

METRO'S 28 BY 2028 PLAN: A CRITICAL REVIEW IX. METRO'S CONGESTION PRICING REVENUE PRICING ESTIMATES ARE NOT CREDIBLE

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IX. METRO'S CONGESTION PRICING REVENUE PRICING ESTIMATES ARE NOT CREDIBLE

Economists characterize congestion as an external cost of an individual's decision to consume travel. The congestion delay that one commuter inflicts on other commuters is a real cost, but, since it does not harm the first commuter, it does not affect that commuter's decision to travel. A congestion toll internalizes this external cost, and ensures that travelers account for the costs their trips impose on others when deciding whether the benefits of a trip justify taking it. According to the Federal Highway Administration (FHWA):¹

Congestion pricing ... is a way of harnessing the power of the market to reduce the waste associated with traffic congestion. ... There is a consensus among economists that congestion pricing represents the single most viable and sustainable approach to reducing traffic congestion.

Congestion pricing motivates travelers to consider other transportation options, including shifting the time of their travel away from the peak period, working from home, using a car- or vanpool, changing residential and/or work locations—or using transit.

Properly planned, designed, implemented, and operated, a Los Angeles County congestion pricing program can reduce congestion and travel-time variability, but Metro's revenue expectations for congestion pricing are overstated. Congestion pricing is not a magic wand, and it will *not* eliminate congestion, especially if prices have been incorrectly set to extremes.

High-occupancy vehicle (HOV) lanes require vehicles to have at least two people (form a carpool) in order to use the lane. High-occupancy toll (HOT) lanes allow carpools and also permit single-driver vehicles to purchase access by paying an electronically collected toll. Los Angeles has had HOV lanes since 1976, when the El Monte Busway on the I-10 San Bernardino freeway was temporarily retasked as an HOV lane during an extended transit strike. This worked so well that, after the strike was settled, it was converted to a Busway/HOV lane as HOV-3, which means that a minimum of three occupants is required to legally use the HOV lane.

In Los Angeles County, there are currently 513 lane-miles of HOV-2 lanes, and on the I-10 and the I-10 Harbor Freeways there are 83 lane-miles of HOT lanes.² California's HOV lanes have been

¹ https://ops.fhwa.dot.gov/congestionpricing/

² Caltrans District 7. 2016 Managed Lane Annual Report. 1. http://www.dot.ca.gov/d7/programs/managedlanes/docs/2016%20Managed%20Lane%20Annual%20Report%20CT%20Dist%2007.pdf

Metro's 28 by 2028 Plan: A Critical Review | IX. Metro's Congestion Pricing Revenue Pricing Estimates 3 Are Not Credible

successful, and most Los Angeles HOV lanes are very well utilized. Yet, many fail the FHWA requirement that HOV lanes speeds should not fall below 45 mph, with some rush hour speeds as low as 10 mph. This excess demand is caused by low occupancy requirements and California allowing single-occupant "clean air vehicles (CAV) to use HOV lanes.³ This congestion and slow speed reduces the utility of the HOV lanes as congestion-free travel. The HOV minimum can be increased to three people, but, for political reasons, such action is seldom taken. Conversion of HOV lanes to HOT lanes may be a viable way to reduce demand and keep speeds higher.

In the *Re-Imagining of LA County: Mobility, Equity, and the Environment*⁴ (a.k.a. *Re-Imagining*) presentation to the Metro Board on January 24, 2019, Metro staff sets forth five different congestion pricing options, giving high and low estimates of revenue generated and earliest revenue realization dates. The *28 by 2028 Plan*⁵ presents (slides 16 and 19) 10-year total revenue projections, but *Re-imagining* reduces these values to reflect the significant time needed to implement any of these options, because none were in place on July 1, 2018, the beginning of the 10-year *28 by 2028* period. Metro provides details for these last three options in the *White Paper*.⁶ **Table 1** summarizes projected annual revenue and time frames until first collection.

