



## **Sepulveda Pass Corridor Project Preliminary Public-Private Partnership Concept**

This Paper describes a concept for expediting the development and implementation of a regional transportation corridor between the San Fernando Valley and the Westside of Los Angeles, with a significant portion of the initial and ongoing costs for project development, design and construction, and operations and maintenance borne potentially by private sector.

- The transit connection between the San Fernando Valley and the Westside of Los Angeles has been discussed – in concept – for many years. There are many who believe that the existing demand for travel in this corridor, coupled with northern expansion of LA County development to the Santa Clarita and Antelope Valleys as well as the continued emphasis on jobs and the economic development of the Westside, make this corridor potentially the highest utilization travel corridor in the entire Metro region.
- Despite much discussion and the demonstrated demand for travel between the Valley and the Westside, this potential corridor remains a concept. No significant professional work or required studies have been undertaken in the corridor to date. Measure R includes about \$1 billion allocated to a “project” in the Valley-Westside corridor in the “out years” of the Measure R sales tax program, unless project acceleration can be achieved. Metro’s newly-branded America Fast Forward initiative seeks to achieve this acceleration.
- Metro is preparing to commence work on the long path of statutory studies, project definition, systems planning, alternatives analysis, project scoping, environmental studies (NEPA/CEQA), conceptual design, preliminary engineering, financial analyses, final design, funding, and -- perhaps in two decades or less time -- actual project implementation.
- The Valley-Westside corridor can be defined in several segments, as shown on diagrams on the following page (courtesy of The Transit Coalition):
  - Mid-Valley to Westwood (Core segment)
  - Mid-Valley to potential northern extensions (Valencia, Santa Clarita Valley, Palmdale/Lancaster, etc.)
  - Westwood southward to LAX
  - LAX to potential southern extensions to PV Peninsula, Long Beach, Beach Cities, etc.
- Metro and Caltrans have embarked on the construction of the continuation of the I-405 HOV/shared ride facility from the Westside through the Sepulveda Pass on I-405. This facility will add one carpool lane in each direction using the center median. It is anticipated to be a “traditional” HOV facility, with no provisions for “HOT” lanes or managed lanes. That is, the facility will likely be a free facility to high occupancy vehicles (2+, 3+ or more) without provision for “selling” excess capacity through tolls to single occupant vehicles. It is

quite likely that the single lane in each direction will be oversubscribed with such carpools from opening day.

- Many believe that to have a successful toll-based “HOT” lane program combined with free high occupancy vehicle/shared ride facility, a minimum of two lanes in each direction is required, particularly in such high demand corridors as the Valley-Westside.
- Despite the clear need for significant additional people-carrying capacity in the corridor beyond the new carpool lanes, no real source of funding other than the \$1 billion identified in the out-years of Measure R has been identified.
- In order to expedite project development and delivery, Metro embarked last year on an ambitious program to identify opportunities for using public-private partnerships (PPPs, or P3s) to advance the delivery of both transit and highway projects identified in the Long Range Transportation Plan (LRTP) and the Measure R program. To date, the program has identified six initial projects (three highway projects and three transit projects) that could benefit from the potential participation of the private sector, both with respect to leveraging existing funding sources and to life-cycle cost savings deriving from private design, construction, financing, maintenance and operations of transportation facilities. The projects determined to have such potential, to date, include:
  - Crenshaw/LAX Transit Project
  - Westside Subway Extension
  - Regional Connector Transit Project
  - High Desert Corridor Highway
  - I-710 South Freight Corridor
  - SR-710 North Extension Tunnel
- The benefit of partnering with the private sector for developing, financing and operating the highway programs is largely undisputed, since doing so would create a new funding source (i.e., tolls) to supplement the funds dedicated to these projects through measure R and other local, state and federal sources. With one highway project already underway in California as a P3 (Presidio Parkway in San Francisco), it is expected that the participation of private sector partners for the new and expanded highways in the Metro region will be well accepted and will expedite their delivery to the public.
- The 3 transit projects currently underway, however, present more limited opportunities for the private sector to become involved in a significant and productive manner. Work to date on Metro’s PPP contract has shown that utilizing long-term private concessions to design, build, finance, and maintain (“DBFM”), or to design, build, finance, *operate* and maintain (“DBFOM”) the transit projects could result in potentially major life-cycle costs savings when measured in terms of *present value*. In order to realize such potential life-cycle savings, however, several significant issues require resolution, including transferring operating labor contracts from public to private sector; shifting design and construction risk from Metro to a concessionaire; and dealing with systems interface among other elements of currently operating rail lines in the Metro system.

