service to highlight it, then click the  **Delete** button.
  - In Step 2, there is also the option to delete records by clicking the  **View All Cost Entries** **View All Cost Entries** button. See more information in the section below.
- **Saving Records** – Each time you complete a cost entry, click the  **Save & Add a New Cost Entry** button to save the expense and reset the data entry blanks for the next entry.
  - You can also click the  **Save** button at any time.
- **Finished with Data Entry** – Once you are finished editing, click the  **Save & Close Form** button to return to the Navigation Menu.

**View All Cost Entries**

Within the Cost Entries List, you can view the existing cost entries currently entered in Step 2: Enter Financial Data tab of the Calculator. This list allows you to view each separate expense entry rather than aggregated expenses by transit cost function in the Summary of Entered Costs list on the Step 2: Enter Financial Data tab. The bottom of the list displays the grand total of expenses entered.

Edit	Cost ID	USOA Object Class	USOA Sub Class	Annual Cost	Cost Applies to	Delete Selected
	15	Casualty and Liability Costs (Insurance)	5050.6 Public Liability / Risk Mgmt.	\$180,000.00	All	<input type="checkbox"/>
	19	Fuel and Lubricants	5031.3 Operations	\$140,000.00	All	<input type="checkbox"/>
	7	Miscellaneous Expenses	5090.1 Operations	\$20,000.00	Operation Type	<input type="checkbox"/>
	17	Miscellaneous Expenses	5090.1 Operations	\$3,600.00	All	<input type="checkbox"/>
	1	Operators Salaries and Wages	5011.1 Operations	\$330,000.00	All	<input type="checkbox"/>
	9	Other Materials and Supplies	5039.6 Administration	\$30,000.00	All	<input type="checkbox"/>
	16	Other Materials and Supplies	5039.4 Vehicle Maintenance	\$10,000.00	All	<input type="checkbox"/>
	8	Other Materials and Supplies	5039.4 Vehicle Maintenance	\$10,000.00	All	<input type="checkbox"/>
	20	Other Materials and Supplies	5039.4 Vehicle Maintenance	\$10,000.00	Area	<input type="checkbox"/>
	10	Other Materials and Supplies	5039.1 Operations	\$4,800.00	All	<input type="checkbox"/>
	3	Other Salaries and Wages	5013.4 Vehicle Maintenance	\$170,000.00	All	<input type="checkbox"/>
	2	Other Salaries and Wages	5013.2 Dispatcher	\$170,000.00	All	<input type="checkbox"/>
	5	Other Salaries and Wages	5013.6 Administration	\$80,000.00	All	<input type="checkbox"/>
	4	Other Salaries and Wages	5013.5 Facility Maintenance	\$80,000.00	All	<input type="checkbox"/>
<b>Grand Total</b>				<b>20</b> entries totaling	<b>\$1,448,400.00</b>	

- To edit a cost entry in the Cost Entries List, click on the **editing** button next to the Cost ID column. The Calculator will take you back to the Step 2: Financial Data tab and isolate the specific cost entry you want to edit. When you are finished editing the record, click the **Remove Filter** button to show all entries.
- To delete cost entries, click the check boxes in the rightmost column for each entry you wish to delete, then click the **Delete** button at the top of the column.
- When you are finished, click the **Close Form** button at the bottom to return to the Step 2: Financial Data tab.

## 4.6 Step 3: Operational Data



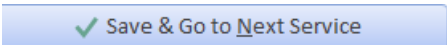
After completing entry of financial data in Step 2, the third step is to enter operational data for hours, miles, and trips information into Step 3: Enter Operational Data. You should enter the total actual data for the period rather than scheduled service information. The Calculator is intended to show calculated costs for a fiscal year.

Step 3 will also allow you to enter passenger hours and miles information for sponsored services within each shared-ride demand responsive route/service. Passenger miles and hours for the sponsored service should be estimated based on a consistent sampling method (as described in the Background section of this manual), while sponsored trips entered should be the total amount of trips for the route/service. The option to enter sponsored service data will only be available for routes/services categorized as Sponsored Service during Step 1.

Enter operational data by clicking the **Step 3: Enter Operational Data** button on the Navigation Menu. When using the Calculator for the first time, the page will appear like the image below. The data will populate in the columns of the page as you enter and save them.

Route / Service Name	Mode	Sponsored Type	Revenue Hours	Vehicle Hours	Revenue Miles	Vehicle Miles	Passenger Trips
Route 1	Motorbus	General Public Transportation					
Route 2	Motorbus	General Public Transportation					
Route 3	Motorbus	General Public Transportation					
Route 12 - Country	Motorbus	General Public Transportation					
Route 12 - Small City	Motorbus	General Public Transportation					
Route 15	Motorbus	General Public Transportation					
<b>Total</b>							

### Enter Data

To start, begin entering operational data for each route/service into the available blanks and dropdown boxes. Click the  **Save & Go to New Service** button to save the operational data for that route/service and move on to the next route/service, simultaneously clearing the data entry blanks. The data list in the menu shows the data for

routes/services currently saved in the Calculator – it will appear blank the first time you use the Calculator.


Enter whole numbers without any commas for each data entry blank. Each of the following attributes must be completed to assign operational data to the routes/services in the Calculator.

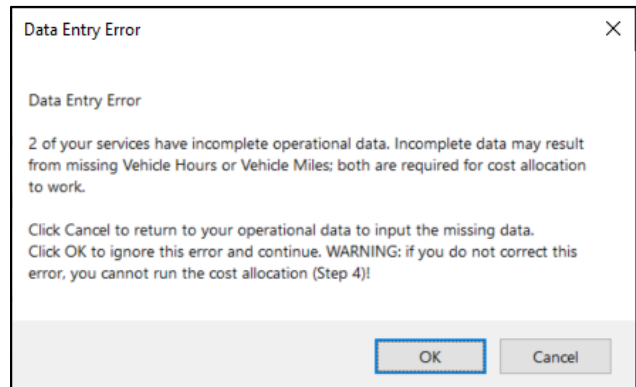
- **Revenue Hours:** Enter the number of revenue hours for the route/service. Revenue hours should not include deadhead hours. (Note: this field is optional, but highly recommended as it is used to calculate performance measures)
- **Vehicle Hours:** Enter the number of total vehicle hours for the route/service. Vehicle hours must be greater than or equal to the number of revenue hours for the route/service.
- **Revenue Miles:** Enter the number of revenue miles for the route/service. Revenue miles should not include deadhead miles. (Note: this field is optional, but highly recommended as it is used to calculate performance measures)
- **Vehicle Miles:** Enter the number of total vehicle miles for the route/service. Vehicle miles must be greater than or equal to the number of revenue miles for the route/service.
- **Passenger Trips:** Enter the number of passenger trips for the route/service. (Note: this field is optional, but highly recommended as it is used to calculate performance measures)

For information on entering data for local sponsors of a shared-ride demand responsive service, see the section on Sponsored Services Data further below

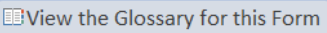


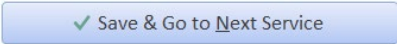
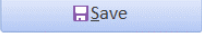
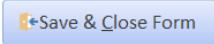
***Incomplete Data***

The vehicle hours and vehicle miles fields for each route/service must be completed in Step 3 in order to execute the cost allocation processes in Step 4. If there are any routes/services that do not have the vehicle hours and miles fields completed, a pop-up alert will appear when you

click on the  **Save & Close Form** button to return to the Navigation Menu. You can either correct and complete the empty data fields immediately by clicking “Cancel” or return to the Navigation Menu by clicking “OK” without correcting the error.

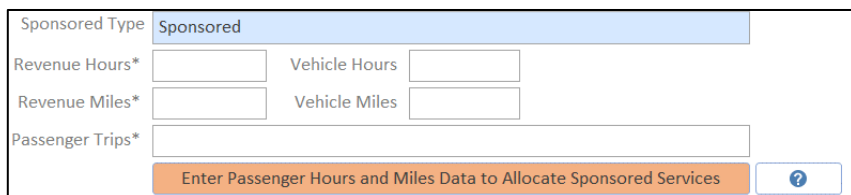


## Other Commands

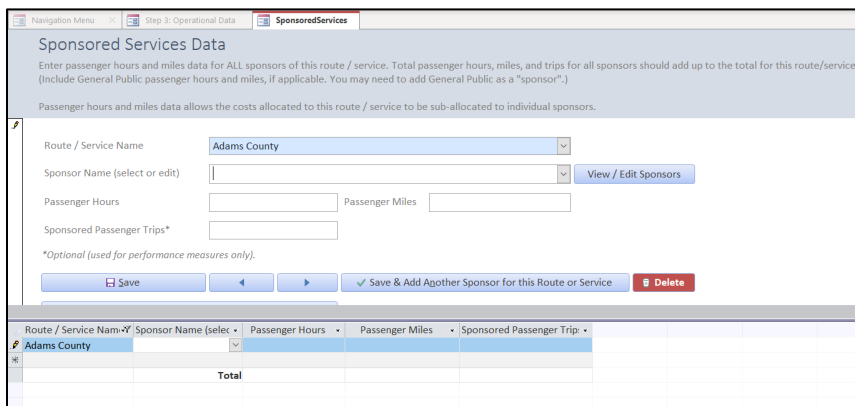
- View Glossary for Operational Terms** – At any point you can click on the  **View Glossary for this Form** button to open a window with terms and definitions for operational data. See more information on the Glossary within Calculator Helps in the Database Management section of this manual.
- Edit A Route/Service** – To edit data for a route/service in the data list, navigate to the record using the  **left arrow** and  **right arrow** buttons *or* click on the route/service to highlight it, then change as needed.
- Saving Records** – Each time you complete data entry for a route/service, click the  **Save & Go to Next Service** button to save the operational data for the route/service and reset the data entry blanks for the next entry. You can also click the  **Save** button at any time.
- Finished with Data Entry** – Once you are finished editing, click the  **Save & Close Form** button to return to the Navigation Menu.

## Sponsored Services Data

If the route/service is characterized as Sponsored in the Type of Service category in Step 1, an orange button will appear underneath the Passenger Trips blank titled **Enter Passenger Hours and Miles Data to Allocate Sponsored Services**. Click the button and the Calculator will navigate to the Sponsored Services Data tab. Here you can further allocate expenses for each sponsored service within the overall route/service.



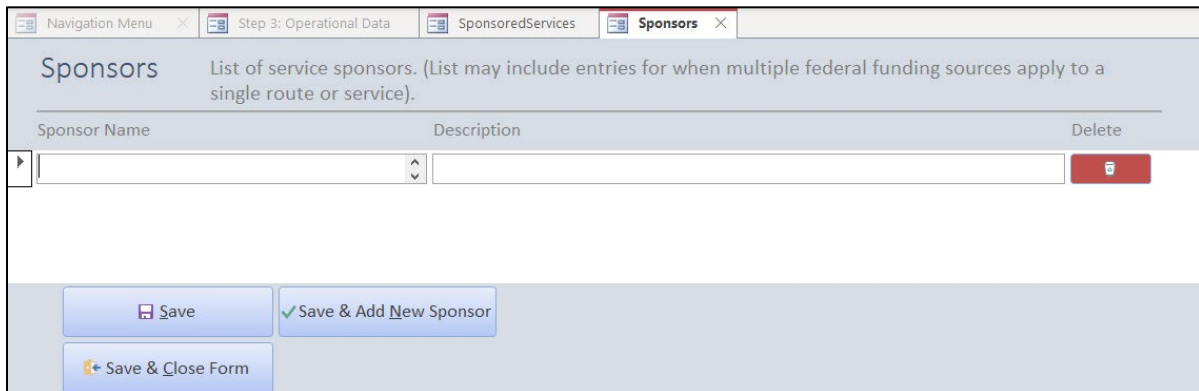
Each of the following attributes must be completed for Sponsored Services Data tab.



