Mr. Mayor and members of the City Council, my name is Poul Hertel and I reside at 1217 Michigan Court

I have handed you a paper to you on the bike share program that will show that there are some questionable assumptions that have been made in the COG COST BENEFIT evaluation. And If corrected, significantly changes the economic outcome of the proposed project.

But let's turn to the cost benefit analysis itself. Turn to page 3 and you will see the results of a COG model that suggests considerable benefit from the BIKE SHARING PROGRAM.

The net present value, calculated by taking the benefits and deducting the costs will range between 145 and 256 million dollars and a rate of return of 79%

You will also find the assumed costs of each bike in the system. The capital cost will range between 4 and 8 thousand dollars per bike, and the operating costs which are based on experience elsewhere, are assumed to be \$1860.

The revenue side seems to be very optimistic. Specifically the ridership assumptions, which drive it all, warrant some attention. Somehow, the rider- share program will more than double the current bicycle ridership in the region. This is very important, because the more riders, the less cars, the less pollution, the less health care and so forth. Hence, the benefits.

The study goes to Paris and Barcelona to get the ridership, or demand assumptions, but fail to take into account how many bikes the two Cities provide, the supply side, in order to get that ridership. This can be seen when we look at how often each bike is expected to be used. Using COG numbers that exclude the DC system, each bike is assumed to be used a whopping 34 times a day. Whereas the bikes in Paris and Barcelona are used under 10 times per day.

If the Paris numbers were used, another 15444 bikes would have to be provided in order to reach the ridership that is assumed in the calculations, costing between \$60 and \$120 million dollars and \$28 million in additional operating costs.

By putting the Paris and Barcelona numbers into the Cost Benefit analysis wipes out all the gains as can be seen on the last page.

The proposed Bike share program originated with the University of Maryland program that has been adapted by the Metropolitan Council of Governments, who it appears, have applied for a tiger II grant for that purpose. The extent to which the local jurisdictions have committed themselves can be seen bellow.

Table 1: Proposal for TPB TIGER II Competitive Grant Submission, Regional Expansion of Capital BikeShare

Jurisdiction	Project Description	Total Project Cost	Total TIGER request	Total Matching Funds	Match %
Arlington County	1028 bikes and 137 stations throughout the County, including the Columbia Pike, Orange Line, and Route 1 corridors, as well as Shirlington and Buckingham.	\$5,625,014	54,177,200	\$1,447,814	26%
District of Columbia	1000 bikes and 100 stations throughout the city in each ward.	\$5,100,000	\$4,080,000	\$1,020,000	20%
Montgomery County	250 bikes and 50 stations in the Bethesda-Chevy Chase, Silver Spring, and Wheaton/Kensington Planning/Policy Areas.	\$2,000,000	\$1,600,000	\$400,000	20%
City of Alexandria	146 bilkes and 17 stations around metrorail, Old Town, Del Ray, Potomac Yard, and the Eisenhower Ave corridor	\$870,000	\$690,000	\$180,000	21%
Fairfax County, Virginia	100 bikes and 16 stations at various locations around Reston including the new Reston Station (construction starting 12/1/2010), the Reston Town Center Transit Center, and major employers/activity centers in the greater Reston area. Bike-sharing will be co-located with a bicycle storage facility at the Reston Transit Center.	\$600,000	\$480,000	\$120,000	20%
University of Maryland, College Park	43 bikes and 7 stations throughout the UMD campus.	\$214,000	\$164,000	\$50,000	23%
City of College Park	16 bikes and 4 stations in the downtown and Hollywood commercial districts of College Park, as well as at the Village at College Park and Mazza Grand Marc developments. Will link directly with UMD's component.	\$175,000	\$140,000	\$35,000	20%
TOTAL	2590 bikes (+1000 already planned bikes in DC) and 332 stations (+100 already planned stations in DC)	\$14,584,014	\$11,331,200	53,252,814	22%

### Taken from the

Application for Funding from the Transportation Investments Generating Economic Recovery II (TIGER II)
Competitive Grant Program Administered by the U.S. Department of Transportation Submitted by Metropolitan
Washington Council of Governments on behalf of National Capital Region Transportation Planning Board August
23, 2010

### For The City of Alexandria (Page 5)

The bike-sharing program will include 146 shared bikes and 17 stations throughout the City, stretching from its northern border with Arlington County (Shirlington and Arlington's Potomac Yards), through Alexandria's Potomac Yards, Del Ray, and Old Town neighborhoods, and down to the Carlyle, East Eisenhower, and West End communities. Bike sharing would connect these activity centers and neighborhoods with four Metrorail stations and will be located in areas of high potential bicycle activity as identified in the City's 2008 Pedestrian and Bicycle Mobility Plan (Appendix 7). These locations were chosen based on a high percentage of residents that bike or walk to work and/or do not own a vehicle, as well as the availability of supporting bicycle infrastructure.

