

The Public Purpose

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WASHINGTON METRO AFTER A QUARTER CENTURY: BILLIONS FOR TRANSIT & MORE CONGESTION

By Wendell Cox

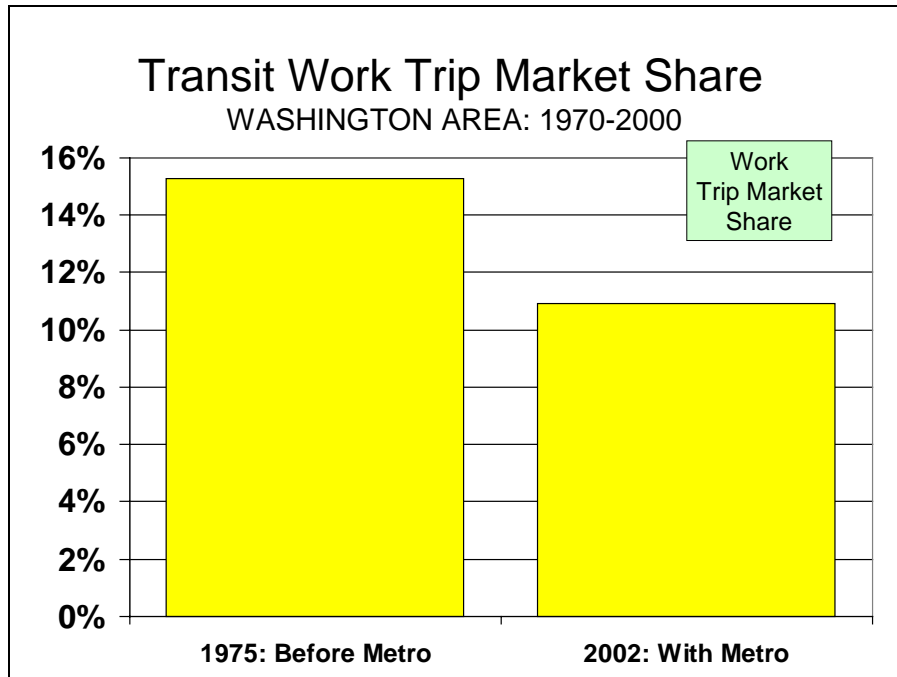
As anyone who understands urban transport knows, transit is about downtown and the core --- the pre-automobile city and nothing more. From Paris to Portland, Phoenix and Perth, transit is capable of providing automobile competitive service virtually only to and sometimes within the core of urban areas. It is why virtually no suburban edge cities have significant transit work trip market shares.

No US urban area has built more new high-quality urban rail than Washington, DC, which spent \$10 billion,¹ most of it from national taxpayers, on a more than 100 mile system. Of course, it would be unfair to have expected Washington's "Metro" subway to have made a difference in area-wide traffic, since, as noted above, transit is about downtown. Predictably, at the metropolitan area level, Metro's impact has been virtually absent. In 1970, before the first section of the system opened, the Census Bureau reported that 15.3 percent of area workers used transit to get to work. By 2000, transit's work trip market share number had dropped 29 percent, to 10.9 percent. Perhaps even more astounding is the fact that Census data indicated a five percent reduction in actual work trip usage from 1990 to 2000, a period during which the system was expanded more than 25 percent.

Over the past 20 years, traffic in the Washington area has become the fourth worst in the nation, following only Los Angeles (which has opened a metro, light rail and commuter rail), San Francisco (where BART has made no difference) and Chicago (with the nation's second most extensive rail system). The problem in Washington is that so many planned freeways were cancelled. In Houston, where road capacity has been built to keep up with demand, traffic is better than in 1986, and the area has improved to 10th worst traffic in the nation from having been the worst in 1985.

However, the real story in Washington is how little difference Metro has made, even in travel to downtown. For more than a quarter century, the metropolitan planning organization ("WASCHCOG") has been counting the way people enter the downtown area in the morning (cordon count). The first counts were taken in 1975, the year before Metro's first section opened.

¹ The inflation-adjusted cost is not available, but would be much higher due to excessive cost escalation.

