

## Transportation

Transportation issues have been among the most controversial facing Arlington government and residents this year. The on-going controversy over the Columbia Pike streetcar project has many very angry people on each side of the issue, and the related \$1 million Superstops made Arlington a national laughing stock as a local government seemingly oblivious to sensible cost standards. Other issues with potential budget implications include the poor condition of many streets, the potential impacts of the opening of METRO's Silver Line and increased development in Tyson Corner, the County's desire to increase bus service and discourage private vehicles, the future of I-66, street improvement projects (some reduce effective street capacity), proposed increases of \$0.50 and \$1.00 on longer Metro Access trips, and a study of reducing parking requirements on new commercial development.

Most transportation projects are the responsibility of the Department of Environmental Services (DES), but many projects are funded and managed by other county offices, including the Neighborhood Conservation (NCAC), Traffic Calming and WalkArlington. Within DES, most transportation projects are handled by four bureaus in the Transportation and Development Division (Planning, Transit, Commuter Services, and Transportation Engineering and Operations). In addition, the Transportation Capital Fund (from the 12.5 cent commercial property tax), the Ballston Parking Garage are supervised by DES. A large fraction of DES activity is related to facilities management, solid waste treatment and other non-transportation functions. The County also obtains considerable revenue from transportation sources, including \$105 million in personal property tax revenues, \$3.5 million from the regional gas tax, parking meter revenues and state aid for transit (\$15 million) and street maintenance (roughly \$10+ million). Since many transportation items are not shown separately in the budget, it is difficult to understand the overall budget for transportation and its components, and to ascertain longer term trends from budget documents.

### Selected Transportation Budget Items

Arlington's contributions to METRO for FY2014 are expected to be \$26.4 million for Metrobus, \$20.1 million for Metrorail and \$0.9 million for Metro Access. This is partly offset by \$19.2 million from state transit aid and the regional gas tax. Net tax support for METRO is proposed to increase 11% from \$25.5 million adopted for FY13 to \$28.2 million for FY2014 (approximately \$280 per household). The largest change is an increase in the Metrorail contribution from \$14.7 million to \$20.1 million (+37%) due to the initial costs of the Silver Line and new Census data used in the subsidy allocation among jurisdictions.

### The Paving Program

Many residents have commented about the poor condition of many Arlington streets in recent years. The County currently maintains over 970 lane miles by a combination of resurfacing (paving), rebuilding and slurry seal maintenance. About 25% of streets are arterials, 11% are collector streets and 64% are neighborhood streets. The desired program calls for neighborhood streets get a 3/8 inch coat of slurry seal after about 7-10 years to extend their life and allow less frequent repaving. The longer lasting micro-surfacing applies a 5/8 inch coating and is used on streets with higher traffic volumes. Paving involves milling and a 2" hot mix asphalt overlay. Re-building involves removing the old surface and a complete rebuild with new stone, base and top layers. A full maintenance program would involve about 52 lane miles of paving, 40-50 lane miles of slurry coating, 10-12 lane miles of microsurfacing and 2 lane miles of complete rebuilding. As of 2012, the costs of a "typical block" would be about \$3,000 for slurry seal, \$7,500 for micro-surfacing, \$27,000 for a hot-mix resurfacing (paving), and \$65,000 for a rebuild using a new soil cement base procedure (vs. \$130,000 for a traditional re-build). Thus deferring needed maintenance can substantially increases costs over the long term. The County has discussed the goal of a 15-year paving cycle, although the planned program may fall short of that high standard.

Unfortunately, the County fell behind on its street maintenance from 2003 through 2011 when paving averaged only about 33 lane miles (see chart below). Paving should have been 50 percent higher to keep pace. This neglect left the county with a backlog of over \$20 million in paving with additional streets

needing it within a few years and means the county will have to do more costly paving and re-building than if it had kept up on normal maintenance.

In order to obtain adequate funding for both a regular maintenance program and to make up the shortfall over a period of years, the County is shifting to the use of bond funding for paving. The \$1.0 million from Pay-Go capital is approximately the amount needed for the slurry and micro-surfacing planned for the 2013 season.

To get an idea of the deteriorated street conditions, the average PCI (pavement condition index) for projects on the 2013 preliminary paving list is about 43 (close to the boundary between “poor” and “very poor”, with many streets with ratings for streets considered “failed”, “serious” or “very poor.” The average PCI for the county is 68.9, which is in the “fair” category and less than “satisfactory” (70-85). .

<b>Arlington Paving Program, 1994-present</b>				
<b>Year</b>	<b>Lane miles</b>			<b>Cost (\$millions)</b>
	<b>Paving</b>	<b>Slurry</b>	<b>Micro surfacing</b>	
1994	34.7	0		\$1.6
1995	70.1	0		3.3
1996	36.6	0		1.7
1997	57.8	0		2.7
1998	43.9	46.2		2.4
1999	56.3	0		2.6
2000	44.9	45.5		2.4
2001	59.9	0		2.7
2002	66.4	0		3.0
2003	34.6	14.7		1.7
2004	44.7	29.7		2.5
2005	38.9	23.9		2.1
2006	17.7	27.2	10.2	2.0
2007	36.8	33.2	12.4	3.9
2008	34.3	23.7	8.4	3.4
2009	25.3	28.7	10.2	2.9
2010	29.7	33.0	13.0	3.6
2011	35.5	42.8	9.1	4.4
2012	48.7	41.7	9.0	5.6
2013	44.9	40.6	9.9	5.7

### **ART Transit**

The ART system currently consists of 13 routes with a total of 2.5 million passenger rides in Fiscal Year 2012 (All data are from FY2012, the most recent publicly available, unless otherwise noted). The County standards are that primary routes with high-frequency service (currently only Route 41) should average 35 passengers per service hour and achieve 35 percent recovery of direct operating costs from fares and business support. Other routes should average at least 12 passengers per hour (reduced several years ago from 20 per hour) and recover at least 20 percent of operating costs.

