

A photograph of a city scene. In the background, a large white dome building is visible, along with a tall, thin obelisk. In the middle ground, a transit bus is driving across a bridge. In the foreground, another transit bus is parked on a road. The text "WMATA Subsidy Allocation Methodology" is overlaid in the center of the image.

WMATA Subsidy Allocation Methodology



Subsidy Components

- Rail Operating Subsidy
 - Base Rail Formula
 - Max Fare Formula
- Bus Operating Subsidy
 - Regional Bus Formula
 - Non-Regional Bus Formula
 - Reimbursable Services
- Paratransit Formula

Base Rail Formula

- Elements and Weighting
 - Population/population density **33%**
 - US Census data for urbanized area population
 - 50% population and 50% density weighted population (pop x density)
 - Average weekday ridership by jurisdiction of residence **33%**
 - Determined by rail passenger survey
 - Number of rail stations by jurisdiction **33%**
 - Assignments determined by Board



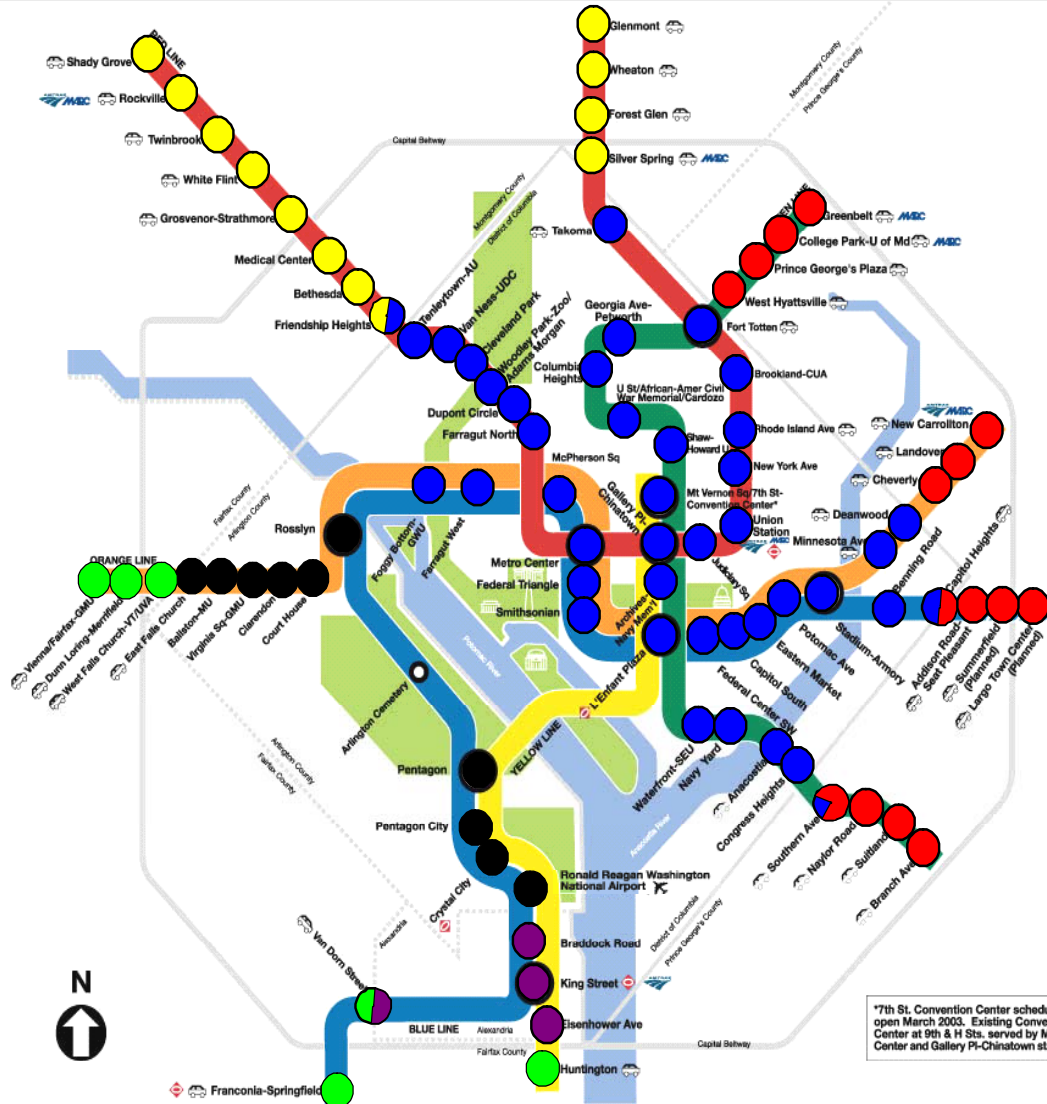
Station Assignments



System Map

Legend

- Red Line • Glenmont to Shady Grove
- Orange Line • New Carrollton to Vienna/Fairfax-GMU
- Blue Line • Franconia-Springfield to Largo Town Center
- Green Line • Branch Avenue to Greenbelt
- Yellow Line • Huntington to Mt Vernon Sq/7th St-Convention Center



