



# National RTAP Cost Allocation Calculator User Group

## Two-Variable Cost Allocation Calculator Virtual Workshop and Demonstration

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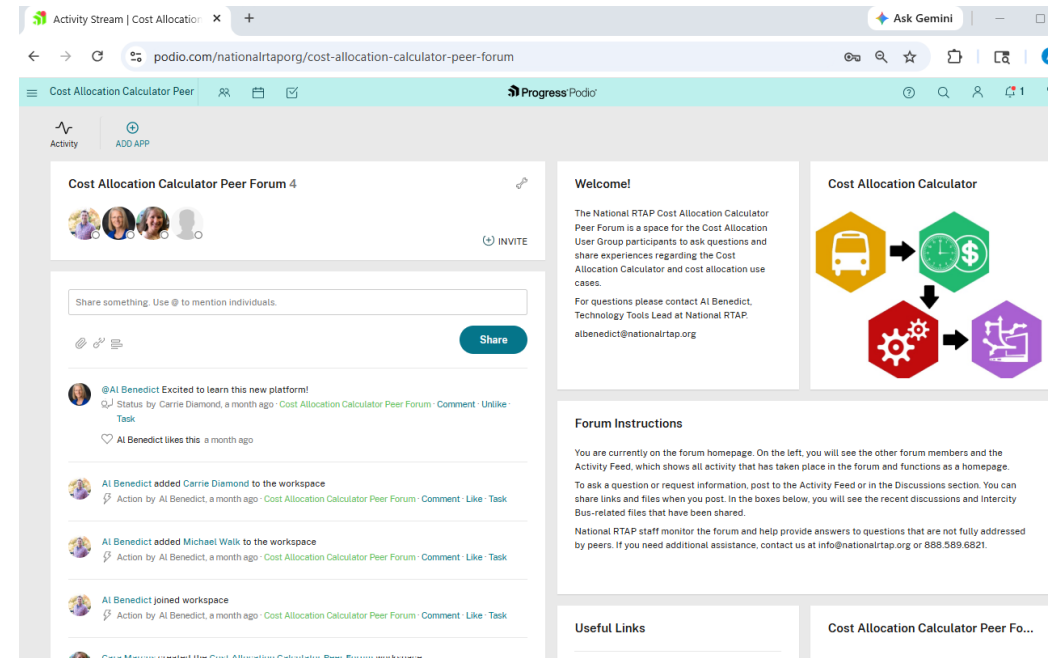
March 18, 2026, 2:00-4:00 PM ET



U.S. Department of Transportation  
Federal Transit Administration

# NRTAP COST ALLOCATION CALCULATOR USER GROUP

- Held launch meeting / prioritized participant feedback
- Share best practices and use cases
- Work through cost allocation questions
- Quarterly meetings (1-hour)
- Peer forum offering ongoing support



<https://forms.gle/duI ZWGaToQVDkvaA7>

*The workshop recording will be posted to the National RTAP website.*

# INTRODUCTION TO THE PRESENTER(S)

Al Benedict



Technology Tool Lead/ Community  
Rides Grant Lead, National RTAP

[Albenedict@nationalrtap.org](mailto:Albenedict@nationalrtap.org)

Michael J. Walk



[m-walk@tti.tamu.edu](mailto:m-walk@tti.tamu.edu)

512-407-1135

# INTRODUCTION TO YOU

- Name
- Agency / organization
- Position / role
- Experience with transit financial management or cost allocation
- What are your expectations for this workshop?

# WORKSHOP LEARNING OBJECTIVES

By the end of this workshop, you should be able to:

- Describe the purpose and importance of allocating costs to services, modes, and jurisdictions
- Discuss the two-variable cost allocation methodology
- Describe the basic features of the Cost Allocation Calculator
- List the stages of data input, the outputs, and the applied uses of the Calculator

# DOWNLOADABLE WORKSHOP MATERIALS

Printouts of the  
PowerPoint  
slides

Handouts



OVERVIEW

<https://tx.ag/AllocationFiles>

# AGENDA

Module 1 – Cost  
Allocation: An  
Overview

Module 2 –  
Design and  
Function of the  
Calculators

Module 3 –  
Results, Features,  
and Data  
Management

## SCHEDULE (IN CENTRAL TIME)

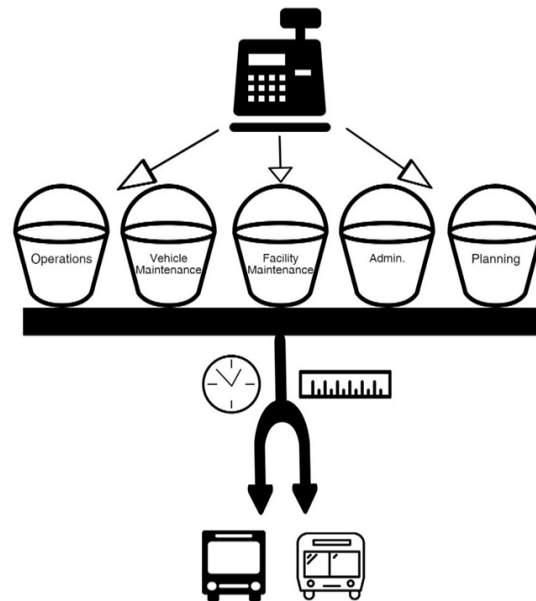
Start	End	Time	Item
1:00 PM	1:15 PM	0:15	Overview of Workshop & Introductions
1:15 PM	1:45 PM	0:30	Module 1 – Cost Allocation: An Overview
1:45 PM	2:30 PM	0:45	Module 2 – Design and Function of the Calculators
2:30 PM	2:45 PM	0:15	Module 3 – Results, Features, and Data Management
2:45 PM	3:00 PM	0:15	Questions & Wrap Up
	Total	2:00	



# QUESTIONS?

# MODULE 1

## COST ALLOCATION: AN OVERVIEW



# LEARNING OBJECTIVES

By the end of this module, you should be able to:

- Discuss the purpose of allocating costs to services, modes, and jurisdictions
- List and describe the four steps in cost allocation methodology
- Define important cost allocation terms

# THERE ARE MANY TYPES OF “COST ALLOCATION”

- Indirect Cost Allocation Plan
  - Central Services Cost Allocation Plan
  - Service-Based Operational Cost Allocation
  - Capital Asset Cost Allocation
  - Local Share Contribution Allocation
  - And more!!!
- **Cost Allocation Model / Plan**
    - A standardized and documented approach for calculating the cost of project / program / service by assigning direct costs and allocating shared costs
  - **Cost Allocation Tool(s)**
    - Software or templates used to turn input data into cost allocation results by following the rules of a cost allocation model
  - **Cost Allocation Results**
    - What you get when you push your data through a cost allocation model
    - Usually at least annually if not more frequently

# WHY DEVELOP A COST ALLOCATION MODEL?

- When operating multiple services (modes, routes, jurisdictions, programs), operating expenses not easily tracked for each service.
- For example, what is *true cost* of a service provided in County A vs. County B or Sponsor A vs. Sponsor B? **TOO COMPLEX to track exactly.**
- **Discussion:**
  - How are you hoping to use a cost allocation model or cost allocation tool?
  - Who has / uses a cost allocation model? Describe it.

# MULTIPLE METHODS

There is not one *model* to rule them all!

Must follow:

- FTA guidelines
- State DOT guidelines and requirements (subrecipients)
- CCAM TAC has released a new cost allocation model / tool in 2026!

<https://www.ccam-tac.org/cost-allocation-tool/>

# CHARACTERISTICS OF TRANSIT COSTS

## Class

- What type of cost?

## Function

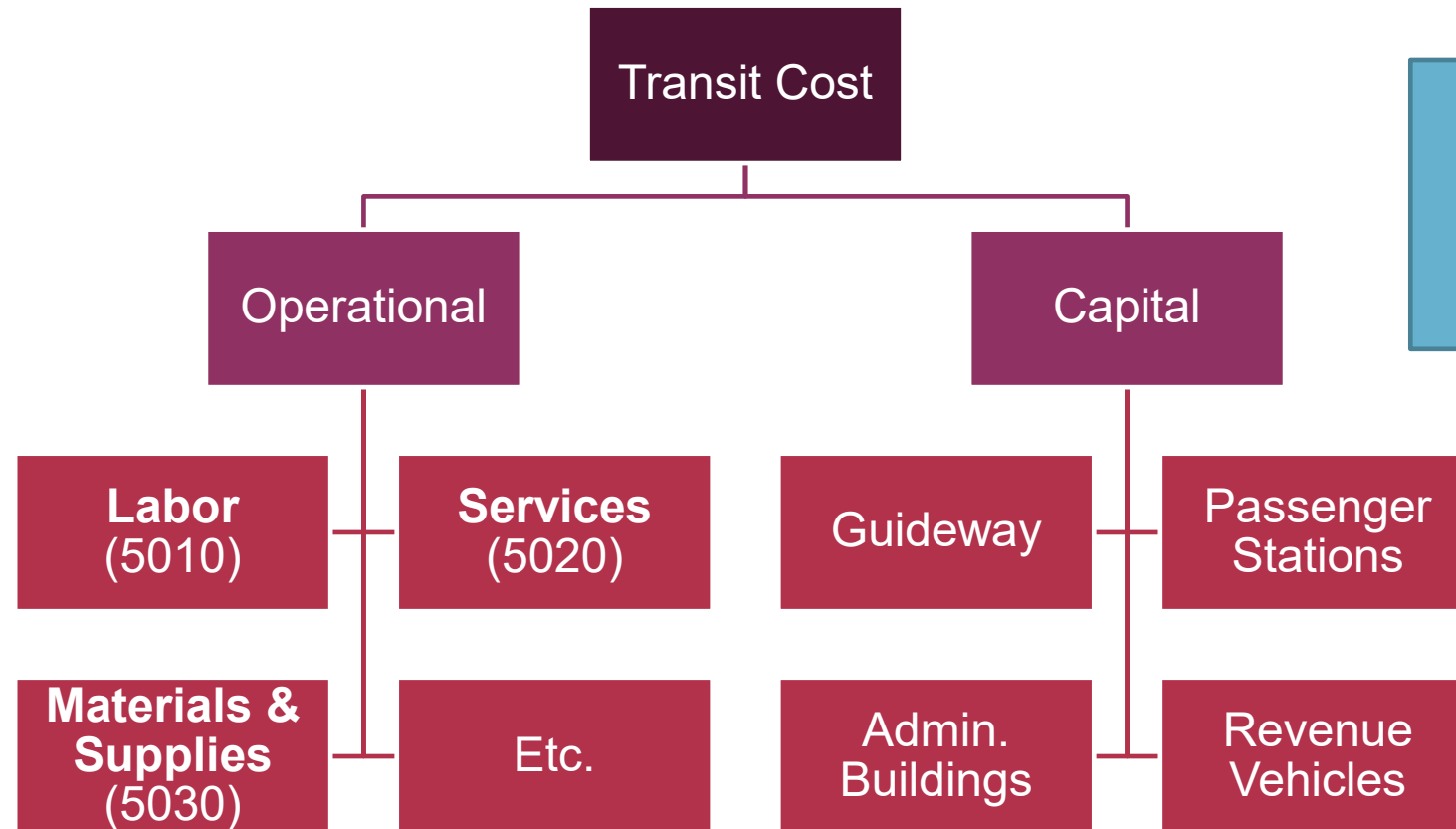
- How was the cost used?

## Applicability

- What transit services does the cost apply to?

These characteristics could be fields built into your accounting software; they become very important during cost allocation, financial reporting, and seeking reimbursement!

