Sub-Allocation Formula and Methodology Implementation Guide

Raleigh UZA Section 5307/5340 and 5339(a) Funds

Summary

Each year, Congress passes legislation which, when signed by the President, appropriates funds for the Department of Transportation and related agencies. After that legislation is enacted, FTA publishes a notice in the Federal Register that provides an overview of the apportionments and allocations for the various FTA programs as well as statements of policy and guidance on public transit administration.

FTA's public transportation assistance program authorization is provided by Chapter 53 of Title 49, U.S. Code. The most recent authorization, the Infrastructure Investment and Jobs Act, was signed in November 2021. The legislation reauthorizes surface transportation programs for Fiscal Year 2022 through FY 2026.

More information on the FTA federal apportionment process is available on the FTA website.

After receiving the allocation amount for the Raleigh UZA area, CAMPO uses the formula methodology to determine funding amounts to sub-allocate to direct recipients, sub-recipients, and other jurisdictions with public transit services within their borders and within the Raleigh UZA. This Sub-Allocation Formula and Methodology Implementation Guide describes the assumptions and formulas used by CAMPO to develop the sub-allocation amounts. The City of Raleigh, as the UZA's Designated Recipient, must concur with the results of this process.

Sub-allocation Formula Methodology, Calculations and Implementation Guide

Sub-allocation Process Assumptions:

- The purpose of this methodology is to document how the spreadsheets (formulae) work and to describe the annual updates that are required to calculate the sub-allocated shares to each eligible transit partner.
- Funding is based on several key metrics applicable to the Section 5307/5340 and 5339(a) programs and is set forth in the FTA annual apportionment tables listed below.
- CAMPO uses worksheets for each funding program to calculate the parties' sub-allocated amounts using the FY26-27 MOU and this agreed-upon methodology. The sub-allocation formula calculates amounts based on population, population weighted by population density, vehicle revenue miles, fixed-guideway directional route miles (if applicable), passenger mile bonus, and low-income population using the FTA data unit values.

The Parties agree to the following sub-allocation formula and methodology:

Sub-Allocation Methodology

Step 1 – Gather Metric Data –

- Gather data from the most recent FTA-published Fiscal Year Apportionment Tables as follows:
  - Table 3: Section 5307 and 5340 Urbanized Area Formula Appropriations;
  - Table 5: Formula Apportionments Data Unit Values; and
  - Table 12: Section 5339 (a) Buses and Bus Facilities Apportionments.
- Gather the most recent NTD data for:
  - Vehicle revenue miles;
  - Passenger miles traveled; and
  - Operating costs;
- Gather the 2020 Census data for:
  - Municipal Population
  - UZA and Municipal Population Density
  - UZA Population
- Use the Table 5: Formula Apportionments Data Unit Values for
  - Population
  - Population weighted by population density,
  - Vehicle revenue miles,
  - Fixed guideway directional route miles (if applicable),
  - Bus incentive, and
  - Low-income population.

- Enter the data into the prepared Section 5307/5340 and 5339a worksheets.

Step 2 – Adjust For Annual Triangle Regional Model (TRM) and the Travel Household Survey Costs – Enter the annual TRM and Travel Household Survey costs into the Section 5307/5340 worksheet to be proportionately removed from each applicable data values "off the top" from the regional 5307 funds.

Step 3 – Develop Parties' Shares for Population and Population Funds to Set Aside for Redistribution – Population of the Raleigh UZA is a component of FTA's formulas. The municipal parties' 2020 Census municipal populations within the Raleigh UZA boundary are gathered. The population value of those municipalities within the UZA is then subtracted from the full UZA population value. Funding from the component of the FTA apportionments based on UZA population is attributed to each municipality with NTD-reported transit service data based on these population figures. The remaining population, and subsequent funding attribution, is assigned based on other criteria in Step 6 below.

Step 4 – Develop Parties' Shares for Population Density, Low-Income Population, and Section 5340 – Population weighted by population density, low-income population, and the Section 5340 allocation to the Raleigh UZA are components of FTA's formulas, which for the sub-allocation formula are each attributed to Raleigh and Cary. Cary will receive its full share of the funding for population (for Section 5340) and population weighted by population density based on its 2020 population and population density within the most recently delineated Raleigh UZA boundary. Cary will also receive its full share of the funding for low-income population based on the low-income population within its boundaries within the most recently delineated Raleigh UZA boundary. Raleigh will receive its shares for these formula components based on the remaining population, population weighted by population density, and low-income population of the Raleigh UZA after deducting Cary's shares.

