

2015-04-02 CM Weekly Newsletter

Item # 2 Attachment

SR 710 Working Group Recommendations

March 9, 2015

The Honorable Bill Bogaard
Mayor, City of Pasadena

Mr. Michael Beck
City Manager, City of Pasadena
100 North Garfield Avenue
Pasadena, CA 91109

Subject: SR-710 Alternatives Working Group

Dear Mayor Bogaard & Mr. Beck:

As members of the State Route (SR) 710 Alternatives Working Group, which was convened in September 2014, we have concluded a series of meetings to identify an "Alternative that is best for Pasadena" for consideration when Metro releases the SR-710 Draft Environmental Impact Report (EIR) / Environmental Impact Statement (EIS). Our membership includes Geoffrey Baum, Joel Bryant, Alan Clelland, Sarah Gavit, David Grannis, Jennifer Higginbotham and Stephen Acker. Our committee was staffed by Fred Dock and Bahman Janka.

Our discussions began with an effort to identify and reliably evaluate the mobility needs that exist, and thereafter how best to meet the needs in a manner consistent with Pasadena's history and character. A consensus was reached that a priority of any proposal should be on moving people, rather than vehicles. Other important priorities identified included ensuring consistency with Pasadena's General Plan, enhancing travel options for underserved communities, improving safety, minimizing environmental impacts, reducing surface street traffic, and providing transportation choices to the public.

There is general agreement that the Pasadena Preferred Alternative to the SR-710 Project be a multi-modal alternative with the following elements:

1. Light Rail Transit (LRT)
2. Expanded Bus Service
3. Local Street Network (LSN) Improvements, and
4. Bicycle Transit.

This multi-mode alternative may include variations on the LRT, BRT and Transportation System Management (TSM) / Transportation Demand Management (TDM) alternatives considered in the SR-710 Project Alternatives Analysis Report; however, we believe that there are also other meaningful options that have yet to be considered. This includes, but is not limited to a BRT line along the Rosemead corridor and an east-west LRT or BRT connecting the current

Gold Line to points west in Glendale and Burbank. Because of rapid advances in transportation technology, there was also general agreement that smarter utilization of existing roadways can be made, and that opportunities exist to more effectively move people in the study corridor through introduction and use of new technologies and operational enhancements.

There were several other areas of agreement. Any proposal should recognize the need to preserve and protect local neighborhoods as new transit routes are developed, so that options such as BRT and LRT do not negatively impact residential neighborhoods. Regional or high density population areas should be served and special attention be given to ensuring connectivity to both the existing and the planned local and regional transportation network to address the challenge of making public transportation convenient and accessible. These solutions should leverage current and planned transit investments by Metro.

Specific concerns were expressed by members of the committee about certain topics. No additional at-grade LRT road crossings should occur in view of the adverse impacts that the Gold Line street-level crossings have had on mobility. Furthermore, at-grade LRT crossings are a safety concern. Any LRT that does enter Pasadena should connect directly to the existing Gold Line as any proposal that does not do so, even if separated by a mere block or two, would be an added burden on Pasadena's streets. Additional parking should be considered at the Fillmore Station and adequate transit security is an ongoing necessity. Also, the conditions that have resulted from the SR-710 stub area excavation should be addressed to improve safety and the Pasadena street network.

Finally, the Working Group concludes that the proposed tunnel is **not** a preferred alternative for Pasadena. Moreover, whether the tunnel proposal would reduce congestion and north-south corridor travel times rather than simply shift existing traffic onto a newly created route without measurable improvements to the network or positive impact on local traffic in Pasadena could not be determined. As an example, recent increases in transit ridership call for a reassessment of traffic forecasts. This should be the subject of careful analysis based on the Draft EIR/EIS.

A more detailed report regarding our suggestions briefly summarized in this letter will be provided to you no later than April 6, 2015 to assist the City in its technical review of the Draft EIR.

Thank you for the opportunity to conduct this interesting and important evaluation process. We look forward to discussing our work with you.

State Route 710 Alternatives Working Group

cc: Members of the City Council
Fred Dock, Director of Transportation

City of Pasadena

SR-710 Working Group Recommendations

March 25, 2015

Beginnings

City of Pasadena Mayor Bill Bogaard and City Manager Michael Beck assembled the SR-710 Pasadena Working Group (PWG) by Invitation on August 18, 2014. Seven City residents were invited to serve on the PWG to, "engage in a detailed evaluation of the project alternatives set forth in the SR-710 EIR" and to "...identify the best project alternative for Pasadena, recognizing that much of the impact associated with the proposed freeway alternatives will have a profound impact on the future of our great city".

City Manager Beck's letter of invitation was sent to and accepted by:

- Mr. Stephen Acker
- Mr. Geoffrey Baum
- Mr. Joel Bryant
- Mr. Alan Clelland
- Ms. Sarah Gavit
- Mr. David Grannis
- Ms. Jennifer Higginbotham

Meetings & Information

A "kick-off" meeting was held at Pasadena City Hall on September 25, 2014. At that initial meeting, Mayor Bogaard and City Manager Beck encouraged the PWG to work toward an outcome of being "for" an alternative or series of alternatives in this corridor as opposed to simply "against" one or more alternatives.

A total of six PWG meetings were held between September 25, 2014 and December 18, 2014, including the "kick-off" meeting. Sequentially, meetings 2 through 6 involved the PWG articulating principles¹ and alternatives criteria² by which they would review alternatives, and a review of a set of hybrid alternatives for mobility choices and access in the study area. These were developed within the context of the Los Angeles County Metropolitan Transportation Authority's ("Metro's") *Objectives* from the December 2012 Alternatives Analysis Report (see Attachment 1).

