

ECONOMIC IMPACT OF PROPOSED COTA SERVICE EXPANSION

Bill LaFayette, Ph.D.

Vice President, Economic Analysis, Columbus Chamber

PROBLEM STATEMENT AND SCOPE OF ANALYSIS

The Central Ohio Transit Authority (COTA) is seeking a 0.25 percent increase in the sales tax in the November 2006 election. The analysis discussed in this paper considers the economic impacts of the expanded operations and the sales tax increase on the Columbus Metropolitan Statistical Area (MSA – Delaware, Fairfield, Franklin, Licking, Madison, Morrow, Pickaway, and Union Counties).

These impacts are of three primary types. *Direct impacts* refer to the increase in regional output (production or gross product) resulting from increases in transit operations and the increase in regional employment resulting from new hiring by COTA. The increase in output is the increase in COTA revenue resulting from the increase in bus service.¹ As Exhibit 1 shows, COTA projects a 66 percent increase in the number of bus trips from 2006 to 2019 if service is expanded, versus a 10 percent reduction if it is not (despite the state's projection of an 11 percent increase in Franklin County population over that period.)

Indirect impacts are created as COTA increases its spending within the region on goods and services to support its increased operations. These new purchases also increase regional output and support new hiring within supplier firms. As the newly-hired employees of COTA and its suppliers increase their household spending throughout the local economy, they create additional impacts on output and employment; these are referred to as *induced impacts*. Because the indirect and induced spending would not occur were COTA operations not increased, these indirect and induced impacts are as much an economic benefit of the levy as are those resulting directly from COTA.

The two key questions in assessing the impact of a given expenditure are whether the spending remains within the local area, and whether that spending occurs only if bus service is increased. For example, construction work by local firms employing local workers, and local purchases of supplies and business services in the course of operations, generate a local impact as those firms and workers make business and household purchases within the Columbus MSA. In contrast, the spending on new buses manufactured outside the area cannot be included because those dollars leave the region and are spent by businesses and households elsewhere. Transit operations, spending, and employment that occur whether the levy is passed or not are also excluded because these do not result in any change in regional output; only changes in spending and employment are relevant.

MEASURING THE ECONOMIC IMPACT OF COTA EXPANSION

In this study, economic impacts are based on the value of the increased bus service and the spending for supplies and services used to sustain that increased service. As will be discussed later, this is a narrow, conservative definition of economic impact that does not reflect larger societal benefits. These larger benefits, while just as real and likely substantial, are not included in the analysis because of the difficulty of measuring their scale and hence of defending any dollar amounts attached to them. But they are discussed in detail below to convey an understanding of their nature and significance.

The most straightforward impacts to measure are direct impacts. These are the *increase* in annual COTA revenue and COTA employment resulting from the passage of the levy (i.e., projected revenue and employment if the levy passes less the projections if it fails). These are provided by COTA for each year from 2007 through 2030 assuming either passage or failure of the levy; the direct impacts for each year

¹ Any increase in state or federal support resulting from the new service would also be a direct output impact because it would represent new dollars coming into the region. COTA is assuming no such increase, however.

are the difference between COTA revenues and employment with passage and those with failure. The revenue projections are deflated to 2006 dollars using the projected change in the Consumer Price Index for all Urban Consumers (CPI-U) from Economy.com.

Indirect output impacts are also easily measured: these are the change in the value of purchases from local suppliers resulting from passage of the levy. COTA provided detailed projections of expenditures through 2030 with and without the levy, together with estimates of the percentage of each expenditure category currently purchased locally. (These percentages are assumed to remain constant over time.) The sum of these local purchases, deflated by projected CPI-U changes, is the indirect output impact.

An economic impact model is applied to the output and employment changes to estimate the indirect employment impact and the two induced impacts. Several generally accepted models are available for this purpose; this paper uses the Regional Input-Output Modeling System (RIMS-II) of the United States Bureau of Economic Analysis. As is the case for the other impact models, RIMS-II is based on a framework called an input-output table. For a given industry in a given geographical area, the input-output table shows the dollar value of the purchases from other local firms by industry and the sales to other local firms by industry. Thus, the input-output table can be used to derive the impact on other local firms of an increase in production within a specific industry.