Table 1: 28 by 2028 Congestion Pricing Alternatives						
Description	Annual Revenue Estimate		Earliest Revenue Realization			
	Minimum	Maximum	Low Range	High Range		
Tolls from existing Express-Lanes	\$25 million		12 months	24 months		
Tolls from new Express-Lanes	\$60 million	\$100 million	Five Years			
Cordon Pricing	\$1,200 million		12 months	24 months		
VMT Pricing*	\$10,350 million		12 months	24 months		
Corridor Pricing in 10 Corridors	\$5,250 million		12 months	24 months		

*Per-mile electronic tolling, with fuel tax rebates to users.

Source: *Re-Imagining of LA County: Mobility, Equity, and the Environment Pricing* White Paper.

³ Poole, Robert. "It's Time to Replace HOV Lanes." Reason Foundation. July 1, 2007. https://reason.org/commentary/its-time-to-replace-hov-lanes/

⁴ Attachment B to Metro Board Report. Agenda Number: 43. Regular Board Meeting. January 24, 2019. Subject: "The Re-Imagining of LA County: Mobility, Equity, and the Environment (Twenty-Eight by '28 Motion Response)." https://boardagendas.metro.net/event/regular-board-meeting-edc898b7baa6/

⁵ Metro, PowerPoint[™] presentation to the Board of Directors. *"28 by 2028 Financial Plan – Laying the Groundwork.* December 6, 2018. http://metro.legistar1.com/metro/attachments/e48e3ad9-7f42-4011-849c-5666ed4f0cc6.pdf

⁶ "Twenty-Eight by '28 Program Financing/Funding Plan White Paper." Attachment B to Metro Board Report. Agenda Number: 38, Regular Board Meeting, December 6, 2018. Subject: "Twenty-Eight by '28 Motion Response." Attachment D, "Primer on Congestion Pricing." 2-3. http://metro.legistar1.com/metro/attachments/18984512-fa10-4b43-aa52-524cfd8bb69a.pdf

Metro's 28 by 2028 Plan: A Critical Review | IX. Metro's Congestion Pricing Revenue Pricing Estimates 4 Are Not Credible

The first congestion pricing option consists of charging higher variable tolls on the existing HOT lanes of the I-10 San Bernardino and I-110 Harbor Freeways. The second congestion pricing option expands HOT lanes to additional freeways.

The third congestion pricing option is "cordon pricing," which charges a fee to enter a designated urban area, generally the central business district. Cordon pricing has been implemented in London, Singapore and several other major cities.

The fourth congestion pricing option is charging commuters a variable rate per mile everywhere in the county. Metro refers to this as vehicle-miles traveled (VMT) charging in all *28 by 2028 Plan* documents and elsewhere, but this brief uses the term mileage-based user fees (MBUF) when referring to the system of charging for road use according to number of miles traveled. VMT refers to the actual travel, not the charging system (except for quotes from Metro documents). Mileage-based user fees are being studied as a potential substitute for cents-per-gallon motor fuel charges. MBUF has been used for trucks in several European nations. Some U.S. states, including California, are conducting MBUF pilots, and Oregon has a permanent MBUF program. Metro reports that, "The technology exists to use MBUF as a method of alleviating congestion but it has not yet been attempted due to political challenges."

The fifth congestion pricing option is "corridor pricing," which charges commuters to use all lanes on all roads within a specific corridor that have high traffic congestion but a viable public transit alternative. It has not been implemented anywhere. The optimal objective would be to set the price to ensure free-flow traffic within that entire corridor.

Metro assumes that it could implement congestion pricing by July 1, 2020.⁷ It would not be possible to complete the necessary legislative, public relations, and technical work for the most innovative options within five years. Indeed, it is very possible that none of these options can be implemented by 2028. The first two options, based on increasing traffic and/or fees for Metro's two existing high-occupancy/toll (HOT) lanes and expanding HOT lanes to other Los Angeles County freeways, offers challenges, but could be implemented more quickly. The revenue estimates above are aggressive but achievable.

The last three options would be new to the United States. The last two are not currently in use at significant scale anywhere in the world for passenger autos. These options include more uncertainty with respect to implementation than Metro acknowledges. Further, Metro attaches revenue ranges to these options that are unreasonably optimistic, and puts forward implementation schedules that are not feasible.

