# Federal Formula Transit Funding: Who Gets What?

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### May 11<sup>th</sup>, 2016



NC Capital Area Metropolitan Planning Organization



# **Main Points of This Presentation**

- How funding is distributed by FTA to transit providers
- Understanding of metrics used by FTA to distribute funding
- Common methods for suballocating FTA funding to transit providers within an urbanized area
- Blanket sub-allocation policies do not work well
- Importance of it being a decision borne through the local MPO planning process (49 U.S.C. Chapter 53)



# **Federal Formula Transit Funding Programs**

#### **Total FFY 2016 Formula Grant Allocation to North Carolina**

Funding Program	Eligible For Use Where?	Eligible Expenses	Total NC FFY 2016 Apportionment
Section 5307	Urbanized Areas	Planning, Capital, Operating	\$67,280,254
Section 5311	Non-Urbanized Areas	Planning, Capital, Operating	\$28,826,455
Section E220	Urbanized Areas	Capital Russe and Rus Facilities	\$6,416,572
Section 5339	Non-Urbanized Areas	Capital – buses and bus facilities	\$1,750,000
Section 5240	Urbanized and Non-Urbanized	Planning Capital Operating	Included with 5207/5211
Section 5540	Areas	Flaining, Capital, Operating	Included with 5307/5311
Section 5210	Urbanized Areas	Capital, Operating, Mobility	\$3,951,713
Section 5310	Non-Urbanized Areas Management, Etc.		\$2,717,141
		TOTAL	\$110,942,135

#### Not Addressed in This Presentation:

- Section 5303
- Section 5329
- Section 5337
- Section 5339 Discretionary
- Section 5307 Small Transit Intensive Cities



#### **Recipients of Urbanized Area Federal Formula Transit Grants**



# **Designated Recipients**

- Principal authority over use and distribution of UZA funds in coordination with MPO
- State, transit provider, and MPO concurrence
- FTA encourages one per UZA
- Can be single designated recipient for multiple contiguous large UZAs
- Authorizes direct recipients through "split letter"
- Can be MPO
- Manages sub-recipients



# **Direct Recipients**



- Transit providers
- Authorized to receive funding through "split letter"
- Takes on responsibility for complying with FTA regulations
- Manages grants directly with FTA
- Manages sub-recipients

# **Sub-Recipients**

- Pass-through arrangement
- Small transit providers and nonprofits
- Direct recipient takes on responsibility for complying with FTA regulations for sub-recipient
- Reports to designated or direct recipient and not FTA
- Direct and designated recipients show how managed through program management plans



# **Designated Recipient Examples**

Area	UZA Population	Designated Recipient		
Durham UZA	347,602	DCHC MPO		
Raleigh UZA	884,891	GoRaleigh		
Burlington UZA	119,911	NCDOT		
Moore County (Non-UZA)	Non-UZA	NCDOT		

# **Direct Recipient Examples**

Area	UZA Population	Designated Recipient	Direct Recipients
			GoDurham
Durbara UZA	217 600		GoTriangle
Dui nam OZA	347,002		Chapel Hill Transit
			Orange County
			GoRaleigh
Raleigh UZA	884,891	GoRaleigh	GoTriangle
			Town of Cary (C-Tran)
			GoTriangle
Burlington UZA	119,911	NCDOT	PART
			Orange County
Moore County (Non-UZA)*	Non-UZA	NCDOT	None

\*Moore County Transportation Services is a sub-recipient of Section 5311 passed from FTA through NCDOT. Non-UZA providers are not direct recipients.