- **Route/Service Name:** Pre-filled field for the overall route/service selected in the previous Step 3 tab.
- **Sponsor Name:** Select the name of the sponsored service. See additional instructions in the Sponsor Names section for adding sponsor names to the Calculator.
- **Passenger Hours:** Enter the number of passenger hours for the sponsored service.
- **Passenger Miles:** Enter the number of passenger miles for the sponsored service.
- **Sponsored Passenger Trips:** Enter the number of passenger trips for the sponsored service. The sum of passenger trips for each sponsored service should equal the total number of passenger trips for the route/service. (Note: this field is optional, but highly recommended as it is used to calculate performance measures)



### *Sponsor Names*

Click on the  **View / Edit Sponsors** button to name the available sponsors to choose from for the route/service. The Calculator will take you to the Sponsors tab as shown below.




To enter a sponsor, type in the bottom row of the Sponsor Name column, then type in the name of the sponsor. If desired, you can also add a description in the description column for the sponsor.

Once you have finished naming and describing the sponsor for the route/ service, an additional row will appear below allowing the entry of more sponsor names. You can click the

 **Save & Add New Sponsor** button to save the current row and add a new row. You can also click the  **Save** button at the bottom to save your progress.




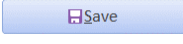


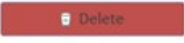
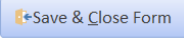
- **Sponsor Name:** Name of the sponsor(s) for the route/service.
- **Description:** Helpful description of the sponsor (if desired).

Click the  **red trash can** button to delete a sponsor name.

Click the  **Save & Close Form** button once you have completed entering information on sponsor names.

*Note:* The information for sponsor names can also be edited by clicking on the **Reference Data** button in the main Navigation Menu. See the Database Management section of this Manual for more details.

### *Other Commands for Sponsored Services*

- **Edit A Route/Service Sponsor** – To edit data for a route/service sponsor in the data list, navigate to the record using the  **left arrow** and  **right arrow** buttons *or* click on the route/service sponsor to highlight it, then change as needed.
  - **Saving Records** – Each time you complete data entry for a route/service, click the  **Save & Add Another Sponsor for this Route or Service** button to save the operational data for the route/service sponsor and reset the data entry blanks for the next entry. You can also click the  **Save** button at any time.
- **Delete A Route/Service Sponsor** – To delete a route/service sponsor from the data list, navigate to the record using the  **left arrow** and  **right arrow** buttons *or* click on the route/service sponsor to highlight it, then click the  **Delete** button.
- **Finished with Data Entry** – Once you are finished editing, click the  **Save & Close Form** button to return to Step 3: Enter Financial Data tab.

## 4.7 Step 4: Run Cost Allocation

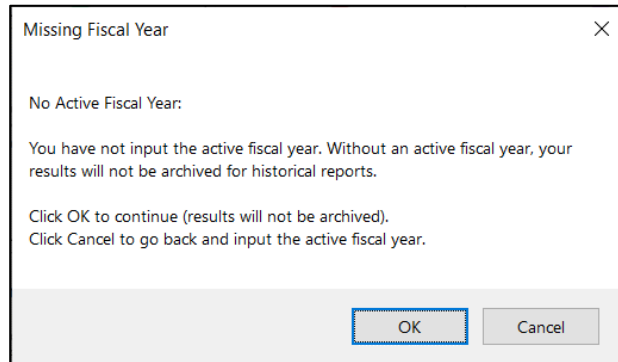


Once you have completed all data entry in Steps 1 through 3, the final step is to allocate expenses entered for each route/service. The Calculator will do this step on command and calculate the fully allocated cost for every route/service according to the number of hours and miles associated with them.

The Calculator will use the percentage of hours and miles for the route/service compared to total hours and miles to calculate the portion of variable costs under Operations, Operations-Fuel, and Vehicle Maintenance. Then the Calculator will calculate the portion of fixed costs under Non-Vehicle Maintenance and Administration for each route/service according to portion of variable costs for each.

Click on the **Step 4: Run Cost Allocation** button on the Navigation Menu to run the cost allocation calculations.

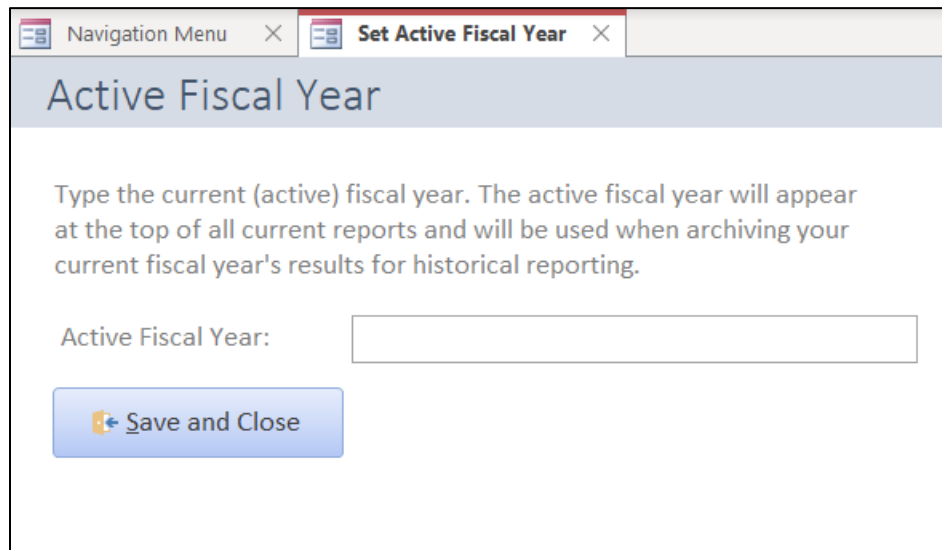
If you have already run the cost allocation for the data entered in the Calculator, click on the **Active Year Reports** button on the Navigation Menu. This will take you to the Generate Cost Allocation Summary Reports tab (see more information later in this section).

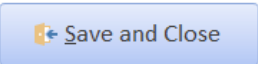


## Active Fiscal Year



To apply the cost allocation results from Step 4 to a fiscal year period, you need to specify the active fiscal year before clicking on the **Step 4: Run Cost Allocation** button. Above Step 4, click on the **Update Fiscal Year Label** button to navigate to the Active Fiscal Year tab.



- In the **Active Fiscal Year** blank, type in the four-digit fiscal year number associated with your data.
- Click the  **Save and Close** button when you are finished to return to the Navigation Menu. The active fiscal year saved will now be showing at the top of the page.

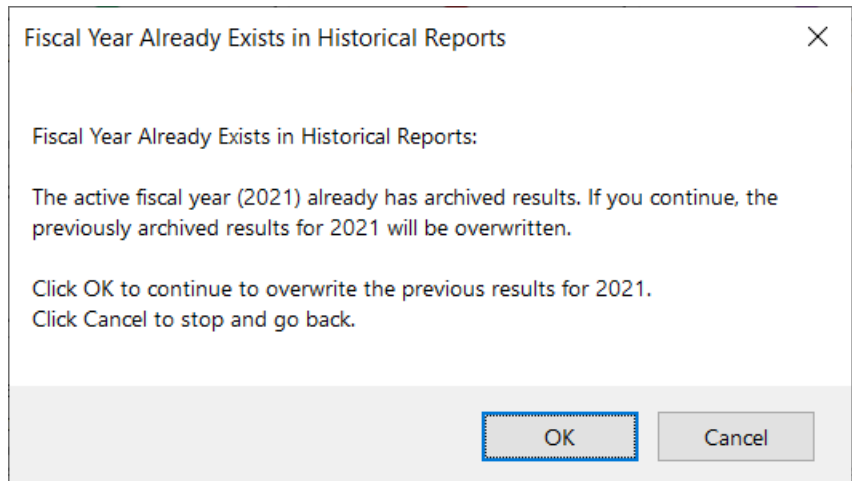
The Calculator checks on whether an Active Fiscal Year has been saved before running calculations in Step 4. Upon clicking the **Step 4: Run Cost Allocation** button, if you do not

have a fiscal year saved you will be prompted with a Missing Fiscal Year pop-up alert asking whether you are sure you want to proceed. You can still run cost allocation calculations in Step 4 without an Active Fiscal Year but results from Step 4 will not be archived in the Calculator.

- Click the **OK** button to proceed with the cost allocation process without an Active Fiscal Year for the results data
- Click the **Cancel** button to not proceed with the process before the fiscal year is entered

The Calculator also checks on whether you already have saved and archived data for the current Active Fiscal Year in the Calculator. If you click on the Step 4: Run Cost Allocation button and the Active Fiscal Year is already saved in the Calculator, a pop-up alert will inform you that the fiscal year report already exists in historical reports in the Calculator. You can either save over the existing fiscal year data or go back to change the Active Fiscal Year before proceeding.

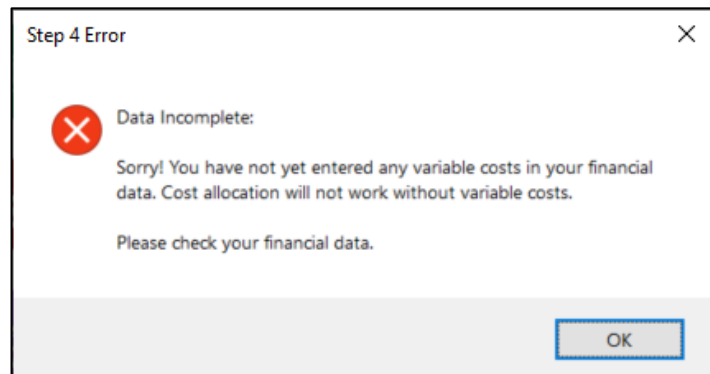
- Click the **OK** button to proceed with the cost allocation process and overwrite the existing results data for the archived year.
- Click the **Cancel** button to not proceed with the process before changing the fiscal year.



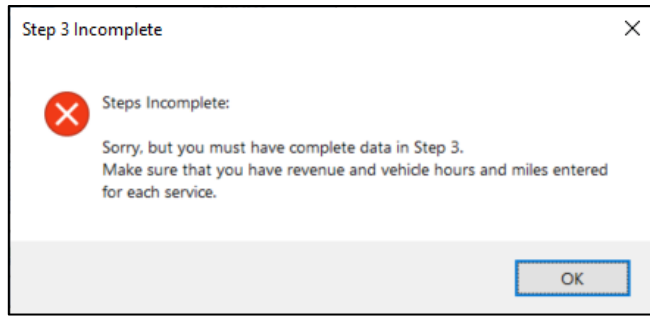

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***STOP!***

If you attempt to click the **Step 4: Run Cost Allocation** button *before* entering your routes/services data in Step 1, financial data in Step 2, and operational data in Step 3, you will get a pop-up alert directing you to go back to the previous tabs. Once you have at least one route/service with operational data and one financial expense as a variable cost entered in the Calculator, you will be able to proceed with allocating costs.

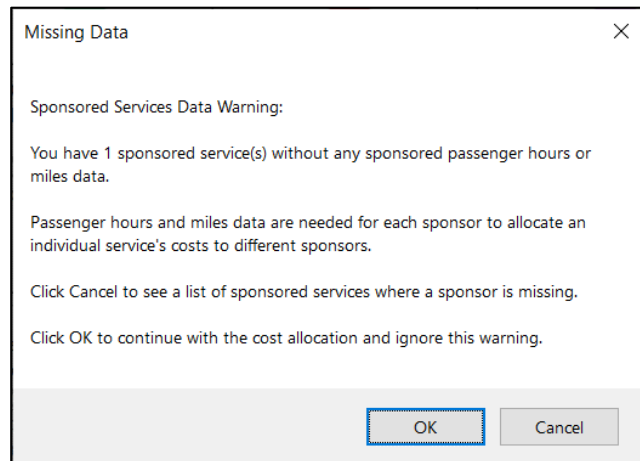


Similarly, if you attempt to click the **View Cost Allocation Reports** button *before* entering all necessary data in Steps 1 through 3, you will get a pop-up alert directing you to go back to the previous tabs. Once you have at least one route/service with operational data and one financial expense entered in the Calculator, you will be able to proceed to the Cost Allocation Results tab.