⁷ *Re-Imagining.* Attachment B.

Metro's 28 by 2028 Plan: A Critical Review | IX. Metro's Congestion Pricing Revenue Pricing Estimates 5 Are Not Credible

HOT LANE REVENUES

The *Plan* (Slide 16) calls out "Toll Revenues, … Conservative projected revenues – \$399 million; … High projected revenues – \$798 million." *Re-imagining* restructures these to existing and new facilities for a combined range of \$500 million to \$700 million, or \$25 million/year for eight years for the existing two HOT lanes, and \$60 million to \$100 million per year for five years for the new HOT lanes.

Metro's *FY19 Adopted Budget* (page 28) includes \$62.8 million for the existing two HOT lanes on the El Monte Busway/High Occupancy Vehicle (HOV)/HOT facility and the Harbor Freeway. Thus, Metro estimates an increase of \$25 million a year for eight years, or a 36% increase/year. It is unclear if this is due to higher utilization, higher tolls, or a combination.

The high revenue projection associated with the HOT expansion option might be attainable for the five-year period, assuming that the authority to convert HOV lanes to HOT service can be obtained and the HOT lanes implemented quickly.

Current experience on the two existing toll facilities may not be transferrable to new facilities. Both have unique characteristics. The El Monte Busway/HOV/HOT lane operated for decades under an HOV-3 requirement and typically had a few hundred available peak-hour vehicle spaces, and the Harbor Freeway Busway/HOV/HOT has two lanes for much of its length.

CORDON PRICING

Cordon pricing is the simplest of the new congestion pricing options Metro plans to implement. It is forecast to generate the lowest funding. It would likely be the easiest option for Metro to gain legislative authority to implement, possibly requiring only state legislation to proceed. The *White Paper* (page 22) offers successful examples (London, Milan, Singapore, and Stockholm).

The first implementation of an electronic road pricing system was also the quickest. Singapore's Area Licensing Scheme (ALS) was approved for implementation in 1993 after only a short period of evaluation and public comment. It was operational two years later. The system has been continually upgraded since inception.

Singapore is not a U.S.-style electoral federal democracy, instead having one single all-inclusive level of government, which allows it to implement major changes far faster than most nations. The ALS is a major success for Singapore, but the lessons learned there cannot necessarily be replicated in a federal-style republic.

Metro's 28 by 2028 Plan: A Critical Review | IX. Metro's Congestion Pricing Revenue Pricing Estimates 6 Are Not Credible

Stockholm's current charging system can be traced to the early 1990s, when conventional tolls were proposed to limit peak-hour congestion and finance capacity expansions. Conventional tolls were never implemented. Beginning in 2002, interest at all levels of government, particularly federal, led to the 2006 deployment of the current congestion charging scheme. Originally a trial project, the system was made permanent after a referendum.

The world's best known cordon pricing scheme consists of eight square miles around the City of London, a small political jurisdiction in the middle of a far larger urban area that includes the historic core of the London financial district. The foundation for London's cordon charge scheme was the Smeed Report of 1964. The first detailed proposal was the London Congestion Research Programme's 1995 report, which led to the Road Traffic Reduction Act in 1997, and implementation in 2003.

New York City has been actively considering a cordon charge since at least 2007. Nothing has been approved for implementation, although this may change soon. A long-time opponent, New York Governor Andrew Cuomo, proposed congestion charges of \$11.52/\$25.34/\$2-5 (autos/trucks/for-hire vehicles) for Lower Manhattan, south of 60th Street, to generate \$810 million to \$1,100 million annually.⁸

The *White Paper*, Attachment D, "Primer on Congestion Pricing," (page 2) reports that, "Preliminary average revenues for cordon pricing of all trips entering downtown LA have been estimated to be as high as \$1.2 billion per year (in year of expenditure dollars)." For Los Angeles, it is unclear if Metro's revenue estimates are expressed in current year dollars or constant dollars in an unspecified year (same for MBUFs and cordon pricing). No citation, calculation, or other explanation for the projected \$1.2 billion annual revenue is provided. As this figure is included in both the *Plan* (Slide 19) and *Reimagining*, it is used in **Table 2**, which compares the *Plan*'s proposed Los Angeles congestion charge zone with the proposed Manhattan South Zone and historical actual data for the City of London Zone.