# **United States**<sup>TM</sup> **Census** Bureau



United States Department of Transportation About DOT | Our Activities | Areas of Focus Q Federal Transit Administration About Funding Regulations & Guidance Home » Funding » Apportionments Funding Formula Apportionments Data Grant Programs Related Links This page provides links to data from National Transit Database (NTD) Applying and the U.S. Census that FTA used to calculate the Fiscal Year (FY) 2016 Sign Up for Updates formula apportionments. Beginning in FY 2013, FTA has used 2010 Census Grantee Tools data in its apportionment calculations. Resources Contact us Section 5307-STIC-Growing States-High Density States Full Year Table - [Excel version - Section 5307 STIC GS HD Full Year Office of Budget and Policy Table] Federal Transit Administration 1200 New Jersey Avenue, S.E. Washington, DC 20590 Census Urbanized Area Population and Population Density Data (Used United States for the Section 5303, 5305, and 5307 Apportionments) - [Excel version - 2010 Census Population Table] Phone: 202-366-4050 National Transit Database Data Used for the Section 5307 Urbanized **Business Hours:** Area Formula and Section 5339 Bus Formula Apportionments -9:00am-5:00pm ET, M-F [Excel version - NTD Section 5307 and 5339 Tables] Share · National Transit Database Data Used for the Small Transit Intensive Cities (STIC) Apportionments - [Excel version - NTD STIC Table] f У G 🕂 · Census Data on Older Adults and People with Disabilities (Used for the Section 5310 Enhanced Mobility of Older Adults and People with Disabilities Apportionments) - [Excel version - Census Data Older Adults/Disabilities Table] Census Data on Rural Population and Land Area (Used for the Section 5311 Rural Area Formula Apportionments) - [Excel version - Census Data Rural Population Table] National Transit Database Data Used for the Section 5311 Apportionments - [Excel version - NTD Section 5311 Table] · Census Low Income Population Data (Used for the Section 5307 and 5311 Apportionments) - [Excel version - Census Low Income Table]

> National Transit Database and Census Data Used for the Tribal Transit Apportionments - [Excel version - NTD Tribal Transit Table]

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ID Number: 4051 www.chtransit.org 405 Martin Luther King, Jr. Blvd. Chapel Hill, NC 27514-5705

#### Chapel Hill Transit (CHT)

Provides purchased transportation to: Research Triangle Regional Public Transportation Authority

(4108). Data filed seperately.

Transit Director: Mr. Brian Litchfield (919) 969-4908

General Information						Financi	al Information				Summary Oper	ating Expenses		
Urbanized Area (UZA) Statist	tics - 2010 Cens	us	Service Consumption	an	15 323 772	Fare Re Source	evenues Earn	ed Funds Expended	\$8	3,734,821	Salary, Wage: Materials and	s, Benefits Supplies	\$	11,347,429 \$3,145,802
Square Miles		182	Annual Unlinked Trip	)S	6,961,414	Fare F	Revenues	(50%)		3,734,821	Purchased Tra	ansportation		\$488,447
Population		347.602	Average Weekday U	nlinked Trips	26,547	Local	Funds	(7%)	\$1	,188,306	Other Operati	ng Expenses		\$2,526,776
Population Ranking out of 4	65 UZAs	110	Average Saturday Un	nlinked Trips	2,194	State	Funds	(16%)	\$2	,757,495	Total Operating	Expenses	\$	17,508,454
Other UZAs Served			Average Sunday Unl	inked Trips	1,264	Feder	al Assistance	(24%)	\$4	1,241,151				
						Other	Funds	(3%)		\$586,681	Purchased Tra	nsportation Report	ed	\$357,292
Service Area Statistics			Service Supplied			Total O	perating Fund	is Expended	\$17	,508,454	Separately	and a production of the second		
Square Miles		62	Annual Vehicle Reve	nue Miles	2,098,326	Source	s of Capital Fi	unds Expended						
Population		80,218	Annual Vehicle Reve	enue Hours	181,403	Local	Funds	(9%)		\$806,359				
			Vehicles Operated in	Maximum Service	90	State	Funds	(8%)		\$714,987				
			Vehicles Available for	or Maximum Service	119	Feder	al Assistance	(83%)	\$7	,624,560				
			Base Period Require	ement	27	Other	Funds	(0%)		\$0				
						Total C	apital Funds	Expended	\$9	9,145,906				
Vehicles Operated in Maximu	um Service and	Uses of Capital F	unds						Sources of O	perating Fun	ds Expended	Sources of Capita	I Funds Expe	ended
	Directly	Purchased,	Revenue	Systems and	Facilities and				24% -					
Mode	Operated	Transportation	Vehicles	Guideways	Stations	Other		Total			3%		- 9%	
Bus	75	1	\$8,957,769	\$0	\$0	\$188,137	\$9,	145,906	16%			8786		
Demand Response	14	0	\$0	\$0	\$0	\$0		\$0	7%		- 50%	05%	18%	
Total	89	1	\$8,957,769	\$0	\$0	\$188,137	\$9,1	145,906						
									Fixed	Vehicles	5	Vehicles		
Modal Characteristics				Ann	nual		Annual		Guideway	Available for	r Average	Operated in	Peak to	-
	Operatir	ng	Fare Us	es of Passer	iger Annual Vehicl	e	Unlinked A	nnual Vehicle	Directional	Maximum	h Fleet Age	Maximum	Base	Percent