This impact is specific both to a given industry and to a given region. If the structure of a local economy is such that most goods and services used by a given industry in its production have to be purchased outside the region, then most of the industry's spending will leak from the local economy and the impact of an increase in production will be less than if there are many local suppliers. On the other hand, if most of the industry's customers are local, their purchases from the industry are likely to represent dollars diverted from other local businesses and thus no increase in regional output.

RIMS-II uses the regional input-output table to calculate a set of unique factors for each industry within the Columbus MSA. Because of their origin in the input-output table, the factors implicitly reflect the structure of the local economy and the presence or absence of local suppliers. One of these factors represents the total increase in regional output resulting from an increase in demand for a given industry's output. Each increase in local supplier purchases and the increase in COTA payroll is multiplied by the relevant industry output multiplier to determine the total increase in regional output resulting from that purchase. The difference between total impact and the increase in supplier purchases is the induced output impact. Two other RIMS-II factors relate an increase in industry output to total job creation (within the industry and elsewhere) and industry job creation to total job creation. The increase in COTA purchases in each industry is multiplied by the first of these factors to obtain the total number of jobs sustained; the second factor is divided into total job creation to distinguish between jobs within the supplier industry (indirect jobs) and elsewhere in the local economy (induced jobs).

The results of these calculations are shown in Exhibit 2. Again, the direct and indirect impacts are due to the actions of COTA in providing bus service and purchasing goods and services from local suppliers; the induced impacts are those occurring elsewhere in the local economy as a result of these activities. Total impact rises rapidly from \$5.1 million and 75 jobs in 2007 to \$60.9 million and 908 jobs in 2015, drops slightly with the completion of planned construction projects, and levels off at \$77 million per year and approximately 1,200 jobs after 2022.

COST AND NET BENEFIT OF COTA EXPANSION

The cost of realizing the economic benefits computed above and shown in Exhibit 2 is the increased tax that Columbus MSA residents will have to bear as a result of approving the 0.25-cent sales and use tax levy. The annual cost of the levy is netted against the annual increase in direct, indirect, and induced output to determine the net benefit. A positive net benefit suggests that the region would be better off if the levy is passed, while a negative net benefit suggests that the region would be worse off. The expected change in total tax receipts resulting from passage of the levy is also provided by COTA.

A critical point in measuring the cost of the levy, however, is that some of the sales taxes are paid by visitors to the region. These visitor payments represent an inflow of dollars to the region, thereby reducing the cost of the levy. Thus, correctly measuring the cost requires determining this visitor allocation. From the standpoint of Franklin County residents and businesses, all visitors from outside Franklin County reduce the burden of the levy. But because of the regional perspective of this study, the only visitors whose spending reduces the cost of the levy are those who live outside the eight-county Columbus MSA. To illustrate the cost of the levy to those voting for it, however, annual sales taxes are allocated among Franklin County residents and businesses, residents and businesses in the balance of the MSA, and visitors to the MSA.

Annual sales taxes paid by visitors from outside the region are estimated as part of an economic impact study of the local tourism industry by Rovelstad and Associates and Longwoods International for Experience Columbus.² The results of this study imply that 14.6 percent of COTA sales taxes were paid by visitors to the region in 2001. This percentage is assumed constant for all years, implying that 85.4 percent of the COTA-projected sales tax receipts (adjusted for inflation using projected CPI-U) represent the annual cost of the levy.

As noted above, an allocation of COTA sales taxes paid by Franklin County-based residents and businesses and residents and businesses located in the other counties of the MSA is also estimated. This is not necessary for the economic impact, but it gives a sense of how much of the tax will actually be paid by local voters and how much will be subsidized by others.