The City of Alexandria has been identified as project owner for the City of Alexandria (Page 10)
Project owners will be recipients of grant funds and will be responsible for administering these funds and implementing the projects in accordance with the grant provisions. Project owners registered their support for this application, understand the obligation this role confers upon them, and will cooperate at all levels in carrying out the activities to be supported by the TIGER II Discretionary Grant. Table 2 identifies project owners for each of the project components.

4

Table 1: Project Component Details

ID	Project Component	Congressiona District	TIGER II Grant Request	Description
1	Adlington Bike-sharing	VA-8	4,346,000	1028 bicycles and 137 stations in Crystal City, Potomac Yard, and Shirlington, and Columbia Pike, Route 1 and Metrorali Orange Line corridors
2	Alexandria Bike-sharing	VA-8	622,900	146 bicycles and 17 stations around Metroral, Old Town, Del Ray, Potomac Yard, and Elsenhower Ave.
3	Reston Bike-sharing	VA-8	500,000	97 bicycles and 16 stations at Reston Town Center Transit Center, Reston Station, and major employers and activity centers
4	Reston Bikestation	VA-8	80,000	Enclosed modular bicycle parking facility to be collocated with transit and a bike-sharing station, creating multi-purpose Bikestation.
5	District of Columbia Bike-sharing	DC-At Large	4,080,000	1000 bicycles and 100 stations distributed in each ward, which will double the soon-to-be constructed 1000-bike system
6	Montgomery County Bike-sharing	MD-8,4	1,383,500	251 bicycles and 50 stations in Bethesda, Silver Spring, Wheaton, Takoma Park and Rockville areas
7	Silver Spring Bikestation	MD-8,4	800,000	Full service enclosed Bikestation with bicycle parking, repair, and rental collocated with Metrorali, Metrobus, and bike-sharing
8	University of Maryland College Park Bike-sharing	MD-5	166,000	33 bicycles and 6 stations throughout the University compus
9	College Park Bike-sharing	MD-5	140,000	23 bicycles and 5 stations at Metrorail, downtown, and major commercial areas, connecting directly to UMD.
	TOTAL TIGER II REQUEST  LOCAL MATCH (22%)  TOTAL PROJECT COST		\$12,118,400	2578 bicycles and 331 stations in regional
			\$3,423,600	bike-sharing network
			\$15,542,000	

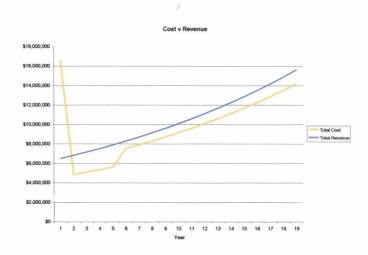
## Table taken from page 8

## Arlington County (page 20)

has secured financial commitments for both capital and operating expenses from the Crystal City Business Improvement District and the Potomac Yards Transportation Management Authority.

TABLE 4: Benefit-Cost Analysis Summary

	7% discount rate	3% discount rate
Cods	\$202,495,000	\$312,392,000
Capital	-\$15,431,000	-\$18,632,000
Operating	-\$54,373,000	-\$83,456,000
Accident	-\$132,691,000	-\$210,304,000
Benefits	\$348,584,000	\$569,033,000
User Cost Sovings	\$151,511,000	\$247,712,000
Travel Time Savings	\$154,440,000	\$252,344,000
Increased Access	\$23,484,000	\$38,371,000
Congestion Reduction	\$6,557,000	\$10,682,000
Emissions Reduction	\$8,894,000	\$13,901,000
Healthcare Cost Savings	\$1,269,000	\$2,067,000
Accident Reduction	\$2,429,000	\$3,956,000
Net Present Value	\$146,089,092	\$256,642,416
Rate of Return 79%		
Benefit-Cost Ratio	1.72	1.82



20-year period, 2010 dollars

### Assumptions

### 1. Cost

Installation cost per station is \$5551.00 at start then \$4500.00

- But then there are Capital costs associated with each station that depend on the size of the station and how many bikes it can hold see capital cost in the first table.
- Operating costs are assumed to be \$155.00 per bike per month or \$1860.00 per year.