Spares Mode Expenses1 Revenues1 Capital Funds Miles Revenue Miles Trips Revenue Hours Route Miles Service in Years Service Ratio \$9,145,906 15,034,462 1,774,251 6.895.848 155,977 N/A 100 7.5 76 2.81 32% \$14,672,139 \$8,734,821 Bus 36% 65,566 25,426 N/A 19 5.4 14 N/A Demand Response \$2,479,023 \$0 \$0 289,310 324,075 Service Effectiveness Service Effectiveness Performance Measures Service Efficiency Unlinked Passenger Trips per Operating Expense per Operating Expense per Unlinked Passenger Trips per Operating Expense per Operating Expense per Vehicle Revenue Mile Vehicle Revenue Hour Vehicle Revenue Mile Vehicle Revenue Hour Passenger Mile Unlinked Passenger Trip Mode \$2.13 3.89 44.21 \$8.27 \$94.07 \$0.98 Bus 0.20 \$37.81 2.58 \$7.65 \$97.50 \$8.57 Demand Response Operating Expenses per Unlinked Passenger Trips per Unlinked Passenger Trips per Operating Expense per Operating Expense per Operating Expenses per Vehicle Revenue Mile Vehicle Revenue Mile Passenger Mile Passenger Mile Vehicle Revenue Mile Vehicle Revenue Mile 0.35 1.25 5.00 10.00 10.00 10.00 0.30 4.00 1.00 0.25 -----..... 7.50 7.50 -----7,50 3.00 0.20 0.75 5.00 5.00 0.15 5,00 ............ -----0,50 2.00 ---0.10 2.50 2.50 2.50 0.25 1.00 0.05 0.00 0.00 0.00 0.00 0.00 0.00 04 05 06 07 08 09 10 11 12 13 04 05 06 07 08 09 10 11 12 13 04 05 06 07 08 09 10 11 12 13 04 05 06 07 08 09 10 11 12 13 04 05 06 07 08 09 10 11 12 13 04 05 06 07 08 09 10 11 12 13

# How Do I Find NTD Data Broken Down By Provider By UZA?

#### - -> C 🗋 www.ntdprogram.gov/ntdprogram/datbase/2014\_database/NTDdatabase.htm



#### Welcome to the NTD Database Page

#### NTD 2014 Database

2014 Agency Information	2014 Reportable Segments					
2014 Agency Mode Service	2014 Reporting Waivers and Failure to Report					
2014 Agency UZAs	2014 Revenue Vehicle Inventory					
2014 Capital Use	2014 Service					
2014 Contract Relationship	2014 Tax Funds					
2014 Directly Generated Funds	2014 Transit Agency Employees					
2014 Energy Consumption	2014 Transit Facilities					
2014 Fare Revenue	2014 Transit Stations					
2014 FFA10	2014 Transit Way Mileage					
2014 Cherating Expense	2014 Vehicle Maintenance					
201 Openting Expenses Reconciliation						

Internet Reporting Login Password and ID Required

Site Map | Accessibility Information | Contact Us | NTD Privacy Notice | E-mail Webmaster

All documents are provided in PDF, PPT and MS Excel format need to download Readers or Viewers to view.







