Construction Impact of LA Metro's Proposed Transportation Projects, 2009-2038



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Executive Summary

The Los Angeles County Metropolitan Transportation Authority (Metro) has proposed an increase in the Los Angeles County sales tax rate of 0.5%, to 8.75%, in order to fund transportation improvement projects in the county.

The Los Angeles County Economic Development Corporation (LAEDC) has estimated the economic impact related to the construction of \$16.5 billion in projects that will be funded by the proposed use or sales tax increase. The total economic impact consists of the one-time increases in total (direct plus indirect) output, jobs, and wages associated with the proposed construction activities in the next 30 years. (Right-of-way acquisition spending and vehicle purchases are not included in the direct spending category because they do not add to economic output or job creation in Los Angeles County.)The findings are presented in the table below.

Economic Impact of LA Metro Projects- Construction				
Construction Spending	\$15,000,000,000			
	Total Impact	Average Annual Impact		
Economic Output	\$32,100,000,000	\$1,070,000,000		
Jobs	210,800	7,030		
Earnings	\$8,700,000,000	\$290,000,000		
Source: LAEDC				

The \$15.0 billion in construction spending on transportation projects in Los Angeles County will generate a total economic impact of \$32.1 billion over the 30-year period. On average, annual output will be an estimated \$1.07 billion. In total, Metro's transportation programs will generate more than 210,000 annual full-time equivalent (FTE) jobs with \$8.7 billion in total earnings, an average of 7,030 jobs and \$290 million salaries per year.

Introduction

The Los Angeles County Metropolitan Transportation Authority (Metro) has proposed an increase in Los Angeles County's sales tax rate of 0.5%, to 8.75%, in order to fund transportation improvement projects over the next 30 years. The projects are divided into three main categories—rail & bus corridor construction; major highway and freeway projects; and rail grade separations plus freeway sound wall construction.

Building new rail lines and rapid bus corridors will cost \$10.6 billion, including \$600 million for right-of-way acquisition (ROW) and \$960 million for vehicle purchases. The net cost of construction will be \$9.1 billion. Direct spending for the major highway and freeway improvement projects will be \$5.1 billion. Rail grade separations and sound wall construction will cost \$820 million, bringing the total construction spending to \$15 million. *All dollar amounts in the report are given in current (2008) dollars*.

The Los Angeles County Economic Development Corporation (LAEDC) has estimated the one-time economic impact of the construction projects that will be funded by the proposed tax increase. The impact consists of the one-time increases in total (direct plus indirect) output, jobs, and wages associated with construction activities over the next 30 years.

The impact estimates were prepared using an in-house model based upon multipliers from the Regional Input-Output Modeling System (RIMS II), developed by the U.S. Department of Commerce, Bureau of Economic Analysis.

Summary Findings: Economic Impact

The total cost of Metro transportation projects is \$16.5 billion allocated over a 30-year period, including \$1.5 billion for right-of-way acquisition (ROW) and vehicle purchases for rail lines and rapid bus corridors. Therefore, direct construction-related spending for all construction projects will be \$15 billion, as shown in Table 1.

Table 1Metro Transportation ProjectsConstruction-Related Spending in LA County					
Type of Project	Total Spending (\$billions)	ROW & Vehicles (\$billions)	Direct Spending (\$billions)		
Rail & Bus Corridor Construction	10.6	1.5	9.1		
Major Highway & Freeway Projects	5.1	n/a	5.1		
Grade Separation & Sound Walls	0.8	n/a	0.8		
Total	16.5	1.5	15		

Sources: LA Metro, LAEDC

The projects will be financed by the proposed 0.5% sales tax increase. The LAEDC estimated the economic impact of all three types of proposed construction programs in Los Angeles County. Table 2 summarizes the economic impact due to construction activity, including the one-time increases in total (direct and indirect) output, employment, and earnings associated with transportation projects.