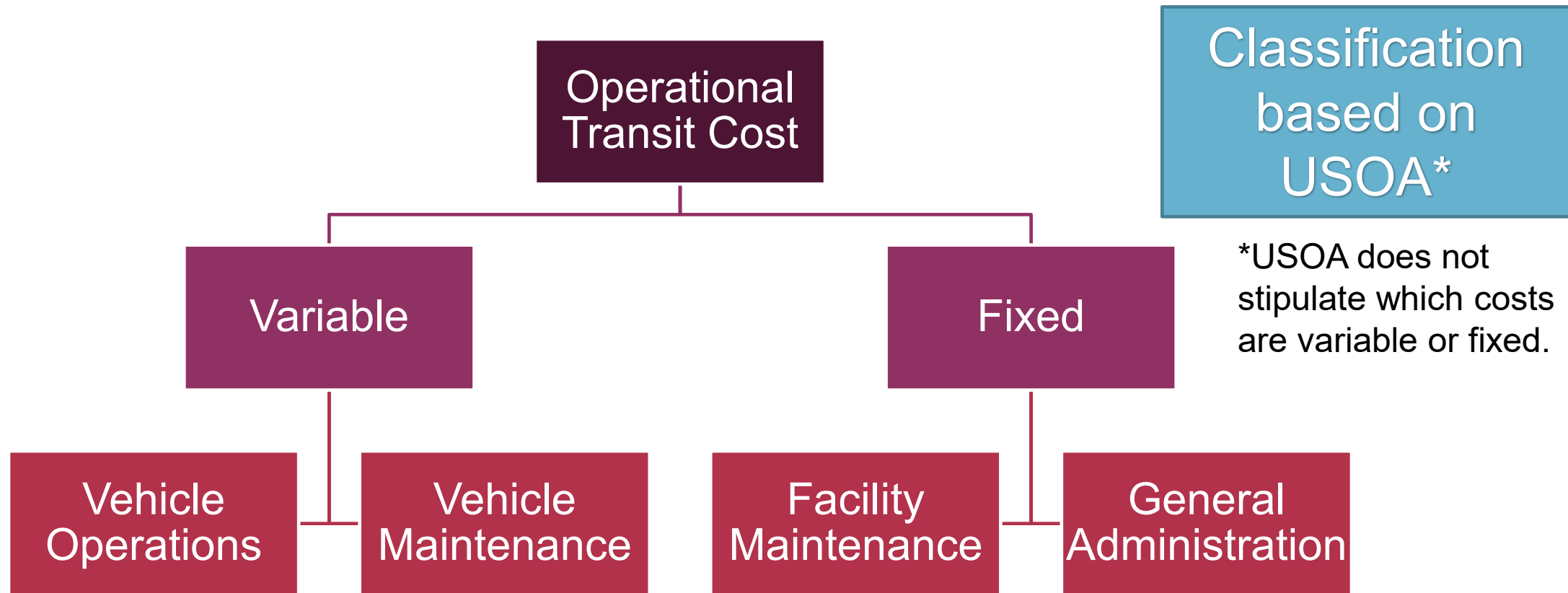
# CLASS



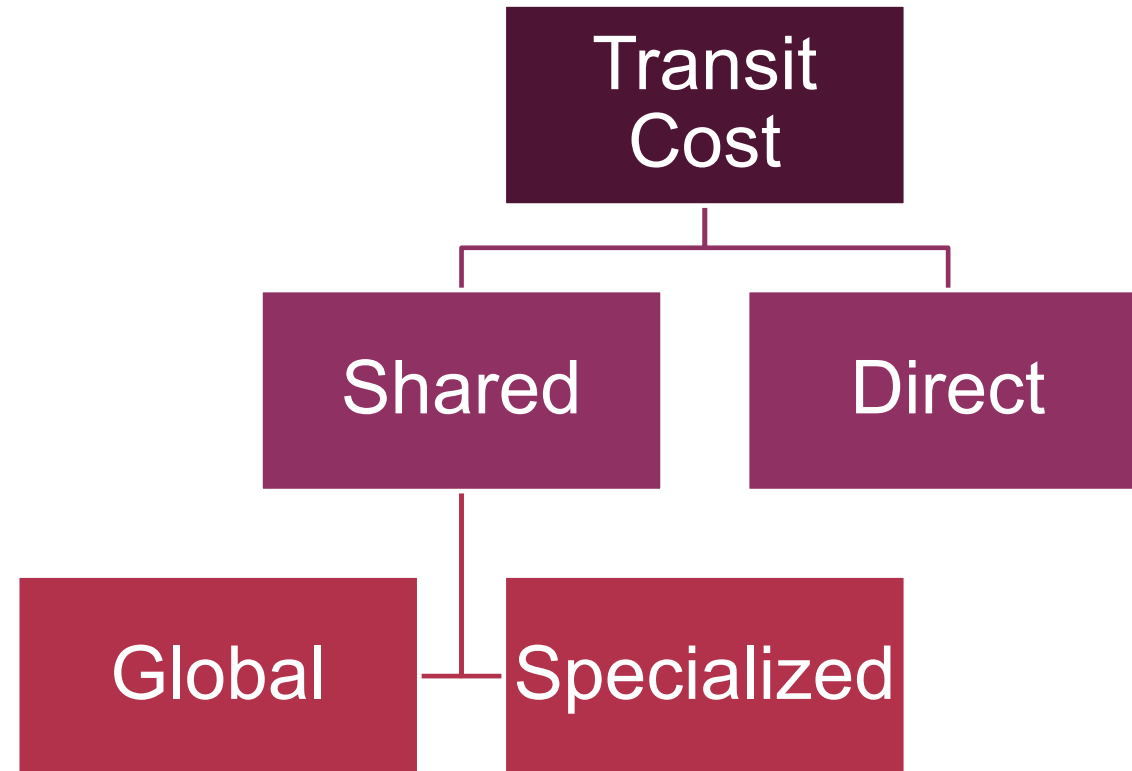
Classification based on USOA

Full NTD reporters *must report their costs to NTD using the object classes in the USOA.*