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А		В	С	D	E		F		G	Н		I		J	K	L		М	N	0	Р
																	Total A	nnual Su	ims		
			5 digit	4 digit											Annual Vehicle Revenue	Annual Unlinked	Annual	Vehicle	Annual Passenger	Annual Operating	Non-Fixed Guideway Vehicle Revenue
ZA	UZA Nar	ne	NTDID	NTDID	Reporter Name	-	Reporter Type		de 🔹	тоз 👻	Allocation T	ype		• Other	D - Hours	<ul> <li>Passenger Trip</li> </ul>	Revenu	e Mile	Miles	Expenses	Miles
50	0 Raleigh,	NC	40007	4007	Capital Area Tr	ansit	Full Reporter: Op	erat DT		PT	Actual Vehic	le Reveni	ue Miles		200,2	29 409,34	1 2	2,167,956	5 3,663,273	\$7,939,265	5 2,167
50	0 Raleigh,	NC	40007	4007	Capital Area Tr	ansit	Full Reporter: Op	erat MB	5	DO	Actual Vehic	le Reveni	ue Miles		214,7	35 6,186,69	4 2	2,744,267	2 27,230,812	\$20,969,899	2,744
50	0 Raleigh,	NC	40108	4108	Research Trian	gle Re	Full Reporter: Op	erat DR		DO	Actual Vehic	le Reveni	ue Miles		9,7	20 16,80	0	233,754	4 335,800	\$1,174,353	3 233
50	0 Raleigh,	NC	40108	4108	Research Trian	gle Re	Full Reporter: Op	erat MB	5	DO	Actual Vehic	le Reveni	ue Miles		51,9	17 820,28	4 1	1,070,124	9,212,607	\$6,517,303	3 1,070
50	0 Raleigh,	NC	40108	4108	Research Trian	gle Re	Full Reporter: Op	erat VP		DO	Actual Vehic	le Reveni	ue Miles		12,4	19 140,05	5	445,791	4,316,005	\$1,467,916	5 445
50	0 Raleigh,	NC	40143	4143	Town of Cary		Small Systems Re	porl DR		РТ	Actual Vehic	le Reveni	ue Miles		22,9	63 40,99	7	355,654	4 (	\$1,074,820	) 355
50	0 Raleigh,	NC	40143	4143	Town of Cary		Small Systems Re	port MB	5	PT	Actual Vehic	le Reveni	ue Miles		32,7	25 301,86	7	475,547	7 (	\$1,543,608	3 475
50	0 Raleigh,	NC	40147	4147	North Carolina	State	Small Systems Re	port MB	3	PT	Actual Data				66,8	44 2,917,39	9	660,997	7 (	\$5,329,784	4 660
51	1 Oklahom	na City, O	K 60017	6017	Central Oklaho	ma Tr	Full Reporter: Op	erat DR		DO	Actual Vehic	le Reveni	ue Miles		29,2	68 48,30	4	513,027	7 425,643	\$3,059,210	513
51	1 Oklahom	na City, O	K 60017	6017	Central Oklaho	ma Tr	Full Reporter: Op	erat DT		PT	Actual Vehic	le Reveni	ue Miles		2,9	61 11,07	4	46,638	3 55,115	\$132,772	2 46
51	1 Oklahom	na City, O	K 60017	6017	Central Oklaho	ma Tr	Full Reporter: Op	erat FB		PT	Actual Data				1,6	41 8,74	0	6,948	3 25,870	\$917,362	2
51	1 Oklahom	na City, O	K 60017	6017	Central Oklaho	ma Tr	Full Reporter: Op	erat MB	3	DO	Actual Vehic	le Reveni	ue Miles		159,1	59 2,833,90	9 2	2,477,645	5 14,211,217	\$19,881,868	3 2,477
51	1 Oklahom	na City, O	K 60017	6017	Central Oklaho	ma Tr	Full Reporter: Op	erat MB	5	PT	Actual Vehic	le Revenu	ue Miles		7,6	01 24,98	6	113,576	5 159,246	\$646,343	3 113
51	1 Oklahom	na City, O	K 60118	6118	City of Edmond	1	Small Systems Re	port CB		PT	Actual Data				4,4	00 67,09	8	93,225	5 (	\$403,365	5 93
51	1 Oklahom	na City, O	K 60118	6118	City of Edmond	1	Small Systems Re	port DR		PT	Actual Data				2,3	65 8,86	5	52,031	1 (	\$217,323	3 52
51	1 Oklahon	na City, O	K 60118	6118	City of Edmond	1	Small Systems Re	port MB	3	PT	Actual Data				11,1	84 201,51	2	137,918	3 (	\$1,025,698	3 137
52	2 Tucson,	AZ	90033	9033	City of Tucson		Full Reporter: Op	erat DR		DO	Actual Vehic	le Reveni	ue Miles		280,5	85 559,53	1 3	3,699,805	5 4,295,704	\$15,304,873	3 3,699
52	2 Tucson,	AZ	90033	9033	City of Tucson		Full Reporter: Op	erat MB	3	DO	Actual Vehic	le Reveni	ue Miles		661,2	30 19,713,44	9 8	3,217,547	7 79,832,702	\$58,802,963	3 8,217
52	2 Tucson,	AZ	90191	9191	Town of Oro V	alley -	Small Systems Re	port DR		DO	Actual Vehic	le Reveni	ue Miles		27,1	64 39,19	6	364,437	7 (	\$1,267,114	4 364
52	2 Tucson,	AZ	90228	9228	vRide, Inc Tu	cson	Full Reporter: Op	erat VP		DO	Actual Vehic	le Reveni	ue Miles		13,7	34 84,99	8	667,720	3,795,185	\$357,456	5 667
53	3 El Paso,	TX-NM	60006	6006	Mass Transit D	epartı	Full Reporter: Op	erat DR		PT	Actual Vehic	le Reveni	ue Miles		134,1	91 297,88	9 2	2,409,026	5 2,985,870	\$7,931,670	2,409
53	3 El Paso,	TX-NM	60006	6006	Mass Transit D	epartı	Full Reporter: Op	erat MB	}	DO	Actual Vehic	le Reveni	ue Miles		577,3	62 12,226,96	1 7	7,410,981	61,827,017	\$49,336,369	7,410
53	3 El Paso,	TX-NM	60124	6124	vRide, Inc El l	Paso	Full Reporter: Op	erat VP		DO	Actual Vehic	le Reveni	ue Miles		33,1	46 221,82	.4 1	1,823,737	11,948,550	\$1,018,860	1,823
54	4 Urban H	onolulu, I	H 90002	9002	City and Count	y of H	Full Reporter: Op	erat DR		PT	Actual Vehic	le Reveni	ue Miles		382,2	66 994,83	2 5	5,370,617	7 10,895,129	\$36,284,854	4 5,370
E F		الباليلمجم	100000	0000	City and Count	- AF LI	Full Deportory On	arat DT		пт	Actual Vahie	la Davan	Allos		25.0	110 54	<b>E</b>	622.065	910 600	60 7E4 E00	
																Average: 1731559.	175 Count:	224 Sum	n: 277049468	100% —	