¹ See Attachment No. 1, *Pasadena Preferred Alternative*

² See Attachment No. 2, *Alternatives Development*

Context for a Pasadena Preferred Alternative

The PWG evaluated the various alternatives in the SR-710 Alternatives Analysis with a specific focus on effects that any/all of these alternatives would have on our mobility choices, quality of life, and the specific values that define our City and reflected in our General Plan. While undertaking this work, the PWG was conscious and acutely aware of the fact that others in our immediate vicinity and throughout the region are potentially benefitted or impacted as well. As such, the PWG concluded that the group needed to ensure it approached its responsibilities with awareness as to how our work would affect the people in Pasadena and the people in adjacent cities.

The PWG also agreed that our deliberations and discussions, while held in the present, needed a focus on the future. In short, our work toward mobility alternatives for the SR-710 corridor greatly transcended a past or even present context and, rather, required a focus on future generations and their preferences for more mobility choices than the automobile, and emergent technology as it relates to mobility.

Given this, the PWG pursued a multi-modal approach that utilizes and improves upon the alternatives identified in Metro's *Alternatives Analysis*, with an emphasis on the following:

- *A focus on "yes"* - the working group was committed to identifying and supporting mobility improvements, systems and approaches within this corridor and subregion that enhance people's accessibility and mobility.
- *Re-Imagine existing infrastructure* - the working group suggests that utilizing the existing system of infrastructure differently than 50 years ago, with a focus on moving and connecting people rather than cars - both honors and maximizes the investment made by our forebears for our current and future mobility needs and recognizes that our decisions today mostly affect future generations.
- *A marketplace of mobility* - the working group values the diversity of both our City and our region and, as such, suggests that a thriving economy, a healthy environment, and equal opportunity demand an equally diverse mobility system to provide numerous transportation choices for all people.

This context - both a look beyond our borders and beyond our generation - instilled a sense of responsibility to a "triple-bottom line" outcome where people, planet and prosperity all benefit tomorrow from decisions made today.

PWG Recommendations

The PWG considered many options before narrowing them down to a preferred set of options. As noted previously, the PWG focused on the various alternatives provided for in Metro's *Alternatives Analysis*, but PWG saw these both as a system of mobility options, as well as viewing them within both a local and regional context.

The PWG recommendations focus on a more holistic consideration of Metro's *Alternatives* based on how they operate as a system of mobility improvements. To achieve such a mobility system requires both regional and local efforts. As such, the PWG recommendations to the City include the following:

- ✓ Local level- The suggested options within the PWG recommendations are focused on serving local higher-density areas and destinations, providing connectivity to existing and emergent local transportation networks and mobility hubs, and promoting safety for people regardless of mode of transport.³

The City's focus on the proposed SR-710 Project provides a local opportunity to both enhance connectivity and safety along a street network that currently operates as Caltrans' rights of way (i.e., South Pasadena Avenue, South St. John Avenue) but that will likely be relinquished and returned to local streets operated by the City as a result of this current process. This eventuality provides the City with the opportunity to reconnect neighborhoods, re-establish a city block structure, and accommodate current and future mobility and access needs through local actions (i.e., modifications to the Transportation Element of the City's General Plan, etc.) that complement an alternative regional mobility strategy to that proposed in the draft SR-710 Environmental Impact Report ("EIR").

- ✓ Regional Level- The PWG's recommended system of regional mobility choices blends together regional access options from Metro's *Alternatives* and adds specific modifications to said Alternatives to create more functional connectivity to the existing and planned mobility system. The PWG's regional mobility system recommendations focus on serving people that currently have few, if any, mobility choices. These suggested options also focus on mobility choices to enhance economic access and environmental justice for people in the SR-710 Study Area and beyond.

As such, the PWG suggests that the City thoughtfully consider these options for *Complete Streets* and *Mobility Hubs* along appropriate Pasadena corridors to promote multi-modal choices within Pasadena that link to the a regional system of mobility and where they are locally most needed.

Overview

The PWG recommended *Pasadena Preferred Alternative* is comprised of the following general components for the City's review, analysis and consideration as it contemplates its response to Metro's SR-710 EIR:

³ See attached "Draft Land Use Diagram (Spring 2013)"

- ✓ Improved Operations of the existing road network - Technology advances are not only putting new tools and techniques at the fingertips of the agencies charged with operating the road networks (including those in the study area), but changing the way that vehicles are accommodated and managed on these facilities:
 - Caltrans Director Malcolm Dougherty has directed that Caltrans must change from a project delivery-oriented organization to an operations focused organization. As result, Caltrans is undergoing a major organizational change to put this into effect. Such enhanced operations should be considered an integral part of the future network as they may improve mobility on those freeways that serve the study corridor.
 - Mobile technologies are already enabling vehicles to be aware of their own surroundings and significantly improve safety. NHTSA is about to mandate vehicle-to-vehicle communications on all new cars and light trucks and within the next two automobile-model years, additional driver assist systems will be available which will eventually lead not only to much safer roadways for all users, but significantly affect how highways are designed. Such advances force a reconsideration of maximizing the efficiency of the current infrastructure rather than adding lane capacity through construction.

- ✓ Complete Streets - The PWG suggests a number of options that the City of Pasadena, neighboring cities and other jurisdictions throughout the region may consider, develop and implement to accommodate all modes of mobility (i.e., automobiles, transit vehicles, bicycles, pedestrians, skateboards, scooters, etc.) within local communities to enhance local and regional mobility and access. Re-imagining our street network for a 21st Century purpose via complete streets, the transformations are effective because they:
 - Are shown to increase safety, ease congestion, and improve access⁴.
 - Are an integral part of Alternative 7 in the I-710 Project alternatives, and supported by the Coalition for Environmental Health & Justice (CEHAJ).
 - Can accommodate and support on-demand transit via mobile app-directed *Transportation Network Companies* (e.g., Uber, Lyft, Ford, Mercedes Benz, etc.)⁵, a key access need for both the emergent Millennial generation and the aging Baby Boomer generation.⁶
 - Can help to re-connect disconnected communities in Pasadena
 - Includes recommendation that the City study closure of one or both of the existing 210/710 ramps at California & Del Mar (as shown on PWG's *Alternative Mobility System* maps).

