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REVISED
FINANCE, BUDGET AND AUDIT COMMITTEE
PLANNING AND PROGRAMMING COMMITTEE
SEPTEMBER 17, 2014

**SUBJECT: SAN FERNANDO VALLEY/SAN GABRIEL VALLEY HIGH CAPACITY
TRANSIT CORRIDOR**

ACTION: RECEIVE AND FILE

RECOMMENDATION

Receive and file this response to the July 2014 Board directive as amended directing the Chief Executive Officer (CEO) to report in September 2014 with recommendations to develop and fund a feasibility study including construction and engineering concepts, ridership and environmental estimates for a San Fernando Valley/San Gabriel Valley High Capacity Transit Corridor. Attachment A contains the July 2014 Board directive as amended (Item 76).

ISSUE

At the July 24, 2104 meeting, the Board directed the CEO to report back at the next Board meeting with recommendations for developing and funding a feasibility study to examine options for enhancing service, performance and ridership on the Metro Orange Line to decrease travel time and reduce traffic interruption. Specifically, it included assessing Bus Rapid Transit (BRT) upgrades, conversion of the Orange Line to Light Rail Transit (LRT) and potential implementation strategies.

The Board directive also placed emphasis on connecting the San Fernando Valley and the San Gabriel Valley through developing and funding a feasibility study examining a San Fernando Valley/San Gabriel Valley High Capacity Transit Corridor including: 1) Connecting the Gold Line Foothill Extension with planned service to the San Bernardino County Line to the Regional Intermodal Transit Center (RITC) at the Bob Hope Airport, to the Red/Orange Line in North Hollywood and on through to the Orange Line ending in Warner Center in one rail transit line; 2) Connecting the North Hollywood Station and Bob Hope Airport; and 3) Implementing a BRT through this corridor.

For the two proposed corridors, cost effectiveness of the improvements and potential implementation strategies for both corridors to be included into the Strategic portion of the Long Range Transportation Plan (LRTP) will also need to be addressed.

The motion as amended requested clarification as to how advanced planning efforts such as the undertaking of feasibility studies corresponds to the LRTP planning process including a plan and timeframe for updating the 2009 adopted LRTP. This report responds to the Board directive.

DISCUSSION

Mobility Matrix

In February 2014, the Board approved the holistic countywide approach for preparing the Mobility Matrices. This approach will develop a framework to allow for consistency in developing screening criteria that will be used to identify and evaluate potential transportation corridor improvements. The Mobility Matrix will not develop a ranked or prioritized list of projects, but rather will provide a high-level evaluation tool to identify short, medium and long-term candidate projects. As it is beyond the scope of work to be completed for the Mobility Matrices, the consultants will not be tasked with completing feasibility studies, alternatives analysis evaluations which compare alignments or modes, detailed engineering or construction concepts including preliminary design and BRT upgrade assessments such as signal prioritization or grade separation options. These matrices will serve as a basis for updating the LRTP.

In August 2014, staff completed the procurement for consultant services to develop the Mobility Matrices. As a starting point, the consultants are reviewing the Preliminary Combined Unfunded Project List that was originally developed in December 2013. This list includes unfunded transportation needs identified by the subregions in response to Directors' Antonovich and Dubois letters, the unfunded Measure R scope elements, and the 2009 LRTP unfunded projects (Strategic element). For the San Fernando Valley and the San Gabriel Valley, the list included the following projects which are part of the Board directive: Bus Option for Orange Line Extension to Bob Hope Airport; Rail Option for Red Line Extension from North Hollywood Station to Burbank Airport Metrolink Station; Rail or Bus Option for SR-134 Transit Corridor between Red Line North Hollywood Station and Gold Line Del Mar Station; Rail Option for Gold Line Extension to Bob Hope Airport; and Rail Option for Gold Line Foothill LRT Extension from Azusa to Claremont.

San Fernando Valley

The Mobility Matrix consultant for the San Fernando Valley subregion will conduct high-level sketch planning analysis as it pertains to assessing the conversion of the Orange Line to LRT. The analysis will focus on developing initial concepts, cost and effectiveness detail including: 1) General physical configuration information; 2) Travel time information (based on speed, signal preemption); 3) General ridership/user

demand information (baseline model run); and 4) General cost information (high level capital and operating costs). Utilizing the above, the consultant will develop rough cost effectiveness valuation.

San Gabriel Valley

The consultant for the San Gabriel Valley will similarly conduct a high-level sketch planning analysis including the aforementioned to examine the Gold Line Extension from Azusa to Montclair to Bob Hope Airport and extension of the Orange Line and/or the Red Line to the Bob Hope Airport. Recognizing the inter-relationships and adjacent interests of the two subregions, the two consultants will work in coordination to develop information.

