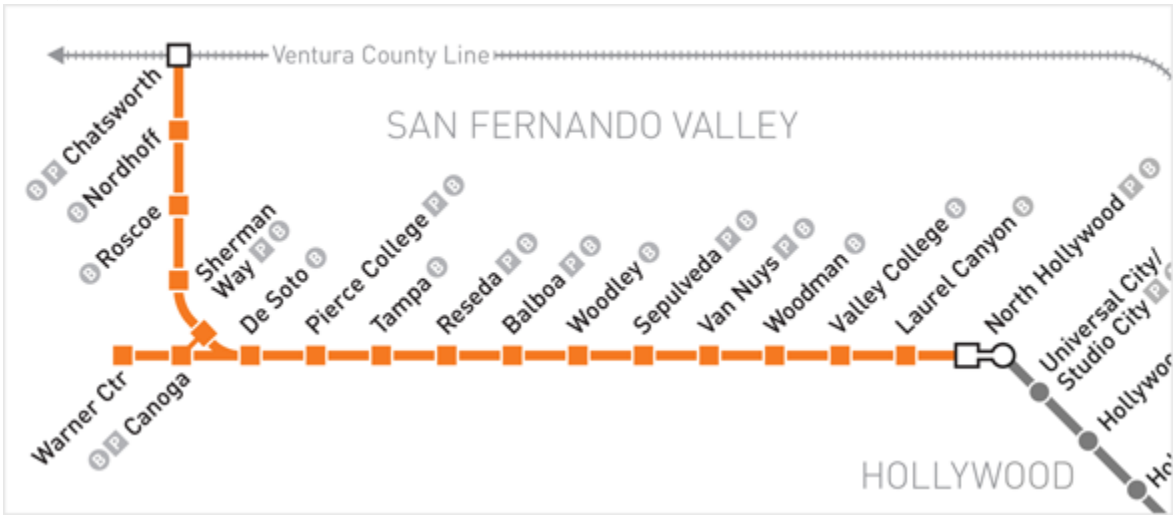
The financial model and assumptions portion of Metro's 2009 Long Range Transportation Plan contemplates annual ridership growth over the life of the 30-year plan. It assumes annual rail growth at 1.25 percent and bus growth at 0.7 percent.

ORANGE LINE BUS RAPID TRANSIT AS A MODEL OF SUCCESS

The Orange Line BRT, which debuted in October 2005, is an unprecedented Metro success story because it has already surpassed its 2020 ridership goal, though it may not be an unqualified success. The Orange Line serves the needs of 30,000 riders per day across the San Fernando Valley. The busway runs 14.7 miles, between the end of the Red Line in North Hollywood and Warner Center, and an additional four miles to Chatsworth and the Amtrak/MetroLink terminal (see Fig. 5). The busway parallels Chandler Boulevard for most of its tree-lined journey, crossing major streets. A bike route that is filled to capacity on weekends parallels a portion of the route.

Fig. 5

Map and Station Locations



Metro buses are powered by compressed natural gas, which has less impact on the environment than petroleum products and is more cost effective. These benefits are lost however, if the buses are traveling their routes empty.

The Orange Line has proven it fills a need in the San Fernando Valley.[17] However, it is not without its faults. The fact that for most of its journey it has its own bus lane is a plus, but the fact that it gets caught at traffic lights is a negative. Metro experts surmise that the bus trip from end to end would be reduced by up to eight minutes just by allowing the buses to force green lights when they approach intersections. Another option Metro is pondering is grade separations at street crossings, avoiding the intersections altogether. This option would cost $28 million to $40 million per crossing, assuming 48 potential crossings, along with the downtime the line might experience while these crossings are being built.[18]

The Orange Line buses, like buses throughout the system, do not accommodate more than two bikes per bus. The demand for bike space exceeds the buses' allotted space for bikes. Although Metro says it encourages bicycling to and from the line, it is apparently not prepared to accommodate all cyclists.

Stops in the middle of the Orange Line route are packed during rush hours (7 a.m.–9 a.m., 3 p.m.–7 p.m.) because there are two community colleges and at least one high school on the route. One solution Metro is looking at is running more buses between the busiest stops, during its busiest times, an improvement standing-room-only passengers would appreciate. However, this of course requires extra buses, extra drivers, and more bus and busway maintenance, as well as associated labor costs.

The Orange Line resulted from a decision to continue on with bus service rather than wait for rail to be approved. The line was built as a busway because, at that time, the state of California had banned above-ground rail transit in the west San Fernando Valley. Governor Jerry Brown signed Assembly Bill 577 (sponsored by Assemblymember Adrin Nazarian), which repealed then-State Senator Alan Robbins's Senate Bill 211, known as the Robbins Bill, making the conversion to light rail legally possible effective Jan. 1, 2015.[19]

The original cost of the Orange Line was $324 million—$23 million per mile for the first 14.7 miles. The four-mile extension to Chatsworth opened in June 2012, four years early and $61 million under budget.