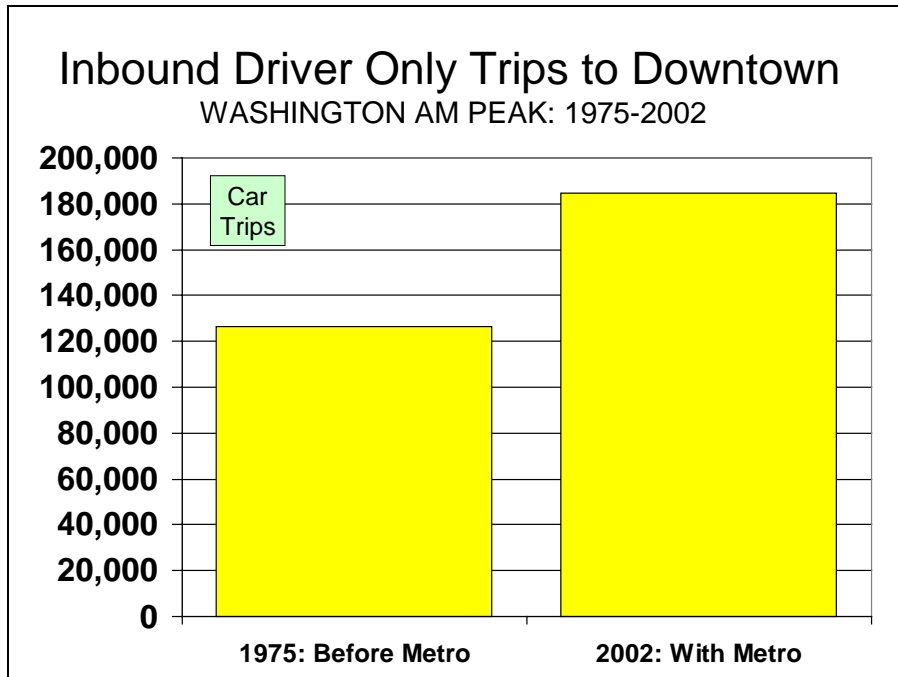


There is good news and there is bad news. The good news is that more people ride transit to downtown than before. The bad news is that transit has taken few cars off the road, because most of Metro's ridership has come from buses and car pool passengers. Metro's principal impact may well have been to *increase* the share of single-occupant commuters driving downtown, by taking away their former car pool passengers.

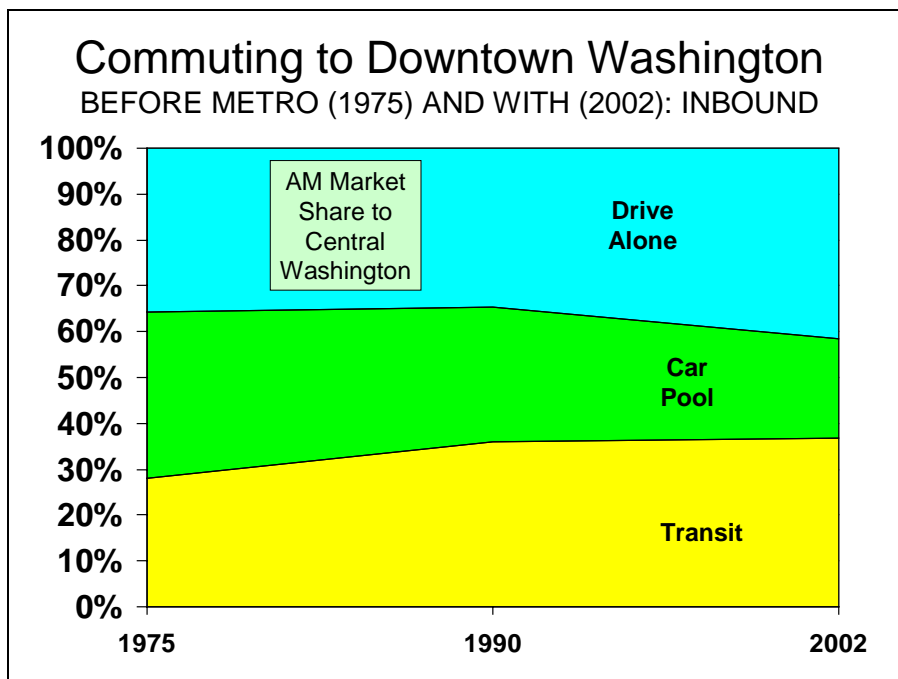
- The share of people sharing rides (transit and car pooling) *declined* 9.2 percent from 1975 to 2002.
- The share of people driving alone *increased* 16.5 percent from 1975 to 2002. Each morning nearly 60,000 more driver only cars enter the downtown area than before Metro was opened.