To arrive at this estimate, note that the majority of the retail centers serving the region as a whole are located in Franklin and Delaware Counties, so that the percentage of sales made in Franklin and Delaware Counties to residents of the other six counties of the MSA far exceeds that made in the other six counties to Franklin and Delaware County residents. Also note a Levin and Driscoll estimate that 25 percent of sales taxes are paid by business.³ Sales tax collections for each county of the MSA are divided by that county's sales tax rate to obtain taxable sales. The portion of each county's taxable sales attributable to tourists (from the Rovelstad-Longwoods study) are subtracted from the total to obtain taxable sales of regional residents. Taxable sales for Franklin and Delaware and for the other six counties are divided by population, giving taxable sales per capita (\$14,620 for Franklin and Delaware and \$9,314 for the balance of the MSA). Assuming that consumption patterns are the same across the region, this implies that the 36.3 percent excess of Franklin and Delaware taxable sales are made to businesses and households outside the region.

Deducting the 14.6 percent tourist percentage and applying the above percentages to the remaining local percentage implies the following allocation of the COTA sales tax increment to households and businesses based within Franklin County and elsewhere:

Franklin County businesses	15.6%	
Franklin County households	<u>46.6%</u>	
All Franklin County entities		62.2%
Other MSA counties businesses	5.8%	
Other MSA counties households	<u>17.4%</u>	
All other MSA counties entities		23.2%
Tourists:		<u>14.6%</u>
Total		<u><u>100.0%</u></u>

² Rovelstad and Associates and Longwoods International, "The Economic Impact, Performance and Profile of the Franklin County, Ohio, Travel and Tourism Industry 2000-2001," September 2003.

³ Levin & Driscoll and the Mid-Ohio Regional Planning Commission, "Economic Benefits of Vision 2020," July 1999, p. 21.

Recall that the only percentage above that has a bearing on the economic impact analysis is the 14.6 percent that is allocated to tourists; the other percentages are included to give a sense of who within the region will ultimately pay the levy. The projected annual levy increment through 2030 and its allocation among the above classes is shown in Exhibit 3. Note that the \$20.6 million cost borne by Franklin County households implies an annual cost for each of the county's 447,700 households of \$45.97, and a daily cost of less than \$0.13.

Exhibit 4 combines the pertinent information in Exhibits 2 and 3 to show the regional benefit of the COTA levy net of its regional cost. The first few years show negative annual net benefits, but these are quickly offset by positive net benefits rising to more than \$37 million per year. Assuming a 4 percent discount rate, the present value of the total benefits is \$802.8 million and the present value of the regional costs is \$523.3 million, implying a net present value benefit of the COTA levy of \$279.5 million.

BENEFITS NOT INCLUDED IN THE ANALYSIS

An array of broader economic benefits will also result from the increase in service and ridership enabled by the passage of the levy. These arise from improved linkages between the workforce and employment centers, and between the broader population and leisure and shopping destinations, that would allow more people to use COTA effectively. It is beyond the scope of this study to place a dollar value on the societal benefits of these improved linkages; doing so would require assumptions regarding the actions of new COTA riders had service not been expanded and measuring the value of such benefits as cleaner air and less-crowded roadways.⁴ But although many of these benefits are not as easily quantified as the output and employment impacts discussed above, it is important to note that they are no less real and result in a benefit of the expansion of transit far larger than that estimated in this analysis.

As Columbus MSA population and employment centers have shifted away from the city center, even the same level of transit service would have provided fewer local residents with the ability to use COTA to reach their destination. But the cutbacks that have actually occurred have resulted in significantly diminished service. One indication of the impact of the geographical expansion of the urbanized area and the cutbacks in COTA service is the magnitude of the decline over the past decade and a half in the percentage of Franklin County workforce using mass transit. According to the 1990 Census, 3.8 percent of workers living in Franklin County and commuting via motorized transportation used public transit that year. The 2000 Census showed a decline to 3.2 percent as the spread of population and workforce outpaced the growth in COTA's route structure. Subsequent service cutbacks resulted in only 2.2 percent of vehicle commuters using COTA by 2004, according to the American Community Survey.⁵

Restoration of previous service reductions and new routes that would be possible with increased funding could have a substantial impact on the ability of COTA to serve the marketplace. The specific nature of the economic impacts resulting from the increase in the number of passengers shown in Exhibit 1 depends on whether the new riders are substituting mass transit for personal transit or whether they are taking trips that they otherwise could not. The first group of riders takes vehicles off of Central Ohio roads by switching to COTA, while the second group increases economic activity and output. The following two subsections discuss impacts resulting from service to each of these populations.