⁸ Walker, Ameena. "Cuomo details plans for MTA, congestion pricing, and more in State of the State." https://ny.curbed.com/2019/1/16/18184024/new-york-andrew-cuomo-state-of-the-state-mta-congestion-pricingmarijuana

Metro's 28 by 2028 Plan: A Critical Review | IX. Metro's Congestion Pricing Revenue Pricing Estimates 7 Are Not Credible

Table 2: Cordon Pricing – Comparison of the London Congestion Charge Zone and the Proposed Los						
Angeles and New York City Congestion Zones ⁹						
Attribute	London	Los Angeles	New York City			
First Operation	February 2003 ¹⁰	FY24 ¹¹	Unknown			
Size (Square Miles)	~21 square km/~8 sq. mi. ¹²	5.84 sq. mi. ¹³	9.272 sq. mi. ¹⁴			
Population	217,200 ¹⁵	71,000 ¹⁶	(2018) 655,751 ¹⁷			
Jobs	1,487,900 ¹⁸	500,000 ¹⁷	(2008) 1,946,770 ¹⁸			
Daily Valid Charges	49,787 ¹⁹	(Unknown)	~250,000-350,000 ²⁰			
Annual Net Revenue	£155.9/\$198.35 million ²¹	\$1,200 million ²²	\$810-1,100 million ²³			
Daily Light-Duty Vehicle Charge	£11.50 (\$14.63) ²⁴	(Unknown)	\$11.52 ²⁶			
Net Revenue/Sq. Mi./Year	~\$25 million	~\$205 million	~\$87-118 million			
Net Revenue/Resident/Year	~\$900	~17,000	~\$1,200-1,700			
Net Revenue/Job/Year	~\$130	~\$2,400	\$415-565			

²⁴ "Congestion Charge," converted to dollars at January 5, 2019 conversion rate.

⁹ This is the formal name of the London zone; the LA and NYC zones have not yet been formed.

¹⁰ Transport for London (TfL), "Congestion Charge:" http://content.tfl.gov.uk/congestion-charge-factsheet.pdf

¹¹ *Re-imagining*, page 2.

BBC. "Congestion Pricing: In London, What is it?" http://news.bbc.co.uk/2/shared/spl/hi/uk/03/congestion_charge/exemptions_guide/html/what.stm

¹³ Los Angeles Times. Mapping L.A. – Central L.A. – Downtown. http://maps.latimes.com/neighborhoods/neighborhood/downtown/

¹⁴ Zip-codes.com, sum of data for lower Manhattan ZIP codes; https://www.zip-codes.com/zip-code/10280/zip-code-10280.asp

¹⁵ Greater London Authority, Ward Profiles and Atlas, https://data.london.gov.uk/dataset/ward-profiles-and-atlas; Analysis of population/jobs of wards within boroughs for those areas within the London Congestion Charge Zone. Population data are for 2015 and jobs data for 2013; both have grown in recent years.

¹⁶ Los Angeles Downtown Center Business Improvement District. "Downtown LA Survey 2018," page 7. https://www.downtownla.com/images/reports/BID.Survey17.Results.v25.pdf

¹⁷ "Downtown LA Survey 2018," page 8.

¹⁸ Census Bureau. CTPP A202105. "Means of Transportation." Manhattan Census Tracts South of Central Park, 2006-2010; Manhattan jobs have subsequently grown approximately 10% from above count.

¹⁹ TfL. "Congestion Charging & Low Emission Zone Key Fact Sheet." 01 July 2018 to September 2018: http://content.tfl.gov.uk/cclez-online-factsheet-jul18-sep18.pdf

²⁰ Estimate based on projected revenue divided by ~260 revenue days/year and estimate of distribution of types of charges and charge rates above.