- Experience from throughout the world has demonstrated that projects that create a user-based revenue stream are the most conducive to public-private partnerships. This is, of course, the reason that toll roads have seen a much greater involvement of non-recourse PPPs than transit systems. Indeed, the fare structure of typical bus and rail systems is analogous to “social infrastructure,” such as public buildings, educational institutions and correctional facilities, where there is no significant source of user-based revenue and hence rely primarily on so-called “availability payments” from various levels of government. For public transportation this is equally true, owing to the inability of fares to cover the amortization of capital construction costs. Within most public transit systems, even ongoing operating and maintenance costs cannot be covered by fare revenue.
- Under the structure of Metro’s PPP Program, the foregoing discussion has led to preliminary analysis of additional projects identified in Metro’s Long Range Transportation Plan and within the Measure R framework that could be done potentially with private sector participation at a minimal cost to LACMTA and the taxpayers. Implementing a transit line within the Valley/Westside corridor has been considered an “unaffordable” transit investment, owing to the very high costs of going over – or through – the Santa Monica Mountains. The \$1 billion allocated in Measure R represents a significant amount of funding, but not nearly sufficient to undertake this project. Additionally, conventional rail technology as currently deployed by Metro cannot easily or efficiently navigate the grades associated with the Sepulveda Pass, making the concept of a tunnel the most viable – though the most expensive – option for connecting the Valley and the Westside via rail.
- In light of the exceptionally strong demand for passenger travel between the Valley and points north, and the Westside and points south, a new and potentially robust alternative developed by Metro’s PPP team for consideration has been recommended for business case assessment. The proposed project for the Valley/Westside corridor envisions a *multi-modal project that integrates an advanced transit technology and a multi-lane toll highway, the latter providing an express alternative to the interminably congested I-405 Freeway, routed through a tunnel between the Valley and the Westside.*
- In light of the current state-of-the-art in deep-bore, large-diameter tunneling technology, an integrated “transit/tollway” facility could be engineered to fit in a 58’ diameter tunnel. A very similar tunneling program was recently awarded to a construction consortium in Washington State for replacement of the aged and seismically vulnerable Alaskan Way Viaduct along the ocean front in Downtown Seattle.
- Preliminary concepts show that a single large diameter tunnel could be built in the Valley/Westside corridor and accommodate a bi-directional transit system and 3-5 tolled highway lanes, which could be reversible, similar the I-595 program in Florida.
- As an alternative to proceeding with the normal federally-required, statutory, multi-decade planning process, it is our contention that this project could be a world-class example of a public-private partnership that would result in delivery of this project decades before otherwise possible, without jeopardizing any of the projects currently in development as

part of the prescribed Measure R process. Indeed, using a P3 approach to bring such a project to reality would add luster to Metro's America Fast Forward program. As part of the ongoing Metro PPP program, a project concept and procurement process can be defined and developed that would allow the private sector to demonstrate its ability to bring efficiency, innovation, and cost-saving technology to a much-needed transportation corridor improvement program.

- Preliminary discussions with officials at the US Department of Transportation suggest that the federal government would be strongly supportive of this type of corridor investment, owing both to its multi-modal characteristics and to its innovative and potentially prudent partnership between public and private sectors. In particular, elements of the *Penta-P Program* (Public-Private Partnership Pilot Program) within the Federal Transit Administration (FTA), and the SEP-15 Program within the Federal Highway Administration could be brought together in a program demonstration representing a new and positive way to better leverage federal investment with local and private funds.
- What would make this project more attractive to private sector investment and participation than any of the 3 transit projects currently in the process of business plan preparation?
  - No previous work or designs have been developed or adopted, nor has there been any previous environmental clearance, allowing a private concessionaire/sponsor to use its ingenuity to develop a workable and financially feasible program for planning, permitting, designing, financing, constructing, operating and maintaining the combined transit line and toll facility.
  - Global bidding would be encouraged to bring in world-class suppliers, constructors and operators in a competitive bidding environment. This means that without constraint of current light rail and metro heavy rail technology, a vehicle supplier could develop a "stand-alone" transit technology that would interface with Metro's current program – in particular, the Orange Line in the Valley, the Purple Line extension to Westwood, and also to Metrolink and regional bus. For those who have seen the Docklands Light Railroad in London and its interface with the London Underground system, this project would create a similar linkage of dissimilar technologies that connect at individual multi-level stations.
  - The tollway portion of the project would have an immediate and robust demand on opening day. As evidenced by the success (and high toll rates) of the SR 91 Express Lanes Program in Orange and Riverside Counties, drivers are willing (and able) to pay hefty rates to avoid congestion. While we would leave the design and engineering to our private partner, concepts could include reversible lanes by time of day (similar to the I-595 project in Florida); variable toll rates as a real-time function of levels of congestion; fully electronic tolling without the necessity of toll booths (similar to the 407 Highway in Toronto, Canada); and the promise of congestion-free drives owing to congestion management through pricing strategies.