⁴ The Mid-Ohio Regional Planning Commission made an attempt to quantify some of these impacts in the July 1999 report, "Economic Benefits of Vision 2020." But as is evident from the accompanying discussion, data underlying the measurements are often scanty and incomplete.

⁵ At the same time, the outward spread of residential areas and workplaces increased the need for commuters to rely on motorized transportation. In 1990, 4.3 percent of commuters walked or biked to work, compared to 2.7 percent in 2004.

Impacts of substituting mass transit for personal transportation

Certainly, commuting to work via bus rather than personal vehicle reduces the direct cost to the commuter through savings on gasoline, maintenance, vehicle depreciation, and insurance. But these savings do not have a substantial economic impact on output or employment. It is likely that households simply reallocate the vehicle cost savings to other local purchases, leaving total local expenditures and output largely unchanged. The benefit is the improved quality of life resulting from diverting expenditures from commuting to other purchases that likely bring greater satisfaction.⁶

One personal vehicle expenditure that does have a local economic impact is the net saving in excise taxes going to federal and state governments. This increases local output because reducing excise taxes keeps dollars in the area that otherwise would leave. At the federal level, the appropriate measure is the reduction in gasoline excise taxes that households pay (\$0.184 per gallon) net of the increase in diesel excise taxes that COTA pays (\$0.074 per gallon, including a credit for fuel for local buses). The state excise tax is \$0.26 per gallon, but a share of that is returned to local governments through a complicated formula.⁷ The impact of state excise tax savings, then, is the reduction in excise taxes less the reduction in the local distribution.

Although the vehicle-related cost savings of commuters cannot be considered an economic benefit, the reduction in the rate of traffic growth and lessened congestion would give rise to benefits positively affecting productivity and output. It is important to note that these benefits accrue to all commuters, whether they use COTA or not. The reduction in traffic congestion would reduce growth in the time that commuters spend in traffic, increasing regional productivity and output by reducing tardiness and the amount of unproductive time necessary to drive to remote locations during the workday. Reduced congestion would also make truck transportation more productive, thereby enhancing the ability to attract expanding and relocating distribution and logistics operations. This is a particularly important benefit for Columbus: the region currently boasts a concentration of transportation and warehousing employment 26 percent larger than average. Regional economic development initiatives over at least the past decade have targeted distribution and logistics because of the region's benefits as a distribution hub and because this industry offers jobs paying significantly more than comparable-skill jobs in other industries.

A decrease in the rate of traffic growth would also reduce the wear and tear on local streets and highways and would forestall the need to invest in new road projects. This would either allow governments to reallocate tax dollars to other purposes or to reduce the tax burden on household and businesses.

Reduced congestion would also reduce the number of accidents. This benefits the region less by increasing output than by preventing declines in output – which is effectively the same thing. Traffic accidents impose significant costs on the economy. These include property damage; the costs of police, emergency and medical services; public safety, insurance and workplace administrative costs; legal costs; the costs of lost productivity through diminished capacity and death; and the cost of traffic delays. Another category of costs includes the intangible emotional costs of experiencing an accident, injury, and diminished capacity, and the costs borne by loved ones in caring for the injured and mourning the deceased. Evaluating the first category of costs (but not the second) for 2000, a group of analysts with the National Highway Traffic Safety Administration estimated that the total cost of vehicle crashes in the U.S. during that year was \$230.6 billion – approximately \$820 for each person living in the U.S., and 2.3 percent of the U.S. Gross Domestic Product.⁸ The analysis also estimated average costs for each

⁶ The MORPC analysis in “Economic Benefits of Vision 2020” incorrectly included the entire value of reduced fuel consumption among the annual travel-related economic benefits (see p. 9).