²¹ TfL. "Annual Report and Statement of Accounts, 2017/18 – 25 July 2018." Notes to the Financial Statements, I. Gross income (continued)," "c) Congestion Charging," £229.8 million Income less £57.5 million Toll facilities and traffic management and £16.4 million Administration, support services and depreciation → £155.9 million net revenue, converted to dollars at January 5, 2019 conversion rate.http://content.tfl.gov.uk/tfl-annual-report-and-statement-of-accounts-2017-18.pdf

²² \$12 billion for the decade ending in FY28 (*Plan*, Slide 19) divided by five years.

²³ Walker. "Cuomo details plans for MTA, congestion pricing, and more in State of the State."

Metro's 28 by 2028 Plan: A Critical Review | IX. Metro's Congestion Pricing Revenue Pricing Estimates 8 Are Not Credible

Revenue/job/year is probably the most important of the three performance indicators calculated, and revenue/resident the least. Most of the trips that cross the London boundary and are liable for the Congestion Zone Charge are home-work commute trips to locations within the Zone, although there are also other types of business, delivery, and personal trips.

The London cordon area is geographically larger than the Los Angeles CBD and has a larger population and more jobs. The Los Angeles cordon would have to generate over eight times the revenue per square mile and over 18 times the revenue per job and revenue per resident to deliver \$1.2 billion/year in revenues. Similarly, the proposed Los Angeles Zone would have to produce about twice as much revenue per square mile, about five times as much per resident, and about 10 times as much per job as the proposed Manhattan South Zone.

The Twenty-Eight by '28 Program Financing/Funding White Paper²⁵ acknowledges that (page 2),

Cordon pricing is more effective when there is a strong Central Business District (CBD) with high quality mass transit operation as alternatives to driving. Los Angeles County does not have a typical CBD, as job centers are dispersed throughout the region.

The Los Angeles area is the prototypical example of disbursed urban form, and the county includes many employment subcenters. Unfortunately, Los Angeles County presently does not have a "high quality mass transit operation." The average passenger loads for Metro's bus, light rail, and heavy rail lines are all among the highest in the nation, making it difficult for Metro to provide any significant additional transit capacity to the Los Angeles CBD in the foreseeable future. Also, if cordon pricing charges are imposed at the London level, ~\$15, this will have a major negative impact on the attractiveness of the CBD as a residential or job site, because Los Angeles presents so many alternatives to locating in the CBD.

The most equitable option would be to put in cordon pricing around some or all of LA's distributed subcenters, although cost, political burden, and limited transit access to subcenters would make this difficult. For the majority of those who currently drive to the Los Angeles CBD, there are no workable alternatives to using an automobile, and this will not change soon.

MBUF PRICING

Metro expects that MBUFs would generate the most revenue. The *White Paper's* estimate (page 22) of \$10.4 billion in annual revenue for MBUFs is more than 1.5 times the Metro FY19 budget of \$6.6

²⁵ Metro. "Twenty by '28." White paper. http://metro.legistar1.com/metro/attachments/18984512-fa10-4b43-aa52-524cfd8bb69a.pdf

Metro's 28 by 2028 Plan: A Critical Review | IX. Metro's Congestion Pricing Revenue Pricing Estimates 9 Are Not Credible

billion. American Public Transportation Association²⁶ figures show this exceeds one-seventh of the \$67.3 billion that constitutes the entire U.S. transit industry's operations and capital expenditures for Fiscal Year 2016 (FY16). It is more than twice the \$3.9 billion in total Federal Highway Trust Fund receipts from all users in the State of California in FY16²⁷ and is one-fourth of the \$41.3 billion collected in the entire **nation**. Neither the *Plan* nor the *White Paper* provides detail on how Metro's MBUF pricing figure was developed, not even the proposed per mile charge.