- “Free-market” approaches to tolling, combined with the likelihood of “premium” transit fares, would generate an extremely robust revenue stream for a concessionaire, and potentially lead to a “hybrid” concession approach between a full “revenue-risk” approach and a partially subsidized “availability payment” approach. Such hybrids are not uncommon in other parts of the world, taking best advantage of the private sector’s marketing and management skills, while allowing the public sector to set transit fares (or provide suitable subsidies), thereby allowing disadvantaged transit riders to make full use of a partially tax-supported transit system.
- The ability for a concessionaire to utilize its own, proprietary transit and toll collection technology greatly encourages competition and competitive bidding most favorable to Metro. For example, many companies around the world – some with foreign government support – have developed technologies that could be most applicable in this corridor. We would expect highly aggressive bidding to result in highly favorable pricing, with potential for export credit financing and other such financial structures aimed at reducing or eliminating subsidies by Metro and/or other public agencies.
- How would we go about procuring, selecting, and implementing such a public-private partnership?
  - The Valley-Westside Corridor Program would be implemented utilizing a “Pre-Development Agreement” (“PDA”) concept. A PDA approach, in this context, would suggest a 3-step procurement process that could be implemented starting in 2011:
    - An initial request for “interest and information” would be sent out by Metro’s P3 team to financial, engineering, construction, and operations firms around the world, providing a description of Metro’s Valley/Westside Corridor concept. We would solicit ideas, reactions, comments, and potential barriers to the concept moving forward. We would also at this time establish a mailing list of interested companies, and receive general statements of individual capabilities and experience. We would specifically seek individual firm responses, discouraging any team formation or consortium development at this juncture, and further discouraging any significant expenditure by firms in responding to this preliminary solicitation.
    - Based on refined corridor concepts, perhaps developed by a retained consultant or by Metro’s P3 team, and based on input received from the initial request for interest and information from a variety of companies, we would then prepare and distribute a “Request for Qualifications” (RFQ) which would seek responses from teams/consortia assembled in specific response to the RFQ. Responders would be required to

demonstrate the consortium's ability to finance, design, construct, provide rolling stock and related systems, operate and maintain the systems in the corridor – both the transit line and the toll facility. Again at this stage, the prospective concessionaires would not be required to undertake significant expenditures.

- Finally, a "Request for Indicative Proposal" (RFIP) would be distributed to a short-list of consortia best meeting the qualifications criteria established by the P3 team to review and rate the Statements of Qualifications. In brief, the short-listed consortia would be asked to respond to an "indicative" project definition, with concepts, approaches, construction means and methods, transit technology, electronic tolling methods and equipment, and an indicative pricing structure. The reason this needs to be "indicative" is that the environmental clearance process requires "purity." Specifically, final alignment, tunneling method, portal locations, ventilation systems, transit technologies, and the myriad of other project attributes cannot be adopted without an appropriate study of alternatives that meets CEQA and NEPA requirements.
- A consortium/concessionaire providing "best value" to Metro would be selected on the basis of the Indicative Proposal. The chosen project team would be required to fund project development activities (conceptual design and environmental clearance), likely using their defined project as the nominal proposed action for environmental review and clearance. Utilizing the PDA approach, Metro would commit to reimburse the concessionaire the costs of the environmental work (as it would for a normal, statutory-based planning program) – but *only* in the event the project did not go forward owing to no fault of the concessionaire. Assuming the project proceeds, the concessionaire would imbed the project development costs into its long-term financial structure, and recover costs through revenues derived from transit fares, tolls, and potentially from availability payments.

Finally, once the environmental work is completed and ROD/NOD is obtained, a final price will be negotiated with the concessionaire for the construction, operations and maintenance of the systems. The term of the concession would begin with the commencement of final design and construction, and continue with operations and maintenance over a defined period of time, generally a minimum of 30-35 years.