### ***Sponsored Data***

The Calculator also checks whether passenger hours and miles data has been entered in Step 3 for routes/service categorized as Sponsored Transportation in Step 1 upon clicking the **Step 4: Run Cost Allocation** button. Cost allocation calculations can be run without entering data for sponsored services, but suballocation of expenses for sponsored services will not be calculated without this data. If there are no sponsors along with passenger hours and miles data, a Missing Data pop-up alert will appear.



- Click the **OK** button to proceed with the cost allocation process without sponsored services data.
- Click the **Cancel** button to not proceed with the process before entering sponsored services data.

If you click **Cancel**, you will then be directed to the Sponsored Services Without a Sponsor tab which shows the sponsored services entered in Step 1 without completed sponsor names and passenger hours and miles data in Step 3. This tab only shows the applicable routes/services without data for sponsors entered – the data for any routes/services shown cannot be edited in this tab.

In order to edit the sponsored service data, click on the  **pencil** icon under Edit Sponsor Data. You will navigate to the selection for the route in the Step 3: Operational Data tab.

To go back to the Navigation Menu, click the  **Close Form** button.

## 4.8 Active Year Reports



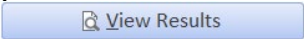
If you have already run the cost allocation for the data entered in the Calculator, you can simply click on the **Active Year Reports** button on the Navigation Menu. This will take you to the Generate Cost Allocation Summary Reports tab.

### Viewing Reports and Tables

The Generate Cost Allocation Summary Reports tab allows users to view reports according to the available dropdown list underneath the **Select Aggregation Type** prompt.

The options in the dropdown include the following.

- **View All:** Shows cost allocation results for all groups of routes/services
- **By Route/Service Name:** Shows the cost allocation results for each individual route/service
- **By Mode:** Shows cost allocation results by NTD travel mode
- **By Service Area:** Shows cost allocation results by geographic area or NTD jurisdiction
- **By Type of Service:** Shows cost allocation results by Directly Operated or Purchased Transportation service
- **By Sponsored Type:** Shows cost allocation results by General Public or Sponsored service
- **By Primary Funding Source:** Shows cost allocation results by primary funding source
- **By Sponsor:** Shows cost allocation results for each individual local sponsor

Once you select a cost allocation type in the dropdown list, you must then select an output type from the options below. More information on the report and export options is found in the following section. Make a selection for the output type and click the  **View Results** button to run the output, which will either open a new tab(s) or launch an export prompt.

Click the  **Close Form** button to return to the Navigation Menu.

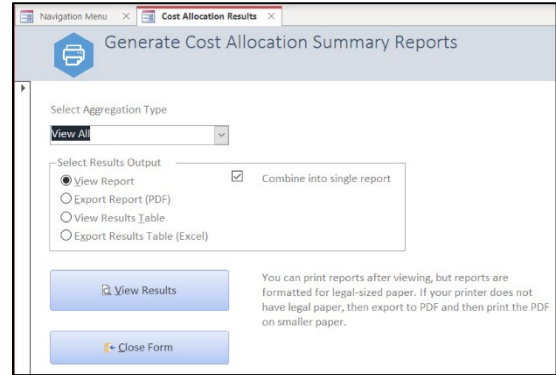
*Note:* The PDF reports generated by the Access Calculator are formatted for 11x14 legal size printing, though they can be fit to print on 8.5x11 letter size printing. You may need to change the default layout when printing the report to your desired paper size.

## Report and Export Options

There are four options for viewing or exporting data from the Calculator.

- **View Report:** opens a window on the fully allocated cost and performance measures for the selected Aggregation Type.

To view a combined report for all groups of cost allocation results, select **View All** in the dropdown list. The checkbox to the right for “**Combine into a single report**” will be selected by default; unselect the checkbox to generate separate reports for each group of routes/services.



- **Export Report (PDF):** launches a prompt to save a PDF version of the report for the selected Aggregation Type.

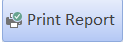
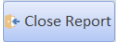
To export a combined PDF report for all groups of cost allocation results, select **View All** in the dropdown window. The checkbox to the right for “**Combine into a single report**” will be selected by default; unselect the checkbox to generate separate report exports for each group of routes/services.

- **View Results Table:** opens a tab on the fully allocated costs and performance measures in a table format rather than a report. The example below shows a table of allocation results by Mode.

Vehicle Operations: Hours-Based	Vehicle Operations: Miles-Based	Vehicle Maintenance	Facility Maintenance	General Administration	Total Allocated Cost	Pass.
\$70,043.21	\$16,666.67	\$27,976.19	\$8,965.10	\$36,981.05	\$160,632.21	
\$68,041.98	\$15,952.38	\$26,777.21	\$8,659.10	\$35,718.80	\$155,149.47	
\$510,314.81	\$107,380.95	\$180,246.60	\$62,375.80	\$257,300.16	\$1,117,618.32	
<b>\$648,400.00</b>	<b>\$140,000.00</b>	<b>\$235,000.00</b>	<b>\$80,000.00</b>	<b>\$330,000.00</b>	<b>\$1,433,400.00</b>	

- **Export Results Table (Excel):** launches a prompt to save an Excel version of the allocation results table for the selected option.
- **View Report:** The pop-up window shows the cost allocation results and performance measures for the selected group of routes in a formatted report output. The example below shows a report for Allocation Results by Mode.

Mode	Cost Allocation						Performance Measures						
	Operations Cost by Transit Function					Total Allocated Cost	Service Effectiveness Measures		Cost Efficiency Measures			Cost Effectiveness Measure	
	Vehicle Operations: Hours-Based	Vehicle Operations: Miles-Based	Vehicle Maintenance	Facility Maintenance	General Administration		Pass. per Revenue Hour	Pass. per Revenue Mile	Cost per Revenue Hour	Cost per Revenue Mile	Cost per Total Vehicle Hour		Cost per Total Vehicle Mile
Motorbus	\$596,225	\$107,381	\$176,648	\$67,816	\$279,742	\$1,227,812	7.86	0.50	\$58.47	\$3.70	\$21.54	\$2.72	\$7.44
Demand Response	\$35,564	\$15,952	\$27,162	\$6,062	\$25,004	\$109,744	0.57	0.03	\$36.58	\$2.19	\$32.28	\$1.64	\$64.56
Commuter Bus	\$36,610	\$16,667	\$26,190	\$6,122	\$25,254	\$110,844	3.00	0.13	\$36.95	\$1.61	\$31.67	\$1.58	\$12.32
<b>Total</b>	<b>\$668,400</b>	<b>\$140,000</b>	<b>\$230,000</b>	<b>\$80,000</b>	<b>\$330,000</b>	<b>\$1,448,400</b>	<b>6.51</b>	<b>0.39</b>	<b>\$53.64</b>	<b>\$3.22</b>	<b>\$22.67</b>	<b>\$2.46</b>	<b>\$8.24</b>

- **Print** - To print a report to a PDF file or a printer on your network, click the  **Print Report** button to select the desired printing options.
- **Close** – When you are finished viewing the report, click the  **Close Report** button to return to the Cost Allocation Results tab.

## 4.9 Historical Year(s) Reports



Once you have run and archived at least two years of cost allocation results you can access the Historical Year Reports in the Access Calculator. Click on the **Historical Year(s) Reports** button on the Navigation Menu to open the Historical Cost Allocation Reports tab.

### Viewing Reports and Tables

The Historical Cost Allocation Reports tab allows users to generate either single year reports from a previous archived year or multi-year report for a range of archived fiscal years. Within those fiscal year periods you can select the Historical Data Type and Aggregation Type for the reports or tables you wish to generate.

**Select Historical Report Type**

In the menu you can select either a **Single Year** or **Multi-Year Report**.

- Select **Single Year** to view a report or table for a single archived fiscal year.

With this selection, a dropdown list for **Fiscal Year** will appear on the right-hand side of the page. Select the fiscal year you desire for the report or table.

- Select **Multi-Year** to view a report or table for a range of archived fiscal years.

With this selection, two dropdown lists for **Starting FY** and **Ending FY** will appear on the right-hand side of the page. Select the fiscal years for the range you desire for the report or table. The ending fiscal year must be after the starting fiscal year for the report or table to generate.

**Select Historical Data Type**

There are two options for historical data report types, Cost Allocation Results or Operations Data Only.

- **Cost Allocation Results** - This report shows the results for operational cost by transit function, total allocated cost, service effectiveness measures, cost efficiency measures,

and cost effectiveness measures for the given group of routes/services. Percentage changes are calculated for the most recent and second most recent year, as well as the most recent year to the earliest year.

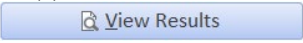
- **Operational Data Only** - This report shows the data saved for hours, miles and trips as well as service effectiveness measures for the given group of routes/services. Percentage changes are calculated for the most recent and second most recent year, as well as the most recent year to the earliest year.

### *Select Aggregation Type*

In the dropdown under Select Aggregation Type are the available selection options for historical cost allocation results including the following:

- **By Route/Service Name:** Shows the historical cost allocation results for each individual route/service.
- **By Mode:** Shows historical cost allocation results by NTD travel mode.
- **By Service Area:** Shows historical cost allocation results by geographic area or NTD jurisdiction.
- **By Type of Service:** Shows historical cost allocation results by Directly Operated or Purchased Transportation service.
- **By Sponsored Type:** Shows historical cost allocation results by General Public or Sponsored service.
- **By Primary Funding Source:** Shows historical cost allocation results by primary funding source.
- **By Sponsor:** Shows historical cost allocation results for each individual local sponsor.

### *View Results*

Once you select the Historical Report, Fiscal Year(s), Historical Data, and Aggregation types from the radio buttons and dropdown, click the  **View Results** button to run the output, which will either open a new tab(s) or launch an export prompt.

Click the  **Close Form** button to return to the Navigation Menu.

*Note:* The PDF reports generated by the Access application are formatted for 11x14 legal size printing, though they can be fit to print on 8.5x11 letter size printing. You may need to change the default layout when printing the report to your desired paper size.

## Report and Export Options

There are four options for viewing or exporting data from the Calculator.

- **View Report:** Opens a pop-up window on the fully allocated cost and performance measures for the selected option.
- **Export Report (PDF):** Launches a prompt to save a PDF version of the report for the selected option.
- **View Results Table:** Opens a tab with the fully allocated costs and performance measures in a table format rather than a report.
- **Export Results Table (Excel):** Launches a prompt to save an Excel version of the allocation results table for the selected option.

### View Reports

The pop-up window shows the report for the Historical Data Type for the selected group of routes in a formatted report output.

### Cost Allocation Results Report

The Cost Allocation Results reports include archived data for Operations Cost by Transit Function, Total Allocated Cost, Service Effectiveness Measures, Cost Efficiency Measures, and Cost Effectiveness Measure for the group of routes/services selected by Aggregation Type. Figure 18 shows an example of a historical Cost Allocation Results report by Mode for a two-year period.