- ✓ Mobility Hubs - The PWG supports the City's previous development of a network of mobility hubs within the City. Mobility hubs are effective as an addition to other infrastructure as they aggregate mobility services and address the "first mile/last mile" issue that sometimes can be an obstacle preventing people from connecting to mobility choices.⁷ Mobility Hubs may be located in a variety

⁴ <http://www.smartgrowthamerica.org/complete-streets/complete-streets-fundamentals/benefits-of-complete-streets/>

⁵ See attached "Dynamic Social Shuttle"

⁶ Combined, these generations will comprise over 70% of California's population.

⁷ (http://media.metro.net/projects_studies/sustainability/images/path_design_guidelines_draft_november_2013.pdf)

of locations (local to regional) and networked together like a "web" of services with linkage to public transit, private services, shared use mobility for both cars and bicycles, etc. Mobility hubs populate mobility choices and added person-carrying capacity along existing surface rights of way by:

- Transforming rail and bus transit stations areas to robust mobility service centers with a multiplicity of options (i.e., carshare, bikeshare, shuttles, scooters, autonomous everything, etc.)
- Transforming employment centers from parking-centric, car-only centers to mobility choice areas that reduce congestion and increase accessibility for a diverse workforce
- Transforming event and activity centers to provide choice access for all (i.e., East LA College, Cal State Los Angeles, Old Pasadena, etc.)

Pasadena's previously envisioned local "mobility hubs" may be viewed via the attached link: http://www.um-smart.org/resources/conference09/presentations/Masuda_Pasadena.pps

- ✓ *Modified Light Rail Transit (LRT) and modified Bus Rapid Transit (BRT)* – The PWG recommends that the City consider LRT and/or Mixed Traffic BRT lines and connector proposals modified from Metro's *Alternatives Analysis* that connect to:
 - A variety of mobility choices locally (north/south and east/west corridors in northern, southern eastern and western Pasadena
 - Regional destinations, BRT/LRT stations (e.g., Gold Line Atlantic Station, Green Line Lakewood Station, etc.) and Mobility Hubs locally, subregionally and regionally
 - Communities within the study area and within our region that have little/no BRT/LRT connectivity
 - Appropriate local arterials that can be transformed into a *network* of people-moving opportunity via a complete streets approach
 - Mobility choices that serve *people*

- ✓ *Bicycle Network improvements* – The PWG suggests that the City consider the inclusion in the City's Bicycle Plan two bicycle network improvements that enhance connectivity and mobility choices. Bicycle transport as a viable mobility option has increased significantly in Los Angeles County in the past five years. As such, this mode of transport can play an important role in providing mobility and connectivity in the SR-710 corridor and beyond.

The recommended improvements for the City's consideration include:

- A bicycle network from Pasadena to downtown Los Angeles via the Arroyo Seco; and
- A bicycle network/bicycle lanes that connect Pasadena to communities to the south via Marengo/Los Robles and Atlantic/Eastern.

Detailed Recommendations

The PWG recommends that a *Pasadena Preferred Alternative* to the SR-710 Project be both modified, holistic compilation of the modal alternatives considered in Metro's SR-710 Project Alternatives Analysis, combined with some new project and modal choices not included in said Alternatives Analysis. Combined, the PWG

believes that the City in its review and analysis of any proposed SR-710 project should consider this system of capital and operational mobility, in whole or in part.

The working group strongly advocates that City staff review and compare the PWG's multi-modal system to Metro's stand-alone, individual improvement being considered in this corridor (i.e., highway tunnel connector, singular light rail line, etc.). This assessment should be performed with a focus on *moving people* rather than solely *moving vehicles*.

The alternative elements included in the PWG's *Pasadena Preferred Alternative* is comprised of the following elements, some from Metro's *Alternatives* and some recommended by the PWG in combination with the Metro *Alternatives* as part of a holistic mobility approach:

- 1) Local Street Network (LSN)⁸
- 2) Mobility Hubs
- 3) Light Rail Transit (LRT)
- 4) Bus Rapid Transit (BRT)/Expanded Bus Service
- 5) Bicycle Network (BN)

To support the City's review of our recommendations, PWG developed a simple layered map via free on-line software that provides the reader/viewer the ability to view the various options that the City may wish to consider by sequentially adding each of the elements noted above until viewing a holistic system of improvements that provides diverse mobility choices for a majority of the study area. The PWG *Alternatives Concept Map* can be viewed by accessing the following link:

https://www.google.com/maps/d/edit?mid=zHLI_QT_8jnE.ks91mYiHKsJM.

As a note, Mobility Hubs are not displayed on the PWG *Alternatives Concept Map* as the City previously considered and adopted grant applications for federal funding of Mobility Hubs. The PWG recommends that the City incorporate these into the *Pasadena Preferred Alternative* program.

1. Local Street Network/Complete Streets Options

- a) **LSN-1: The City of Pasadena should consider developing a Complete Streets approach for the SR-710 stub areas (e.g., St. John Avenue, Pasadena Avenue) in west Pasadena continuing along the Interstate 210 (I-210) to east Pasadena (e.g., Corson Street, Maple Street).**

The focus of LSN-1 is to transform the SR-710 'Stubs' and the Fremont Corridor to a safe, functional mobility network that reconnects neighborhoods and facilitates economic and social exchange. PWG recommends:

⁸ Not all the corridors shown on the PWG interactive maps would be developed as Complete Streets. PWG merely suggests these east/west and north/south corridors as appropriate for the City's and neighborhoods' further consideration.

Pasadena Stub Area (North) - While following the City's Guiding Principles and transportation objectives outlined in the City's Transportation Element of the General Plan, the City should study the SR-710 Stub area to determine how to optimize mobility and reconnect neighborhoods in this section of Pasadena in light of the impending relinquishment of Caltrans right of way back to local control. An option for the City to consider may be the Connecting Pasadena Project (CPP)⁹. This concept has the potential to reconnect Pasadena neighborhoods, and may provide added value subregionally if combined with South Pasadena's proposed plans to upgrade the Fremont Corridor within their city boundaries.