The right-of-way for the original portion of the Orange Line was purchased with funds from Proposition 108—which states those funds must be used for exclusive busways that are converted, within 10 years after completion of construction, into rail lines. That 10-year deadline arrives in October 2015. According to a Metro executive, Metro will wait for the

[17] William Vincent and Lisa Callaghan, A Preliminary Evaluation of the Metro Orange Line Bus Rapid Transit Project, April 2, 2007, http://www.gobrt.org/Orange_Line_Preliminary_Evaluation_by_BTI.pdf.
[18] www.athalyeinc.com/projects/Bridges-and-Structures/Lakeview-Avenue-Grade-Separation-Project.html, www.athalyeinc.com/projects/Bridges-and-Structures/Laurel-Street-Grade-Separation.html.
[19] asmdc.org.

state of California to ask for repayment, which could be anywhere between $40 million and $85 million. The possible Orange Line conversion to light rail cannot be paid out of Measure R tax funds, because light rail was not addressed in that measure as it was not legally allowed at the time.

President Barack Obama's proposed FY2015–16 transportation budget addresses funding for only the Regional Connector and two Purple Line extensions. Metro supports continuing the light rail discussion to address the conversion costs, which are estimated at $100 million per mile.[20] The Metro Board—in conjunction with Community Organization Grants Scheme, Caltrans, and Metrolink—wants to draft a new transportation sales tax ballot initiative that could possibly go before voters as early as 2016.[21]

Metro Studies Relating to the Orange Line

As the information below illustrates, the Metro Board has spent a lot of time and money gathering information regarding the future of the Orange Line Bus Rapid Transit.

- August 2011—Los Angeles County BRT and Street Improvement Study approved by the board.[22]

- February 2014—Board received the above study.[23]

- February 2014—Board approved the countywide approach for preparing Mobility Matrices.[24] The Subregional San Fernando Valley report addresses the Orange Line.

- July 2014—Board unanimously approved Metro staff to do a feasibility study regarding converting the Orange Line to light rail, among other objectives.[25]

- August 2014—Metro staff procured consultant services to develop the Mobility Matrix, whose report was expected in April 2015.[26]

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[20] East San Fernando Valley Transit Corridor Alternatives Analysis Report, Source: Metro, 2012.
[21] The LRTP Update vs. Ballot Initiative Dilemma, July 16, 2014. Amendment to the SFV/SGV High Capacity Transit Corridor Motion.
[22] Metro 21 Planning and Programming Committee Feb. 19, 2014 Subject: Los Angeles County Bus Rapid Transit and Street Design Improvement Study.
[23] Ibid.
[24] Metro 12 Revised Sept. 17, 2014. Subject : San Fernando/San Gabriel Valley High Capacity Transit Corridor. Finance, Budget and Audit Committee. Planning and Programming Committee.
[25] San Fernando Business Journal, Mark Madler, July 25, 2014.
[26] Metro 12 Revised Sept. 17, 2014. Subject : San Fernando/San Gabriel Valley High Capacity Transit Corridor. Finance, Budget and Audit Committee. Planning and Programming Committee.

- September 2014—Metro staff presented many immediate short- and long-term proposals, including adding service over the highest demand segment of the Orange Line and making room in Orange Line buses for more bikes by removing four to six seats. Long-term proposals included buses longer than 60 feet and grade separations. No costs were associated with either option, the report stating that "costs vary greatly."[27]

- March 2015—Subregional Mobility Matrix San Fernando Valley Final Report is published.[28]

The success of the Orange Line BRT encouraged the Metro Board to explore additional BRTs in other areas of its service domain. A transit expert at the Lewis Center for Regional Policy Studies and the Institute of Transportation Studies at UCLA (the UCLA source) explained that BRTs along busy corridors are effective in increasing ridership, e.g. Wilshire corridor to downtown.

The BRT is less expensive than building light rail, but light rail can carry more passengers by adding cars without adding drivers. But a light rail without grade separation at intersections is not as efficient as a subway, which would of course be much faster but much more expensive.

FAREBOX RECOVERY RATE AND FEDERAL FUNDING

The farebox recovery rate is determined by counting all fares collected in one year from riders of Metro bus and rail, divided by the total cost to operate Metro's bus and rail systems. The goal of a 33 percent farebox recovery rate is used in discussions regarding federal funding of Metro systems. Metro uses the 33 percent rate as a tool to reflect its efforts to wisely manage its operations budget, apart from subsidized sources. Metro Budget personnel said the 33 percent is an accepted standard of fares-to-operations rate for most transit systems across the nation. The UCLA source notes the rate is valuable as a standard for competing for state and federal monies.