Figure 18: Historical Cost Allocation Results by Mode

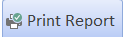
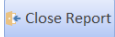
Historical Cost Allocation Results By Mode													
Cost Allocation Results By Mode FY2021-FY2022											Monday, January 5, 2026 2:31:50 PM		
Mode & Fiscal Year	Operations Cost by Transit Function					Total Allocated Cost	Performance Measures						
	Vehicle Operations: Hours-Based	Vehicle Operations: Miles-Based	Vehicle Maintenance	Facility Maintenance	General Administration		Service Effectiveness Measures		Cost Efficiency Measures			Cost Effectiveness Measure	
							Pass. per Revenue Hour	Pass. per Revenue Mile	Cost per Revenue Hour	Cost per Revenue Mile	Cost per Total Vehicle Hour		Cost per Total Vehicle Mile
<b>Commuter Bus</b>													
2021	\$70,043	\$16,667	\$27,976	\$8,965	\$36,981	\$160,632	3.00	0.13	\$53.54	\$2.33	\$45.89	\$2.29	\$17.85
2022	\$70,043	\$16,667	\$26,786	\$16,799	\$36,958	\$167,253	3.00	0.13	\$55.75	\$2.42	\$47.79	\$2.39	\$18.58
% change 2022 v. 2021	0.00%	0.00%	-4.26%	87.38%	-0.06%	4.12%	0.00%	0.00%	4.12%	4.12%	4.12%	4.12%	4.12%
% change 2022 v. 2021	0.00%	0.00%	-4.26%	87.38%	-0.06%	4.12%	0.00%	0.00%	4.12%	4.12%	4.12%	4.12%	4.12%
<b>Demand Response</b>													
2021	\$68,042	\$15,952	\$26,777	\$8,659	\$35,719	\$155,149	0.57	0.03	\$51.72	\$3.10	\$45.63	\$2.32	\$91.26
2022	\$68,042	\$15,952	\$25,638	\$16,227	\$35,700	\$161,560	0.57	0.03	\$53.85	\$3.23	\$47.52	\$2.41	\$95.04
% change 2022 v. 2021	0.00%	0.00%	-4.26%	87.40%	-0.05%	4.13%	0.00%	0.00%	4.13%	4.13%	4.13%	4.13%	4.13%
% change 2022 v. 2021	0.00%	0.00%	-4.26%	87.40%	-0.05%	4.13%	0.00%	0.00%	4.13%	4.13%	4.13%	4.13%	4.13%
<b>Motorbus</b>													
2021	\$510,315	\$107,381	\$180,247	\$62,376	\$257,300	\$1,117,618	7.86	0.43	\$53.22	\$2.93	\$43.83	\$2.48	\$6.77
2022	\$510,315	\$107,381	\$172,577	\$116,973	\$257,341	\$1,164,587	7.86	0.43	\$55.46	\$3.06	\$45.67	\$2.58	\$7.06
% change 2022 v. 2021	0.00%	0.00%	-4.26%	87.53%	0.02%	4.20%	0.00%	0.00%	4.20%	4.20%	4.20%	4.20%	4.20%
% change 2022 v. 2021	0.00%	0.00%	-4.26%	87.53%	0.02%	4.20%	0.00%	0.00%	4.20%	4.20%	4.20%	4.20%	4.20%
<b>Total</b>													
2021	\$648,400	\$140,000	\$235,000	\$80,000	\$330,000	\$1,433,400	6.51	0.35	\$53.09	\$2.87	\$44.24	\$2.44	\$8.16
2022	\$648,400	\$140,000	\$225,000	\$150,000	\$330,000	\$1,493,400	6.51	0.35	\$55.31	\$2.99	\$46.09	\$2.54	\$8.50
% change 2022 v. 2021	0.00%	0.00%	-4.26%	87.50%	0.00%	4.19%	0.00%	0.00%	4.19%	4.19%	4.19%	4.19%	4.19%
% change 2022 v. 2021	0.00%	0.00%	-4.26%	87.50%	0.00%	4.19%	0.00%	0.00%	4.19%	4.19%	4.19%	4.19%	4.19%

### Operations Data Only Report

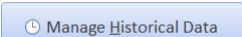
The Operations Data Only Report includes data for hours, miles, and trips as well as Service Effectiveness Measures for the group of routes/services selected by Aggregation Type. Figure 19 shows an example of a historical Operations Data Only report by Mode.

Figure 19: Historical Operations Data Only Report by Mode

Mode & Fiscal Year	Operations Data					Service Effectiveness Measures	
	Revenue Hours	Vehicle Hours	Revenue Miles	Vehicle Miles	Pass. Trips	Pass. per Revenue Hour	Pass. per Revenue Mile
<b>Commuter Bus</b>							
2021	3,000	3,500	69,000	70,000	9,000	3.00	0.13
2022	3,000	3,500	69,000	70,000	9,000	3.00	0.13
% change 2022 v. 2021	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
% change 2022 v. 2021	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
<b>Demand Response</b>							
2021	3,000	3,400	50,000	67,000	1,700	0.57	0.03
2022	3,000	3,400	50,000	67,000	1,700	0.57	0.03
% change 2022 v. 2021	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
% change 2022 v. 2021	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
<b>Motorbus</b>							
2021	21,000	25,500	381,000	451,000	165,000	7.86	0.43
2022	21,000	25,500	381,000	451,000	165,000	7.86	0.43
% change 2022 v. 2021	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
% change 2022 v. 2021	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
<b>Total</b>							
2021	27,000	32,400	500,000	588,000	175,700	6.51	0.35
2022	27,000	32,400	500,000	588,000	175,700	6.51	0.35
% change 2022 v. 2021	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
% change 2022 v. 2021	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

- **Print** - To print a report to a PDF file or a printer on your network, click the  **Print Report** button to select the desired printing options.
- **Close** – When you are finished viewing the report, click the  **Close Report** button to return to the Cost Allocation Results.

### Manage Historical Data

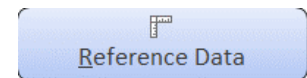
Within the Historical Cost Allocation Reports tab you can view or delete archived results data for each fiscal year saved in the Calculator. Click on the  **Manage Historical Data** button to open the Manage Fiscal Years in Historical Results tab. See more in the Database Management section of this manual.

*Note:* The Manage Fiscal Years in Historical Results tab can also be accessed by clicking on the **Delete Data Batches** button from the main Navigation Menu, then on the **Historical Results Data** button. See the Database Management section of the Manual for more details.

## 4.10 Database Management

The Database Management section on the Navigation Menu allows users to manage reference data, export data, reset data for the entire Calculator, delete specific batches of data or view helpful resources.

### Manage Reference Data



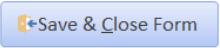


To manage the reference data saved in the Calculator, click on the **Reference Data** button on the Navigation Menu. On the Calculator Reference Data tab, there are three data category tabs available for Service Areas, Funding, and Sponsors. Users can edit the data names and descriptions for these data elements here in order for the same reference data categories to be made available in Steps 1 and 3. Click on the cells to edit the names and description for each reference data category as needed.

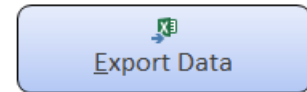
The screenshot shows a web application window with two tabs: "Navigation Menu" and "Reference Data". The "Reference Data" tab is active, displaying the "Calculator Reference Data" section. Underneath, there are three tabs: "Service Areas", "Funding", and "Sponsors". The "Service Areas" tab is selected, showing the title "Service Areas (Rural and Urban Areas)" and a description: "List of service areas. List should include all rural and/or urban service areas to which costs will be allocated." Below this is a table with three columns: "Area Name", "Area Description", and "Delete".

Area Name	Area Description	Delete
Rural Area (non-UZA)		
Urban Area (UZA)		
Small City		
*		

At the bottom of the interface, there are three buttons: "Save", "Save & Add a New Service Area", and "Save & Close Form".

- Click the  **red trash can** button to delete an available reference data name.
- Click the  **Save** button at the bottom of the tab to save your progress.
- Click the **Save & Add** button to save the entry and move to the bottom row of the entry list.
- Click the  **Save & Close Form** button when you are finished to return to the Navigation Menu.

## Export Data



To export data entered into the Calculator during Steps 1 through 3 or the allocation results for the routes/services, click on the **Export Data** button on the Navigation Menu.

### Export Data

Export Cost Entries


Export your financial data entries (Step 2 data) into an Excel workbook

Export Service and Operating Data

Export your service and operating data entries (data from Steps 1 and 3) into an Excel workbook

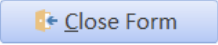
Export Sponsored Service Operating Data

Export your sponsored service operating data entries (passenger hours, miles, and trips data) from Step 3 for sponsored services into an Excel workbook

 Close Form

There are three export options that will provide data in an Excel download format:

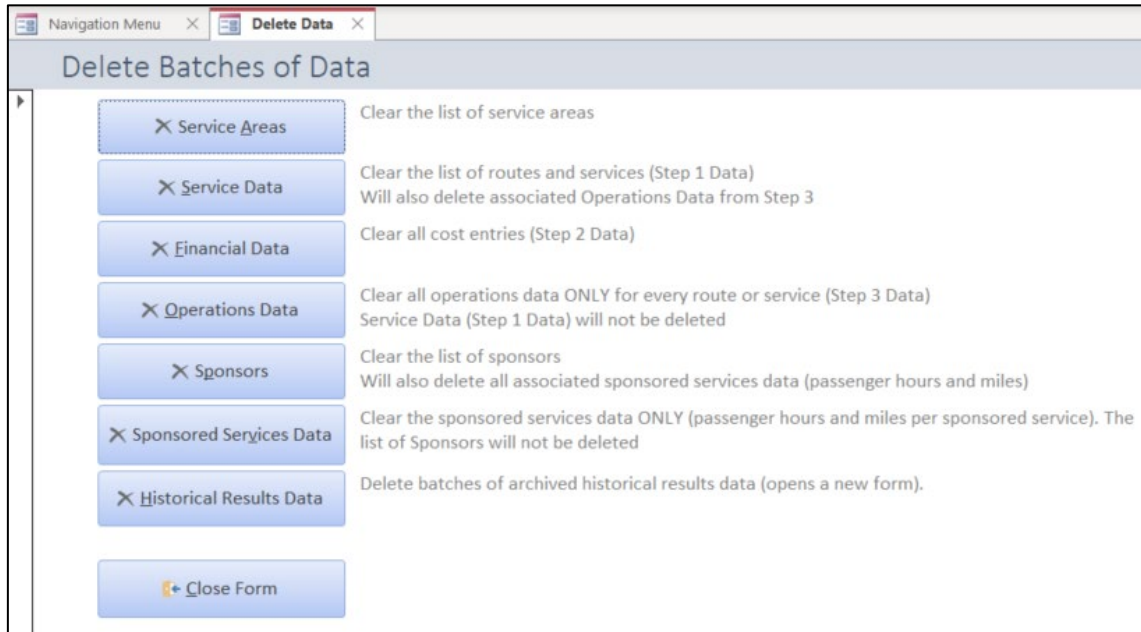
- **Export Cost Entries:** launches a prompt to save an Excel download of the cost entry data entered during Step 2 of the Calculator.
- **Export Service and Operating Data:** launches a prompt to save an Excel download of the routes/services with operational data entered during Steps 1 and 3 of the Calculator.
- **Export Sponsored Service Operating Data:** launches a prompt to save an Excel download of the sponsored service operating data entries (passenger hours, miles, and trips data) from Step 3 for sponsored services.

Click the  **Close Form** button to return to the Navigation Menu.

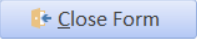
## Delete Data Batches



To delete certain batches of data from the Calculator, click the **Delete Data Batches** button on the Navigation Menu. The Calculator will open the Delete Batches of Data tab, which has the options listed below. Clicking any option will show a prompt asking whether you are sure you want to delete that batch of data.