Step 5 – **Develop Percentages for each Parties' Vehicle Revenue Miles and Passenger Mile Bonus** - Vehicle revenue miles and passenger miles traveled vs. operating costs (incentive tiers) are components of FTA's formulas. The funding to be sub-allocated based on Vehicle Revenue Miles and Passenger Miles Bonuswill be in proportion to each Party's NTD-reported submissions that informed the subject fiscal year apportionments. Formula calculation: (Rev Mi / (Rev Mi+ Pass Mi Bonus)) and (Pass Mi / (Rev Mi+ Pass Mi Bonus)) .

Step 6 - **Assign the Population Set-Aside Funds Based on Proportional Shares** - Multiply the remaining funds from Step 3 by the respective shares of the total funding for vehicle revenue miles and the incentive tiers that each Party is attributed as determined by Step 5 to determine the funding split among the Parties for the remaining unallocated funding apportioned based on population. Formula Calculation: [(Remaining Funds*(Rev Mi% from Step 4))*(Agency Rev Mi/ Total Rev Mi) = Adjustment Dollars)]

Data Used

All National Transit Database (NTD) and Census data is consistent with the data used by the FTA to apportion the subject formula funds to the Raleigh UZA, which are captured in FTA annual apportionment tables (see below). The formula data used for the sub-allocation is aligned with the same fiscal year or NTD reporting year of data used by the FTA for its annual calculations of the Section 5307/5340 and Section 5339(a) apportionments.

FTA-Published Tables & Data Utilized in Annual Calculations

FTA publishes all annual apportionments and associated tables on its website at https://www.transit.dot.gov/funding/apportionments/current-apportionments

Tables and data presently used for these calculations include:

- Table 3: Section 5307 and 5340 Urbanized Area Formula Appropriations
- Table 5: Formula Apportionments Data Unit Values
- Table 12: Section 5339 (a) Buses and Bus Facilities Apportionments

And other FTA apportionment resources such as Formula Apportionments Data.

- Census UZA Population and Population Density Data

- National Transit Database (NTD) Data – Vehicle Revenue Miles, Passenger Miles, Operating Costs for Section 5307 and Section 5339 (a) – Historically, FTA uses agencies' service data for the most recently closed NTD report year prior to the federal fiscal year of apportionment but may allow flexibility regarding the NTD report year used at the discretion of the FTA Administrator. Ex: For the FY 2025 apportionments, the FTA used data from the 2023 NTD Report Year, which corresponds to an agency's most recently closed NTD report year prior to the FFY of apportionment.

- Census Low Income Population Data

Funding Source Definitions

FTA Urbanized Area Formula Grants Program (Section 5307):

Pursuant to Title 49, Chapter 53 of the U.S.C., FTA apportions Section 5307 funds to UZAs and States for public transportation capital projects, operating assistance, and transportation-related planning. Section 5307 supports public transportation by: (1) Assisting in the planning, engineering, design, construction, evaluation, and maintenance of public transportation projects, equipment, and facilities; (2) Facilitating cooperation between public transportation providers and private companies engaged in public transportation to encourage the planning and establishment of area-wide public transportation systems needed for economical and desirable urban development; (3) Encouraging mobility management, employment-related transportation alternatives, joint development practices, and transit-oriented development; (4) Providing financial assistance to States and local governments to help carry out national goals related to mobility for all, including seniors, individuals with disabilities, and economically disadvantaged individuals; (5) Investing in bus and bus-related activities such as replacement, overhaul, and rebuilding of buses; and (6) Investing in crime prevention, public transportation safety, and security equipment.

FTA Formula Grants for Buses and Bus Facilities Program (Section 5339(a)):

Pursuant to 49 U.S.C. 5339(a), FTA apportions funds to Designated Recipients in large UZAs and States for small UZAs and rural areas for the purpose of financing capital bus and bus-related projects that will support the continuation and expansion of public transportation services in the United States.