However, four high-ranking Metro Budget personnel repeatedly said the receipt of federal funds is not contingent upon achieving any specific farebox recovery rate. Metro has received federal funds without ever achieving this rate. Various Metro sources report its

[27] Metro 12 Revised Sept. 17, 2014. Subject : San Fernando/San Gabriel Valley High Capacity Transit Corridor. Finance, Budget and Audit Committee. Planning and Programming Committee.
[28] Prepared by STV Incorporated.

current rate at either 25 percent or 26 percent. The most recent proposed federal budget earmarked $330 million to subsidize the expansion of the rail system in the county.[29]

This 33 percent rate was used as part of the justification to raise fares in September 2014. Metro's 2009 Long Range Transportation Plan contemplates two more fare increases, again in part based on reaching the 33 percent rate. The Metro board has not approved these two new increases, as it plans to undertake more reviews. The current position of Metro budget staff is that the increases will be necessary for continued maintenance of the system.

In a document dated Sept. 17, 2014, Metro's Finance, Budget and Audit Committee found that achievement of the 33 percent goal is used as justification for Metro's increased efforts to reduce fare evasion and improve fare collection.

SECURITY AND SAFETY

Transit experts have found that a secure transit system encourages ridership. Studies confirm most individuals' intuitive conclusions that the safer riders feel on the transit system, the more likely they are to continue to ride it.[30] Metro has three crimes per 1 million journeys, according to Metro's executive officer of the Department of Program Management and a commander on the front lines of the system. There are 14,000 reported crimes per year, of which the large majority is fare evasion. There are 2.8 accidents per 10,000 miles involving train/auto and train/pedestrian, for a total of 125 accidents logged per year. Since 1993, only one homicide has been committed on the transit system. Metro has 10,000 cameras in multiple locations to cover the 1.5 million journeys per day, 45 million journeys per month, and a half-billion journeys a year. The cameras are on buses and trains, and at stations, and are monitored by one or two people. The recordings are kept indefinitely. There is a red alert button at every metro station/platform in case of an emergency, and rail cars have an intercom system that allows riders to speak to the driver.

The Transit Policing Division of the Los Angeles County Sheriff's Department is charged with security of the transit system and has a stated zero tolerance for crime. The division comprises 650 employees, 435 of whom are sworn officers, including plainclothes personnel.

Metro has four teams, each made up of a sworn officer and a clinician trained in mental health; the teams travel the transit system eight hours per day to help the mentally challenged.

[29] Metro.net, Legislative Alert, Monday, Feb. 2, 2015.
[30] UCLA Institute of Transportation Studies, "The Factors influencing Transit Ridership: A Review and Analysis of Ridership Literature," Sept. 1, 2003.

Fare Evasion

One area of controversy regarding security is in dealing with fare evaders on rail. According to the 2014 Fare Enforcement Strategic Plan, sheriffs and Metro security routinely conduct fare inspections on bus and rail by deploying dedicated fare enforcement teams to target peak periods and Top 10–noted fare evasion areas on the Metro system. Fare inspections are performed by 106 sheriff's assistants, eight metro security officers (during the evenings), and 75–80 sheriff's deputies per shift. Fare inspection times and locations are scheduled randomly, as well as specifically based on high incident rates. Metro has made improvements in fare collecting—including TAP[31] validating machine location, gate-latching,[32] and the creation of the Fare Evasion Task Force.[33]

Community groups have voiced their concerns regarding the attempts of sworn officers to cite fare evaders. They believe that a simple encounter over fare enforcement has the potential to escalate to a degree where someone may be hurt or worse. This kind of incident would be a public relations problem for Metro and could be a spark that could enrage a community for some time. The motivation to cite fare evaders is fairly clear and understandable to the rider: that anyone who rides a bus, rail, or light-rail should pay a fare.

Metro's System Safety, Security and Operations Committee's document of Sept. 18, 2014, outlines other motivations for stopping fare evaders and collecting more fares. This document references Metro's 2009 Long Range Transportation Plan: "Full funding grant agreements assume an increase in farebox recovery from the current 26 to 33 percent, which would ensure fiscal solvency of Metro's bus and rail system…to ensure that Metro is collecting the maximum amount of fares due from customers." These statements are misleading and should not be used as a reason to cite fare evaders. As stated above, there is no direct connection between any funding and a farebox recovery rate of 33 percent. Metro planners and budget personnel said funding and/or solvency of Metro is not contingent upon any such attainment. For Metro to argue that the rate supports its efforts to catch fare evaders is specious.

Signage

Metro posts no courtesy signage on escalators to encourage riders to stand to the right and walk on the left. In 2014, Metro standardized escalator safety signage, making it compliant

[31] Transit Access Pass: A plastic card that contains state-of-the-art smart chip technology. www.taptogo.net.
[32] Once gates are latched, turnstiles will not allow a rider to enter the station unless a TAP card with an appropriate fare has been tapped at the gate.
[33] Metro 11, Revised Finance, Budget and Audit Committee, Sept. 17, 2014, Subject: Fare Collection Improvement Strategies.