It is possible to calculate a rough estimate of the MBUF rate needed to generate the revenues Metro estimates MBUFs would provide. The *White Paper* indicates that the \$10.4 billion/year estimate is for the Metropolitan Area, not Los Angeles County. Because their populations are roughly equal, we can substitute the County for "Metropolitan Area" and assume that MBUFs charging will be implemented for all of Los Angeles County. The total average working weekday VMT for the Los Angeles-Long Beach-Anaheim urbanized area (UZA) for 2016 was 279.3 million.²⁸ Assuming 343 working weekday equivalents per year to account for lower weekend and holiday travel, this gives an estimate of 96 billion annual VMT in Los Angeles County. Dividing this into the \$10.35 billion annual revenue projection from the *White Paper* produces a County MBUF charge of \$0.11/mile. Any MBUFs will reduce driving, so increase \$0.11/mile to a \$0.12/mile guestimate to achieve the projected revenues.

By comparison, the current total taxes per gallon of gasoline are approximately \$0.75-1.00, including federal and state charges, sales taxes, and the cap-and-trade costs on gasoline passed through to motorists. Using \$1.00, and assuming 20 miles per gallon gives \$0.05/mile—or, well under half of the implicit MBUF Metro's proposes.

Efforts are underway elsewhere to advance use of road pricing, including some well-publicized demonstration projects, but experience indicates these schemes cannot be deployed quickly. Implementing MBUF would require time to produce a local consensus to move forward, work with stakeholders at the state and national level, acquire legal authority to proceed, and time to plan, design, contract for, and implement the technical system to assess the MBUFs. It would be impossible to implement such a system in Los Angeles alone on anything other than a demonstration basis.

If the MBUF is intended as a congestion charge with higher rates during peak hours, than a major share of the peak-hour reduction would be shifted to non-peak hours. An MBUF that is not time-

²⁶ APTA. 2018 Public Transportation Fact Book. Table 1: National Totals for Selected Modes. 23. https://www.apta.com/resources/statistics/Documents/FactBook/2018-APTA-Fact-Book.pdf

Federal Highway Administration. *Highway Statistics 2016.* Table FE-9. Federal Highway Trust Fund Receipts Attributable to Highway Users in Each State, Fiscal Year 2016. https://www.fhwa.dot.gov/policyinformation/statistics/2016/pdf/fe9.pdf

Federal Highway Administration. *Highway Statistics 2016*. Table HM-71. Urbanized Areas 2016. https://www.fhwa.dot.gov/policyinformation/statistics/2016/pdf/hm71.pdf

Metro's 28 by 2028 Plan: A Critical Review | IX. Metro's Congestion Pricing Revenue Pricing Estimates 10 Are Not Credible

specific would have less of this desirable effect, but total VMT will likely decline by a nontrivial amount, diminishing the revenues collected.

Corridor Pricing

Corridor pricing is an interesting but complex concept. The lack of demonstration projects to date and the difficulty of determining charging levels and the technology to make it work leaves many unanswered questions. For example, do residents of the corridor who travel within the corridor without leaving it pay a fee?

ANALYSIS

It is unlikely that the last three options can generate additional funding in time to be of any use financing the projects in the *Plan*. The congestion pricing element in the *Plan* should be viewed as a first discussion of possible long-term changes and/or additions Metro wants to pursue with respect to funding sources, some of which have considerable merit—but with very questionable projected annual revenues.

Any of the last three strategies would take several years to implement, which makes it difficult for Metro to extract eight years of revenue-generation from them. Further, the last three prospective revenue sources are probably mutually exclusive for political, technical, and public acceptance reasons. Achieving any one would be an impressive accomplishment. Implementing more than one would be very difficult politically, and the combined revenues would certainly be discounted significantly.

Road use charges most generally are discussed in the U.S. as replacements for the current motor fuel tax model, and less frequently as a strictly incremental source of revenue. If Metro's potential revenue sources are intended as additional charges rather than as fuel tax replacements, then their approval will be even more politically challenging. If Metro does not intend these charges to be additional costs to drivers, but replacements for current road financing mechanisms, then the calculation of new funding should be done on a net, not a gross, basis. This is particularly important for Metro, which collects five different sales taxes totaling 2¼% on the sale of motor fuels, including collecting sales taxes on the other motor fuel taxes and fees.