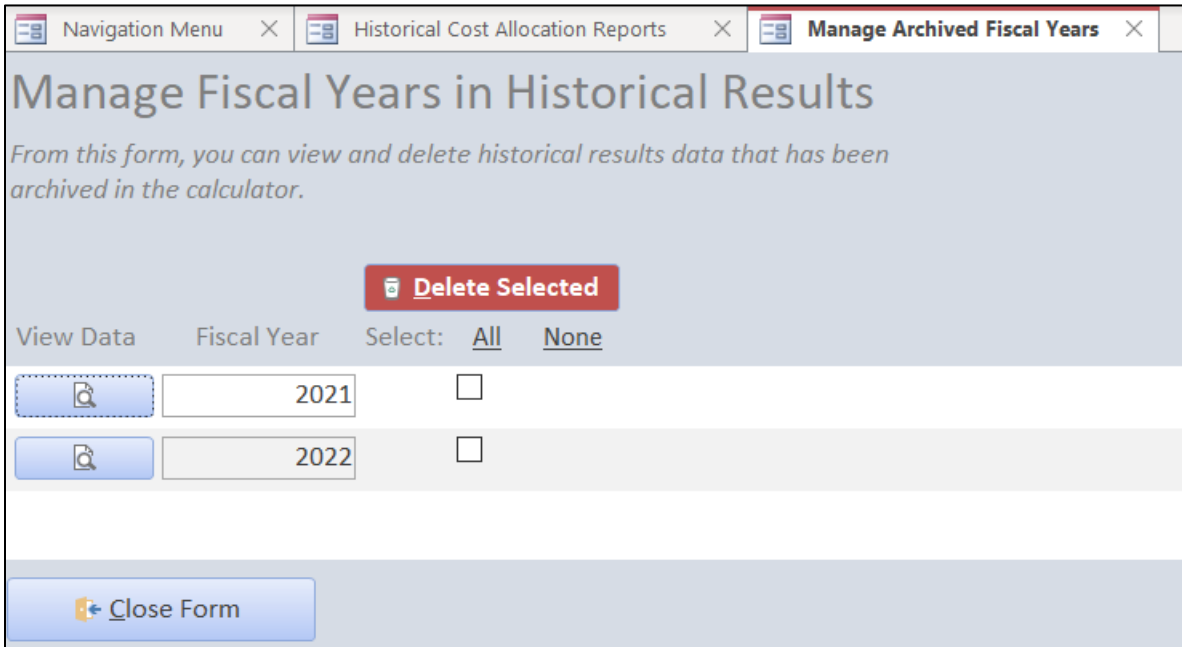




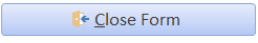
- **Service Areas:** Deletes all data for NTD jurisdictions /geographies entered within Step 1.
- **Service Data:** Deletes all data for route/service characteristics entered in Step 1, along with associated operations data entered in Step 3.
- **Financial Data:** Deletes all cost entries data entered in Step 2.
- **Operations Data:** Deletes all operational data entered in Step 3.
- **Sponsors:** Deletes all data for sponsor names entered within Step 3, along with associated passenger hours and miles data.
- **Sponsored Services Data:** Deletes all passenger hours and miles data within Step 3.
- **Historical Results Data:** Opens the Manage Fiscal Years in Historical Results tab (see next section below).

Click the  **Close Form** button to return to the Navigation Menu.

***Manage Fiscal Years in Historical Results***

From the Manage Fiscal Years in Historical Results tab you can choose to view or delete historical results data.



- Click the  **View Data** button to navigate to the Archived Historical Results Data tab (see section below).
- Click the  **Delete Selected** button to delete all archived fiscal year data that has a checkbox selected.
- Click the  **Close Form** button to return to the Navigation Menu.

***Archived Historical Results Data***

From the Archived Historical Results Data tab, you can choose to edit specific historical results records or delete historical results data.

Navigation Menu | Historical Cost Allocation Reports | Manage Archived Fiscal Years | Archived Historical Results

### Archived Historical Results Data


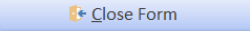
Archived cost allocation results and operations data are shown below for each route / service name and fiscal year.

- Changing the Route / Service Name is allowable and should not affect the accuracy of allocation results.
- Editing other values or deleting records on this form is possible, but IS NOT RECOMMENDED. Making changes or deleting records may cause allocation results to be incorrect. For example, the Total Allocated Cost will not update if you change one of the cost fields (e.g., Vehicle Operations), and to maintain accuracy, you would have to edit several other values.

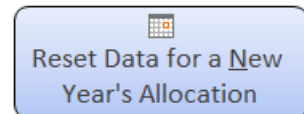
Delete Selected

	Fiscal Year	Sponsor	Route / Service Name	Mode	Primary Funding Source	Service Area	Type of Service	Sponsored Type	Vehicle Operations: Hours-Based	Vehicle Operations: Miles-Based
<input type="checkbox"/>	2021		Route 2	Motorbus	5311	Rural Area (non-L)	Directly Operatec	General Public Se	\$70,043.21	\$16,904.76
<input type="checkbox"/>	2021		Route 3	Motorbus	5311	Rural Area (non-L)	Directly Operatec	General Public Se	\$70,043.21	\$9,523.81
<input type="checkbox"/>	2021		Route 12 - Countr	Motorbus	5311	Rural Area (non-L)	Directly Operatec	General Public Se	\$50,030.86	\$9,761.90
<input type="checkbox"/>	2021		Route 12 - Small (	Motorbus	5307	Rural Area (non-L)	Directly Operatec	General Public Se	\$30,018.52	\$7,619.05
<input type="checkbox"/>	2021		Route 15	Motorbus	5307	Urban Area (UZA)	Directly Operatec	General Public Se	\$90,055.56	\$22,619.05
<input type="checkbox"/>	2021		Route 16	Motorbus	5307	Urban Area (UZA)	Directly Operatec	General Public Se	\$110,067.90	\$24,523.81
<input type="checkbox"/>	2021		Purple	Commuter Bus	5307	Urban Area (UZA)	Purchased Transp	General Public Se	\$70,043.21	\$16,666.67
<input type="checkbox"/>	2021		Washington Cour	Demand Respons	5311	Rural Area (non-L)	Directly Operatec	General Public Se	\$24,014.81	\$5,238.10
<input type="checkbox"/>	2021		Adams County	Demand Respons	5311	Rural Area (non-L)	Directly Operatec	Sponsored	\$44,027.16	\$10,714.29
<input type="checkbox"/>	2021	Veterans	Adams County						\$33,867.05	\$8,497.54
<input type="checkbox"/>	2021	Medicaid	Adams County						\$10,160.11	\$2,216.75
<input type="checkbox"/>	2021		Route 1	Motorbus	5311	Rural Area (non-L)	Directly Operatec	General Public Se	\$90,055.56	\$16,428.57

Select: All None

- Click the editable cells to edit historical results information archived for the fiscal year in the Calculator. *Note: this will overwrite the existing results data and cannot be undone..*
- Click the  **Delete Selected** button to delete all archived fiscal year data that has a checkbox selected.
- Click the  **Close Form** button to return to the Navigation Menu.

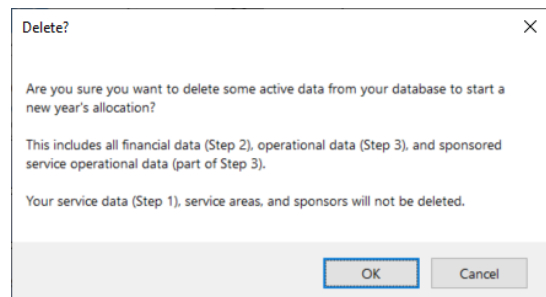
## Reset Data



To use the Calculator across multiple fiscal years, click the **Reset Data for a New Year's Allocation** button on the Navigation Menu. This will clear all financial data, operational data, and active year cost allocation results from the Calculator. This button clears all financial data and operational data in Steps 2 and 3 while keeping the saved Fiscal Year Report data you have archived in the Calculator. Clicking this button will maintain the service characteristics data saved in Step 1, allowing you to use the same set of routes or services for the new fiscal year without starting from scratch.

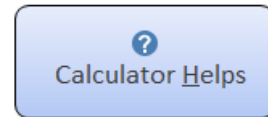
## STOP!

The Reset Data for New Year function should only be used once you have generated a Summary Report with your data and are satisfied with the data accuracy from your data inputs in Steps 1, 2, and 3. Once you reset the Calculator with this function, you will not be able to get back any financial data or operational data previously entered in Steps 2 and 3, respectively.

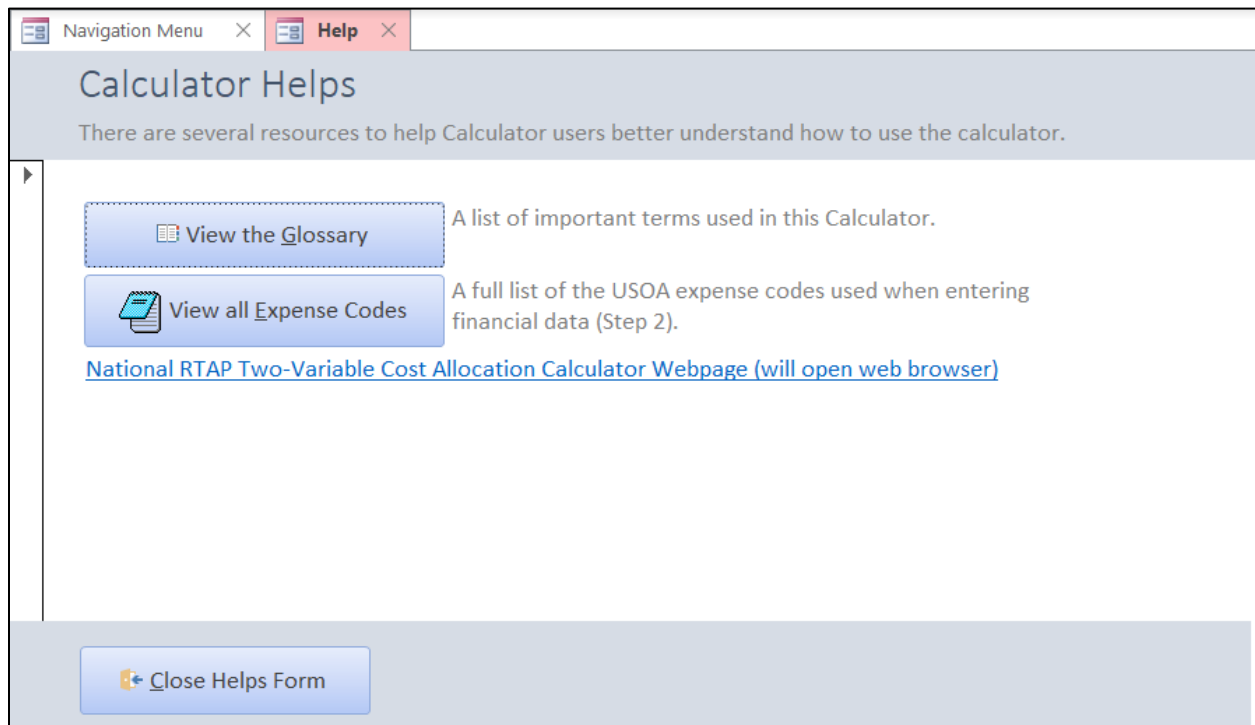


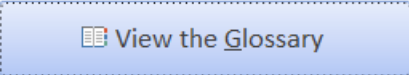
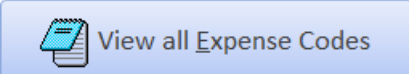
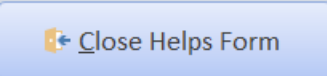
After clicking the Reset Data for New Year button, the pop-up alert shown above will appear. Click **OK** to reset the Calculator for a new fiscal year, or click **Cancel** to return to the Navigation Menu.