*7th St. Convention Center scheduled to open March 2003. Existing Convention Center at 9th & H Sts. served by Metro Center and Gallery Pl-Chinatown stations.



Example: FY05 Budget Base Rail Formula

FY05 Budget	Population Weighted By Density		Average Weekday Ridership			Station Assignments			FY05 Formula Distribution
	2000 Census	Formula Weight	May '03 Ridership	Percent of Total	Formula Weight	Station Distribution	Percent of Total	Formula Weight	
District of Columbia	25.9%	8.6%	164,008	28.5%	9.5%	39.8	47.6%	15.9%	34.0%
Montgomery	21.4%	7.1%	119,646	20.8%	6.9%	11.5	13.8%	4.6%	18.7%
Prince George's	18.7%	6.2%	110,532	19.2%	6.4%	13.2	15.8%	5.3%	17.9%
Maryland Subtotal	40.1%	13.4%	230,178	39.9%	13.3%	24.7	29.6%	9.9%	36.6%
Alexandria	5.0%	1.7%	27,255	4.7%	1.6%	3.5	4.2%	1.4%	4.7%
Arlington	6.8%	2.3%	62,863	10.9%	3.6%	10.0	12.0%	4.0%	9.9%
City of Fairfax	0.5%	0.2%	2,296	0.4%	0.1%	0.0	0.0%	0.0%	0.3%
Fairfax County	21.3%	7.1%	86,704	15.0%	5.0%	5.5	6.6%	2.2%	14.3%
Falls Church	0.3%	0.1%	2,930	0.5%	0.2%	0.0	0.0%	0.0%	0.3%
Virginia Subtotal	34.0%	11.3%	182,049	31.6%	10.5%	19.0	22.8%	7.6%	29.4%
Total	100.0%	33.3%	576,235	100.0%	33.3%	83.5	100.0%	33.3%	100.0%

Note: For FY05 NY Ave. & blue line extension are only carried for ½ year. FY06 station total will be 85 stations excluding Arlington Cemetery

Bus Formulas

- Three types of service: regional, non-regional, reimbursable (as defined by the Regional Mobility Panel)
 - **Regional** – total subsidy equals total regional bus operating cost, minus regional bus revenue – allocated via regional bus formula
 - **Non-regional** – subsidy equals marginal cost of operating each route minus the revenue of that route
 - **Reimbursable** (demonstration or contract service) – subsidy equals the marginal cost minus revenue for the route, or by separate contract

Regional Bus Formula

- Elements and Weighting
 - Population/population density **25%**
 - Revenue hours **25%**
 - Assigned geographically or by Board agreement
 - Revenue miles **35%**
 - Assigned geographically or by Board agreement
 - Ridership by jurisdiction of residence **15%**
 - Average weekday ridership
 - Determined by bus survey



Example: FY05 Budget Regional Bus Formula

FY05 Budget Jurisdiction	Population Weighted By Density		Average Weekday Ridership			Revenue Miles			Revenue Hours			FY05 Formula Distribution
	2000 Census	Formula Weight	May '03 Ridership	Percent of Total	Formula Weight	Sept '03 Schedule	Percent of Total	Formula Weight	Sept '03 Schedule	Percent of Total	Formula Weight	
		25.0%			15.0%			35.0%			25.0%	
District of Columbia	25.9%	6.5%	219,643	58.0%	8.7%	11,838,092	42.7%	14.9%	1,165,279	53.2%	13.3%	43.4%
Montgomery County	21.4%	5.4%	41,980	11.1%	1.7%	3,845,238	13.9%	4.8%	252,884	11.6%	2.9%	14.8%
Prince George's County	18.7%	4.7%	64,800	17.1%	2.6%	4,573,695	16.5%	5.8%	296,264	13.5%	3.4%	16.4%
Maryland Subtotal	40.1%	10.0%	106,780	28.2%	4.2%	8,418,933	30.3%	10.6%	549,147	25.1%	6.3%	31.2%
Alexandria	5.0%	1.3%	15,214	4.0%	0.6%	1,523,758	5.5%	1.9%	106,541	4.9%	1.2%	5.0%
Arlington	6.8%	1.7%	19,394	5.1%	0.8%	2,522,160	9.1%	3.2%	171,223	7.8%	2.0%	7.6%
City of Fairfax	0.5%	0.1%	1,406	0.4%	0.1%	0	0.0%	0.0%	-	0.0%	0.0%	0.2%
Fairfax County	21.3%	5.3%	13,794	3.6%	0.5%	3,339,235	12.0%	4.2%	189,223	8.6%	2.2%	12.2%
Falls Church	0.3%	0.1%	2,478	0.7%	0.1%	107,747	0.4%	0.1%	7,599	0.3%	0.1%	0.4%
Virginia Subtotal	34.0%	8.5%	52,286	13.8%	2.1%	7,492,900	27.0%	9.5%	474,587	21.7%	5.4%	25.4%
Total	100.00%	25.0%	378,709	100.0%	15.0%	27,749,925	100.0%	35.0%	2,189,013	100.0%	25.0%	100.0%