Table 2Metro Transportation ProjectsConstruction-Related Economic Impact in LA County				
Type of Project	Total Output (\$billions)	Employment (# of jobs)	Earnings (\$ billions)	
Rail & Bus Corridor Construction	19.5	127,800	5.2	
Major Highway & Freeway Projects	10.9	71,500	3.0	
Grade Separation & Sound Walls	1.7	11,500	0.5	
Total	32.1	210,800	8.7	
Annual Average	1.07	7,030	0.29	

Sources: LA Metro, LAEDC

Direct workers are those people who will work for the firms actually involved in the Metro's construction or improvement projects (construction firms, design, engineering & architecture firms, etc). Indirect jobs are generated when the firms directly involved in the projects make purchases from their suppliers and vendors. Still more indirect jobs are created when direct and indirect workers spend their wages on consumer goods and services. The total job creation (direct & indirect) associated with construction will hinge on one single factor: the amount actually spent for the transportation projects in LA County.

During the 30-year construction period, the estimated total economic output in Los Angeles County related to the completion of Metro's proposed transportation projects will be \$32.1 billion (expressed in 2008 dollars). The projects will create 210,800 annual direct and indirect full-time equivalent (FTE) jobs countywide with \$8.7 billion in total wages. Dividing the number of jobs by 30 years, we get an average of 7,030 annual FTE jobs and \$290 million in earnings per year.

Measuring jobs in annual full-time equivalents is especially useful with construction projects, where job creation has an interim nature. Annual FTEs measure the amount of work involved, not the actual number of workers involved. For instance, one annual FTE could be two people each working half-time (20 hours a week) for a year, or twelve people each working full-time for one month.

Building rail lines (including the construction of light and heavy rail lines) and the construction of bus rapid transit lines will generate \$19.5 billion in total (direct and indirect) output for the Los Angeles County economy over the course of 30 years. Also, work on these projects will create nearly 128,000 annual FTE total jobs with over \$5 billion in total earnings. So, on average, the project will create 4,270 annual FTE jobs and \$170 million annually.

The total economic output associated with the major highway and freeway construction projects will be \$10.9 billion, as shown in Table 2. These projects may include building new freeways or highways in the LA County region as well as improving the existing ones. Over the 30-year period, the total number of annual FTE jobs related to these projects will be 71,500 with \$3.0 billion in total salaries, or 2,380 annual FTE jobs with \$100 million in earnings per year.

Rail grade separation and sound wall construction along the freeways and highways located in Los Angeles County will create \$1.7 billion in total (direct & indirect) economic output. The total jobs and wages associated with these projects will be 11,500 annual FTE jobs and \$0.5 billion respectively, which translates into 380 annual FTE jobs and \$16 million in wages annually.

Summary Findings: Fiscal Impact

Metro's multi-billion dollar transportation projects will generate significant state and local taxes over the 30-year period. The projected tax revenue impact of the proposed Metro construction projects is presented in Table 3.

Table 3Metro Transportation ProjectsConstruction-Related Fiscal Impact		
Type of Taxes	Total Fiscal Impact	
State Taxes	\$800,000,000	
Local Taxes	\$200,000,000	
Total	\$1,000,000,000	

Source: LAEDC

The contractors working on the project will purchase several million dollars worth of necessary materials, and large portion of this spending (on estimated 35% of the total) is sales- or use-taxable. In addition, the direct and indirect workers will pay state income taxes on their earnings, and their sales-taxable purchases will generate additional tax revenues.

Combined, the Metro projects will generate \$1 billion in state and local taxes over a 30-year period. The vast majority of taxes (\$800 million) will go to the state of California, and the rest (\$200 million) will be captured by local municipalities (LA County and cities within LA County).

To make these calculations, the relevant sales or use tax rate for Los Angeles County is assumed to be 8.75% (the current 8.25% plus the expected increase of 0.5%). The LA Metro's share of sales taxes will be 1.5% of the total 8.75%, which suggests that Metro will capture an estimated \$110 million in sales or use taxes over the 30-year period. On average, Metro will capture nearly \$3.7 million annually due to the construction related projects taking place in Los Angeles County.

Overall, the LAEDC's estimates of total tax revenues generated by construction-related activities are low, because the LAEDC has considered only state income and local taxes. Local permits and fees for construction, which would be substantial for projects of this size, are not included in the calculation. Nor did we include the state unemployment insurance or California disability insurance paid by the direct and indirect workers in construction-related jobs. Finally, various state taxes, such as state fuel taxes or state corporate taxes, were not estimated because of data limitations.