Los Angeles County Bus Rapid Transit and Street Design Improvement Study

In February 2014, the Planning and Programming Committee received the completed Los Angeles County BRT and Street Design Improvement Study. The Study's purpose was to identify, analyze and develop recommendations for an effective Countywide BRT system that includes dedicated peak hour bus lanes along with a number of other general bus speed improvements. The Study identified and recommended feasible and cost-effective techniques to improve the quality of street life at or near the bus stops along the recommended BRT corridors. The BRT corridor from Burbank to North Hollywood and the BRT corridor between the North Hollywood Red Line Station and the Orange Line to the Pasadena Gold Line were evaluated. The two BRT corridors were subsequently combined as one potential candidate corridor. The Study analysis showed it to have high potential for BRT implementation and recommended further technical corridor level analysis. Motion 80 also approved at the July Board meeting directed further work be conducted on this corridor. Attachment B contains the Board directive.

Orange Line BRT Operational Enhancements

The Orange Line was first opened in 2005 as a 14.7 mile bus way and street running BRT. The Chatsworth branch, opened in 2012, added another 4 miles of bus way. Presently, the Orange Line approaches 30,000 average weekday ridership. It is the second most popular Metro bus line behind the Rapid Line 720 and the most popular line in the Valley. The Orange Line is currently providing service every four minutes during extended weekday peak morning and afternoon periods using high capacity 60-foot buses. This service is running at or near Metro policy maximum passenger loading levels for most of these peak periods, with the peak loads occurring between the North Hollywood and Van Nuys stations. Service is also provided for frequent mid-day and weekend service at eight and ten minutes, respectively.

Metro Operations staff continually monitors the Orange Line's performance. To date, most of the significant delays occur at traffic signals and at high-volume stations where dwell times are extended. The following immediate, short and long-term proposals have been identified.

Immediate Proposal

1. Instruct operators to maintain cruising speed of 35 to 45 mph in order to work with the signal system. The sign postings act to instruct operators to maintain a cruising speed on certain segments, which will help to trigger a larger number of green lights and provide the appearance of a smoother and faster ride. The initial implementation is already in progress with signs posted on Chandler Boulevard. The results have been positive. This proposal will increase efficiency, particularly if paired with increased intersection speeds (see Short-term Proposal #1). The postings are expected to be applied to the remainder of the alignment by November 2014.
2. Investigate extending the four minute service before and after the peak periods to increase the number of service hours while utilizing the existing bus fleet. This change can reduce overcrowding by encouraging some riders to take earlier or later trips. Staff would need to conduct a cost and manpower analysis to determine its overall impact to customers prior to initial implementation.
3. Investigate the feasibility of adding service over the highest demand segment of the line from North Hollywood to Reseda with some bus trips turning back at some point west of Reseda. Staff would need to conduct a cost and manpower analysis to determine its overall impact to customers prior to initial implementation.

Short-term Proposals

1. Increase the intersection crossing speeds from the artificially low speed of 10 mph to not more than 25 mph. Several intersections will be exempted from this because of specific hazards, including the Burbank/Fulton and Sherman Way stations. Both the City of Los Angeles and the City of Los Angeles Police Department would need to approve this change before Metro can implement it. The entire trip from end to end on this alignment is 18 miles and takes approximately 48 to 66 minutes. If implemented, a time savings of up to eight minutes per trip could be realized.
2. In the month of July 2014, there were 3,258 bicycle boardings and 108 boardings per average weekday. Staff will evaluate the service impacts of removing four to six seats on the buses to allow space for bikes.
3. Use the real-time information gained from the signal system and the location of buses to develop a software program to signal operators when to speed up or slow down as they approach signals. Metro would need the City of Los Angeles to permit the use of this data and investigate capital cost to equip Metro buses to use this system. In order to use full signal pre-emption for the entire length of the system, the City of Los Angeles would need to engage and be supportive of this proposal.

Long-term Proposals

1. Evaluate the use of buses longer than 60 feet and seek policy and legislative changes, if needed.
2. Evaluate grade separation of the alignment when it crosses major intersections. The primary benefit is that the transit vehicle has no traffic signal to traverse and therefore will not encounter any potential delay which at some signals could be an average of 90 seconds to two minutes. Streets that should be considered for grade separation include: Laurel Canyon, Van Nuys, Sepulveda, Balboa, and Reseda Boulevards on the main line and the entire length of the Orange Line extension from Warner Center to Chatsworth. Grade separation costs can vary greatly.

Ultimately, there are a number of short-term and long-term projects that need to be considered that would improve the operation of the Orange Line. Further study is necessary to place a cost estimate on each approach.

ALTERNATIVES CONSIDERED

The Board could direct staff to undertake a feasibility study of the corridors identified in the motion. This is not recommended as such a study could cost upwards of \$3 million and take 12 to 18 months to complete, once a contract is awarded and would require two additional Full Time Equivalent (FTEs).