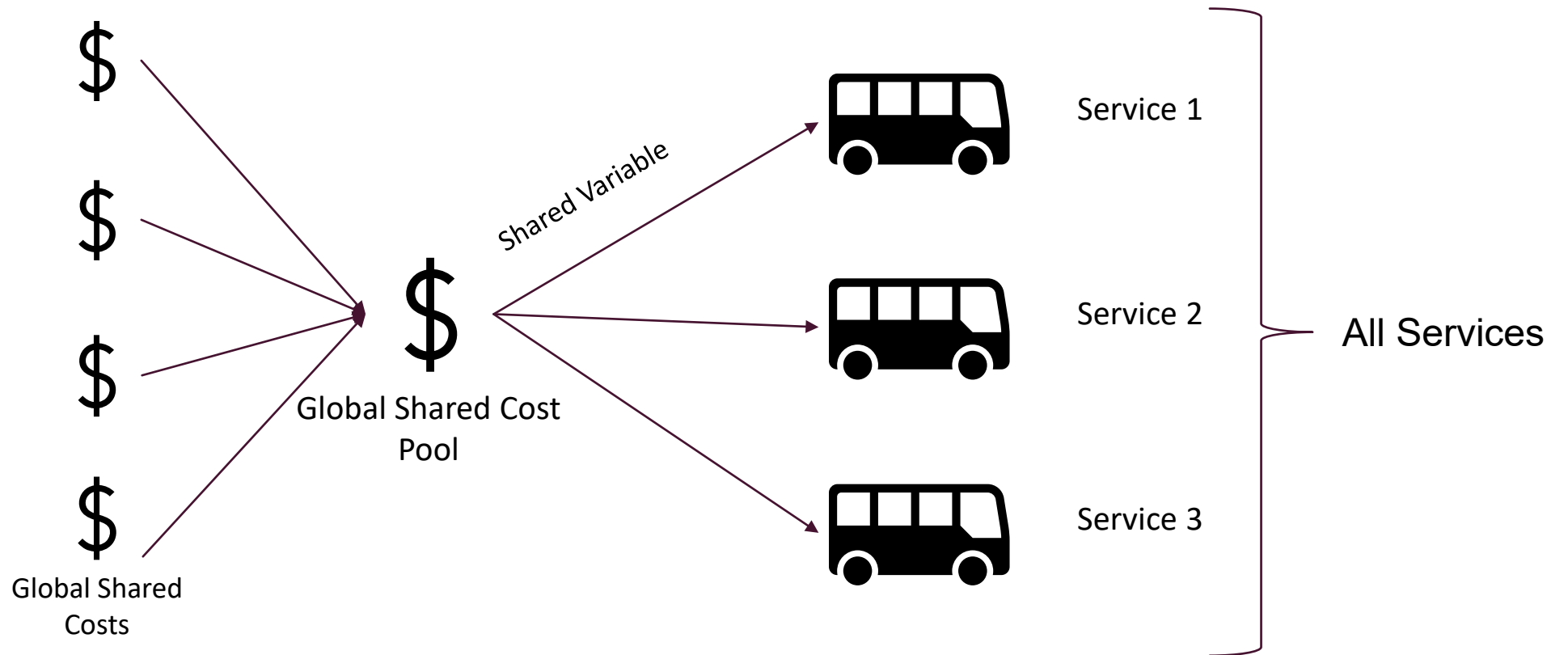
# FUNCTION



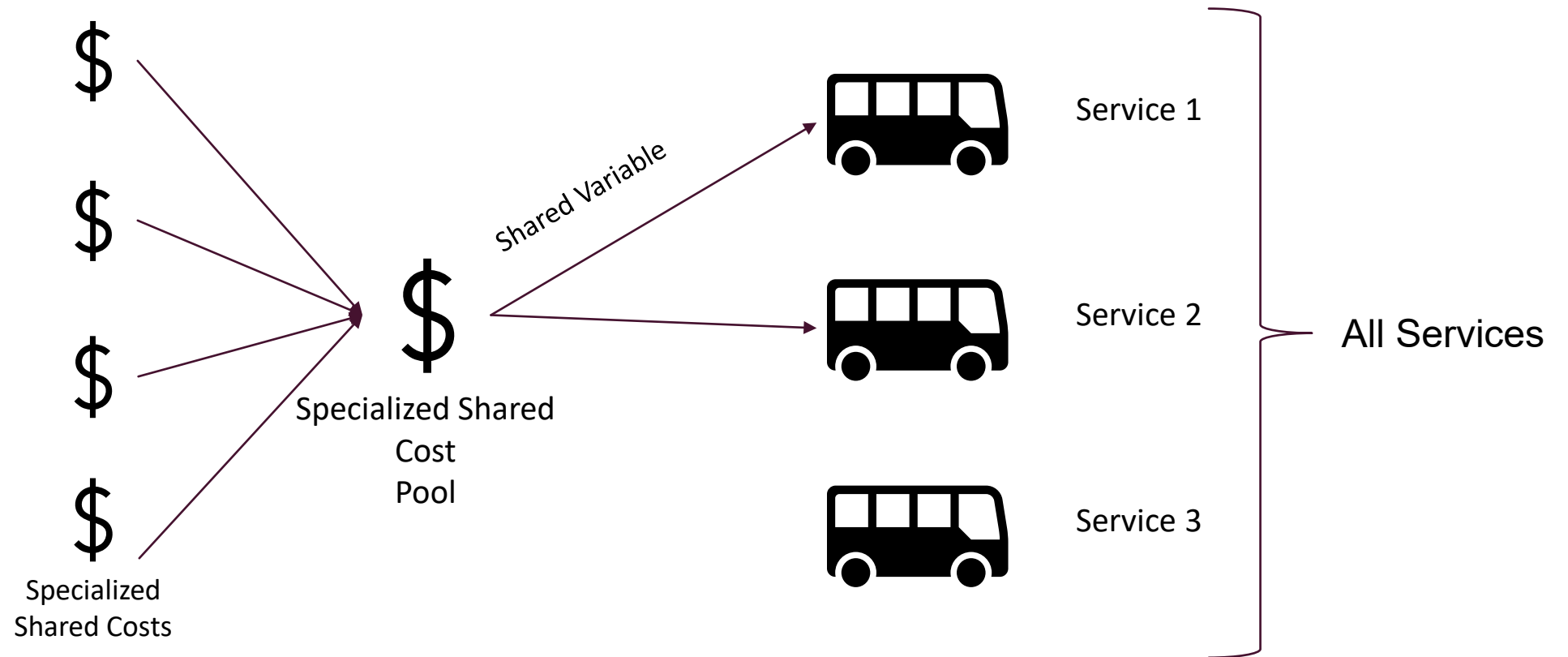
# APPLICABILITY



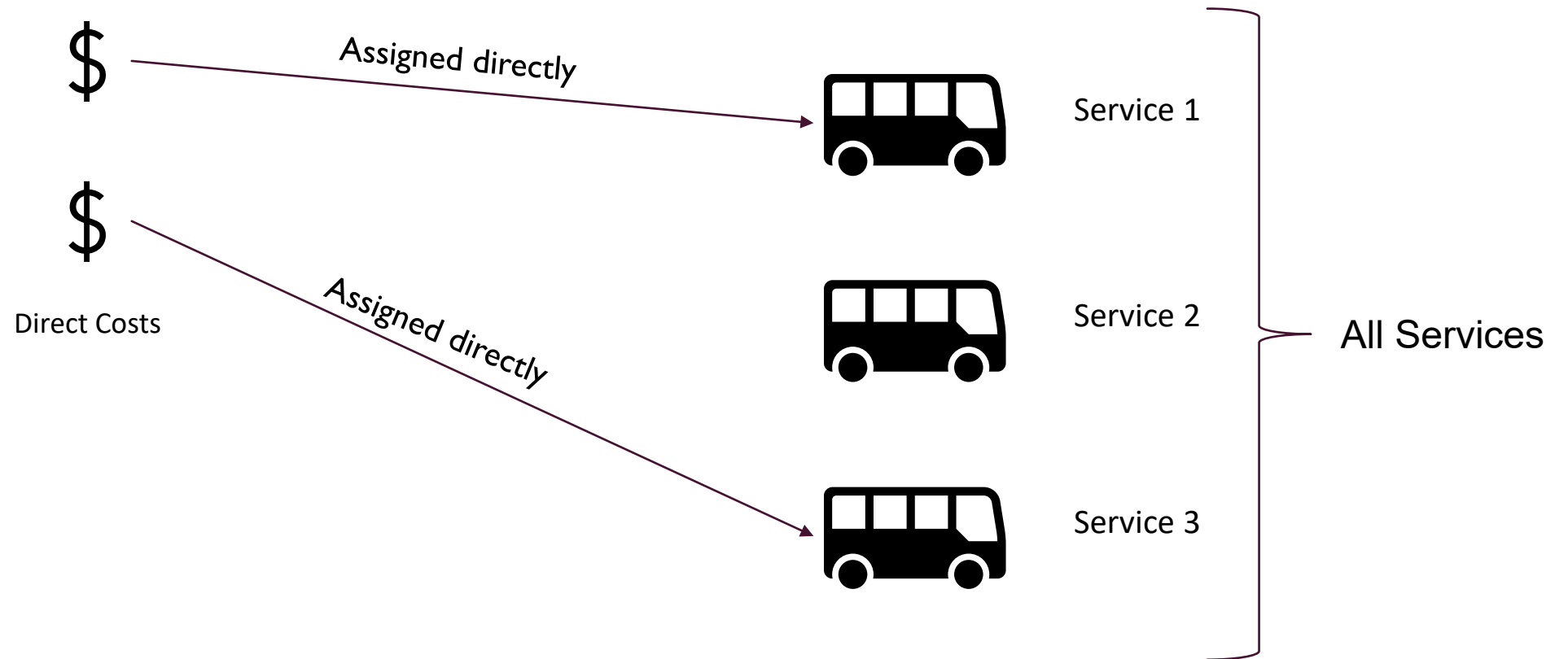
# GLOBAL SHARED COSTS



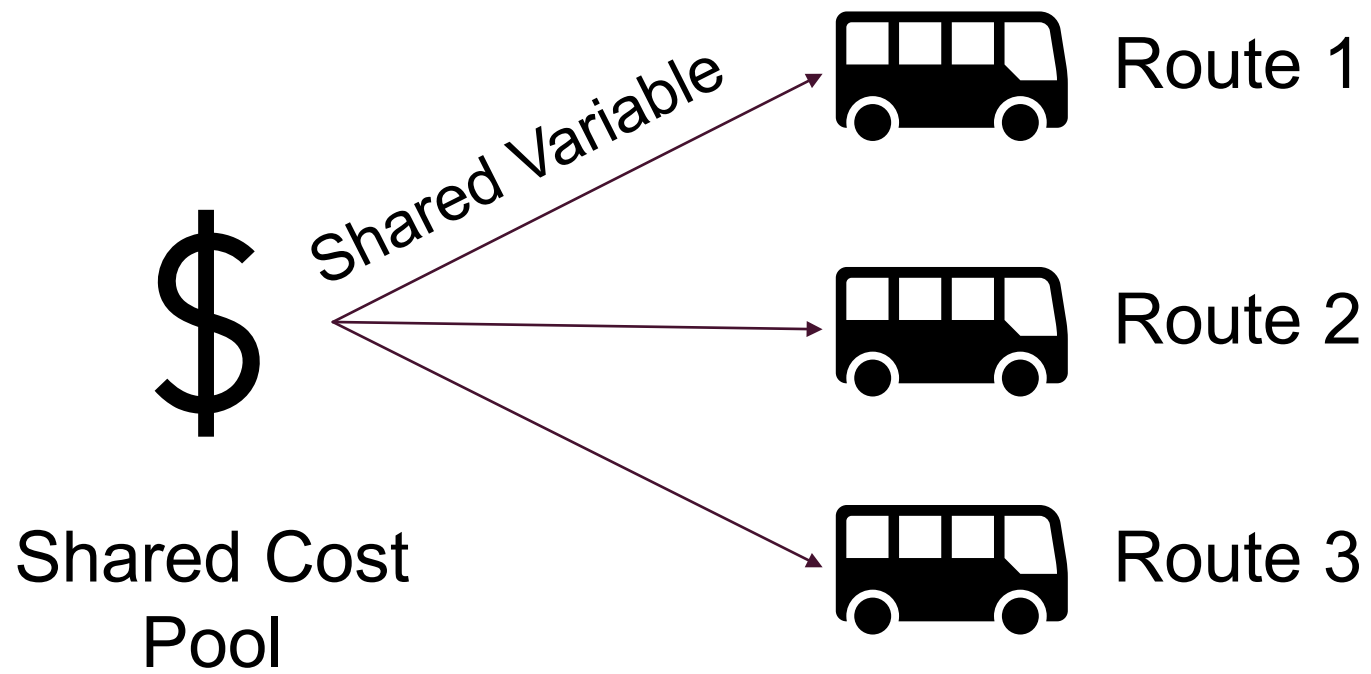
# SPECIALIZED SHARED COSTS



# DIRECT COST



# ALLOCATING COSTS TO A SERVICE



# KEY OPERATING COST ALLOCATION VARIABLES

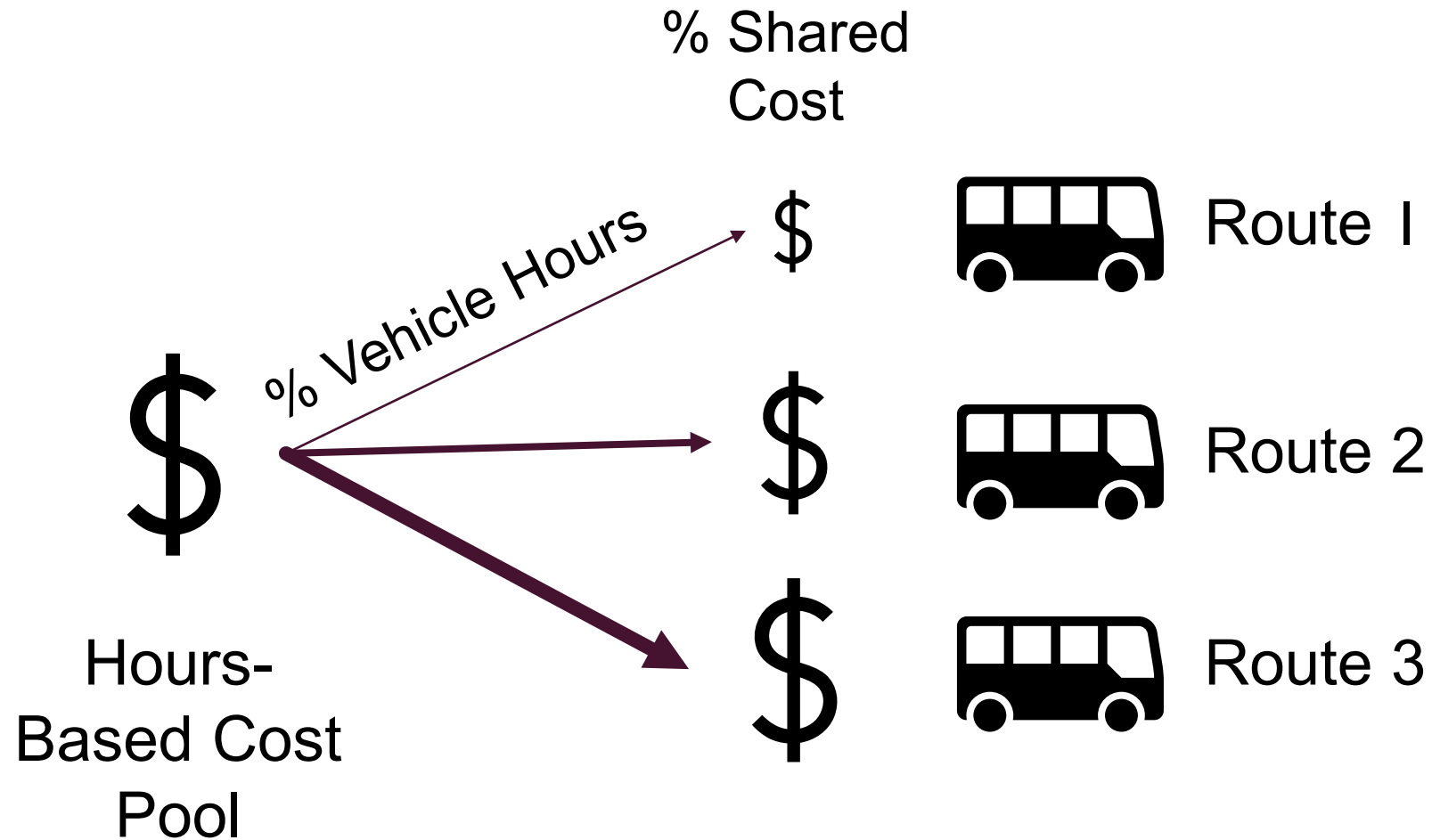
## % Vehicle Hours

- The sum of time vehicles are in operation
- Includes revenue and non-revenue operation
- *Used to allocate hours-based expenses (e.g., operator wages)*

## % Vehicle Miles

- The sum of distance traveled from vehicles in operation
- Includes revenue and non-revenue operation
- *Used to allocate miles-based expenses (e.g., fuel)*

# ALLOCATING COSTS TO A ROUTE / SERVICE



# CHARACTERISTICS OF TRANSIT COSTS - ADDITION

## Class

- What type of cost?

## Function

- How was the cost used?