FTA Formula Grants for Growing States and High Density States (Section 5340):

Determined based on a statutory formula, added to the urbanized area formula and has the same eligibility and program requirements as Section 5307. Funds are allocated to Designated Recipients in larger UZAs and to States for smaller UZAs and rural areas to finance projects that support and expand public transportation.

Other Terms

Accountable Fiscal or Grants Manager:

The single, identifiable individual with ultimate financial and/or grant management accountability and responsibility for each Party's acceptance, tracking and control over federal grants that is appointed by each Party's Director level staff.

FTA Terms

Designated Recipient:

An entity designated in accordance with the planning process under Sections 5303 and 5304 by the governor of a State, responsible local officials, and publicly-owned operators of public transportation to receive and apportion amounts under 49 U.S.C 5336 to urbanized areas with 200,000 or more in population or to a State or regional authority, if the authority is responsible under the laws of a State for a capital project and for financing and directly providing public transportation. See 49 U.S.C. 5302.

Direct Recipient:

An entity that receives funding directly from FTA.

Sub-Recipient:

A non-federal entity that receives a subaward from a pass-through entity to carry out part of a federal program (i.e., an entity receiving grant funds from a direct, "pass-through" recipient). The sub-recipient's federal compliance oversight is the responsibility of the Designated or Direct recipient.

Bus Incentive Funding:

A component of the Section 5307 and 5339(a) formulas for which a certain percentage of funds allocated under each program is attributable based on Bus Passenger Miles Traveled (BPMT) squared, divided by operating costs for those transit agencies reporting such data to the NTD.

Bus Passenger Miles:

FTA utilizes the National Transit Database (NTD) report of annual Bus Passenger Miles Traveled reported by each transit agency within the Raleigh UZA to calculate Bus Incentive Funding.

Operating Expenses (interchangeable with Operating Costs):

The costs necessary to operate, maintain, and manage a public transportation system. Operating expenses usually include such costs as driver salaries, fuel, and items having a useful life of less than one year.

Bus Operating Cost:

FTA utilizes the annual Bus Operating Costs reported to the NTD by each transit agency within the Raleigh UZA to calculate Bus Incentive Funding.

Bus Vehicle Revenue Miles (BVRM):

Annual Bus Vehicle Revenue Miles (BVRM) reported to the NTD by each transit agency are utilized to calculate the proportional share of the funding apportioned by FTA based on BVRM for each transit agency.

Fixed Guideway:

A public transportation facility (i) using and occupying a separate right-of-way for the exclusive use of public transportation; (ii) using rail; (iii) using a fixed catenary (wire) system; (iv) for a passenger ferry system; or (v) for a bus rapid transit system. See 49 U.S.C. 5302(8).

Fixed Guideway Operating Cost:

FTA utilizes the annual Fixed Guideway Operating Cost reported to the NTD by each agency within the Raleigh UZA to calculate Fixed Guideway Incentive Funding.

Fixed Guideway Vehicle Revenue Miles (VRM):

FTA will utilize the NTD report of the annual Fixed Guideway Vehicle Revenue Miles reported by each transit agency within the Raleigh UZA to calculate Fixed Guideway Funding.

Fixed Guideway Directional Route Miles:

FTA will utilize the NTD report of the annual Fixed Guideway Directional Route Miles reported by each agency within the Raleigh UZA to calculate Fixed Guideway Funding.

Fixed Guideway Passenger Miles:

FTA utilizes the annual Fixed Guideway Passenger Miles reported to the NTD by each agency within the Raleigh UZA to calculate Fixed Guideway Incentive Funding.

Census Terms

American Community Survey (ACS):

An ongoing sample-based study of the population conducted by the Census Bureau, supplementing the decennial census. The Census Bureau annually publishes low-income population totals based on the most recent ACS estimates available by the beginning of the federal fiscal year of apportionment.

Census Population:

FTA utilizes the decennial 2020 census population of the Raleigh Urbanized Area (UZA) until updated UZA boundaries are delineated that correspond to a new census, which is anticipated in the few of years after 2030. FTA uses the Raleigh UZA population to determine population in the formula, while the MOU uses the 2020 municipal population of the parties' jurisdictions within the Raleigh UZA in the formula to calculate the sub-allocations.