Should South Pasadena implement its proposed Complete Streets plan in the Fremont Corridor (as noted above), mobility choices within a subregional context may be improved. South Pasadena's plan is documented in the May 2009 'Fremont Avenue Traffic Calming Concept Plan'.

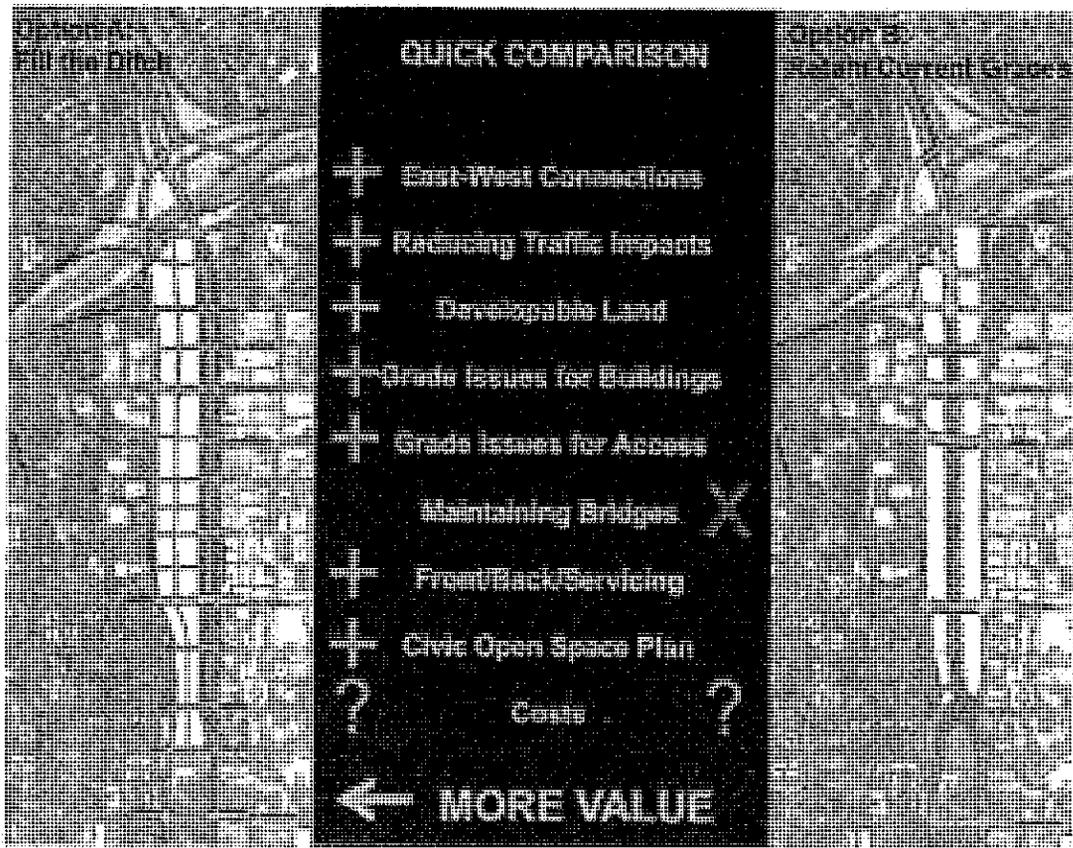
Additionally, the City of Los Angeles and the residents of El Sereno (the oldest community in Los Angeles) may consider a redesign to streets within the El Sereno SR-710 Stub area south using a similar strategy to that used by the CPP for the Pasadena SR-710 Stub area north.

PWG believes this recommendation to be of benefit to all communities in this corridor, but recommends City staff review carefully to ensure that there are no unintended negative consequences from this recommendation on adjacent jurisdictions.

A graphic representation of the CPP is shown in Figure 1.

⁹ The Connecting Pasadena Project (CPP) is an ongoing project led by volunteer citizens with the assistance of expert advisors, whose purpose is to provide master planning alternatives for the SR-710 'Stub' area.

Figure 1: Two CPP Concepts for Redesigning Pasadena's SR-710 Stub.



b) **LSN-2:** Consider a north/south and east/west Complete Streets network for other major Pasadena transportation corridors to enhance mobility choices and connectivity throughout the City.

The PWG recommends that the City consider expanding its Complete Streets program to include a more expansive network of city streets to tie into the multi-modal choices the PWG is recommending be considered as an alternative system for local, subregional and regional mobility and access. The Complete Streets approach is consistent with our objective to promote multi-modal transportation by making all modes of travel – walking, bicycling, driving automobiles, riding public transportation, or delivering goods – safe and accessible.

As with our LSN-1 recommendation, this LSN-2 approach has significant “stand alone” value for Pasadena, as well as solid potential to significantly enhance local-to-regional mobility when added to the overall regional improvements suggested as part of the PWG *Pasadena Preferred Alternative*.

The PWG recognizes that the local street network is not expressly part of Metro's proposed SR-710 project or alternatives. However, the PWG believes that the City can, and should, seek out mobility strategies that positively affect individual and collective safety, mobility and accessibility in our City and region. Thus, Pasadena needs to complement and enhance, where practical and in alignment with our values and principles of our General Plan, a *system* of access improvements such as those identified in this report and consistent with individual elements called out by Metro in their *Alternatives Analysis*.

2. *Mobility Hubs*

a) **MH-1: Pursue funding for and implementation of the City's Mobility Hub concept program.**

The City has previously developed a set of Mobility Hubs for submittal to the United States Department of Transportation for its consideration for funding. The PWG believes that the City's previous approach integrates well with a set of local-to-regional complementary mobility improvements, such as those recommended by the PWG.