⁷ For details, see Ohio Department of Taxation, “Motor Fuel Taxes: Amounts Distributed to Municipalities and to All Local Governments, by County, Calendar Year 2004,” July 22, 2005.

⁸ Lawrence J. Blincoe, et al., *The Economic Impact of Motor Vehicle Crashes, 2000*, National Highway Traffic Safety Administration, U.S. Department of Transportation, May 2002, p. 1.

individual involved in a crash (not each crash), including both economic and intangible costs.⁹ These are shown below. Levels of injury are categorized according to the Maximum Abbreviated Injury Scale (MAIS), where MAIS 0 is the least severe injury and MAIS 5 is most severe. As is evident from the scale of these costs, the reduction of even a handful of accidents per year will have a substantial economic impact on the region.

	Direct costs	Intangible costs	Total costs
Property damage only (per vehicle)	\$ 2,532	\$ 0	\$ 2,532
MAIS 0	1,962	0	1,962
MAIS 1	10,562	4,455	15,017
MAIS 2	66,820	91,137	157,958
MAIS 3	186,097	128,107	314,204
MAIS 4	348,133	383,446	731,580
MAIS 5	1,096,161	1,306,836	2,402,997
Fatal	977,208	2,389,179	3,366,388

Another economic benefit of reduced traffic is reduced pollution. The economic benefits of diminished pollution include increased output due to improved health and reduced worker illness and absenteeism. The economic impact of Central Ohio's deteriorating air quality increased considerably on April 15, 2004, when the U.S. Environmental Protection Agency (EPA) designated most of the counties of Columbus MSA as "nonattainment" for ozone and particulate pollution. This designation may lead to a requirement that local gas stations sell cleaner formulations of gasoline that would cost three to five cents more per gallon. Based on the above arguments, this would have more of a quality of life impact than an economic impact. But a definite economic impact would come from the likelihood that this designation would hamper the region's ability to attract new and expanding companies that would need operating permits from the EPA, thereby reducing regional employment and output growth.¹⁰

Impacts of providing enhanced mass transit to those lacking personal transportation

Providing better transportation access to individuals who do not have personal vehicles creates a different array of economic benefits for the region. The most obvious is providing better access to employment centers. This deepens the pool of workers from which employers can draw in filling positions, thereby allowing them to be more selective and enhancing the productivity of their operations. It also shortens bus rides and increases the array of jobs available to workers without personal transportation, thereby enabling them to become more productive and enjoy more stable employment. Both these benefits lead to higher regional output as households produce and consume more. More stable employment for households without personal transportation also reduces regional poverty and the attendant costs in providing monetary benefits and social services.

Apart from these work-related benefits, providing enhanced bus service for these individuals gives them access to more shopping and entertainment destinations. This improves the quality of life of these individuals by allowing them to broaden their choices or shopping only when others can provide transportation for them, and possibly to purchase goods and services more cheaply than they could by relying solely on neighborhood stores.

⁹ Blincoe, et al., pp. 61-62.

¹⁰ See Spencer Hunt, "EPA Tells Ohio: Cut Smog," *Columbus Dispatch*, April 16, 2004, and air quality information at www.morpc.org.

Exhibit 1
Increases in service could cause nearly a doubling in the number of riders using COTA