## Allocation Cost Pool

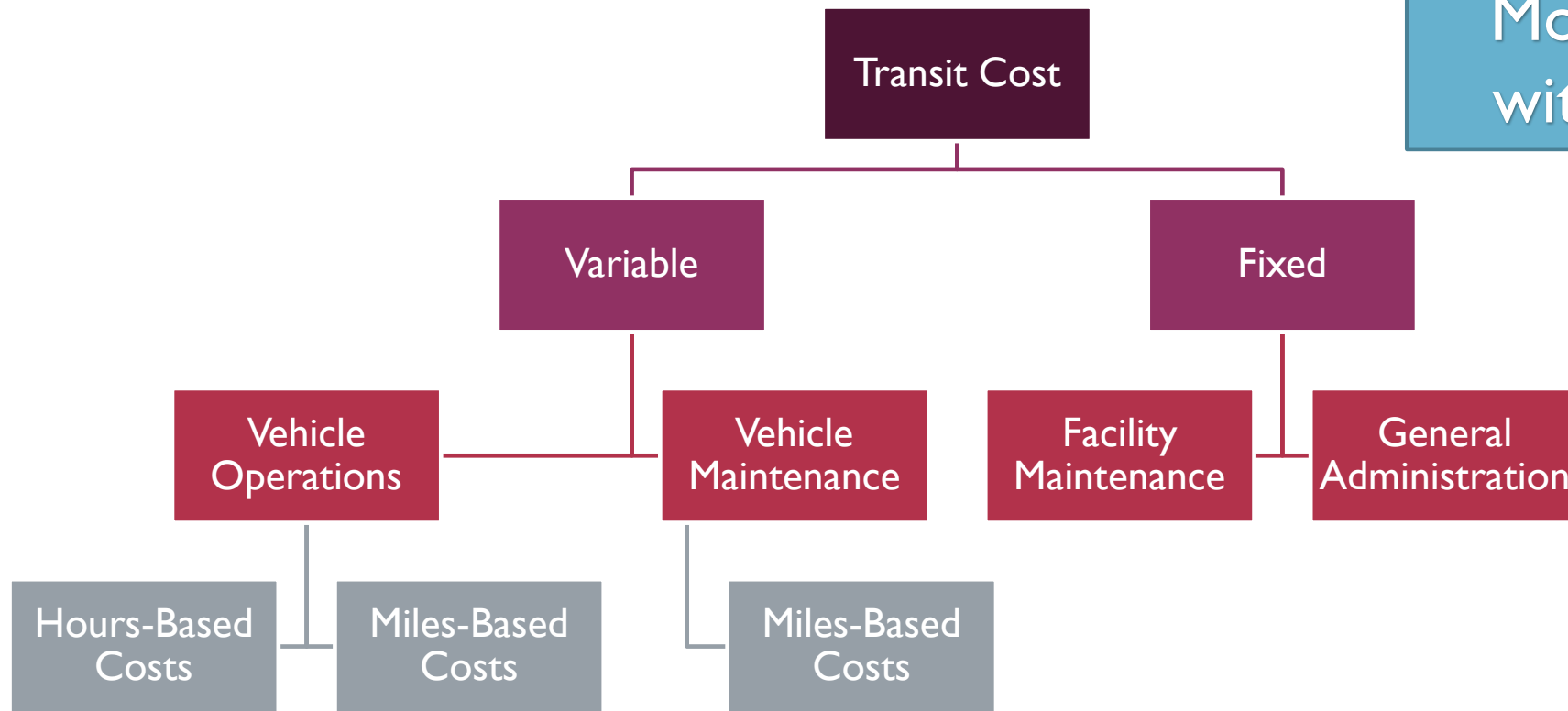
- Variable hours-based
- Variable miles-based
- Fixed

## Applicability

- What transit services does the cost apply to?

These characteristics could be fields built into your accounting software; they become very important during cost allocation, financial reporting, and seeking reimbursement!

# ALLOCATION COST POOLS

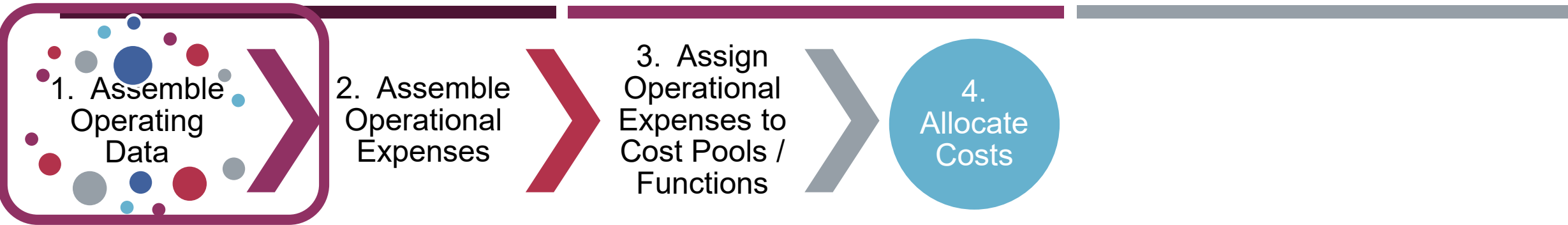


Mostly aligns with USOA\*

\*USOA does not stipulate which costs are variable or fixed. USOA does not directly stipulate what allocation basis or cost pool a cost should be assigned to.

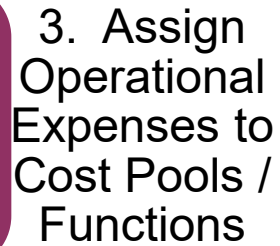
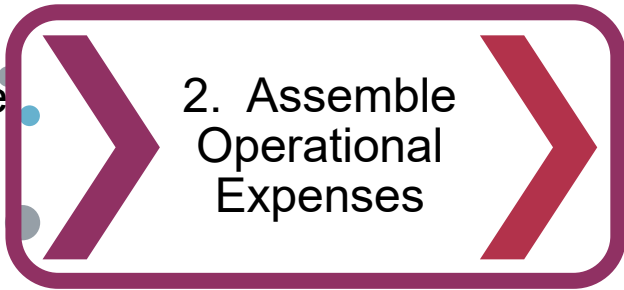
# COST ALLOCATION: FOUR-STEP PROCESS





*Need three pieces of information for each route / service:  
**Hours, Miles, Passengers (optional)**  
 (Fiscal Year Totals)*

Service	Funding Source	Mode	Revenue Vehicle Hours	Total Vehicle Hours	Total Vehicle Miles
<b>Total Service</b>			<b>26,550</b>	<b>30,000</b>	<b>300,000</b>
Fixed Route	Section 5307 Small Urban	MB	7,650	9,000	75,000
Demand Response	Section 5311 Rural	DR	18,900	21,000	225,000



**Need Fiscal Year-End Total Operating Expenses by Line-Item Chart-of-Account Format**

*Determine which are global shared, specialized shared, and direct.*

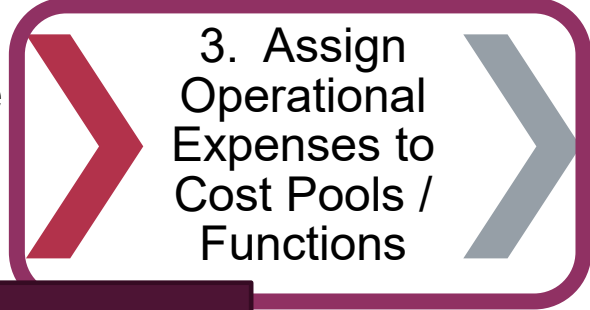
Account Description	Annual Total Operating Expense
<b>Total Operating Costs</b>	<b>\$3,500,000</b>
<b>Salaries</b>	<b>\$1,190,000</b>
Drivers	\$800,000
Dispatch	\$90,000
Maintenance	\$200,000
Office Staff	\$100,000
<b>Fringe</b>	<b>\$650,000</b>
Drivers	\$400,000
Dispatch	\$50,000
Maintenance	\$100,000
Office Staff	\$100,000

USOA provides common framework for accounting

**See Handout 1-A (Object Classes column)**



2. Assemble Operational Expenses



3. Assign Operational Expenses to Cost Pools / Functions



See Handout 1-A  
(Functions columns)

Hours-Based Shared Cost Pool

Miles-Based Shared Cost Pools

Fixed Shared Cost Pools

Account Description	Annual Total Operating Expense	Variable Costs			Fixed Costs	
		Vehicle Operations: Hours-Based	Vehicle Operations: Miles-Based	Vehicle Maintenance	Facility Maintenance	General Administration
<b>Total Operating Costs</b>	<b>\$3,500,000</b>	<b>\$1,562,200</b>	<b>\$490,000</b>	<b>\$535,800</b>	<b>\$15,000</b>	<b>\$897,000</b>
<b>Salaries</b>	<b>\$1,190,000</b>					
Drivers	\$800,000					
Dispatch	\$90,000					
Maintenance	\$200,000					
Office Staff	\$100,000					
<b>Fringe</b>	<b>\$650,000</b>					
Drivers	\$400,000					
Dispatch	\$50,000					
Maintenance	\$100,000					
Office Staff	\$100,000					

4. Allocate  
Costs to Routes  
and Services,  
Modes, Funding  
Sources,  
Jurisdictions

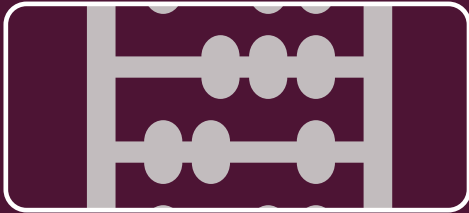
### **Allocate Variable Costs to Each Service**

- Hours-Based Costs by service's % of hours
  - Vehicle Operations Hours-Based
- Miles-Based Costs by service's % of miles
  - Vehicle Operations Miles-Based
  - Vehicle Maintenance

### **Allocate Fixed Costs to Each Service**

- Allocate Fixed Costs as % variable costs
  - Facility Maintenance
  - General Administration

# FINAL CONSIDERATIONS



Review and update your cost allocation plan at least annually and at major service changes or adding or losing sponsors



Document it!



Train multiple staff on it!

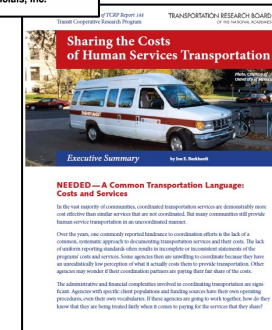
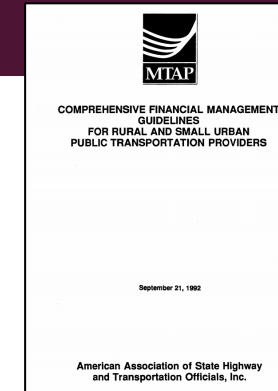
# FTA AND OMB REFERENCES

- National Transit Database Policy Manual (2025 or latest)
- 2 CFR 200 (2013)
- FTA Circular 9050.1A Urbanized Area Formula Program (2024)
- FTA Circular 9040.1H Formula Grants for Rural Areas (2024)
- FTA Circular 9070.1H Enhanced Mobility of Seniors and Individuals with Disabilities (2024)
- FTA Circular 5010.1F Award Management Requirements (2024)

# BASIS OF THIS ACCOUNTING METHODOLOGY

Based on methodologies described in:

- AASHTO MTAP Comprehensive Financial Management Guidelines for Rural and Small Urban Public Transportation Providers
- TCRP Report 144 Sharing the Costs of Human Services Transportation
- TCRP Report 101 Toolkit for Rural Community Coordinated Transportation Services

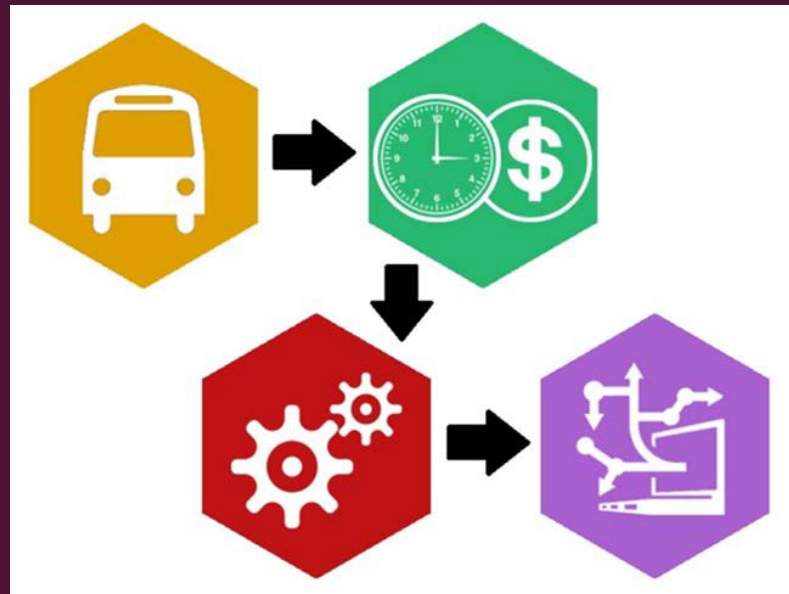


# HELPFUL RESOURCES

- Documents / Guidance
  - National RTAP Fundamental Financial Management Manual
  - National RTAP Advanced Topics in Financial Management for Rural Providers
- Tool
  - National RTAP Two-Variable Cost Allocation Calculator: <https://www.nationalrtap.org/Technology-Tools/Cost-Allocation-Calculator>