The most successful route is 41 along Columbia Pike and up to Ballston and Courthouse, which alone accounts for 36% of total ART ridership, averaged 38.0 riders per service hour and recovered 44.4% of direct operating costs from fares(see table below). Routes 42 (Ballston-Pentagon) and 51 (Ballston-Virginia Hospital) are also successful, averaging about 28 and 29 passengers per service hour, respectively, and with 50 and 35 percent operating cost recovery, which is partly due to support from business contributions. At the other extreme, three routes have low ridership and two fall well below the 20 percent cost recovery standard. Route 75 (Shirlington-Ballston via Carlin Springs) had the lowest hourly ridership (13.2 per hour), but exceeded the cost recovery standard due to business contributions. Route 53 (Ballston-East Falls Church via Military-Williamsburg-Sycamore) averaged only 13.7 riders per hour and 15.2 percent cost recovery. Most riders seem to travel within about 1 mile or so of either Ballston or East Falls Church, with few riders in between, and evening buses frequently arrive and depart from EFC empty or with one or two riders. After many years of low ridership, modest route revisions were considered over the past year and mid-day service was reduced to hourly rather than 30 minute service. A recently proposed change is to add new supplemental rush hour service between Westover and East Falls Church. This route may never be successful given its long route through low density neighborhoods along low traffic streets. Route 62 (Courthouse-Ballston via Lorcom Lane) averages only 15.3 passengers per hour and recovered only 15.2 percent of operating costs.

It is useful to compare these low ridership routes to private vehicles. Assuming an average ride is about 10-12 minutes, this implies an average number of passengers of 2.5 to 3 on the bus over the course of a day. Since ART buses likely get about 3 to 3.5 mpg (a study of San Diego hybrid CNG buses found 3.2 mpg), this implies only about 8-10 mpg per passenger. Further, two of the largest per rider subsidies are for routes into high income areas in north Arlington (\$4.43 for Route 53 and \$3.97 for Route 62). This is difficult to justify from either an environmental or economic standpoint. While the \$9.3 million in expenditure reductions in the Manager's proposed budget (p. 14) includes "reduction in underutilized transit service," the \$95,000 saving would be only 2.1 percent of the FY2012 ART net tax subsidy. While there may be some effects from the opening of the new Silver Line, careful rethinking of the north Arlington routes 53, 62 and 52 seems in order to focus service and funding on the most used routes and times and reduce or eliminate service in the most underutilized times and routes.

Fiscal Year 2011-2012 ART Results Summary									
Route	Route Summary	Annual Passengers (1000s)	Service hours /wk	Pass. per hour	Op. Cost per pass.	Revenue per pass.	Net Subsidy per pass.	Op. Cost Recovery %	b u s
	Systemwide	2,537	2,003	25.3	\$2.84	\$1.06	\$1.77	37.5%	
<b>41</b>	Columbia Pike-Ballston-Court House	922	475	<b>38.9</b>	\$1.85	\$0.82	\$1.03	<b>44.4%</b>	
42	Ballston-WashBlvd-ColPike-Pentagon	272	195	<b>27.9</b>	\$2.56	\$1.29	\$1.27	<b>50.3%</b>	b
45	Columbia Pike-DHS/Sequoia-Rosslyn	175	184	19.0	\$3.76	\$1.63	\$2.13	<b>43.4%</b>	b
51	Ballston-VirginiaHospital-LeeHarrisonShop	188	130	<b>29.1</b>	\$2.46	\$0.87	\$1.59	35.4%	b
52	Ballston-VirginiaHospital-YorktownHS-Sycamore-EFC	131	114	22.9	\$3.11	\$1.00	\$2.11	32.1%	b
<b>53</b>	Ballston-Military-OldGlebe-Williamsbg-Sycamore-EFC	85	123	<b>13.7</b>	\$5.22	\$0.79	\$4.43	<b>15.2%</b>	
61	Rosslyn-Court House Metro Shuttle	68	66	20.6	\$3.48	\$0.70	\$2.77	20.3%	
<b>62</b>	CourtHouse-LorcomLn-HB,W&L-Ballston-VaSquare	51	66	<b>15.3</b>	\$4.68	\$0.71	\$3.97	<b>15.2%</b>	
74	DouglasPark-ArlingtonVillage-ArlingtonView-Pent.City	31	35	17.6	\$4.07	\$0.78	\$3.29	19.1%	
<b>75</b>	Shirlington-WakefieldHS-CarlinSprings-Ballston-VaSq	95	144	<b>13.2</b>	\$5.39	\$1.33	\$4.06	24.6%	b
77	Shirlington-Lyon Park-Court House	175	170	20.5	\$3.51	\$0.97	\$2.54	27.7%	b
84	Douglas Park-Nauck-Pentagon City	36	38	19.0	\$3.80	\$0.92	\$2.88	24.1%	
87	Pentagon Metro-Army Navy Drive-Shirlington	309	269	23.0	\$3.11	\$1.65	\$1.46	52.9%	b

Notes: Route times are about 8AM with eastbound/northbound times first. b in last column indicates business contributions for this route.

Submitted to the R&E Committee by Jerry Auten  
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