Since the UZA boundary does not match the municipal boundaries, a GIS analysis is utilized by CAMPO to determine the 2020 Census population of the portions of each municipality that is a Party to this MOU that is within the Raleigh UZA. That data is used to determine the proportion of UZA population attributable to each municipal party. This data remains consistent for the entire 2-year MOU period during the census period.

The GIS analysis methodology conducted by CAMPO for Population is described as follows:

- Selection of overlapping Census blocks with the UZA was determined to be any block with an overlapping area of greater than or equal to 50% **for the Raleigh UZA population estimate**; This was determined to be the appropriate method as applying this threshold produced the same value as supplied by the FTA. It also matches the NC OSBM estimate.

- For each reporting municipality, census blocks were selected for tabulation where 99% or more of their geographic area overlapped with the municipal boundary. **(data file for this sourced from NC OSBM for the 2020 Census Municipal Boundary File).**This produced a population estimate roughly in proportion to the original analysis in this document when compared to the Raleigh UZA as a whole.

- Square miles for population density were calculated using selected Census blocks from tabulate intersection results of Raleigh UZA using NC State Plane projection (1983, feet) and US Survey Miles. During review it was discovered that original metrics used Land Area only when considering population density so new denominators were applied to the density calculations above using the new square mile estimates in the spreadsheet. This method is consistent with FTA methodology for determining population density.

Municipality:

A town, village, or other district is a municipal corporation organized under the laws of North Carolina that has the powers, duties, privileges and immunities conferred by law on cities, towns, and villages.

Municipal Population:

For the 2020 Census, a "municipal population" refers to the population living within legally defined municipalities, such as incorporated cities, towns, and villages.

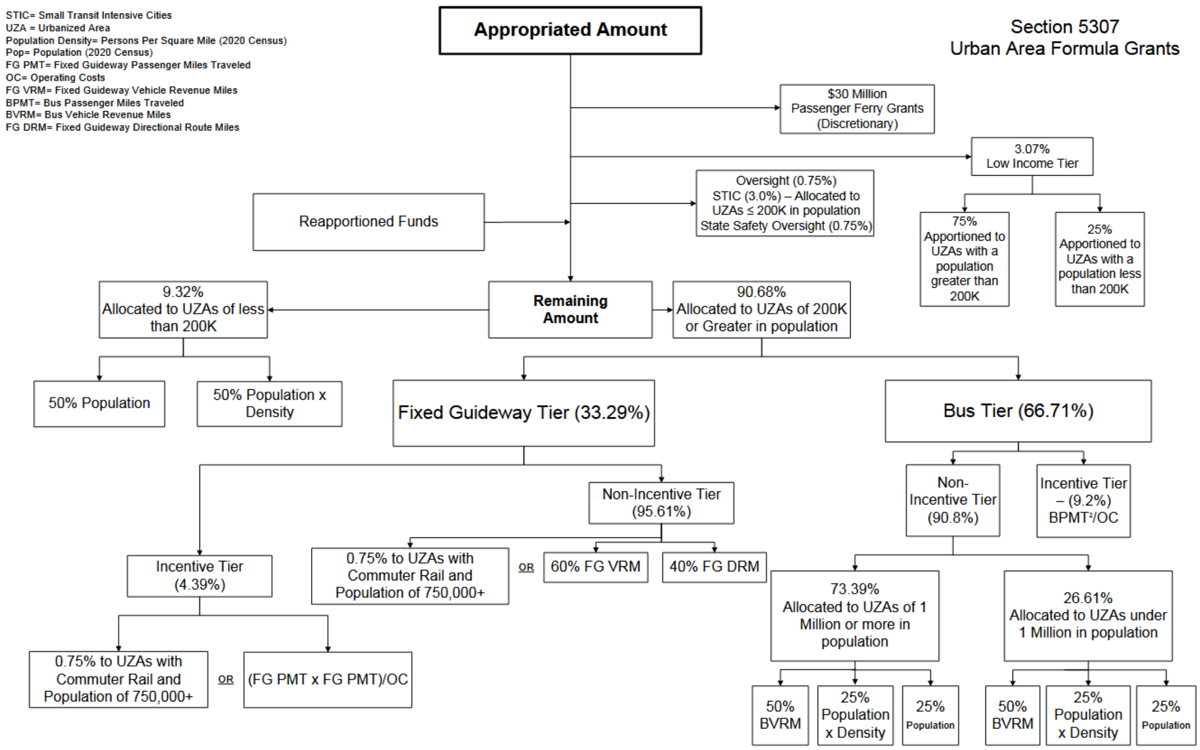
Low-Income Individual:

An individual whose family income is at or below 150 percent of the poverty line, as that term is defined in Section 673(2) of the Community Services Block Grant Act (42 U.S.C. 9902(2)), including any revision required by that section for a family of the size involved.