## MODULE 2

### DESIGN AND FUNCTION THE NATIONAL RTAP CALCULATORS



# LEARNING OBJECTIVES

By the end of this module, you should be able to:

- Understand the features of the Cost Allocation Calculator
- Know the stages of data input, outputs, and applied uses of the Calculator

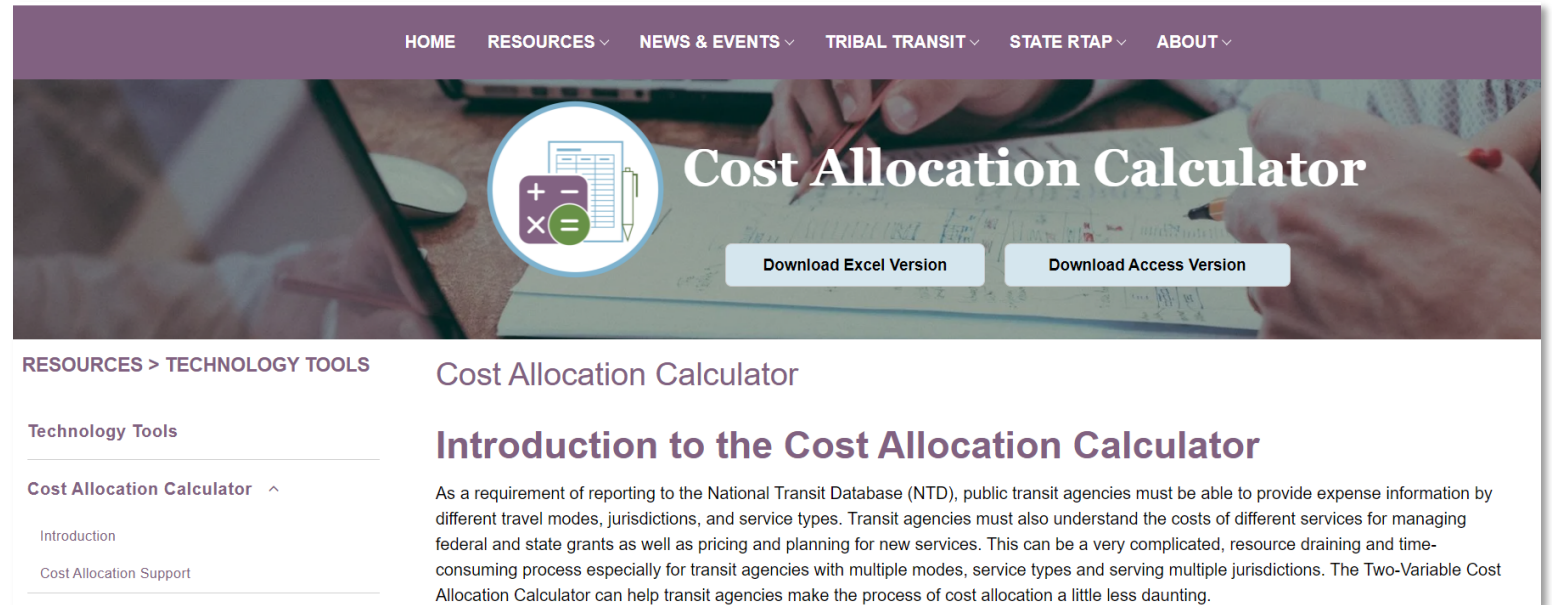
## WHAT IS THE CALCULATOR?

- Application tool to help agencies accurately allocate costs
- Built on both MS Excel and Access, with the same functionality
- Requires no special skills needed to use; relies on standard transit data – no new data collection should be necessary
- Used to allocate cost to individual or groups of routes/services
- Can also allocate costs for local sponsors within the same shared-ride demand responsive service
- Produces PDF reports and Excel exports of results
- Latest version is 4.1

# OPTIONAL: DOWNLOAD THE CALCULATORS

- **From National RTAP:  
Download the Cost  
Allocation Calculator**

- Landing page:  
[https://www.nationalrtap.org/  
Technology-Tools/Cost-Allocation-  
Calculator](https://www.nationalrtap.org/Technology-Tools/Cost-Allocation-Calculator)
- Excel and Access application  
versions
- Click on Download buttons



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## Cost Allocation Calculator

Download Excel Version Download Access Version

RESOURCES > TECHNOLOGY TOOLS

### Cost Allocation Calculator

Technology Tools

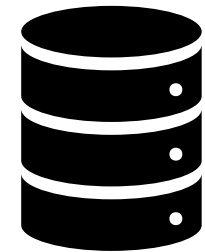
Cost Allocation Calculator ^

Introduction

Cost Allocation Support

#### Introduction to the Cost Allocation Calculator

As a requirement of reporting to the National Transit Database (NTD), public transit agencies must be able to provide expense information by different travel modes, jurisdictions, and service types. Transit agencies must also understand the costs of different services for managing federal and state grants as well as pricing and planning for new services. This can be a very complicated, resource draining and time-consuming process especially for transit agencies with multiple modes, service types and serving multiple jurisdictions. The Two-Variable Cost Allocation Calculator can help transit agencies make the process of cost allocation a little less daunting.



# ALLOCATION METHODOLOGY

Two variable cost allocation by Vehicle Hours and Vehicle Miles

## Variable Costs

- Allocated by Vehicle Hours and Miles
- Vehicle Operations-Hours Based (excluding miles-based costs) by % of hours
- Vehicle Operations-Miles Based (e.g., tires and tubes and fuel for revenue vehicles) by % of miles
- Vehicle Maintenance by % of miles

## Fixed Costs


- Allocated based on the % of variable costs
- Facility Maintenance and General Administration

# 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.

**A**

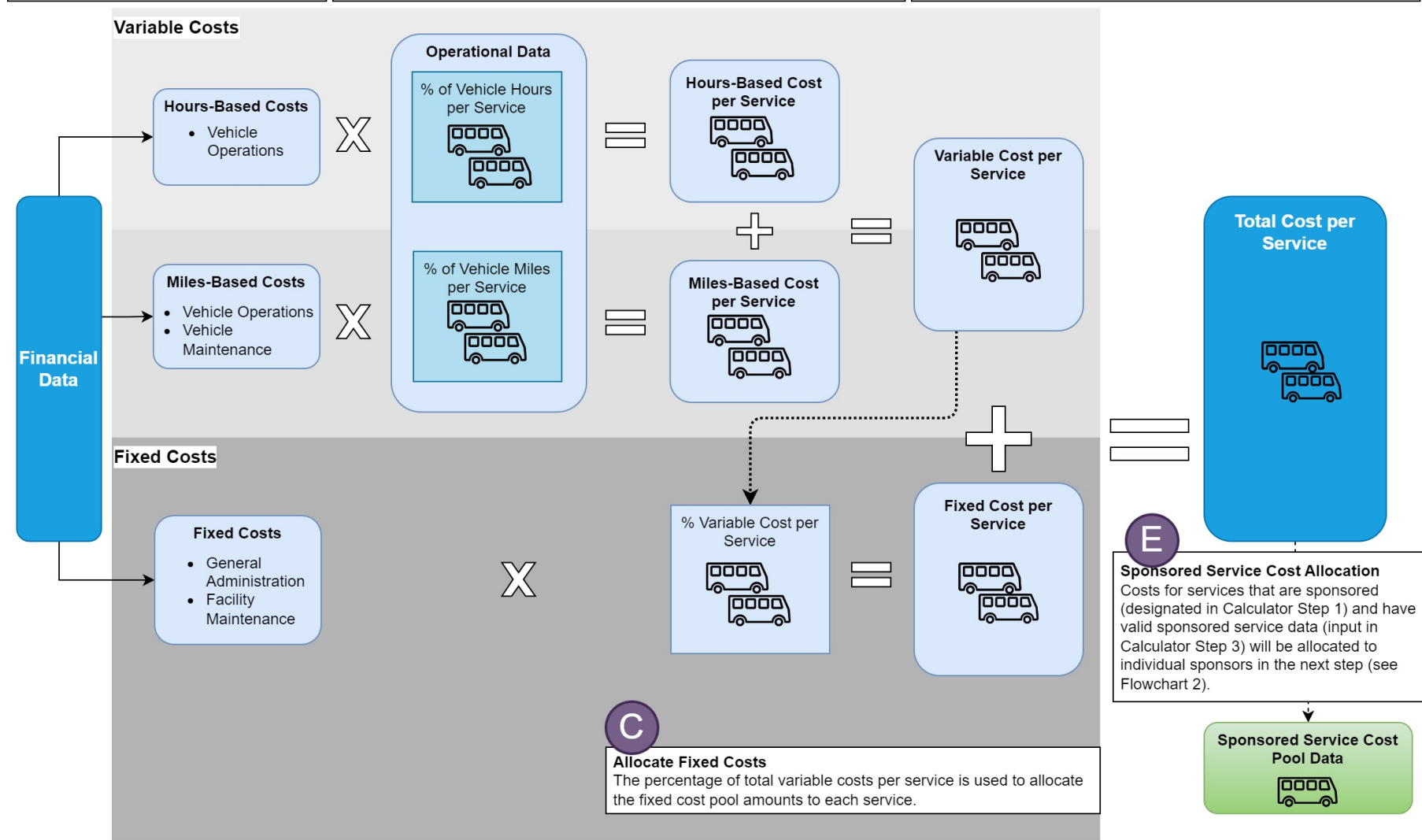
**Assign Costs to Cost Pools**  
Financial data entries from Calculator Step 2 are assigned to one of 5 cost pools based on the chosen USOA expense code.

**B**

**Allocate Variable Costs**  
Operational data entries from Calculator Step 3 are used to calculate each service's percentage of total vehicle hours or miles. These percentages are used to allocate the variable cost pool amounts to each service.

**D**

**Add Variable and Fixed Costs Together**  
The total variable cost per service is added to the total fixed cost per service to calculate the total allocated cost per service.



See Handout 2-A for full set of flow charts

# APPLICATION METHODOLOGY— FOUR-STEP PROCESS



1. Service Data



2. Financial Data



3. Operational Data



4. Allocate Costs

Each data entry page is accessible from the Navigation Menu page

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

# STEP 1 – SERVICE DATA

- List of all routes / services (herein after referred to as *service*) to which you want to allocate costs
- For each route / service, you need:
  - Name
  - Mode (NTD mode)
  - Service area (typically rural vs. urban)
  - Type of service (*directly operated or purchased transportation*)
  - Sponsored type (either *general public* or *sponsored* [funded, at least in part by a local third party])
  - Primary funding source (typically 5307, 5311, 5310)

# STEP 1 – SERVICE DATA CONCEPTS

- Each service listed will receive an allocation of your costs
- Examples of typical service entries
  - A single fixed route
  - A demand-responsive transit program (with or without sponsors)
  - A single vanpool program
- For each service listed, you will need to have operational data (for Step 3), at least:
  - Vehicle hours
  - Vehicle miles
- In cases where you want to split the cost of a service, (e.g., the urban part of a service vs. the rural part of a service)
  - You may need to enter TWO services for non-demand-responsive services (e.g., the urban part of a route and the rural part of a route)
  - Shared-ride demand-responsive service costs can be sub-allocated using the “sponsor” concept – you do not necessarily need two service entries unless you have dedicated fleets

## STEP 1 – SERVICE DATA CONCEPTS (CONT'D)



- In Excel Calculator, it is *critical* to have all services entered correctly in Step 1
  - If a service is missing from Step 1 and you start entering costs in Step 2, **you will have to go delete and then re-enter your costs**
- In Access Calculator, it is *best* to have all services entered correctly in Step 1
  - If a service is missing from Step 1 and you start entering costs in Step 2, you may need to fix individual cost entries that apply directly to that missing service

# DEMONSTRATION IN THE CALCULATOR



QUESTIONS?