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# So How Much Should Each Transit Agency Get?



# **Common Sub-Allocation Methods**

- 1) Disaggregate FTA Formula Variables to Transit Providers and/or Jurisdictions
- 2) Apply Actual FTA Formula to UZA
  - Section 5307 and 5339 non-incentive tier (90.8%)
    - 50% bus revenue vehicle miles
    - 25% population
    - 25% population \* density
  - Section 5307 and 5339 incentive tier (9.2%)
    - (Passenger miles \* passenger miles)/operating cost
  - Section 5340 sub-allocate by relative population share

3) Methods based on purpose of funding

4) Project based – not addressed in this presentation

# Examples for Section 5307 (Bus Tier Only), 5339 and 5340

www.transit.dot.gov/funding/apportionments/table-5-fta-fiscal-year-2015-formula-programs-apportionments-data-unit-valu-0

X



610

98%

### Method 1: Population/Density Disaggregation By Jurisdiction (NCDOT/ITRE Method)

#### **GREENSBORO UZA POPULATION DISAGGREGATION**

Jurisdiction	Population	FFY 2016 FTA Population Data Unit Value*	Population Allocation
Greensboro	269,131		\$732,065.28
High Point	194		\$527.70
Guilford County	42,485	\$2.7201076	\$115,563.77
PART			
TOTAL	311,810		\$848,156.75
*Source: FT	$\Lambda$ for $117\Lambda$ c 200 000 - 1 00	0.000 parsons	

\*Source: FTA for UZAs 200,000 – 1,000,000 persons

#### **GREENVILLE UZA POPULATION DISAGGREGATION**

Jurisdiction	Population	FFY 2016 FTA Population Data Unit Value*	Population Allocation					
Greenville	83,434		\$534,008.78					
Pitt County	34,364	\$6.4003737	\$219,942.44					
TOTAL	117,798		\$753,951.22					
*Source: FTA for UZAs < 200,000 persons								