3. *Light Rail Transit (LRT) Options*

a) **LRT-1: Consider a modified approach to Metro's proposed LRT-4X Alternative as part of a regional mobility choice system.**

The PWG believes that this Metro alternative has numerous positive attributes, including the following:

- ✓ It would serve significant population areas along an important transportation corridor.
- ✓ It would directly serve two large education centers (Cal State LA, East LA College) and connects to two more via Gold Line linkage (Pasadena City College, Caltech).
- ✓ It could provide an important regional connection with the Gold Line in the north with a connection of the two lines at Fillmore Station.
- ✓ It may provide an opportunity for future extension to the north (i.e., to northern Pasadena, to Altadena, to the Jet Propulsion Laboratory and La Canada) and to the west (i.e., towards Glendale, Burbank and the Red & Orange Line terminus in North Hollywood).
- ✓ It may provide opportunities for future extensions south (i.e., to communities along or near the I-710 corridor).

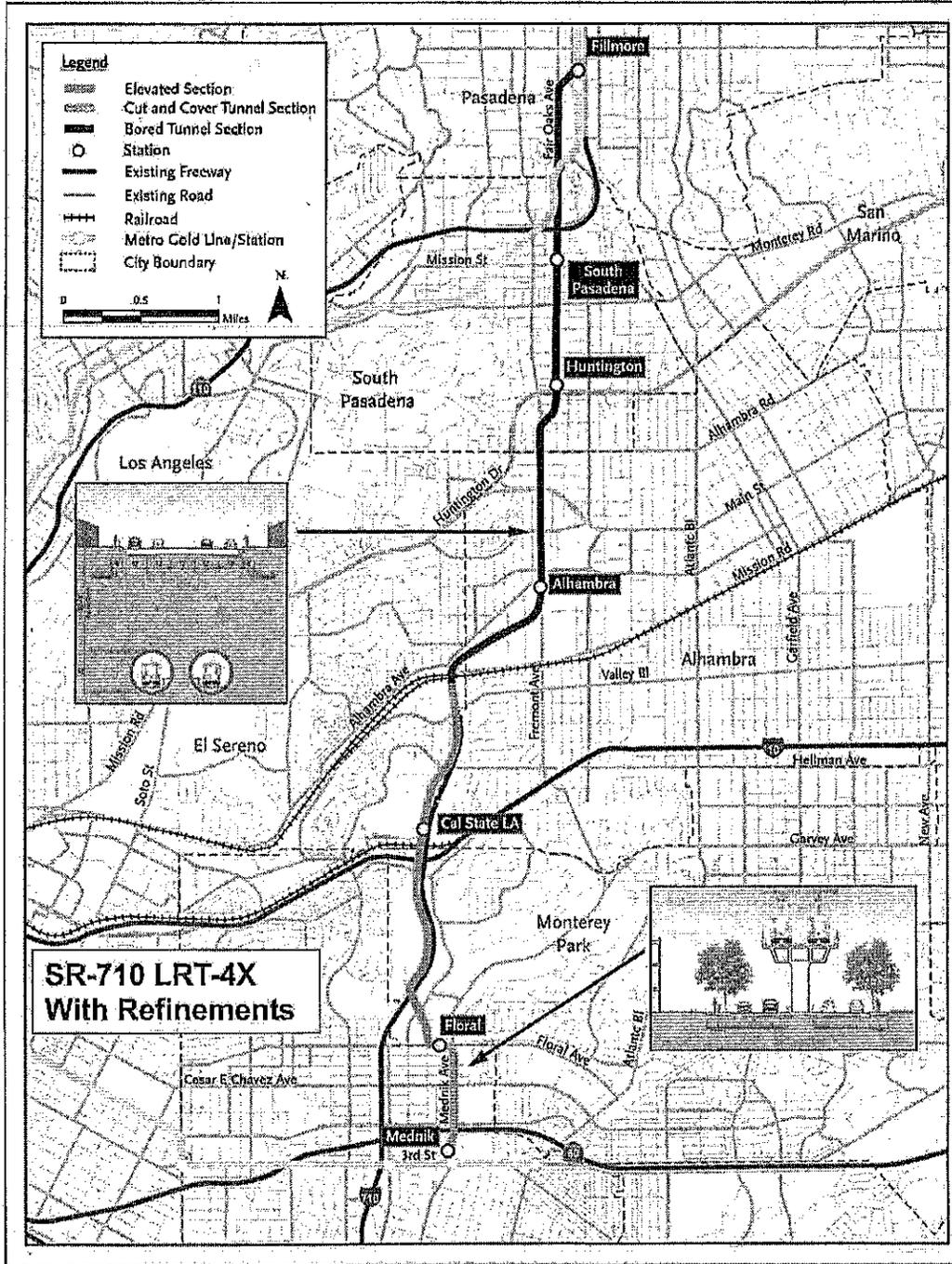
However, LRT-4X has several deficiencies pursuant to the working group's criteria that the PWG recommend be addressed in order for its inclusion in a Pasadena Preferred Alternative. The PWG suggests that the Metro LRT-4X Alternative be improved by recommending:

- i. A connection of the LRT-4X with the Gold Line at the East Los Angeles Civic Center station.
- ii. A potential connection to the Silver Line along the Interstate 10 near or at Cal State Los Angeles.
- iii. A connection to the existing Gold Line at/near the Fillmore station.
- iv. As feasible, enhance public safety through potential grade-separation at Glenarm for both LRT-4X and existing Gold Line.

- v. The precise alignment, design (i.e., elevated or at-grade) and station locations must be developed in direct consultation with local communities along the proposed line.
- vi. Where possible, utilize existing rail yards rather than develop new ones.

A graphic of LRT-4X is shown in Figure 2.