Paratransit Formula

- Cost of service minus revenue for each rider allocated by jurisdiction of residence
- Costs are calculated as:
 - Cost per trip times trips completed per jurisdiction of residence.
 - Scheduling cost based on trips requested per jurisdiction of residence.
 - Vehicle lease cost times the number of vehicles assigned to each jurisdiction
- Indirect cost allocation based on the distribution of direct costs.

Example: FY05 Budget Paratransit Formula

FY05

Jurisdictions: (Thousands)	Direct Cost	OH Cost	Total Cost	Revenue	Subsidy	
District of Columbia	\$11,243	\$674	\$11,917	\$922	\$10,995	23%
Montgomery	\$14,880	\$893	\$15,773	\$1,220	\$14,553	31%
Prince George's	\$15,170	\$910	\$16,080	\$1,244	\$14,836	31%
Northern Virginia	\$7,478	\$449	\$7,926	\$613	\$7,313	15%
Total	\$48,771	\$2,926	\$51,697	\$4,000	\$47,697	100%
<i>NoVA SubAllocations:</i>						
Alexandria	\$658	\$39	\$697	\$54	\$643	9%
Arlington	\$585	\$35	\$620	\$48	\$572	8%
Fairfax City	\$88	\$5	\$93	\$7	\$86	1%
Fairfax County	\$6,078	\$365	\$6,443	\$499	\$5,945	81%
Falls Church	\$69	\$4	\$73	\$6	\$67	1%
Total NVA	\$7,478	\$449	\$7,926	\$613	\$7,313	100%

Appendix

Density Weighted Population

Populations from 2000 Census (adjusted for UZA)

Formulas	A	B	C=(B/A)	D=(B*C)/1M	E=(B _{jur} /B _{tot})	F=(D _{jur} /D _{tot})	G=(E+F)/2	2000 Cen. % Dist	1990 Cen. % Dist.
Jurisdiction	UZA Land Area sq/mil. 2000 Cen.	2000 Pop of UZA 2001 Cen.	Pop. Density UZA	Density Wght. Pop Millions	UZA Pop. Dist	Density Wght. Pop Dist	Avg.		
DC	61	572,059	9,326	5,335	16.3%	35.5%	25.9%	25.9%	31.1%
MD	518	1,624,290	3,134	5,090	46.4%	33.9%	40.1%		
VA	370	1,305,693	3,526	4,604	37.3%	30.6%	34.0%		
Total	950	3,502,042	3,687	15,029	100.0%	100.0%	100.0%		
Montgomery	254	843,747	3,321	2,802	51.9%	54.9%	53.4%	21.4%	19.7%
Prince George's	264	780,543	2,954	2,306	48.1%	45.1%	46.6%	18.7%	18.3%
Maryland	518	1,624,290	3,134	5,108	100.0%	100.0%		40.1%	38.0%
Arlington	26	189,453	7,304	1,384	14.5%	25.4%	20.0%	6.8%	6.5%
Alexandria	15	128,283	8,440	1,083	9.8%	19.9%	14.9%	5.0%	4.5%
Fairfax County	321	956,082	2,978	2,848	73.2%	52.3%	62.8%	21.3%	19.2%
Falls Church	2	10,377	5,189	54	0.8%	1.0%	0.9%	0.3%	0.3%
Fairfax City	6	21,498	3,490	75	1.6%	1.4%	1.5%	0.5%	0.5%
Virginia	370	1,305,693	3,526	5,443	100.0%	100.0%		34.0%	30.9%
								100.0%	100.0%