With the substantial Metro expansion that occurred since 1990, it might be expected that recent trends would be better. Not so. Virtually all of the transit and car pooling loss has occurred since 1990.

From 1990 to 2002, the share of single-occupant vehicle commuting to central Washington rose 17.9 percent. While there is no immediate data on the extent of congestion, it seems fair to suggest that traffic to downtown Washington is considerably worse than it was before, since virtually no additional roadway capacity has been provided. On a daily basis, more than 33,000 additional cars entered the downtown area with only a driver. Counting return trips, it is estimated that 66,000 new single-occupant automobile trips have been added since 1990, during peak hours alone. This is more than the total daily ridership of the new light rail lines in Houston, Minneapolis and Southern New Jersey combined.



The lesson is clear. \$10 billion and the latest rail transit technology are not sufficient to reduce traffic congestion even to the single destination where the promise was the greatest. But has the lesson been learned? Of course not. Local officials are making plans to proceed with a \$3.3 billion² extension to Dulles Airport. Promotional literature predictably implies that the new rail line will reduce traffic congestion. But it will not. Their very own Environmental Impact Statement says that the Dulles rail line would not reduce traffic congestion. One useful reform in the next transportation reauthorization bill would be to subject transit operators and planning agencies to “truth in advertising” regulations.



² Based upon experience in Washington and elsewhere, this figure could easily double.

A summary of the data from the WASHCOG central area cordon counts follows:

PERSON TRIPS: 1975-2002					
Excludes Commuter Rail and Commuter Bus (No 1975 data)					
Person Trips	1975	1990	2002	Change 1975-2002	Change 1990-2002
WMATA Bus	99,500	52,900	27,100	-72.8%	-48.8%
Metro Rail	0	104,200	136,100		30.6%
Transit: Total	99,500	157,100	163,200	64.0%	3.9%
Auto: Single Occupant	126,300	151,400	184,600	46.2%	21.9%
Auto: Car Pool	128,200	128,600	96,200	-25.0%	-25.2%
Auto: Total	254,500	280,000	280,800	10.3%	0.3%
Total	354,000	437,100	444,000	25.4%	1.6%
Total Automobiles	180,800	201,800	224,800	24.3%	11.4%

MARKET SHARE: 1975-2002					
Excludes Commuter Rail and Commuter Bus (No 1975 data)					
Market Share	1975	1990	2002	Change 1975-2002	Change 1990-2002
WMATA Bus	28.1%	12.1%	6.1%	-78.3%	-49.6%
Metro Rail	0.0%	23.8%	30.7%		28.6%
Transit: Total	28.1%	35.9%	36.8%	30.8%	2.3%
Auto: Single Occupant	35.7%	34.6%	41.6%	16.5%	20.0%
Auto: Car Pool	36.2%	29.4%	21.7%	-40.2%	-26.4%
Auto: Total	71.9%	64.1%	63.2%	-12.0%	-1.3%
Total	100.0%	100.0%	100.0%		

MULTIPLE OCCUPANT V. SINGLE OCCUPANT: 1975-2002

Excludes Commuter Rail and Commuter Bus (No 1975 data)

Person Trips	1975	1990	2002	Change 1975-2002	Change 1990-2002
Multiple-Occupancy (Transit & Car Pools)	227,700	285,700	259,400	13.9%	-9.2%
Auto: Single Occupant	126,300	151,400	184,600	46.2%	21.9%
Total	354,000	437,100	444,000	25.4%	1.6%

Market Share	1975	1990	2002	Change 1975-2002	Change 1990-2002
Multiple-Occupancy (Transit & Car Pools)	64.3%	65.4%	58.4%	-9.2%	-10.6%
Auto: Single Occupant	35.7%	34.6%	41.6%	16.5%	20.0%
Total	100.0%	100.0%	100.0%		

MULTIPLE OCCUPANT V. SINGLE OCCUPANT: 1990-2002

Includes Commuter Rail and Commuter Bus

Person Trips	1990	2002	Change 1990-2002
Multiple-Occupancy (Transit & Car Pools)	300,300	282,400	-6.0%
Single-Occupancy Automobiles	151,400	184,600	21.9%
Total	451,700	467,000	3.4%

Market Share	1990	2002	Change 1990-2002
Multiple-Occupancy (Transit & Car Pools)	66.5%	60.5%	-9.0%
Single-Occupancy Automobiles	33.5%	39.5%	17.9%
Total	100.0%	100.0%	



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