  FORMULA FOR OPERATING COST = \$155.00 \* Number of bikes at each station \*12

The assumptions are broken down by the station sizes described here;

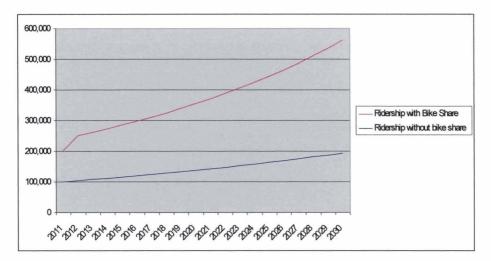
Total cost per station can then be calculated as follows

	Per Station					
Station	Installation cost, initial	Installation cost, expansion	Capital cost	# of bikes	Operating Cost	#
XS	5551	4500	26064	4	7440	49
S	5551	4500	34801	7	13020	160
M	5551	4500	43539	10	18600	106
L	5551	4500	52276	13	24180	15

### Total Cost Per Bike is as follows

Per Bike					
	Installation cost, initial	Capital cost	Total Cost	Operating Cost	
XS	\$ 1,387.75	\$ 6,516.00	\$ 7,903.75	\$ 1,860.00	
S	\$ 793.00	\$ 4,971.57	\$ 5,764.57	\$ 1,860.00	
M	\$ 555.10	\$ 4,353.90	\$ 4,909.00	\$ 1,860.00	
L	\$ 427.00	\$ 4,021.23	\$ 4,448.23	\$ 1,860.00	

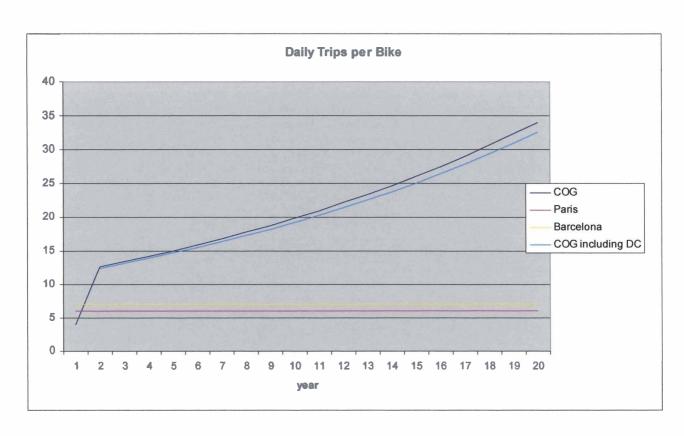
The revenue side seems to be very optimistic. Specifically the ridership assumptions, which drive it all warrant some attention. The DC effect has been taken out as they seem to be already running their system. Somehow this rider- share program will overshadow all current bicycle riders in the regions as seen on the first table. The more riders, the less cars, the less pollution, the less health care and so forth, the cumulative costs diminish. Hence the benefits.



The study go to Paris and Barcelona to get the ridership, or demand assumptions, but fail to take into account how many bikes the two Cities provide, the supply side, in order to get that ridership.

This can be seen when we look at how often each bike is expected to be used. Using COG numbers that exclude the DC system, each bike is assumed to be used a whopping 34 times a day. Whereas the bikes in Paris and Barcelona are used under 10 times per day.

If the Paris numbers were used, another 15444 bikes would have to be provided in order to reach the ridership that is assumed in the calculations, costing between \$60 and \$120 million dollars and \$28 million in additional operating costs.