The State of California collects substantial sales tax revenues on motor fuel. A significant share of both the federal and state fuel tax revenues go for transit. Barring new legislation, likely requiring a two-thirds majority vote, Metro does not have the legal authority to impose a tax on services, or on other governmental charges that are not imposed on the sale of goods. It is unclear if Metro could acquire this authority.

Metro's 28 by 2028 Plan: A Critical Review | IX. Metro's Congestion Pricing Revenue Pricing Estimates 11 Are Not Credible

Also, these potential new road use revenue sources would have collection costs that might range from several times to an order of magnitude greater than current collection costs. *Washington State Road Usage Charge Assessment: Business Case Evaluation Report* (January 7, 2014) calculated the collection costs for the current fuel tax system as 0.4%-0.6%. Other studies report higher values. Balducci²⁹ reports 0.2% in a 2003 study, 0.8% in a 1994 study, and 1.0% in a 2003 study, and Fleming reports 4.5% exclusive of opportunity costs.³⁰ The costs for MBUF systems such as smart phone and stand-alone automated smart mileage meters are 12%-13%. The lower the toll, the higher the collection cost percentage is. Fleming (page 39) estimates 5%-12% for toll roads, with reductions for MBUFs (pages 43-47). The risks of non- or under-payment and outright fraud would also be much higher than for the current fuel tax collection model, particularly in the early years of collection.

Based on staff presentations at Metro Board meetings and in supporting documents, Metro's primary interest in congestion pricing appears to be revenue generation, with only secondary attention to reducing congestion. Managing congestion should be the primary goal, with revenue generation the secondary goal. Further, increasing cost of driving for Los Angeles County's many lower-income residents, when the great majority of them have no workable alternative means of transportation, would be very poor public policy.

The cities Metro reports that have implemented congestion charges all have more-extensive transit systems relative to Los Angeles. Transit in the Los Angeles region has been subject to an even larger long-term decline than in the rest of the nation. Transit serves a relatively small portion of Los Angeles trips compared to other very large U.S. cities. Major growth over the next decade is extremely unlikely, given Metro's record of declining transit patronage. It is interesting to speculate what could be done to improve LA transit with large new congestion charge revenues, but Metro has for decades had access to more locally controlled revenues than almost any other U.S. transit operator, and its use of these funds to date has produced lower, not higher, transit ridership. Implementing Los Angeles County congestion charges would mean that Los Angeles' large population of lower-income residents would face higher costs for their daily travel, and it is incumbent on Metro to use any new congestion charge revenues to target improving the transportation options available to low-income households. At a minimum, improving and expanding bus service will better serve the riders Metro is currently losing.

²⁹ Balducci, Patrick et al. Costs of Alternative Revenue-Generation Systems. Transportation Research Board. National Cooperative Highway Research Program Report 689. 2001. 10. https://www.nap.edu/download/14532#

³⁰ Fleming, Daryl S. et al. *Dispelling the Myths: Toll and Fuel Tax Collection Costs in the 21st Century.* Reason Policy Study 409. November 2012. 23. https://reason.org/wp-content/uploads/files/dispelling_toll_and_gas_tax_collection_myths.pdf

Metro's 28 by 2028 Plan: A Critical Review | IX. Metro's Congestion Pricing Revenue Pricing Estimates 12 Are Not Credible

CONCLUSIONS

1. Transportation economists have argued for 60 years that congestion pricing is the most promising means for managing traffic congestion. In addition, congestion tolls would generate new revenues that can be used for transportation needs.

2. Structuring an area-wide congestion pricing scheme for Los Angeles will be a lengthy and challenging process with uncertain outcomes, in part because the impacts on low income households will be significant. Still, congestion pricing has the potential to improve network level of service.

3. Congestion pricing is best applied as a congestion management tool, and only secondarily as a revenue source.

4. Expanding the HOT network is feasible and likely productive.

5. Metro is overstating the potential revenues from the more innovative congestion pricing schemes it is considering. The agency should focus on objective, credible evaluations of such important alternatives, including realistic implementation schedules.