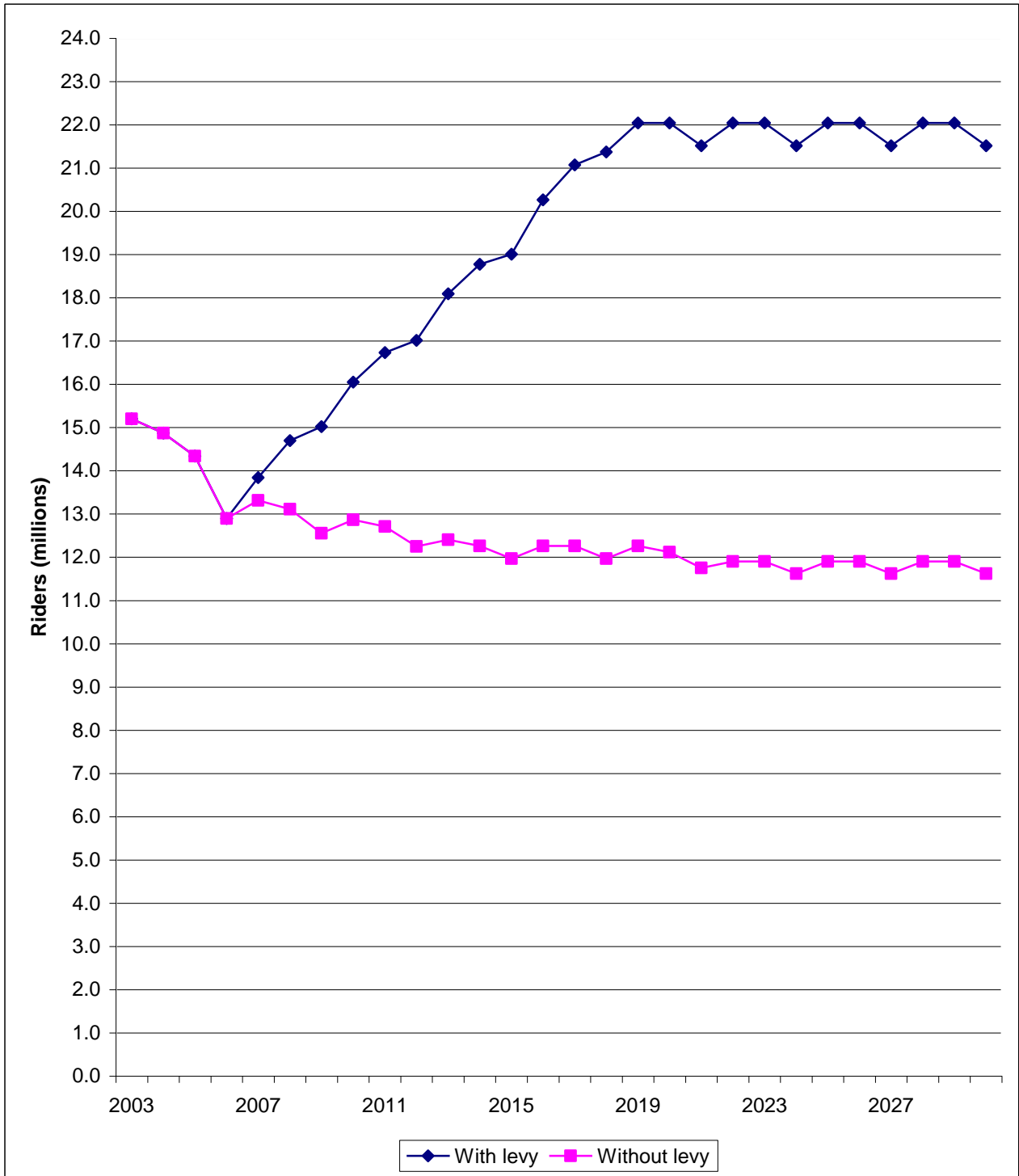


Exhibit 2

Results of the economic impact analysis show benefits of the expansion of COTA service rising to more than \$77 million annually and 1,200 jobs, not including broader societal benefits

(Output totals in constant 2006 dollars)