## Calculator Helps



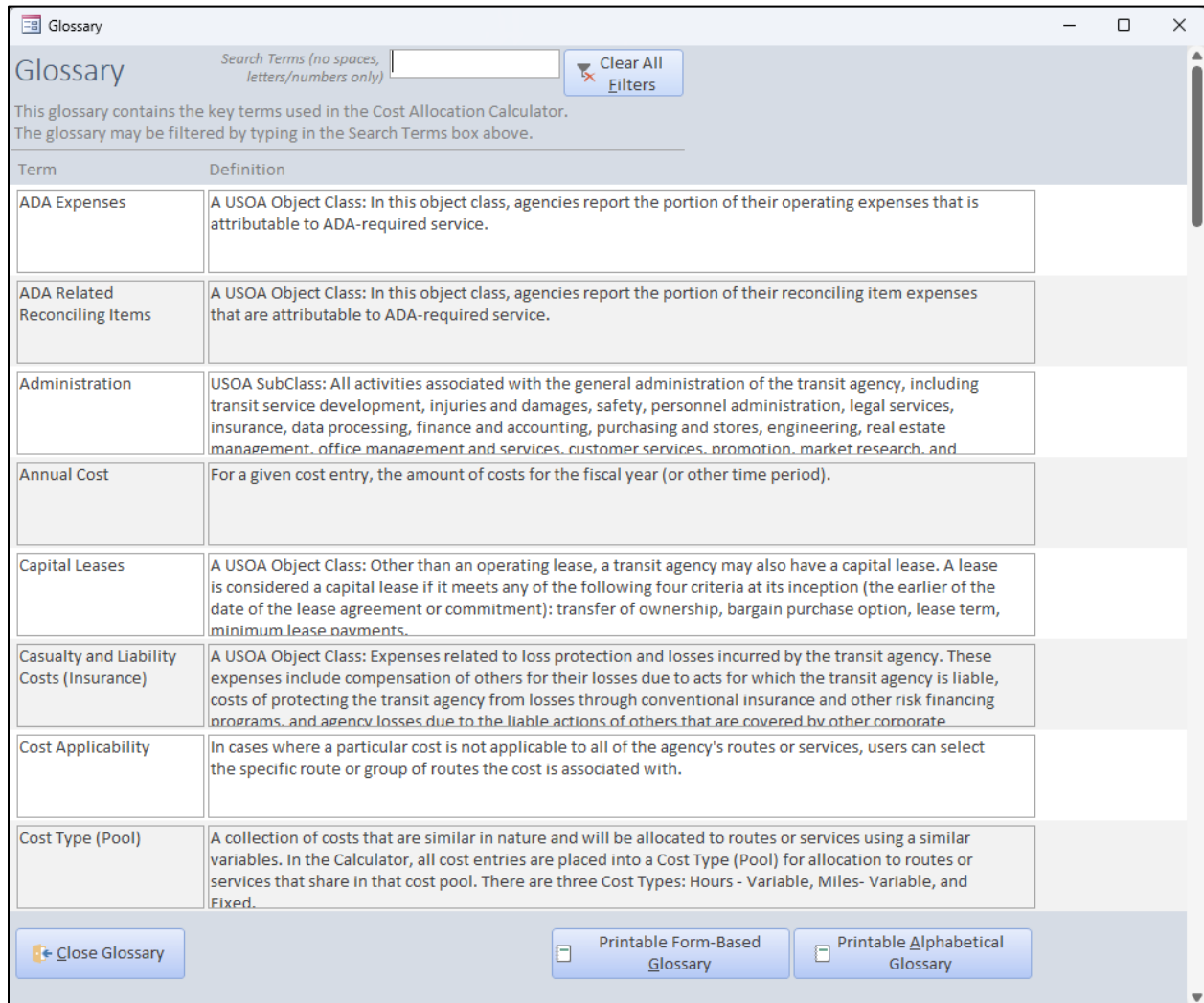
To view available resources on understanding data terminology, USOA expense codes applicable to transit service, and National RTAP guidance for the Cost Allocation Calculator, click on the **Calculator Helps** button on the Navigation Menu.

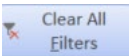
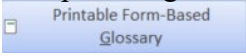
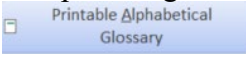
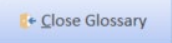


- Click the  **View the Glossary** button to open the window for the Glossary of terms used in the Calculator.
- Click the  **View all Expense Codes** button to open the window for the Expense Codes List on USOA expense codes available in Step 2.
- Click the hyperlink to open the Cost Allocation Calculator support center page on the National RTAP website in your browser.
- Click the  **Close Helps Form** button to close the Calculator Helps tab and return to the main Navigation Menu.

## Glossary

This glossary contains key terms used in the Cost Allocation Calculator in Steps 1, 2, and 3. Users can scroll through the window or use the blank cell at the top of the window to search for specific terms.



- To clear the search terms cell, click on the  **Clear All Filters** button.
- To open the glossary in a printable format tab organized by data type, click on the  **Printable Form-Based Glossary** button.
- To open the glossary in a printable format tab organized alphabetically, click on the  **Printable Alphabetical Glossary** button.
- When you are finished, click the  **Close Glossary** button at the bottom of the window to return to the main Calculator Helps tab, Navigation Menu or Financial Data or Operational Data tabs if the Glossary was accessed there.

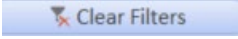


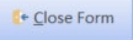
### Expense Code List

This window provides information on all USOA expense codes available for Step 2: Enter Financial Data tab. Users can use the filters at the top of the window to show information for specific cost groups, object class titles, subtitles applicable to cost function subclasses, transit functions, and cost types. The filters for Title, Subtitle, and Transit Function are consistent with the available options for data entry in Step 2: Enter Financial Data. The Cost Type terms show whether a particular Cost Code is pooled and allocated according to variable (by either hours or miles) or fixed expenses.

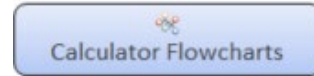
Also, users can search for specific words in the cost definitions using the blank cell above the Definition column. Entering a word(s) will filter the expense codes in the window to show only definitions containing the word(s) entered.

The screenshot shows the 'Expense Code List' window. At the top, there are instructions: '- This form displays all expense codes used by the Cost Allocation Calculator.', '- To view the full details for a single expense code, click on the code number in the Cost Code column.', and '- To filter the list of codes, use the boxes above the column labels; to remove the filter, click Clear'. Below the instructions is a 'Clear Filters' button and a search box with an 'X' button. The main table has the following columns: USOA Cost Group, Cost Code, Title (USOA Object Class), Subtitle, Definition, Transit Function, and Cost Type (Pool). The table contains five rows of data, all with '5010 - Labor' in the USOA Cost Group column. The Cost Codes are 5011.1, 5011.2, 5011.4, 5011.5, and 5011.6. The Subtitles are Operations, Dispatching, Vehicle Maintenance, Facility Maintenance, and Administration. The Definitions describe salaries and wages for various roles. The Transit Functions are Vehicle Operations, Vehicle Maintenance, Facility Maintenance, and General Administration. The Cost Types are Hours - Variable, Miles - Variable, and Fixed. At the bottom, there are buttons for 'Close Form' and 'Printable Expense Code Report'.

USOA Cost Group	Cost Code	Title (USOA Object Class)	Subtitle	Definition	Transit Function	Cost Type (Pool)
5010 - Labor	5011.1	Operators Salaries and Wages	Operations	Operators' salaries and wages include the cost of labor, excluding paid absences and fringe benefits, for the transit agency's employees who are classified as revenue vehicle operators or crewmembers.	Vehicle Operations	Hours - Variable
5010 - Labor	5011.2	Operators Salaries and Wages	Dispatching	Salaries and wages for operators when performing as a dispatcher. Includes the cost of labor, excluding paid absences and fringe benefits, for the transit agency's employees who are classified as revenue vehicle operators or crewmembers when performing dispatching work (optional disaggregation).	Vehicle Operations	Hours - Variable
5010 - Labor	5011.4	Operators Salaries and Wages	Vehicle Maintenance	Salaries and wages for operators when performing vehicle maintenance. Includes the cost of labor, excluding paid absences and fringe benefits, for the transit agency's employees who are classified as revenue vehicle operators or crewmembers when performing vehicle maintenance work (optional disaggregation).	Vehicle Maintenance	Miles - Variable
5010 - Labor	5011.5	Operators Salaries and Wages	Facility Maintenance	Salaries and wages for operators when performing facility maintenance. Includes the cost of labor, excluding paid absences and fringe benefits, for the transit agency's employees who are classified as revenue vehicle operators or crewmembers when performing non-vehicle maintenance work (optional disaggregation).	Facility Maintenance	Fixed
5010 - Labor	5011.6	Operators Salaries and Wages	Administration	Salaries and wages for operators when performing administrative work. Includes the cost of labor, excluding paid absences and fringe benefits, for the transit agency's employees who are classified as revenue vehicle operators or crewmembers when performing administrative work (optional disaggregation).	General Administration	Fixed

- To clear all filters selected to search for specific expense codes, click the  **Clear Filters** button to reset the window and show all expense codes.
- To clear words entered in the Definition search cell, click the  **X** button to the right of the cell.
- To open the expense codes in a printable format tab organized by Cost Code, click on the  **Printable Expense Code Report** button.
- When you are finished, click the  **Close Form** button at the bottom of the window to return to the Calculator Helps tab, Navigation Menu or Financial Data or Operational Data tabs if the Expense Codes were accessed there.

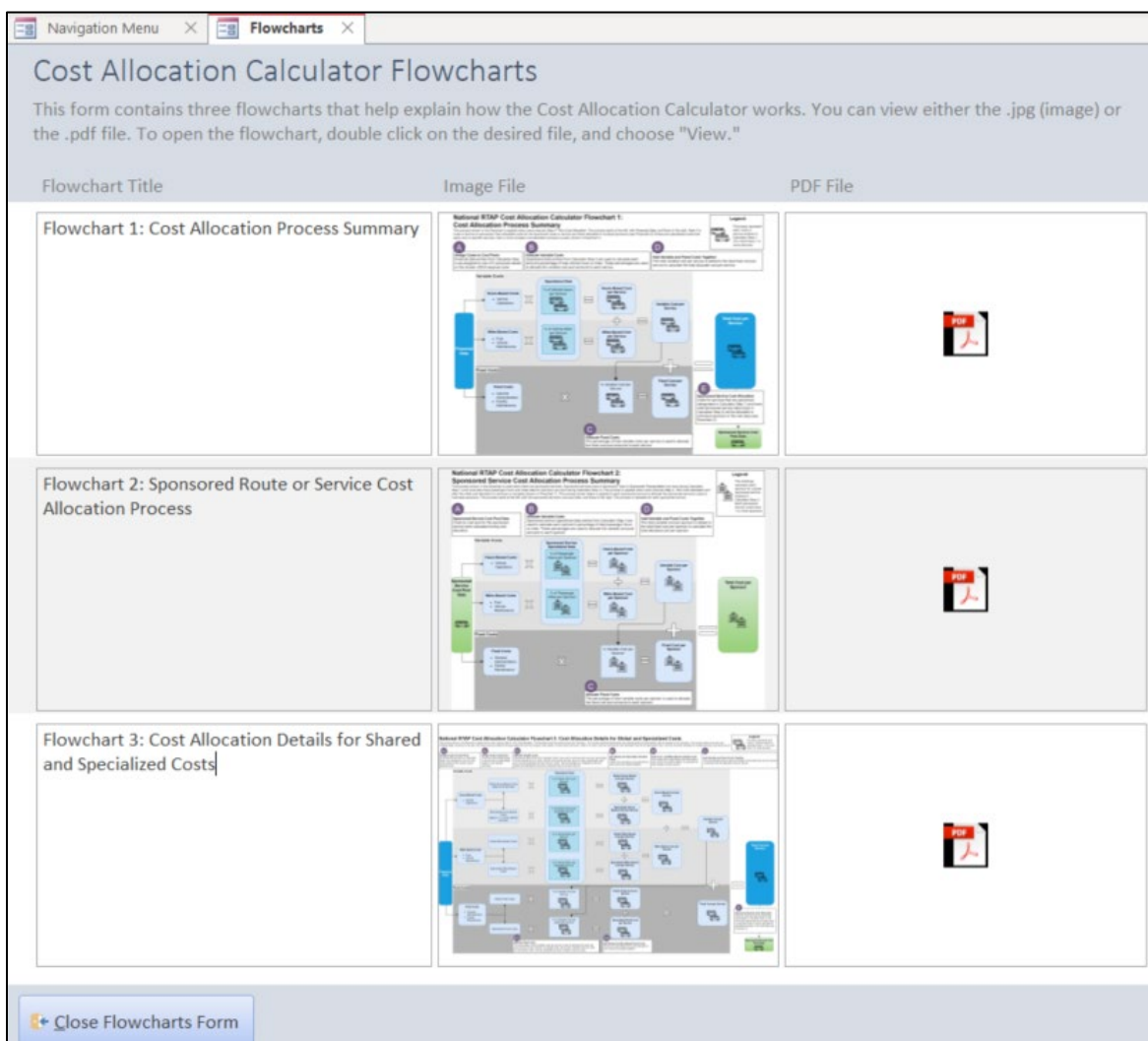
## Flowcharts



If you have questions on the detailed process used to run the cost allocation steps in the Calculator, there are three process flowcharts available which show the steps used by the Calculator to make allocations to routes or services, make suballocations to local sponsors, and separately allocate shared vs. specialized costs.