## STEP 2 – FINANCIAL DATA

- Start with your chart of accounts for the fiscal year
- Organize by USOA object class, Subclass (i.e., function), and cost applicability (global shared, specialized shared, and direct)
- For each cost entry, you need:
  - USOA Object Class
  - Calculator SubClass
  - Annual Cost
  - Applicable services

## STEP 2 – FINANCIAL DATA CONCEPTS

- The calculator uses “expense codes,” to determine how to allocate and report each cost entry (see following slides)
- A new cost entry is needed for each unique combination of:
  - Object Class
  - SubClass
  - Applicability

# EXPENSE CODES

# EXPENSE CODE DETAILS!

Step 2: Financial Data requires entry of operational expenses by Object Class and “SubClass” (subclasses are essentially transit functions) adapted from the Uniform System of Accounts (USOA)

- Challenges:
  - Can be hard to know which object class and subclass combination is right for a given expense.
  - Can be hard to know what options are even available.
- Improvements in version 4.1:
  - Improved the expense code list (chart of accounts) and definitions to better align with the USOA and provide more detail.
  - Added Expense Code Definition box to Excel tool.
  - Added searchable Expense Code tab to Excel tool.
  - Removed some expense codes not applicable to cost allocation.

# EXPENSE CODES

- Unique combination of a *USOA Object Class* (type of cost) and a SubClass (a transit function / cost use)
- Expense codes determine
  - How the Calculator allocates the entered cost
  - How the Calculator categorizes the cost in results reports (e.g., as vehicle operations vs. as vehicle maintenance)
- 80 possible combinations = 80 unique expense codes

# LIST OF EXPENSE CODE OBJECT CLASSES AND SUBCLASSES

## USOA Object Classes

Amortization of Intangibles	Other Materials and Supplies
Capital Leases	Other Paid Absences
Casualty and Liability Costs (Insurance)	Other Reconciling Items
Depreciation	Other Salaries and Wages
Extraordinary and Special Items	Purchased Transportation Filing Separate Report
Fringe Benefits	Purchased Transportation in Report
Fuel and Lubricants	Related Parties Lease Agreements
Interest Expenses	Services
Miscellaneous Expenses	Taxes
Operating Lease Expenses	Tires and Tubes
Operators' Paid Absences	Utilities
Operators' Salaries and Wages	Voluntary Non-Exchange Transactions

## SubClasses

Administration
Capital Leasing (only used in Purchased Transportation)
Facility Maintenance
Fuel
General Utilities (only used in Utilities)
Operations
Operator (only used in Operators' Paid Absences)
Public Liability / Risk Mgmt. (only used in Casualty and Liability Costs)
Vehicle Maintenance

What kind of expense was it? Aligns with object classes in the USOA.

How was the expense used? Aligns with concept of transit functions.

# EXAMPLE EXPENSE CODES

<b>Expense Code</b>	<b>USOA Object Class</b>	<b>SubClass</b>	<b>Use</b>	<b>Allocation Variable</b>
5011.1	Operators' Salaries and Wages	Operations	Pay to operators when performing duties associated with vehicle operations	Vehicle Hours
5011.4	Operators' Salaries and Wages	Vehicle Maintenance	Pay to operators when performing vehicle maintenance duties	Vehicle Miles
5011.5	Operators' Salaries and Wages	Facility Maintenance	Pay to operators when performing facility maintenance duties	Variable Costs
5040.1	Utilities	Operations	Utilities used for revenue vehicles (e.g., electricity for battery-electric buses)	Vehicle Miles
5040.6	Utilities	General Utilities	Utilities not used to power revenue vehicles (e.g., electricity for facilities, natural gas for facilities, internet)	Variable Costs

# ENTERING A COST - 1<sup>ST</sup> TASK: SELECT A USOA OBJECT CLASS

Navigation Menu × Step 2: Enter Financial Data

Step 2: Enter Financial Data

View the Glossary for this Form (except USOA definitions)

View the USOA Expense Code List

Cost Data Entry

Record 1 of 6

Total Costs Accounted: \$162.00

USOA Object Class

Annual Cost

SubClass

Cost Applicability

- Shared Cost (All Routes / Services)
- Select below for Specialized Costs
- A specific Route / Service (or multiple)
- A specific Mode
- A specific Service Area
- A specific Type of Service
- A specific Funding Source

Amortization of Intangibles

Capital Leases

Casualty and Liability Costs (Insurance)

Depreciation

Extraordinary and Special Items

Fringe Benefits

Fuel and Lubricants

Interest Expenses

Miscellaneous Expenses

Operating Lease Expenses

Operators' Paid Absences

**Operators' Salaries and Wages**

Other Materials and Supplies

Other Paid Absences

Other Reconciling Items

Other Salaries and Wages

Hide Expenses

Cost Type (Pool)

Definition

Save

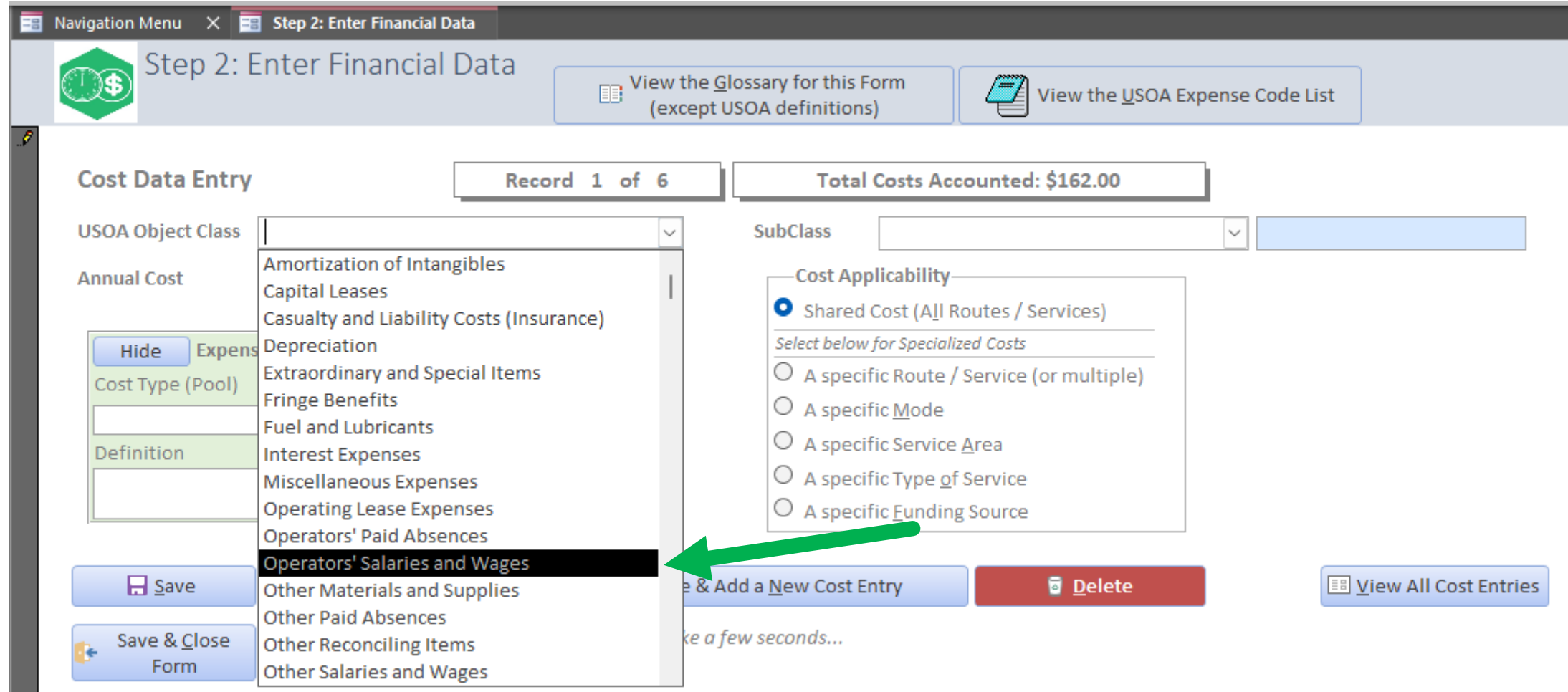
Save & Close Form

Save & Add a New Cost Entry

Delete

View All Cost Entries

Take a few seconds...



# ENTERING A COST - 2<sup>ND</sup> TASK: SELECT A SUBCLASS

Navigation Menu × Step 2: Enter Financial Data

Step 2: Enter Financial Data

View the Glossary for this Form (except USOA definitions)

View the USOA Expense Code List

Cost Data Entry

Record 1 of 6

Total Costs Accounted: \$162.00

USOA Object Class: Operators' Salaries and Wages

Annual Cost: [ ]

SubClass: [ ]

Code	Subtitle
5011.1	Operations
5011.4	Vehicle Maintenance
5011.5	Facility Maintenance
5011.6	Administration

Cost App: Shared C

Select below for:

- A specific
- A specific Mode
- A specific Service Area
- A specific Type of Service
- A specific Funding Source

Hide Expense Code Definition

Cost Type (Pool): [ ] Transit Function: [ ]

Definition: [ ]

Save Save & Add a New Cost Entry Delete View All Cost Entries

Save & Close Form If you have a lot of specialized costs, this may take a few seconds...

Note: The displayed SubClasses will be limited to those valid for the selected Object Class.

# ENTERING A COST - 3<sup>RD</sup> TASK: REVIEW DEFINITION

Navigation Menu × Step 2: Enter Financial Data

Step 2: Enter Financial Data

View the Glossary for this Form (except USOA definitions)

View the USOA Expense Code List

Cost Data Entry

Record 1 of 6

Total Costs Accounted: \$162.00

USOA Object Class: Operators' Salaries and Wages

SubClass: 5011.1

Operations

Annual Cost

Hide Expense Code Definition

Cost Type (Pool)	Transit Function
Hours - Variable	Vehicle Operations

Definition

Salaries and wages, excluding the cost of paid absences and fringe benefits, for operators for time spent per... CLICK FOR MORE...

Cost Applicability

- Shared Cost (All Routes / Services)
- Select below for Specialized Costs
- A specific Route / Service (or multiple)
- A specific Mode
- A specific Service Area
- A specific Type of Service
- A specific Funding Source

Save

Save & Add a New Cost Entry

Delete

View All Cost Entries

Save & Close Form

If you have a lot of specialized costs, this may take a few seconds...