### Method 1: Population/Density Disaggregation By Jurisdiction (NCDOT/ITRE Method)

#### **GREENSBORO UZA POPULATION \* DENSITY DISAGGREGATION**

Jurisdiction	Population	Pop. Share	Pop. Density	Pop. Share * Density	Jurisdictional Share	Population Density Allocation
Greensboro	269,131	0.863124	2401.08	2072.43	0.962855	\$630,022.90
High Point	194	0.000622	385.74	0.24	0.000112	\$73.28
Guilford County	42,485	0.136253	585.01	79.71	0.037033	\$24,231.73
PART						
TOTAL	311,810	1.0000	1683.5	2152.38	1.00000	\$654,327.91

#### Note:

X pop\*density + Y pop\*density + Z pop\*density



UZA pop\*density



## Method 2: Population Disaggregation By Service Area Population (Upstate SC)

#### **GREENVILLE, SC UZA POPULATION DISAGGREGATION**

Transit Provider	Service Area Population	Percent of Transit-Served Population	Greenville UZA Population	FFY 2016 FTA Population Data Unit Value*	Population Allocation
Clemson Area Transit	28,350	15.7%			\$171,032.87
Greenville Transit Authority	152,213	84.3%	400,492	\$2.7201076	\$918,348.46
TOTAL	180,563	100%			\$1,089,381.33

\*Source: FTA for UZAs 200,000 – 1,000,000 persons

#### **GREENVILLE, SC UZA POPULATION \* DENSITY DISAGGREGATION**

Jurisdiction	Population	Pop. Share	Pop. Density	Pop. Share * Density	Jurisdictional Share	Population Density Allocation**		
Clemson	28,350	0.157	1570.51	246.57	0.13196	\$82,384.76		
Greenville	152,213	0.843	1924.01	1621.94	0.86804	\$541,931.37		
TOTAL	180,563	1.0000	1859.22	1868.51	1.00000	\$624,316.13		
**Source: Date unit value used from ETA for LIZAs 200,000 1,000,000 persons								

\*Source: Data unit value used from FTA for UZAs 200,000 – 1,000,000 persons

## **Pros/Cons/Limitations of Method 1**

- Does not reward unwarranted service expansion
- May work better for all types of systems and all service modes within a system (fixed-route, demandresponse, vanpool, etc.)
- <u>PRO:</u> More predictable from year to year
- <u>CON</u>: Difficult to disaggregate low-income component of formula accurately
- <u>CON</u>: Not always representative of transit providers' service areas (arbitrary political boundaries)
- <u>CON</u>: Does not account for overlapping service areas
- <u>CON</u>: May not scale proportionately with size or ridership of transit system

# **Pros/Cons/Limitations of Method 2**

- Low-income component of formula more accurately disaggregated
- Can more easily be adapted to account for overlapping service areas
- <u>PRO/CON</u>: Only really works for fixed-route providers
- <u>CON</u>: Incentivizes route development where it may not be well-supported by ridership (Coverage > frequency)
- <u>CON</u>: May not scale proportionately with size or ridership of transit system
- <u>CON</u>: Less predictable from year to year

### For UZAs < 200,000 Persons, You Are Finished

- Population
- Population \* Density
- Low-Income Population

#### For UZAs > 200,000 Persons, There Is More to Disaggregate

- Bus Vehicle Revenue Miles
- (Passenger Miles \* Passenger Miles)/Operating Cost

# **Service Data Disaggregation**

#### **RALEIGH UZA BUS VEHICLE REVENUE MILES DISAGGREGATION**

Transit Agency	Bus Revenue Miles	FFY 2016 FTA Revenue Mile Data Unit Value*	Bus Revenue Mile Allocation		
GoRaleigh	4,912,218		\$2,610,555.52		
GoTriangle	1,749,669	\$0.5314413	\$929,846.37		
C-Tran	831,201		\$441,734.54		
TOTAL	7,493,088		\$3,982,136.43		
*Coursos ET	A for 1174 o 200 000	1 000 000 paragana			

Source: FTA for UZAs 200,000 – 1,000,000 persons

#### **RALEIGH UZA INCENTIVE TIER DISAGGREGATION**

Transit Agency	Passenger Miles	Operating Cost	Pass. Miles Share	Pass. Miles/OC	Pass. Miles Share * Pass. Miles/OC	Agency Share of Allocation	Incentive Tier Allocation**
GoRaleigh	30,894,085	\$28,909,164	0.690239	1.06866	0.73763	0.61138	\$323,321.07
GoTriangle	13,864,418	\$9,159,572	0.309761	1.51365	0.46887	0.38862	\$205,517.08
TOTAL	44,758,503	\$38,068,736	1.0000	1.17573	1.2065	1.00000	\$528,838.15