Navigate to the Cost Allocation Calculator Flowcharts tab by clicking the **Calculator Flowcharts** button on the Navigation Menu. The tab will appear as shown in Figure 20 below – you can either click on the image file or PDF file for each flowchart.

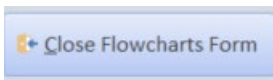
Figure 20: Cost Allocation Calculator Flowcharts



- **Flowchart 1** – Click on the **Flowchart 1** button to generate the Cost Allocation Process Summary flowchart image. This flowchart shows the process of how financial data is

separated into cost pools for variable or fixed costs, then allocated based on vehicle hours or miles data.

- **Flowchart 2** – Click on the **Flowchart 2** button to generate the Sponsored Route or Service Cost Allocation Process flowchart image. This flowchart shows the process of suballocating the total cost data for a sponsored service to local sponsors using cost pools with passenger hours and miles data to determine the total cost per sponsor.
- **Flowchart 3** – Click on the **Flowchart 3** button to generate the Cost Allocation Details for Shared and Specialized Costs flowchart image. This flowchart goes into further detail from Flowchart 1 to show how shared and specialized costs are separated from the five cost pools in order to assign costs specifically applicable to each route or service.

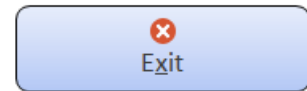


- Click the **Close Flowcharts Form** button to return to the Navigation Menu.

See Appendix C of this manual for the full explanation of the flowcharts for the Calculator processes.

## Exit

The **Exit** button on the Navigation Menu saves and closes the Access Calculator.



# Appendix A – Service and Operational Data Definitions

The definitions in this appendix are adapted from the NTD Glossary, found online at: <https://www.transit.dot.gov/ntd/national-transit-database-ntd-glossary>

## Service Data Inputs

Route / Service Name	Name of the route or service as chosen by the transit agency. May also include in the name a label showing the geographic area where the service is operated.
NTD Mode	Description of mode of service operated with subcategories for bus (can be conventional bus fixed route service, bus deviated fixed route service, or intercity bus service) and demand response (usual service or subscription) modes.
NTD Jurisdiction/Area	Enter the UZA, non-UZA, or other geographic area where the route operates. The Census Bureau delineates urban areas after each decennial census by applying specified criteria to decennial census and other data.
Sponsored Type	Designation for the route or service being either general public transit service or sponsored service. Select Sponsored if some rides are paid for by other third parties. Selecting Sponsored allows you to input data to sub-allocate the costs of shared-ride demand responsive service to sponsors in Step 3.
Type of Service	Designation of service being either directly operated by the agency or purchased from another public or private entity.
Primary Funding Source	Financial assistance obtained from the federal government or other sources to assist with paying the costs of providing transit services. Only one primary funding source can be selected for a single route or service. If there are multiple significant funding sources for a shared-ride demand responsive service, the user can allocate costs to each funding source by setting the Sponsored Type value to Sponsored Transportation in Step 1 and then entering the passenger hours and miles for each sponsor in Step 3.

## Mode Types

Bus Rapid Transit	Fixed-route bus systems that operate at least 50 percent of the service on fixed guideway. These systems also have defined passenger stations, traffic signal priority or preemption, short headway bidirectional services for a substantial part of weekdays and weekend days; low-floor vehicles or level-platform boarding, and separate branding of the service.
Commuter Bus	Local fixed-route bus transportation primarily connecting outlying areas with a central city. Characterized by a motorcoach (aka over-the-road bus), multiple trip tickets, multiple stops in outlying areas, limited stops in the central city, and at least five miles of closed-door service.
Demand Response	Transit mode comprised of passenger cars, vans or small buses operating in response to calls from passengers or their agents to the transit operator, who then dispatches a vehicle to pick up the passengers and transport them to their destinations.
Demand Response Taxi	A special form of the demand response mode operated through taxicab providers. The mode is always purchased transportation type of service.
Ferryboat	A transit mode comprised of vessels carrying passengers over a body of water.
Motor Bus	A transit mode comprised of rubber-tired passenger vehicles operating on fixed routes and schedules over roadways. Vehicles are powered by diesel, gasoline, battery, or alternative fuel engines contained within the vehicle.
Trolleybus	A transit mode comprised of electric rubber-tired passenger vehicles, manually steered and operating singly on city streets. Vehicles are propelled by a motor drawing current through overhead wires via trolleys, from a central power source not onboard the vehicle.
Vanpool	Mode comprised of vans, small buses and other vehicles operating as a ride sharing arrangement, providing transportation to a group of individuals traveling directly

	between their homes and a regular destination within the same geographical area. The vehicles must have a minimum seating capacity of seven persons, including the driver.
Volunteer Driver Program	Services that provide transportation for older adults and persons with disabilities using volunteer drivers and personally owned/leased vehicles. Typical programs reimburse drivers based on miles driven for part of their out-of-pocket expenses for fuel, maintenance, and vehicle costs; revenues to cover expenses are partially covered by either donations to the program or a fee charged to riders.

## Service Area

Rural area (non-UZA)	An area with a population of fewer than 50,000 as designated by the U.S. Bureau of the Census.
Urbanized area (UZA)	An urbanized area is an incorporated area with a population of 50,000 or more that is designated as such by the Bureau of the Census.
Other	Write in a different geographic area such as a city or county name if desired rather than using UZA designations.

## Sponsored Type

General Public	Transport of passengers by group travel systems available for use by the general public, typically managed on a schedule, operated on established routes, and that charge a posted fee for each trip.
Sponsored	Public transportation services that are paid, in whole or in part, directly to the transit provider by a third party. These services may be offered by transit providers as part of a Coordinated Human Services Transportation Plan. Common sponsors include the Veterans Administration, Medicare, ARC, Assisted Living Centers, and Head Start programs.

	In the Calculator, the Sponsored Transportation designation must be used for any shared-ride demand-responsive service for which you want to allocate costs to multiple funding programs or service sponsors.
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## Type of Service

Directly Operated	Transportation service provided directly by a transit agency, using their employees to supply the necessary labor to operate the revenue vehicles. This includes instances where an agency’s employees provide purchased transportation services to the agency through a contractual agreement.
Purchased Transportation	Transportation by provided by a different public or private entity on behalf of the transit agency as part of a contractual agreement. Purchased transportation can include regular and continuing general or special transportation to the public, but does not include school bus, charter, or intercity bus transportation.

## Primary Funding Source

5307 - Urbanized Formula	The Federal Transit Administration formula funding program that makes federal funds available to governors and other recipients for transit capital and operating assistance and transportation-related planning in urbanized areas.
5310 - Mobility for Seniors and Individuals with Disabilities	The Federal Transit Administration formula funding program that makes federal funds available to states and designated recipients to meet the needs of older adults and people with disabilities when the transportation provided is unavailable, insufficient, or inappropriate to meeting these needs.
5311 - Rural Formula	The Federal Transit Administration grant program which provides capital, planning, and operating assistance to states to support public transportation in rural areas with populations less than 50,000.

Other	Write in a different federal funding program, state grant program, or other funding source used as the primary support for the route or service.
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## Operational Data Inputs

Revenue Hours	The hours that vehicles are scheduled to or actually travel while in revenue service. Revenue hours include running time and layover / recovery time. Revenue hours exclude deadhead, operator training, vehicle maintenance testing, and school bus and charter services.
Vehicle Hours	The hours that vehicles travel while in revenue service plus deadhead hours. Vehicle hours include revenue service, deadhead, and layover/recovery time. Vehicle hours exclude hours for charter service, school bus service, operator training, fueling and lunch breaks, or vehicle maintenance testing.
Revenue Miles	The miles that vehicles are scheduled to or actually travel while in revenue service. Revenue miles include running time and layover / recovery time. Revenue miles exclude deadhead, operator training, vehicle maintenance testing, and school bus and charter services.
Vehicle Miles	The miles that vehicles travel while in revenue service plus deadhead miles. Vehicle miles include revenue service and deadhead. Vehicle miles exclude miles for charter service, school bus service, operator training, fueling and lunch breaks, or vehicle maintenance testing.
Passenger Trips	The number of passengers who board public transportation vehicles. Passengers are counted each time they board vehicles no matter how many vehicles they use to travel from their origin to their destination.

## Sponsored Services

<p>Sponsor Name</p>	<p>Name of the sponsored or shared-ride service according to the funding source or sponsoring agency supporting the cost of the passenger trip(s). Sponsors may be human services agencies, medical centers, companies, and other public or private entities. In some cases, the sponsor may be source of grant funds in the case where passenger trips on a single service are being supported by multiple grant programs.</p>
<p>Passenger Hours</p>	<p>The sum of the number of hours individual passengers ride in a revenue vehicle. This data is needed for allocation of shared-ride demand response hours-based costs to individual sponsors.</p>
<p>Passenger Miles</p>	<p>The sum of the number of miles individual passengers ride in a revenue vehicle. This data is needed for allocation of shared-ride demand response miles-based costs to individual sponsors.</p>
<p>Sponsored Trips</p>	<p>The number of passenger trips for the sponsored route in the shared-ride demand responsive service.</p>

# Appendix B – USOA Object Class Definitions

The definitions in this appendix are adapted from the USOA document effective June 2016. The online version of the document can be found here:

[https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/ntd/56681/uniform-system-accounts-usoa-effective-fy18\\_0.pdf](https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/ntd/56681/uniform-system-accounts-usoa-effective-fy18_0.pdf)