These corridors are not in the constrained element of the Long Range Transportation Plan (LRTP). Conducting the high level sketch planning through the Mobility Matrix work would provide the Board with rough order of magnitude cost and ridership information as well as preliminary performance data and provide information for the update to the LRTP. Upon completion of this analysis, the Board could direct further work be performed.

NEXT STEPS

As currently scheduled, the Mobility Matrix work will be completed in February 2015. Staff, in conjunction with the consultants, will continue to work closely with all the subregions to develop the Mobility Matrices and provide quarterly oral reports to the Board as directed. Upon completion, staff will return to the Board. Operations staff will continue to investigate improvements that can be made to the Orange Line and provide the Board with potential cost and recommendations.

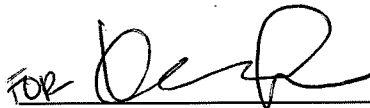
ATTACHMENTS

- A. "San Fernando Valley/San Gabriel Valley High Capacity Transit Corridor" and as Amended
- B. Motion by Directors Antonovich, Najarian, Ridley-Thomas and Garcetti to Item 80

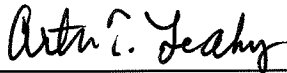
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Motion by:

Councilmember Paul Krekorian, Mayor Eric Garcetti, Supervisor Michael Antonovich, Supervisor Zev Yaroslavsky, Director John Fasana and Director Ara Najarian

San Fernando/San Gabriel Valley High Capacity Transit Corridor

July 16, 2014

The Orange Line Bus Rapid Transit (BRT) has been a tremendous success, with ridership approaching 30,000 a day – far reaching original projections. With its popularity and based on its current capacity, it is time to look at how we can enhance service, performance and ridership. Some options include signal prioritization, enhanced grade separations, as well as conversion to rail.

While the Orange Line serves an important role in connecting riders across the Valley to transit, there is a need to look at the possibility of expanding and connecting our network to Burbank, Glendale, Eagle Rock and Pasadena in order to have a continuous link between the San Fernando and San Gabriel Valleys. Additionally, with recent completion of the Regional Intermodal Transit Center (RITC) and enhanced Metrolink service to Bob Hope Airport, one of the most critical remaining missing links of the current system is a more direct connection between North Hollywood Station and the Bob Hope Airport.

Such a line could not only meet the substantial transit needs of that corridor, but could also service the Bob Hope Airport and create a vital train-to-plane link that would be transformational for the entire region.

In advance of a potential ballot measure and the passage of AB 577 (Nazarian) into law which allows for the construction of Light Rail in the Southeast San Fernando Valley

I THEREFORE MOVE that the Board instruct the CEO to report back to the Board at the next board meeting with recommendations for:

- A. To develop and fund a feasibility study – including construction and engineering concepts, ridership and environmental estimates – to examine options for enhancing service and ridership on the Orange Line to decrease travel time and reduce traffic interruption, including:
 - 1. BRT upgrades assessment – in addition more articulated buses
 - 2. BRT to low/high floor Light Rail Vehicle (LRT) Conversion Assessment
 - 3. Signal prioritization for the current BRT;
 - 4. Grade separations and options
 - 5. Cost-Effectiveness of Improvements

6. Potential Implementation Strategies which include adding this corridor into the strategic portion of MTA's Long Range Transit Plan (LRTP)
- B. To develop and fund a feasibility study – including construction and engineering concepts, ridership and environmental estimates – of a San Fernando/San Gabriel Valley High Capacity Transit Corridor which would examine:
1. Connecting the Gold Line Foothill Extension with planned service to the San Bernardino County Line to the RITC at the Bob Hope Airport, to the Red/Orange Line in North Hollywood and on through to the Orange Line ending in Warner Center in one rail transit line.
 2. Connecting North Hollywood Station and Bob Hope Airport, including rail and bus options that could include the extension of the Orange Line and/or the Red Line to the Bob Hope Airport.
 3. Build on existing MTA staff and others feasibility studies and take next steps toward implementing a BRT through this corridor
 4. Cost-Effectiveness of Improvements
 5. Potential Implementation Strategies which include adding this corridor into the strategic portion of MTA's Long Range Transit Plan (LRTP)

I FURTHER MOVE that the Board direct the CEO to work with the San Fernando Valley Council of Governments (SFVCOG), the San Gabriel Valley Council of Governments (SGVCOG) and affected jurisdictions including the Burbank-Glendale-Pasadena Airport Authority, City of Los Angeles, City of Glendale, City of Burbank, and City of Pasadena to achieve these goals.

I FURTHER MOVE that the Board direct the CEO to identify possible funding for all these aforementioned studies.