# ENTERING A COST – 4<sup>TH</sup> TASK: ENTER REMAINING DATA

Navigation Menu × Step 2: Enter Financial Data

Step 2: Enter Financial Data

[View the Glossary for this Form \(except USOA definitions\)](#) [View the USOA Expense Code List](#)

**Cost Data Entry** Record 1 of 6 Total Costs Accounted: \$10,162.00

USOA Object Class: Operators' Salaries and Wages SubClass: 5011.1 Operations

Annual Cost: \$10,000.00

**Expense Code Definition**

Cost Type (Pool): Hours - Variable Transit Function: Vehicle Operations

Definition: Salaries and wages, excluding the cost of paid absences and fringe benefits, for operators for time spent per... [CLICK FOR MORE...](#)

**Cost Applicability**

- Shared Cost (All Routes / Services)
- Select below for Specialized Costs
- A specific Route / Service (or multiple)
- A specific Mode
- A specific Service Area
- A specific Type of Service
- A specific Funding Source

**Select Mode**

DR	
ID	ModeName
RB	Bus Rapid Transit
DR	Demand Response

[Save](#) [Save & Add a New Cost Entry](#) [Delete](#) [View All Cost Entries](#)

[Save & Close Form](#) *If you have a lot of specialized costs, this may take a few seconds...*

# COST CODE SUPPORT

Navigation Menu × Step 2: Enter Financial Data

Step 2: Enter Financial Data

[View the glossary for this Form \(except USOA definitions\)](#) [View the USOA Expense Code List](#)

**Cost Data Entry** Record 1 of 6 Total Costs Accounted: \$10,162.00

USOA Object Class: Operators' Salaries and Wages SubClass: 5011.1 Operations

Annual Cost: \$10,000.00

**Expense Code Definition**

Cost Type (Pool)	Transit Function
Hours - Variable	Vehicle Operations

Definition: Salaries and wages, excluding the cost of paid absences and fringe benefits, for operators for time spent per... [CLICK FOR MORE...](#)

**Cost Applicability**


- Shared Cost (All Routes / Services)
- Select below for Specialized Costs*
- A specific Route / Service (or multiple)
- A specific Mode
- A specific Service Area
- A specific Type of Service
- A specific Funding Source

**Select Mode**

ID	ModeName
RB	Bus Rapid Transit
DR	Demand Response

**Buttons:** Save, Save & Add a New Cost Entry, Delete, View All Cost Entries, Save & Close Form

*If you have a lot of specialized costs, this may take a few seconds...*



# A NOTE ABOUT WHAT COSTS TO INCLUDE IN THE CALCULATOR

- Should include *all operational costs allocable to the management and operation of your transportation service(s) that you want to be included in your results*
- This includes unallowable costs (i.e., costs not eligible for grant reimbursement)
  - *Unless you are using cost allocation results for grant reimbursement purposes*
- This includes Object Class group 5200 – Reconciling Items
  - *Unless you are using cost allocation results to fill out NTD RR-20 or NTD F-30 forms (these both exclude reconciling items)*

# DEMONSTRATION IN THE CALCULATOR



QUESTIONS?

## STEP 3 – OPERATIONAL DATA

- Provide operations data for all services entered in Step 1
- Required for each service for allocation to work (the allocation variables):
  - Vehicle Hours
  - Vehicle Miles
- Optional data (used in reports):
  - Revenue Hours
  - Revenue Miles
  - Passenger Trips
- If you want to determine the cost of service for different sponsors of a shared-ride demand-response service, you also need for each sponsor:
  - Passenger Hours
  - Passenger Miles

## STEP 3 – OPERATIONAL DATA CONCEPTS

- Each service listed will require at least Vehicle Hours and Vehicle Miles
- The list of services in Step 3 is determined by what you input in Step 1
- Sub-allocation of costs to sponsors is a special, optional step (discussed more in subsequent slides)

# DEMONSTRATION IN THE CALCULATOR

# SHARED-RIDE DEMAND RESPONSE COST ALLOCATION



# SHARED-RIDE DEMAND RESPONSE

COST ALLOCATION TO PROGRAMS / SPONSORS

# SHARED RIDE DEMAND RESPONSE

- To allocate costs of shared-ride demand response services to jurisdictions, funding programs, or sponsors, then more steps may be needed
- Options:
  - If passenger trip characteristics are about the same across programs / sponsors: use trips to allocate costs
  - If passenger trip characteristics differ significantly (in terms of distance or duration) across programs / sponsors:
    - **Option 1: Use passenger hours to allocate hours-based costs. Use passenger miles to allocate miles-based costs**
    - Option 2: Use direct miles to allocate costs. (Direct miles is how many miles it *would take* to drive the passenger from origin to destination, regardless of actual path of vehicle.)
    - Option 3: Some other method

# ALLOCATING SHARED-RIDE DEMAND RESPONSE COSTS

1. Calculate total passenger hours and miles by program / sponsor
  1. Obtain from dispatching software OR
  2. Use driver manifests or dispatching data to determine average trip length in passenger miles and passenger hours by service type and estimate passenger miles and hours by program / sponsor
2. Determine
  1. % of passenger hours per program / sponsor
  2. % of passenger miles per program / sponsor
3. Allocate demand response costs to each program / sponsor
  1. Hours-based costs for demand response x program's % of passenger hours
  2. Miles-based cost for demand response x program's % of passenger miles
  3. Fixed costs by % of variable (hours- and miles-based) costs

# THE TOOL: OPTIONS FOR SPONSOR SUB-ALLOCATION

- *Note:* The tool asks for passenger hours and passenger miles per sponsor. But you could do any of the following!

Variable	Original Tool Design	Only Have Passenger Miles?	Need to Use Direct Time and Miles?	Only Have Ridership? (not recommended)
Data Entered To Allocate Hours-Based Costs	Passenger Hours	Passenger Miles	Direct Hours	Trips
Data Entered To Allocate Miles-Based Costs	Passenger Miles	Passenger Miles	Direct Miles	Trips

- *Note:* The tool does not know you're entering in a different variable, so, all the labels on reports and forms will be incorrect (i.e., will say "passenger hours" and "passenger miles").

# DEMONSTRATION IN THE CALCULATOR



QUESTIONS?

## MODULE 3

# RESULTS, FEATURES, AND DATA MANAGEMENT



## STEP 4 – COST ALLOCATION RESULTS AND CONCEPTS

- Running cost allocation will allocate your **costs** (Financial Data from Step 2) to your **services** (Step 1) using your **operational data** (Step 3) and then prepare reports upon request

### Key Concepts

- Results for are for a *fiscal year*
- Reports can be *single year* (active fiscal year) or *multi-year* (combining multiple fiscal years using stored results)
- Many different reports are available
  - By service
  - By mode
  - By service area
  - By sponsor, etc.
- The calculator holds financial and operational data for only a single fiscal year
  - Single-year *results* can be stored and displayed in multi-year reports BUT, the calculator is only displaying stored results – it does not have the underlying line-item entries of costs

# DEMONSTRATION IN THE CALCULATOR

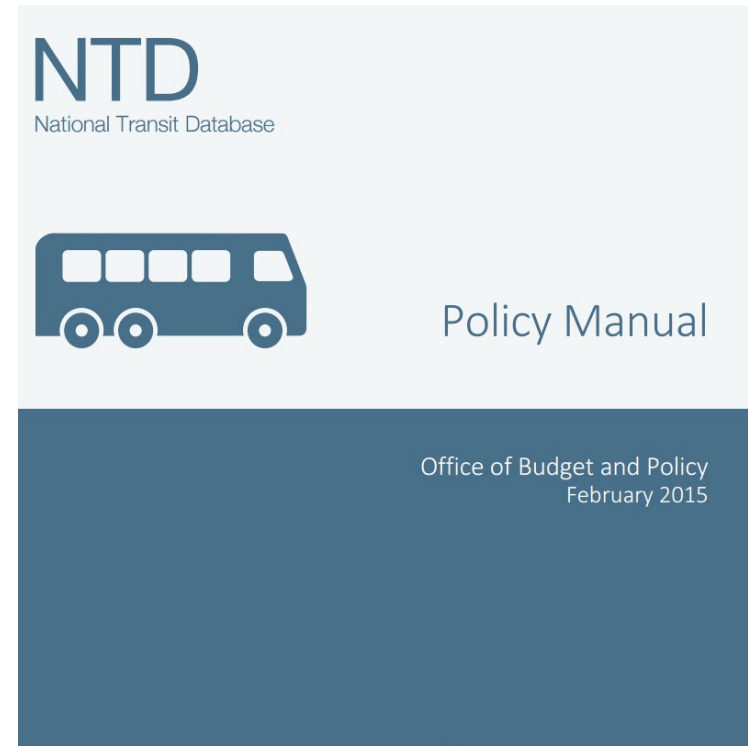


# CALCULATOR RESULTS HOW CAN YOU USE?

# NTD Reporting

- By Mode
- By Section 5307 and Section 5311
- By Chart-of-Account Line Item (Object Class)
- By Function
- By Service Type (Directly Operated/Purchased)

Note! NTD reduced reporters (e.g., Section 5311 subrecipients) *should exclude some financial items!* (i.e., see USOA Reconciling Items)



# Understand Costs by Funding Source



Service	Funding Source	Mode	Total Revenue Hours	Total Revenue Miles	Total Passenger Trips	Total Cost
<b>TOTAL</b>			<b>26,550</b>	<b>282,750</b>	<b>210,000</b>	<b>\$3,500,000</b>
Fixed-Route	Section 5307 Small Urban	MB	7,650	71,250	120,000	\$980,636
Demand Response	Section 5311 Rural	DR	18,900	211,500	90,000	\$2,519,364



# Know Costs, Measure Performance, and Make Decisions

Service	Total Cost	Passenger Trips per Vehicle Hour	Cost per Revenue Hour	Cost per Revenue Mile	Cost per Passenger Trip
<b>TOTAL</b>	<b>\$3,500,000</b>	<b>7.91</b>	<b>\$131.83</b>	<b>\$12.38</b>	<b>\$16.67</b>
Fixed-Route	\$980,636	15.69	\$128.19	\$13.76	\$8.17
Demand Response	\$2,519,364	4.76	\$133.30	\$11.91	\$27.99
<i>Demand Response Service Allocation Total Cost</i>			<i>Cost per Pass. Hour</i>	<i>Cost per Pass. Mile</i>	<i>Cost per Pass. Trip</i>
General Public	\$1,941,547		\$43.15	\$1.62	\$32.36
Adult Day Care	\$577,818		\$38.52	\$1.93	\$19.26

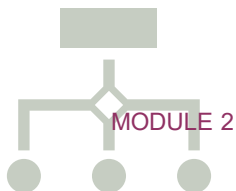
## OTHER FEATURES OF THE CALCULATOR



Historical Year Reports – compare results over range of years



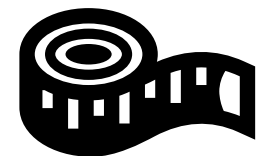
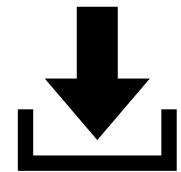
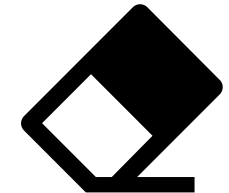
Data editing and management



Process flowcharts and glossaries

# DATA EDITING, MANAGEMENT, AND DISPLAY

- Options for data editing in both applications
- Options for exporting available data and reports
- Use the Calculator with a single route/service
  - May be useful for performance metrics and historical reports
  - May be useful is that single service has multiple sponsors