Figure 2: Metro's LRT-4X Alternative



b) **LRT-2: The potential for LRT connecting many parts of the study area (i.e., downtown Los Angeles, Pasadena, Glendale and Burbank).**¹⁰

The stated purpose for the SR-710 Gap Closure project is as follows:

*"The purpose of the proposed action is to effectively and efficiently accommodate regional and local north-south travel demands in the study area of the western San Gabriel Valley and east/northeast Los Angeles..."*¹¹

The PWG notes that the project study area includes many communities in Los Angeles, Glendale and La Canada-Flintridge that are un-served or under served by mobility choices. Indeed, the City of Glendale is the third largest city in Los Angeles County. Thus, the PWG believes it is essential that alternatives that could connect these communities to local, subregional and regional mobility choices are included for consideration in a holistic system of mobility choice improvements. And regional transit connectivity in this area – an option already under renewed consideration by Metro pursuant to last year's Board motion¹², and subsequent to the demise of the once-proposed Burbank/Glendale/Los Angeles Blue Line – would enhance regional-to-local mobility choices, thus benefitting mobility choices in the western portion of the study area. As such, the PWG believes that it is important for the City to be cognizant of such opportunity when assessing a *Pasadena Preferred Alternative* mobility choice system.

As seen in Figure 3, these communities are in the center of a regional no-transit "V" between the Red Line traveling northwest, and the Gold Line traveling northeast. While Metrolink passes through the area, it does not adequately serve – nor is it intended to serve -- local communities and local trips given that it is Commuter Rail with limited local stops. This has been recognized by Metro as witnessed by the funding of a study of a North Hollywood to Pasadena BRT service about to commence.

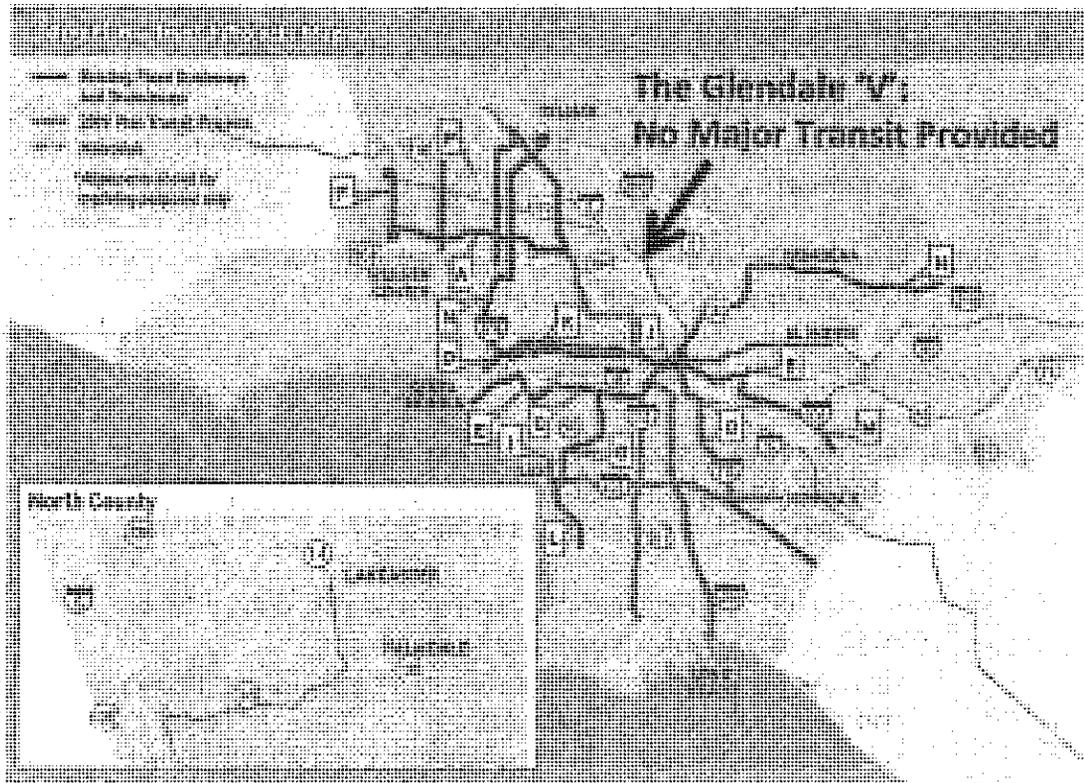
While the PWG believes that transportation improvements in the Glendale region are an important element of an SR-710 multi-modal alternative, the PWG does not propose a specific modal strategy or corridor alignment as part of our work. The subject communities must recommend a preferred alternative, if any, for their city and such option(s) should be considered in cooperation with Pasadena and other neighboring cities. Thus, the working group suggests that either LRT-2 or BRT-2 be a starting point for such consideration in the communities that are in the western portion of the study area, as noted above.

¹⁰ This regional connector may be implemented as BRT instead of LRT. This corridor is under study by Metro to assess connections between the existing Red/Orange Line station in North Hollywood and the Pasadena Gold Line Lake Avenue station.

¹¹ State Route 710 Study, Alternatives Analysis Report, December 2012.

¹² <http://la.curbed.com/archives/2014/07/metro-considering-rail-link-from-valley-to-bob-hope-to-pas.php#more>

Figure 3: Communities not served/under-served by mobility choices¹³



4. *Bus Rapid Transit (BRT)/Expanded Bus Service Options*

- a) **BRT-1:** The City should pursue, in consultation and cooperation with other cities in the corridor, a Rosemead Boulevard BRT system.

Currently, north/south bus service is provided along the entire Rosemead Boulevard Corridor from the 210 Freeway North to the City of Lakewood south (near the Long Beach Airport); however, only local buses serve this route. Given the significant lack of north/south transit choices, the PWG recommends that regional connector BRT service be considered more fully along this corridor (possibly with peak-hour BRT lanes and a signal priority system) than was done by Metro in the past.

A proposed BRT route in this corridor has the following advantages:

- The route directly serves the SR-710 Study area north/south transportation routes.
- Service and physical upgrades to this corridor should reduce travel time and increase transit ridership.
- The line is strategically placed in an area that is currently not served by either north/south transit or other mobility alternatives.

¹³ From 2009 Metro 'Long Range Transportation Plan, Technical Document,' Fig. 5.6

- The route serves significant populations un-served or under-served by transit.
- There is good system connectivity from this corridor to existing transit (i.e., Gold Line, Silver Line and Green Line,).
- It provides excellent opportunities for future system connectivity.
- BRT is generally less expensive to construct and operate relative to other transit modes (e.g. tunnel freeways, LRT, etc.) yet has proven to be very effective in Los Angeles County (e.g., Orange Line).

b) BRT-2: As an alternative to LRT-2, a BRT line connecting Los Angeles, Glendale and Burbank to Pasadena should be considered.