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The LRTP Update vs. Ballot Initiative Dilemma

July 16, 2014

Amendment to the SFV/SGV High Capacity Transit Corridor Motion

By Directors O'Connor, Dubois and Knabe

The motion before us today clearly makes the case for the need to address the growing Orange Line ridership. The lifting of the ban on at-grade light rail in this corridor makes it only logical that Metro should seek to undertake a feasibility study for the conversion of the Orange Line BRT to a light rail project at some point in time. The fact remains, however, that feasibility studies will not provide funding commitments until the project is included in an updated LRTP. The question then becomes: (a) under what process should feasibility studies such as those described in the Motion be conducted, and (b) where do they belong in the existing queue of Metro Long Range Transportation Plan budgeted and approved transit project studies?

Meanwhile, Metro staff is bringing before us this month updates of the Short Range Transportation Plan (SRTP), staff is undertaking the Board directed subregional Mobility Matrix Studies, and concurrently proceeding with Ballot Initiative "outreach" efforts with the TAC Working Group and establishing an Executive Committee with the COGS, Caltrans and Metrolink as part of an effort to draft a potential new Transportation sales tax Ballot Initiative that could possibly go before the voters as early as 2016.

Within that context, this Motion brings into focus questions as to the efficacy of undertaking the preparation of any new sales tax Ballot Initiative outside the Long Range Transportation Plan *Update* planning process.

It is questionable how a new Ballot Initiative can balance the need to complete the regional investments approved in Measure R, bring forward the projects identified in the **2009 LRTP Strategic Plan** in Tiers 1 and 2, manage to incorporate "new" projects seeking feasibility study-funding without running the risk of becoming a de facto subregional-centric "shopping cart" of projects that fails to reflect Metro's commitment to developing sustainable mobility programs such as the **Active Transportation Agenda** and **Complete Streets** that address local and subregional congestion issues, and integrating State mandated sustainability strategies?

The challenges listed above coupled with those of developing new funding sources and re-balancing transportation priorities and funding need to be developed through a transparent, inclusive and innovative Long Range Plan planning process from which a new sales tax Ballot Initiative should emerge.

All of these issues described above need to be weighed in the context of the shortcomings of Measure R; primarily that the need for its counter-part, Measure J, lay in the fact that, for all its leadership and ambition, Measure R substantially underfunded and underestimated the costs of the transit and highway Expenditure Plan projects. This

The LRTP Update vs. Ballot Initiative Dilemma

July 16, 2014

ambitious Motion reinforces the imperative that any new sales tax Ballot Initiative must contain projects whose costs are carefully estimated and fully funded if we are to garner the support of the subregions, cities and voting public.

WE, THEREFORE, MOVE to amend the *High Capacity Corridor* Motion to instruct the CEO to return in September, 2014 with a report back to the Board on

1. A plan to update the 2009 LRTP;
 - a. including the feasibility of complying with the instructions outlined in the Motion and similar advanced planning or other feasibility studies for the Strategic Plan or new initiatives;
2. That Metro staff return with recommendations to re-focus current Ballot Initiative energies and resources towards the update of the 2009 LRTP,
 - a. including a plan to incorporate subregional priorities developed through the subregional mobility matrix studies, using the joint work program to better link SCAG's 2016 RTP process with a Metro LRTP update; and
3. A timeframe under which the updated LRTP could be completed.

***MOTION BY DIRECTORS MICHAEL ANTONOVICH,
ARA NAJARIAN, MARK RIDLEY-THOMAS AND ERIC GARCETTI***

July 24, 2014

After several years of evaluation, MTA staff developed a list of eligible corridors for additional bus rapid transit (BRT) projects based on, among other things, ridership potential and net savings of operations funding. Two of the corridors hit upon unmet transit needs, which would greatly relieve congestion and link major transit centers.

The first corridor, Vermont Avenue, has long been recognized as one of the most congested streets in Los Angeles. According to MTA statistics, the Vermont Avenue corridor has among the most daily bus boardings in all of LA County. The bus system is unable to accommodate commuter demands without service improvements.

The second corridor between the North Hollywood Red/Orange Lines and the Pasadena Gold Line, by all accounts, has huge ridership potential and would connect the San Fernando and San Gabriel Valleys. Metro, in collaboration with Bob Hope Airport, is providing an important plane-to-train connection through improvements to the Metrolink Antelope Valley and Ventura County Lines. The Airport recently opened its Regional Intermodal Transit Center that provides seamless connectivity from trains to buses to planes. An additional connection through enhanced BRT is warranted to increase mobility.

I THEREFORE MOVE that the CEO direct staff to advance these projects and provide the Board with a report back in September on an implementation plan to include:

- A. Operations requirements
- B. Funding requirements
- C. Implementation timelines

I FURTHER MOVE that the CEO:

- A. Immediately initiate the hiring process for the Bus Rapid Transit planning position included in the Board-approved MTA Fiscal Year 2014-15 budget
- B. Dedicate additional staff to the aforementioned projects and the Countywide BRT Study as needed