\*\*Source: Data unit value from FTA for UZAs 200,000 – 1,000,000 persons

# **A Few Notes on NTD Reporting**

>50,000 (5311)			
	FY2014	FY2015	Pct Change
Population	4.041135	4.035655	-0.14%
Population Density			
Revenue Miles	0.046371	0.047212	1.81%
Low Income Population	1.642215	1.639988	-0.14%
Land Area	34.09	34.05	-0.12%
Efficiency Incentive			

50,000-199,999 (530			
	FY2014	FY2015	Pct Change
Population	6.300360	6.286417	-0.22%
Population Density	0.003208	0.003201	-0.22%
Revenue Miles			
Low Income Population	4.052752	4.043962	-0.22%
Land Area			
Efficiency Incentive			

\*Source: FTA and NCDOT

- Service metrics only matter for TMA UZAs and non-UZA territory
- Revenue miles worth ~\$0.05 in non-UZAs
- Revenue miles worth \$0.00 in UZAs < 200,000</li>
- Revenue miles worth ~\$0.53 in TMA UZAs
- NTD allows flexibility re: UZA assignment of service metrics
- Incentive for providers to report metrics to large UZAs vs. small UZAs or non-UZA territory

## **Overall Pros/Cons of Disaggregation**

- to the UZA apportionment
- Incentivizes NTD reporting to UZAs where it counts
- RO: Most consistent with spirit of FTA Formula
- <u>PRO/CON</u>: Does not tie funding to apparent need
- <u>CON</u>: Does not balance interests of coverage and frequency equally
- <u>CON</u>: Not much emphasis on service provided, but more so with Method 2
- <u>CON</u>: Does not account for differences in service mode costs

# **Apply FTA Formula to UZA**



# **Apply FTA Formula to UZA**

- 90.8% based on non-incentive tier variables
  - 50% bus vehicle revenue miles
    - Use what is reported to NTD for each provider
  - 25% population
    - Can use jurisdiction population
    - Can use service area population
  - 25% population \* density
    - Can use jurisdiction population \* density
    - Can use service area population \* density
- 9.2% based on incentive tier variables
  - (Passenger miles \* passenger miles)/operating cost
  - Use what is reported to NTD
  - Some use unlinked passenger trips as a surrogate

# **Overall Pros/Cons of Applying FTA Formula**

- Balances interests of coverage and frequency more equally
- Incentivizes NTD reporting to UZAs where it counts
- More emphasis on service provided and ridership
- PRO/CON: Does not tie funding to need
- <u>PRO/CON</u>: Incentivizes service provision more than ridership development
- **<u>CON</u>**: Not as consistent with spirit of FTA Formula
- <u>CON</u>: Transit providers do not get exactly what they contribute to the UZA apportionment
- <u>CON:</u> Does not account for differences in service mode costs

# Methods Based on Purpose/Need For Funding

- <u>Section 5339:</u> Bus and Bus Facilities
- Distributed by FTA same method as 5307
- Intended to address issues with bus fleet age and condition
- Incorporate fleet utilization metric
- Greater age + fleet utilization = greater stress on systems' capital resources
- Variables Used:
  - NTD-reported fleet age
  - NTD-reported spare ratio



# **CASE STUDY – DCHC MPO**

Players: DCHC MPO as DR; CHT, GoDurham, GoTriangle, OPT as dr's

Funds: 5307, 5340, 5339

DR role: allocate funds to recipients based on local needs

<u>1998:</u> GoTriangle joins GoDurham and CHT for 5307/5340; Funds distributed via disaggregated FTA formula with local twist

2015: OPT becomes dr and receives 5307/5340/5339

<u>Many local considerations:</u> other federal and local funding (5310, STPDA, 5303, CMAQ, BRIP, local sources); agency relationships

Key finding: Difficult to modify allocation approach (TCRP)

**Goal:** Fair and equitable distribution of funds

**<u><b>Questions/Comments?**</u>

4+X 7+X  $\frac{50+8c}{2} = Pe Eco]$ 13 PA+q))+1( PC=1i2