As noted in LRT-2 above, the PWG recommends either option LRT-2 or BRT-2.

c) BRT-3: The City should consider a modified Metro BRT-6X option operated as a Mixed Traffic BRT and as part of a *system of mobility choices* that provides north/south mobility choice alternatives to BRT-1.

The PWG recommends a modified BRT-6X alternative to provide added mobility choices.

Metro's BRT-6X approach has some critical deficiencies, including:

- BRT-6X is not proposed as part of a *system* of mobility improvements, thus only provides modest stand-alone mobility benefits; and
- BRT-6X proposes that portions of the proposed rights of way within Pasadena be developed and operated in *exclusive lanes*, which could be both disruptive and expensive in key areas within the City.

To correct these deficiencies, the PWG recommends the following:

- Consider BRT service as part of a *suite* of mobility improvements and within one of several corridors, as shown on PWG's *Alternatives Concept Map*; and
- Design and operate the BRT service as a Mixed Traffic BRT.

5. *Bicycle Network (BN) Options*

Two BN options were recommended to the PWG by a group of bicycle enthusiasts/activists that reside both in Pasadena and South Pasadena. The PWG recommends that the City review these suggestions for inclusion in the City's Bicycle Plan.

Bicycle transport across the country has increased exponentially over the past decade and with our Mediterranean climate in Southern California, the PWG believes that biking is growing to be an even more important part of a multi-modal, holistic systems solution for a sustainable mobility (and environmental) future. Furthermore, more people may choose a bicycle as a "sometimes-to-many times" mode of transportation if streets can be made both safe and optimal for bicycle use. This is another reason that the PWG recommends the City pursue a comprehensive Complete Streets Network strategy, as noted previously.

- a) **BN-1:** The PWG recommends that the City review the BN-1 from Pasadena to downtown Los Angeles via the Arroyo Seco and then south along the LA River for potential inclusion in the City's Bicycle Plan.¹⁴

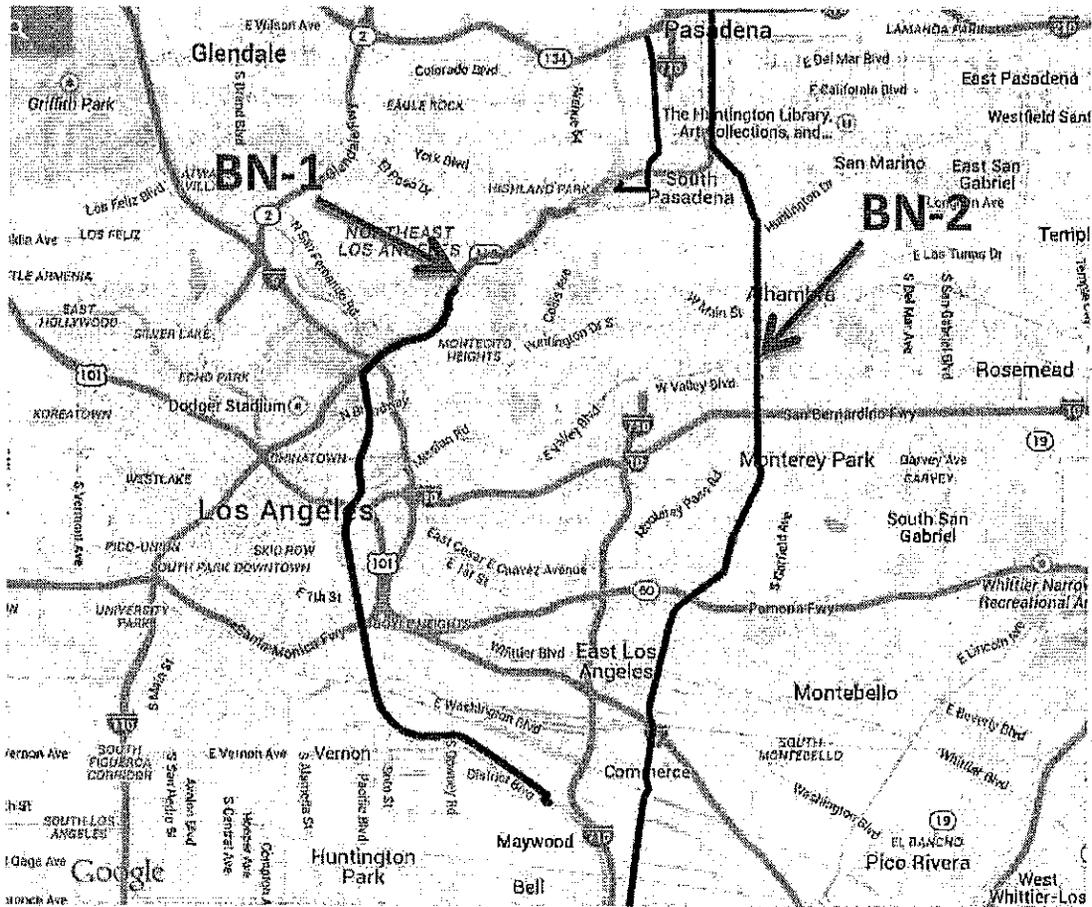
BN-1 would complete the missing parts of Arroyo Seco and Los Angeles River regional Class 1 bicycle network as shown on Figure 5 (missing sections are shown in black). Within the City of Pasadena, that bikeway starts on Orange Grove Boulevard with buffered lanes, as is already proposed as part of the PasDOT's new bicycle plan (not yet approved), and which is shown in Figure 6.