# DEMONSTRATION IN THE CALCULATOR

# PROCESS FLOWCHARTS

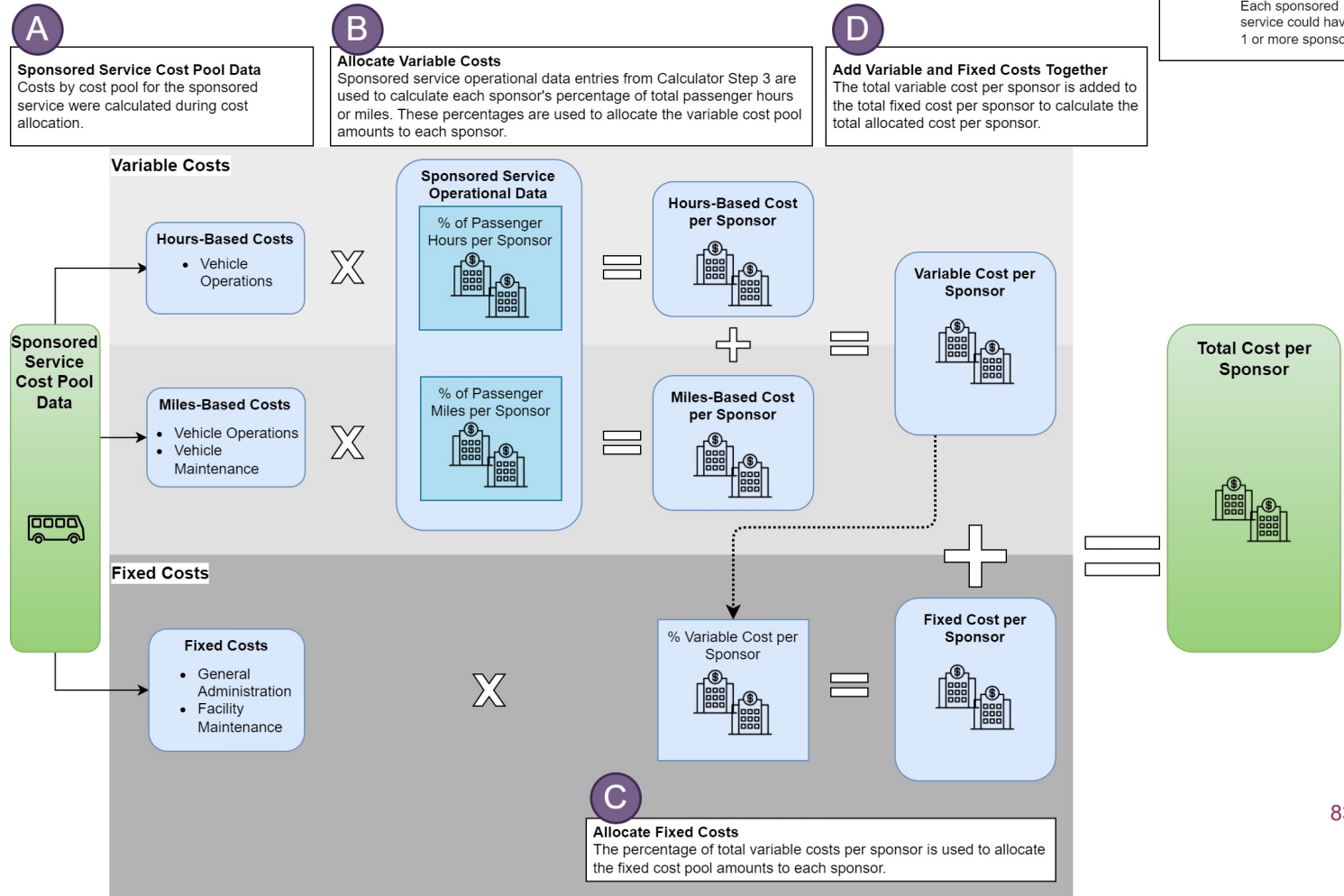
## National RTAP Cost Allocation Calculator Flowchart 2: Sponsored Service Cost Allocation Process Summary

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.

- Cost Allocation Process Summary
- Sponsored Service Cost Allocation Process Summary
- Cost Allocation Details for Global and Specialized Costs



# GLOSSARIES & EXPENSE CODE LISTS

- Available from the main navigation menu
- Available from each data entry screen

# TRAINING & HELP

MODULE 3

# ONLINE RESOURCES

- **Support Center page:** <https://www.nationalrtap.org/Technology-Tools/Cost-Allocation-Calculator/Support>
  - Definitions and concepts
  - Instruction manual
  - Instructional webinars and training videos
  - Frequently asked questions
  - Related links

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## Cost Allocation Calculator Support

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TECHNOLOGY TOOLS

Technology Tools

Cost Allocation Calculator  
^

Introduction

Cost Allocation Support

GTFS Builder

### Cost Allocation Calculator Support

#### Getting Started

The application is simple and easy to use. Here are a few terms that are important to understanding cost allocation.

- **Cost Allocation:** the act of taking a sum of operating costs and distributing that sum to individual transit routes, transit services, or jurisdictions.
- **Fully Allocated Cost:** a fully allocated cost means a cost that represents the full cost of a transit route or service, including all costs incurred by the transit agency—both variable and fixed.
- **Variable Costs:** 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.

# TRAINING VIDEOS (NEED MINOR UPDATES FROM LATEST VERSION)

- New series of brief videos demonstrating how to use the Calculator at various steps
  - Separate videos for the Access and Excel versions
- Topics include:
  - Calculator Overview
  - Service Data
  - Financial Data
  - Operational Data
  - Allocate Costs and View Reports
  - Data Management and Help Resources

national rtap

Cost Allocation Calculator  
National RTAP - 10 / 14

National RTAP Cost Allocation Calculator Video: Calculator Overview  
National RTAP

4 views • Oct 7, 2021

National RTAP  
140 subscribers

SUBSCRIBE

This video provides an introduction to the Cost Allocation Calculator from National RTAP, including an overview of the applications and cost allocation process.

National RTAP Cost Allocation Calculator Video: Calculator Overview  
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National RTAP Webinar - Two Variable Cost Allocation...  
National RTAP  
258 views • 2 years ago

# BOOKING TIME FOR HELP

- <https://outlook.office365.com/book/NationalRTAPCostAllocationCalculatorHelp@tti.tamu.edu/>
- Short: <https://tx.ag/AllocationHelp>

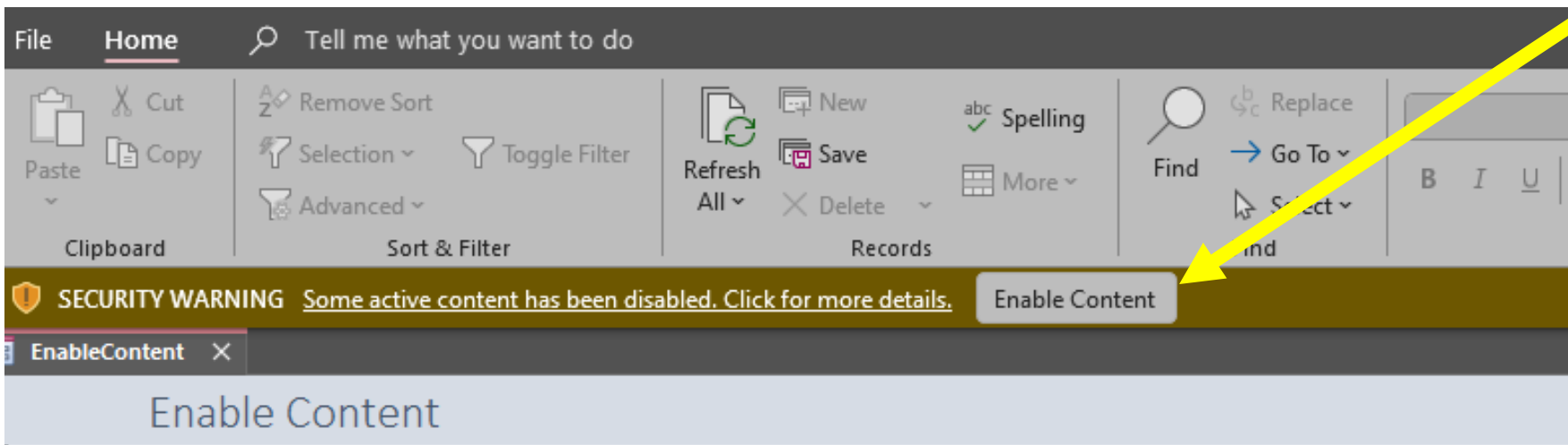


# DEALING WITH SECURITY WARNINGS

# KEY STEPS

- Download
- Save to trusted location!
  - See the download pages on National RTAP website for instructions
- Enable content / allow editing

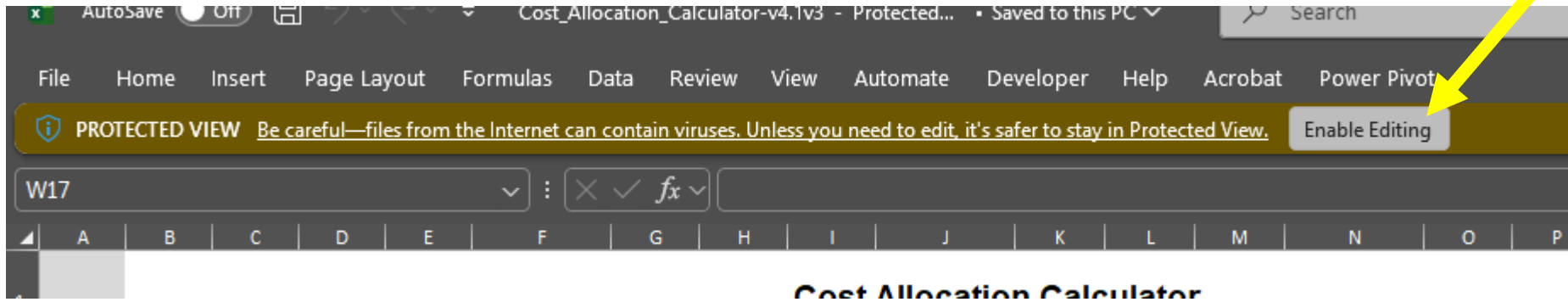
# ACCESS: NEED TO ENABLE CONTENT



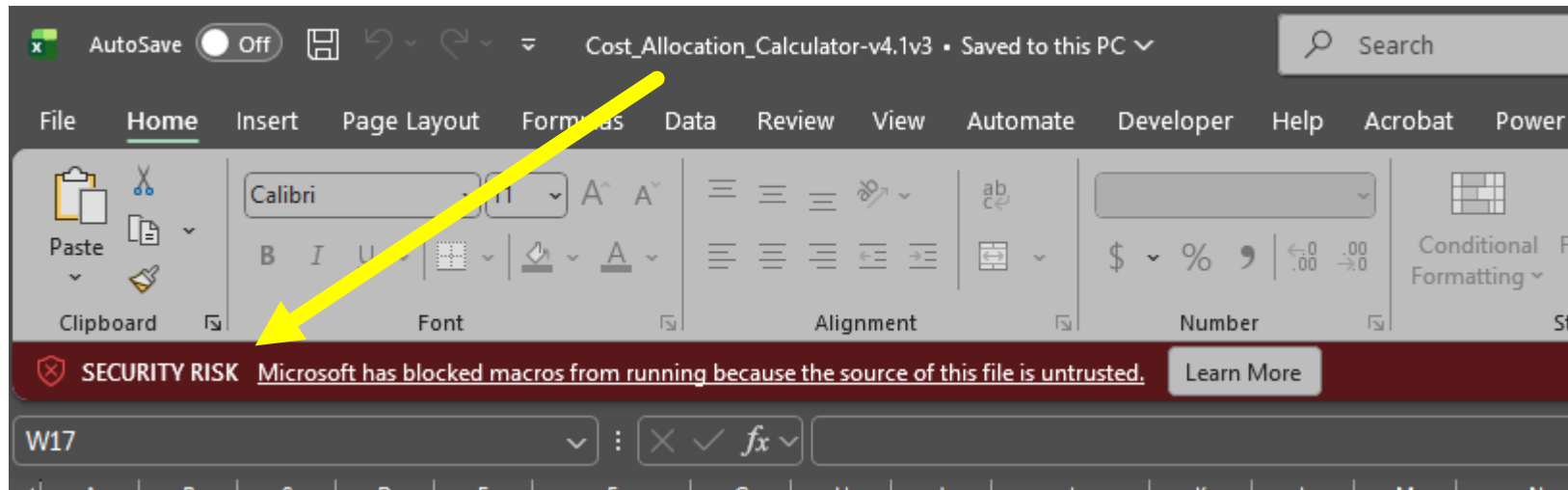
The screenshot shows the Microsoft Access ribbon interface. A yellow arrow points to a security warning bar that reads: "SECURITY WARNING Some active content has been disabled. Click for more details." To the right of the warning is a button labeled "Enable Content". Below the ribbon, a tab titled "EnableContent" is visible. A light blue box contains the text: "Enable Content".

*To use this database, you must click the Enable Content button displayed above!*

# EXCEL: NEED TO ENABLE EDITING



# IF YOU SEE THIS...DON'T PANIC!



File isn't saved in a trusted location.

Save the file to a trusted location first. Then, open the file from that trusted location.

If problems persist, contact your IT support people.

- Michael Walk: [m-walk@tti.tamu.edu](mailto:m-walk@tti.tamu.edu)
- Book time to meet with TTI staff: <https://tx.ag/AllocationHelp>

QUESTIONS?