	Increase in Columbus MSA output (\$000)				Increase in Columbus MSA employment			
	Direct	Indirect	Induced	Total	Direct	Indirect	Induced	Total
2007	\$ 482	\$ 3,038	\$ 1,624	\$ 5,144	29	5	42	75
2008	1,412	8,533	5,835	15,781	86	29	113	228
2009	2,320	12,109	7,899	22,329	143	38	160	341
2010	2,902	13,539	7,783	24,224	187	32	179	399
2011	3,591	18,476	11,938	34,005	240	58	242	540
2012	4,510	28,433	22,560	55,503	292	132	365	790
2013	5,214	31,444	24,228	60,886	344	140	404	888
2014	5,877	28,250	17,860	51,987	397	88	367	851
2015	6,733	29,688	17,682	54,104	441	82	385	908
2016	7,446	33,110	19,841	60,397	451	94	428	973
2017	8,050	36,267	21,742	66,059	462	103	469	1,034
2018	9,146	39,458	23,691	72,295	474	113	509	1,096
2019	9,226	40,250	24,214	73,690	485	116	519	1,120
2020	9,178	40,944	24,674	74,796	504	119	527	1,150
2021	9,601	41,361	24,970	75,932	519	121	532	1,172
2022	9,698	42,078	25,458	77,234	527	124	541	1,191
2023	9,509	42,127	25,495	77,132	527	124	541	1,192
2024	9,922	42,177	25,533	77,632	527	125	541	1,192
2025	9,894	42,327	25,670	77,892	527	126	543	1,195
2026	9,737	42,426	25,761	77,924	527	127	543	1,197
2027	10,128	42,560	25,883	78,571	527	128	545	1,199
2028	10,134	42,699	26,010	78,842	527	129	546	1,201
2029	9,912	42,735	26,031	78,679	527	129	546	1,202
2030	10,366	42,809	26,095	79,271	527	130	547	1,203

Exhibit 3
Households and businesses outside Franklin County will ultimately bear 38 percent
of the annual cost of the COTA levy

(Totals in constant 2006 dollars)

	Total levy (000)	Franklin County			Other MSA counties			Tourists
		Households	Businesses	Total	Households	Businesses	Total	
2007	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
2008	33,324	\$ 15,529	\$ 5,199	\$ 20,728	\$ 5,798	\$ 1,933	\$ 7,731	\$ 4,865
2009	44,165	\$ 20,581	\$ 6,846	\$ 27,426	\$ 7,685	\$ 2,562	\$ 10,246	\$ 6,448
2010	43,834	\$ 20,427	\$ 6,794	\$ 27,221	\$ 7,627	\$ 2,542	\$ 10,170	\$ 6,400
2011	43,999	\$ 20,504	\$ 6,820	\$ 27,323	\$ 7,656	\$ 2,552	\$ 10,208	\$ 6,424
2012	44,235	\$ 20,613	\$ 6,856	\$ 27,470	\$ 7,697	\$ 2,566	\$ 10,262	\$ 6,458
2013	44,147	\$ 20,573	\$ 6,843	\$ 27,415	\$ 7,682	\$ 2,561	\$ 10,242	\$ 6,446
2014	44,790	\$ 20,872	\$ 6,942	\$ 27,814	\$ 7,793	\$ 2,598	\$ 10,391	\$ 6,539
2015	44,856	\$ 20,903	\$ 6,953	\$ 27,855	\$ 7,805	\$ 2,602	\$ 10,407	\$ 6,549
2016	44,921	\$ 20,933	\$ 6,963	\$ 27,896	\$ 7,816	\$ 2,605	\$ 10,422	\$ 6,558
2017	45,392	\$ 21,153	\$ 7,036	\$ 28,188	\$ 7,898	\$ 2,633	\$ 10,531	\$ 6,627
2018	45,608	\$ 21,253	\$ 7,069	\$ 28,323	\$ 7,936	\$ 2,645	\$ 10,581	\$ 6,659
2019	45,451	\$ 21,180	\$ 7,045	\$ 28,225	\$ 7,908	\$ 2,636	\$ 10,545	\$ 6,636
2020	45,789	\$ 21,337	\$ 7,097	\$ 28,435	\$ 7,967	\$ 2,656	\$ 10,623	\$ 6,685
2021	45,924	\$ 21,400	\$ 7,118	\$ 28,519	\$ 7,991	\$ 2,664	\$ 10,654	\$ 6,705
2022	45,877	\$ 21,378	\$ 7,111	\$ 28,489	\$ 7,983	\$ 2,661	\$ 10,643	\$ 6,698
2023	46,201	\$ 21,530	\$ 7,161	\$ 28,691	\$ 8,039	\$ 2,680	\$ 10,719	\$ 6,745
2024	46,530	\$ 21,683	\$ 7,212	\$ 28,895	\$ 8,096	\$ 2,699	\$ 10,795	\$ 6,793
2025	46,501	\$ 21,669	\$ 7,208	\$ 28,877	\$ 8,091	\$ 2,697	\$ 10,788	\$ 6,789
2026	46,976	\$ 21,891	\$ 7,281	\$ 29,172	\$ 8,174	\$ 2,725	\$ 10,898	\$ 6,858
2027	47,139	\$ 21,967	\$ 7,307	\$ 29,273	\$ 8,202	\$ 2,734	\$ 10,936	\$ 6,882
2028	47,238	\$ 22,013	\$ 7,322	\$ 29,335	\$ 8,219	\$ 2,740	\$ 10,959	\$ 6,897
2029	47,408	\$ 22,092	\$ 7,348	\$ 29,440	\$ 8,249	\$ 2,750	\$ 10,999	\$ 6,922
2030	47,796	\$ 22,273	\$ 7,408	\$ 29,681	\$ 8,317	\$ 2,772	\$ 11,089	\$ 6,978