## Object Class Definitions

Amortization of Intangibles	Amortization of Intangibles is a RECONCILING ITEM. If you use this code, the expense will be included in your cost allocation results: however, NTD operating expenses may need to exclude these costs. Consult your NTD analyst.
Capital Leases	Capital Leases may be in addition to an operating lease and are a RECONCILING ITEM. A lease is considered a capital lease if it meets any of the following four criteria at its inception (the earlier of the date of the lease agreement or commitment): Transfer of ownership, Bargain purchase option, Lease term, Minimum lease payments.
Casualty and Liability Costs (Insurance)	Casualty and Liability Costs (Insurance) are expenses related to loss protection and losses incurred by the transit agency. These expenses include compensation of others for their losses due to acts for which the transit agency is liable, costs of protecting the transit agency from losses through conventional insurance and other risk financing programs, and agency losses due to the liable actions of others that are covered by other corporate insurance.
Depreciation	Depreciation is a RECONCILING ITEM. If you use this code, the expense will be included in your cost allocation results: however, NTD operating expenses may need to exclude these costs. Consult your NTD analyst.
Extraordinary and Special Items	Extraordinary and Special Items are RECONCILING ITEMS and cover material events or transactions that are distinguished by their unusual nature and by the infrequency of their occurrence. Examples of material extraordinary items include capital assets

	that were impaired by extraordinary events such as hurricanes or other natural disasters.
Fringe Benefits	Fringe Benefits are the expenses for employment benefits that an employee receives in addition to his or her base salaries and wages. Fringe benefits include payments associated with the employee's labor that do not arise from the performance of work, but still arise from the employment relationship.
Fuel and Lubricants	Fuel and Lubricants includes fuel used to propel revenue and non-revenue vehicles and lubricants such as motor oil, transmission fluid, and grease. Purchase and cash discounts are included in the cost of the fuel or lubricant.
Interest Expenses	Interest expenses are charges for the use of capital borrowed by the transit agency. Interest expenses may accrue on both short-term debt and Long-Term Debt obligations.
Miscellaneous Expenses	Miscellaneous Expenses includes expenses that cannot be attributed to any of the other expense object classes. Agencies must check to be sure an expense does not belong in a different object class before reporting it as miscellaneous. Direct miscellaneous expenses are reported in the appropriate function. Shared miscellaneous expenses are allocated among the functions according to the reporter's best professional judgment.
Operating Lease Expenses	Operating Lease Expenses include payments for the use of Capital Assets not owned by the transit agency. Operating leases allow the transit agency to use assets, but do not allow them the rights of asset ownership (e.g., transfer of title). As such, operating leases are not capitalized as assets, but are recorded as operating expenses during the reporting period.
Operators' Salaries and Wages	Operators' salaries and wages include the cost of labor, excluding paid absences and fringe benefits, for the transit agency's employees who are classified as revenue vehicle operators or crewmembers.
Other Materials and Supplies	Other Materials and Supplies expenses in this object class include products obtained from outside suppliers or those manufactured internally that are not covered in the two

	preceding object classes. The cost of the material or supply includes shipping costs, purchase discounts, cash discounts, sales taxes, and excise taxes. Costs associated with this object class include materials and supplies issued from inventory or purchased for immediate use (i.e., items used without going through inventory).
Other Paid Absences	Other Paid Absences include vacation leave, sick time, and other paid time off not contingent on a specific event outside the control of the transit agency for its employees that are not classified as revenue vehicle operators or crewmembers.
Other Reconciling Items	Other Reconciling Items are any other costs that cannot be captured in the above reconciling items object classes, such as funds to another agency through a cooperative agreement and expenses for purchased transportation services not meeting NTD requirements for a contractual agreement.
Other Salaries and Wages	Other Salaries and Wages includes the cost of labor, excluding paid absences and fringe benefits, of employees of the transit agency who are not classified as revenue vehicle operators or crewmembers (e.g., maintenance workers, administrative staff, and transit managers).
Purchased Transportation Filing Separate Report	Purchased Transportation Filing Separate Report means an agency reports Purchased Transportation (PT) expenses in this object class when the other party reports the associated service data (e.g., miles, ridership) in their own NTD report.
Purchased Transportation in Report	Purchased Transportation in Report includes the payments or accruals to sellers or providers of service, including fare revenues retained by the seller. The agency reports Purchased Transportation (PT) expenses in this object class when they report the associated service in their own NTD report.
Related Parties Lease Agreements	Related Parties Lease Agreements includes leases other than operating and capital leases. Related parties leases are leases with terms and payment amounts that are substantially less than they would be in usual circumstances because the transit agency is related to the lessor.

Services	Services are the labor and other work provided by outside organizations for fees and related expenses. Outside organizations may be private companies or public entities.
Taxes	Taxes are the charges and assessments levied against the transit agency by federal, state and local governments. Sales taxes, excise taxes, freight-in and other acquisition costs are not included in this object class. Instead, they are accounted for as part of the cost of the material or service purchased.
Tires and Tubes	Tires and Tubes expenses include the cost of tires and tubes, whether they are rented, leased or purchased. Purchase discounts, cash discounts, sales taxes, and excise taxes are included in the cost of the tires and tubes.
Utilities	Utilities include expenses for electricity, gas, water, telephone, heating oil, fuel for backup generators, and internet.
Voluntary Non-Exchange Transactions	Voluntary Non-Exchange Transactions is for the provider to record the non-exchange expenses when all applicable eligibility requirements have been met. In a voluntary non-exchange transaction, an agency gives or receives value (e.g., revenue vehicle) without directly receiving or giving equal value (e.g., cash) in return.

## Subclass Definitions

Administration	All activities associated with the general administration of the transit agency, including transit service development, injuries and damages, safety, personnel administration, legal services, insurance, data processing, finance and accounting, purchasing and stores, engineering, real estate management, office management and services, customer services, promotion, market research, and planning.
Facility Maintenance	All activities associated with facility maintenance, including administration, repair of buildings, grounds and equipment as a result of accidents or vandalism, operation of electric power facilities, maintenance of vehicle movement control systems, fare collection and counting equipment, passenger stations, operating station buildings, grounds and equipment,

	communication systems, general administration buildings, grounds and equipment, and electric power facilities.
Fuel	The costs of gasoline, diesel fuel, propane, lubricating oil, transmission fluid, grease, etc., for use in vehicles.
Operations	All activities associated with vehicle operations, including transportation administration and support, revenue vehicle movement control, scheduling of transportation operations, revenue vehicle operation, ticketing and fare collection, and system security.
Vehicle Maintenance	All activities associated with revenue and non-revenue (service) vehicle maintenance, including administration, inspection and maintenance, and servicing (cleaning, fueling, etc.) vehicles. In addition, vehicle maintenance includes repairs due to vandalism and accident repairs of revenue vehicles.

## Appendix C – Process Flowcharts

TTI developed three flowcharts depicting the Calculator processes and calculations used to produce the resulting allocated costs and performance measures. The flowcharts depict:


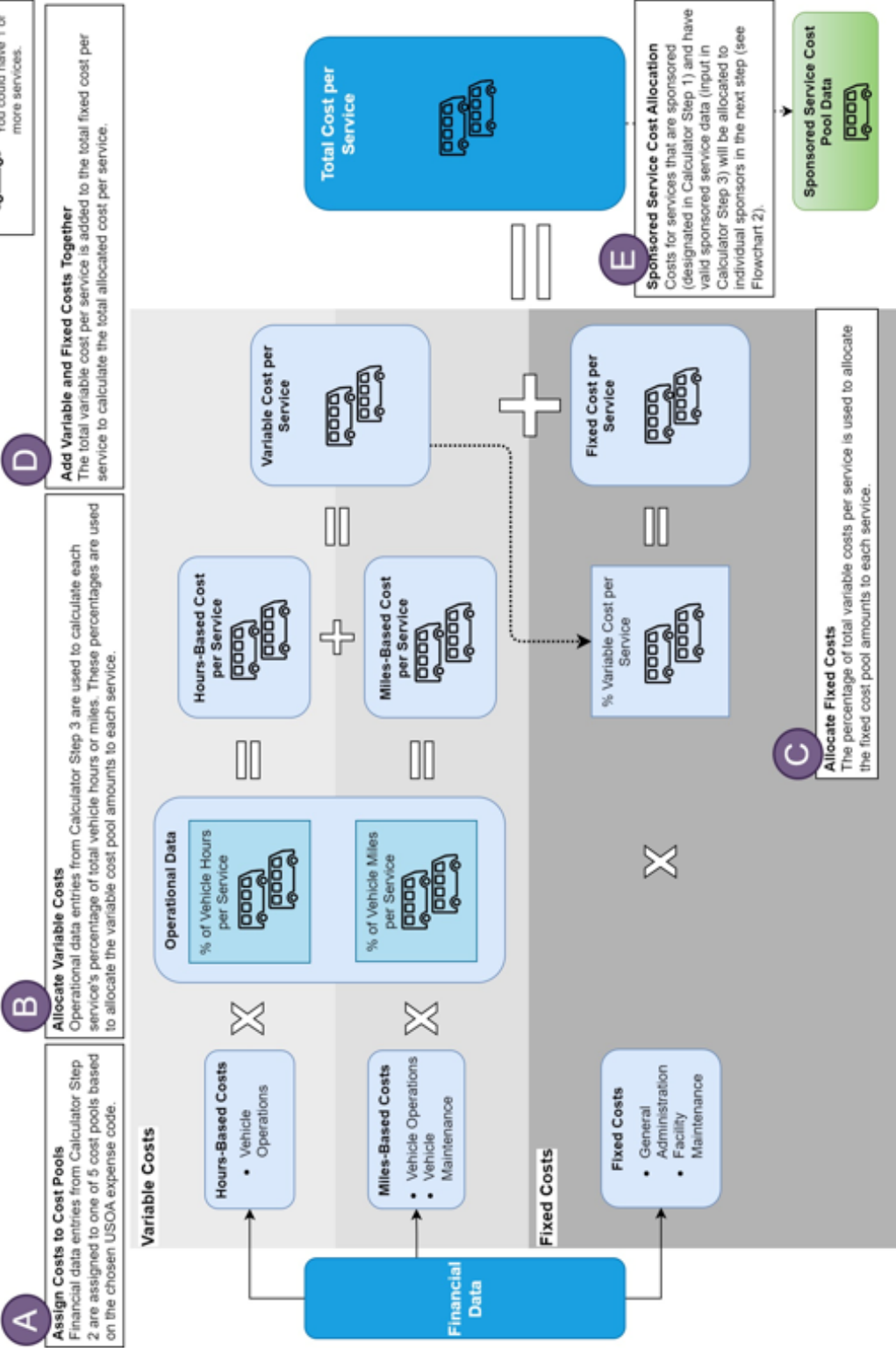
- Cost Allocation Process Summary
- Sponsored Route or Service Cost Allocation Process
- Cost Allocation Details for Shared and Specialized Costs

The flowchart diagrams show how sources of data are used together and information for routes/services with different funding sources are allocated. The flowcharts are intended to help DOT, transit agencies, and other staff understand the calculations behind the Calculator results in order to ease the implementation of the Calculator into financial management processes at small transit agencies needing to use the Calculators.

## National RTAP Cost Allocation Calculator Flowchart 1: Cost Allocation Process Summary

The process shown in this flowchart is applied when users execute Step 4 - Run Cost Allocation. The process starts at the left, with Financial Data, and flows to the right. Note: If a route or service is sponsored, then allocated costs for the sponsored route or service are further allocated to individual sponsors (see Flowchart 2); if there are specialized costs that apply only to specific services, then a more complex cost allocation process is used, shown in Flowchart 3.

**Legend:**  
The buses represent each route or service entered in Calculator Step 1. You could have 1 or more services.

## National RTAP Cost Allocation Calculator Flowchart 2: Sponsored Service Cost Allocation Process Summary

The process shown in this flowchart is used when there are sponsored services. Sponsored services have a Sponsored Type of Sponsored Transportation (as input during Calculator Step 1) and must also have passenger hours and miles data for sponsors (as input during Calculator Step 3). The process is applied when users execute Step 4 - Run Cost Allocation and after the initial cost allocation to services is complete (shown in Flowchart 1). The process shown below is applied to each sponsored service to allocate the sponsored service's costs to individual sponsors. The process starts at the left, with the sponsored service's cost pool data, and flows to the right. The process is repeated for each sponsored service.

**Legend:**  
The buildings represent each sponsor for a given sponsored service entered in Calculator Step 3. Each sponsored service could have 1 or more sponsors.