# **Comparing Cost benefit**

# Using Paris Ridership Assumption

# Using COG assumptions

	7%	3%	7% discount rate	3% discount rate
Costs	\$108,547,000	\$160,276,000	\$202,495,000	\$312,392,000
Capital	-\$15,431,000	-\$18,632,000	-\$15,431,000	-\$18,632,000
Operating	-\$54,373,000	-\$83,456,000	-\$54,373,000	-\$83,456,000
Accident	-\$38,743,000	-\$58,188,000	\$132,691,000	-\$210,304,000
Benefits	\$108,113,000	\$168,597,000	\$348,584,000	\$569,033,000
User Cost Savings	\$56,905,000	\$89,975,000	\$151,511,000	\$247,712,000
Travel Time Savings	\$39,713,000	\$61,112,000	\$154,440,000	\$252,344,000
Increased Access	\$5,188,000	\$7,891,000	\$23,484,000	\$38,371,000
Congestion Reduction	\$1,796,000	\$2,754,000	\$6,557,000	\$10,682,000
Emissions Reduction	\$2,577,000	\$3,778,000	\$8,894,000	\$13,901,000
Healthcare Cost Savings	\$1,269,000	\$2,067,000	\$1,269,000	\$2,067,000
Accident Reduction	\$665,000	\$1,020,000	\$2,429,000	\$3,956,000
Net Present Value	-\$434,308	\$8,321,211	\$146,089,092	\$256,642,416
Rate of Return 7%		)	79%	
Benefit-Cost Ratio	1.00	1.05	1.72	1.82
20-year period, 2010 dollars				

### SPEAKER'S FORM

DOCKET ITEM NO.

spane

### PLEASE COMPLETE THIS FORM AND GIVE IT TO THE CITY CLERK BEFORE YOU SPEAK ON A DOCKET ITEM

PLEASE ANNOUNCE THE INFORMATION SPECIFIED BELOW PRIOR TO SPEAKING

1. NAME:	Poul	14. til	(Bike Shore)
		chym Cart	
			RESS: PalHafrels, con
		THER THAN YOURSELI	
4. WHAT IS YOUR I	POSITION ON TH AGAINST:		
5. NATURE OF YOU INTEREST, ETC.		ITEM (PROPERTY OWN	ER, ATTORNEY, LOBBYIST, <u>CIVIC</u>
6. ARE YOU RECEI	VING COMPENSA	ATION FOR THIS APPEA	ARANCE BEFORE COUNCIL?

This form shall be kept as a part of the permanent record in those instances where financial interest or compensation is indicated by the speaker.

A maximum of three minutes will be allowed for your presentation, except that one officer or other designated member speaking on behalf of each bona fide neighborhood civic association or unit owners' association desiring to be heard on a docket item shall be allowed five minutes. In order to obtain five minutes, you must identify yourself as a designated speaker, and identify the neighborhood civic association or unit owners' association you represent, at the start of your presentation. If you have a prepared statement, please leave a copy with the Clerk.

Additional time not to exceed 15 minutes may be obtained with the consent of the majority of the council present; provided notice requesting additional time with reasons stated is filed with the City Clerk in writing before 5:00 p.m. of the day preceding the meeting.

The public normally may speak on docket items only at public hearing meetings, and not at regular legislative meetings. Public hearing meetings are usually held on the Saturday following the second Tuesday in each month; regular legislative meetings on the second and fourth Tuesdays in each month. The rule with respect to when a person may speak to a docket item at a legislative meeting can be waived by a majority vote of council members present but such a waiver is not normal practice. When a speaker is recognized, the rules of procedures for speakers at public hearing meetings shall apply. If an item is docketed for public hearing at a regular legislative meeting, the public may speak to that item, and the rules of procedures for speakers at public hearing meetings shall apply.

In addition, the public may speak on matters which are not on the docket during the Public Discussion Period at public hearing meetings. The mayor may grant permission to a person, who is unable to participate in public discussion at a public hearing meeting for medical, religious, family emergency or other similarly substantial reasons, to speak at a regular legislative meeting. When such permission is granted, the rules of procedures for public discussion at public hearing meetings shall apply.

### Guidelines for the Public Discussion Period

- (a) All speaker request forms for the public discussion period must be submitted by the time the item is called by the city clerk.
- (b) No speaker will be allowed more than three minutes; except that one officer or other designated member speaking on behalf of each bona fide neighborhood civic association or unit owners' association desiring to be heard during the public discussion period shall be allowed five minutes. In order to obtain five minutes, you must identify yourself as a designated speaker, and identify the neighborhood civic association or unit owners' association you represent, at the start of your presentation.
- (c) If more speakers are signed up than would be allotted for in 30 minutes, the mayor will organize speaker requests by subject or position, and allocated appropriate times, trying to ensure that speakers on unrelated subjects will also be allowed to speak during the 30 minute public discussion period.
- (d) If speakers seeking to address council on the same subject cannot agree on a particular order or method that they would like the speakers to be called on, the speakers shall be called in the chronological order of their request forms' submission.
- (e) Any speakers not called during the public discussion period will have the option to speak at the conclusion of the meeting, after all docketed items have been heard.