Exhibit 4

Netting the positive regional impacts against the regional costs shows the net benefit of the COTA levy rising to more than \$37 million annually, not including broader societal benefits

(Totals in constant 2006 dollars)

	Regional output benefit (\$000)				Regional levy cost (000)			NET BENEFIT
	Direct	Indirect	Induced	Total	Total	Tourists	Net	
2007	\$ 482	\$ 3,038	\$ 1,624	\$ 5,144	\$ 0	\$ 0	\$ 0	\$ 5,144
2008	1,412	8,533	5,835	15,781	33,324	4,865	28,459	\$(12,678)
2009	2,320	12,109	7,899	22,329	44,165	6,448	37,717	\$(15,388)
2010	2,902	13,539	7,783	24,224	43,834	6,400	37,435	\$(13,211)
2011	3,591	18,476	11,938	34,005	43,999	6,424	37,575	\$ (3,570)
2012	4,510	28,433	22,560	55,503	44,235	6,458	37,777	\$ 17,726
2013	5,214	31,444	24,228	60,886	44,147	6,446	37,702	\$ 23,184
2014	5,877	28,250	17,860	51,987	44,790	6,539	38,250	\$ 13,737
2015	6,733	29,688	17,682	54,104	44,856	6,549	38,307	\$ 15,797
2016	7,446	33,110	19,841	60,397	44,921	6,558	38,363	\$ 22,034
2017	8,050	36,267	21,742	66,059	45,392	6,627	38,764	\$ 27,295
2018	9,146	39,458	23,691	72,295	45,608	6,659	38,949	\$ 33,346
2019	9,226	40,250	24,214	73,690	45,451	6,636	38,815	\$ 34,875
2020	9,178	40,944	24,674	74,796	45,789	6,685	39,103	\$ 35,692
2021	9,601	41,361	24,970	75,932	45,924	6,705	39,219	\$ 36,713
2022	9,698	42,078	25,458	77,234	45,877	6,698	39,179	\$ 38,056
2023	9,509	42,127	25,495	77,132	46,201	6,745	39,456	\$ 37,676
2024	9,922	42,177	25,533	77,632	46,530	6,793	39,736	\$ 37,895
2025	9,894	42,327	25,670	77,892	46,501	6,789	39,712	\$ 38,180
2026	9,737	42,426	25,761	77,924	46,976	6,858	40,117	\$ 37,807
2027	10,128	42,560	25,883	78,571	47,139	6,882	40,257	\$ 38,314
2028	10,134	42,699	26,010	78,842	47,238	6,897	40,341	\$ 38,501
2029	9,912	42,735	26,031	78,679	47,408	6,922	40,486	\$ 38,193
2030	10,366	42,809	26,095	79,271	47,796	6,978	40,818	\$ 38,453