Low-Income Population:

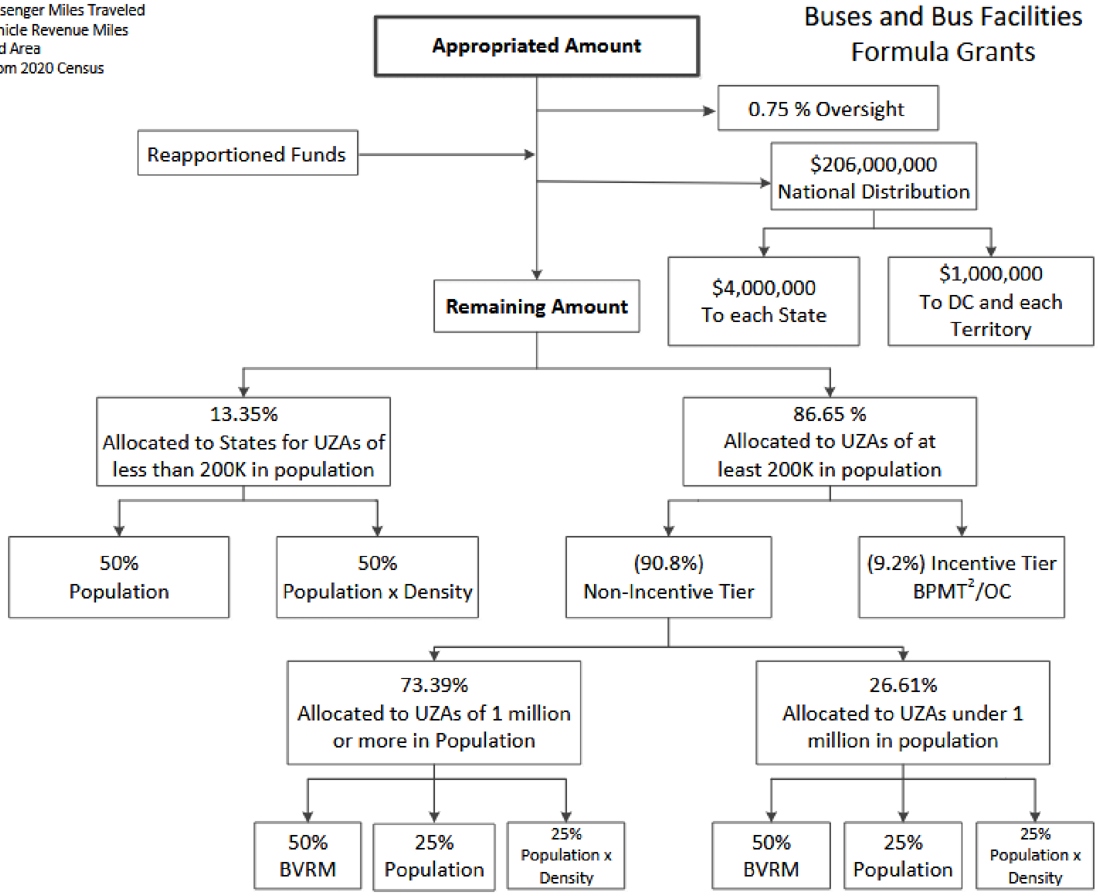
FTA usually utilizes most the recent five (5) year estimates from the American Community Survey from the Census at the beginning of the federal fiscal year of apportionment to determine the Low-Income Population within the Raleigh UZA.

Reference: Current (April 2026) FTA Apportionment Methodologies



Population Density= Persons Per Square Mile (2020 Census)
OC = Operating Costs
BPMT = Bus Passenger Miles Traveled
BVRM = Bus Vehicle Revenue Miles
UZA = Urbanized Area
Population is from 2020 Census

Section 5339
Buses and Bus Facilities
Formula Grants



Section 5340 Formula