Where Orange Grove ends in South Pasadena, the buffered bike lanes could turn west along Mission Street. Where Mission Street ends the route would take a jog on Arroyo Drive and drop down into the Arroyo Seco via Stoney Drive. Bikeway sections located in South Pasadena are currently part of the 2011 South Pasadena Bicycle Master Plan, although these currently do not have a Class I designation. They are currently listed as

- Orange Grove – Class II bike lane
- Mission Street west to Grand Avenue - Green lane
- Mission Street west of Grand Avenue – Class II bike lane
- Stoney Drive – Class II bike lane.

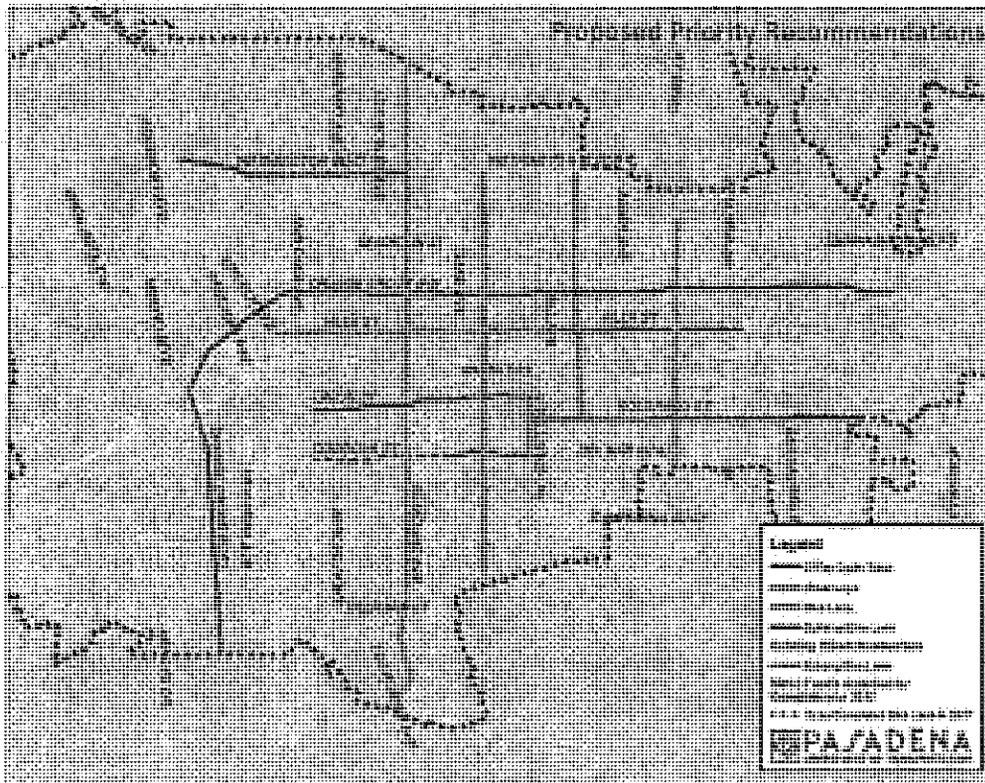
¹⁴ Portions of this network are already completed.

Figure 4: Potential Bikeway options: 1) BN-1: Along the Arroyo Seco and LA River and 2) BN-2: Along the Atlantic Boulevard Corridor.¹⁵



¹⁵ Lines in green currently exist and are in use.

Figure 5: Pasadena Department of Transportation Proposed Bicycle Plan Map (additional bikeways, not yet approved).



The rest of the bikeway, as proposed, is Class I. It extends southwest along the Arroyo Seco to the LA River and then turns south along that river. The City should consider the benefits of completion of the LA River bikeway down to South Atlantic Avenue in the City of Maywood as part of its review; there it will join with the currently existing Los Angeles River Trail that extends to Long Beach.

Advantages of this bikeway include the following:

- It improves north/south bike transportation both within the SR-710 Project and within the I-710 Project Study Areas.
- It maximizes connectivity with existing bikeways.
- Completing the Los Angeles River Trail was proposed in the original I-710 Project Community Alternative 7 (CA-7), and is still favored by most I-710 communities.
- Both BN-1 and BN-2 serve both economically and mobility-disadvantaged communities.
- South Pasadena sections of the BN are already included in that city's Bicycle Master Plan.

- b) **BN-2:** The PWG suggests that the City consider a new bikeway network as part of the City's Bicycle Plan from Pasadena to Bell Gardens generally along the Marengo/Los Robles/Atlantic/Eastern Corridor.

The PWG recommends that the City consider a new regional north/south bikeway in this "mobility choice" deficient portion of the Metro study area as part of the City's Bicycle Plan. The alignment of this potential bikeway is shown in Figure 5.

Advantages of this bikeway include the following:

- It provides a direct north/south bike transportation route that serves both the SR-710 Project and I-710 Project Study Areas.
- It provides a bikeway in a region that is currently not served by a bicycle network, and has other transit mobility deficiencies.
- It maximizes connectivity with existing bikeways in Pasadena and along the Los Angeles River.
- It serves both economically and mobility disadvantaged communities as it travels south.

Both bikeway options are shown in Figure 5. An online, interactive map can be found at <https://www.google.com/maps/d/edit?mid=z1Wb2F12xsok.kds-o7ic6LUo>.

The Pasadena Department of Transportation's (PasDOT) Proposed Bicycle Plan Map (new bikeways, not yet approved) is shown in Figure 6.

Intended Outcomes of the *Pasadena Preferred Alternative*

The PWG has worked diligently to develop a principled focus on those options that will provide more mobility choices to more people. Some of our suggestions are consistent with those alternatives contained in Metro's SR-710 Project EIR and some of our suggested mobility improvements are not included in that document. The PWG suggests that the City focus on a "transportation mobility bundle" of capital improvements and operating system changes that best meet our assessment of our emergent population's needs. In short, with the Millennial and Baby Boomer generations comprising over 70% of California's population by the year 2020, it is imperative to not view mobility in this corridor through a "rear view mirror" perspective; rather, we all must do our best to look forward to the mobility needs of a generation that will need mobility assistance as they age, and of a generation that "connects" more by technology than by owned automobiles.

As such, the PWG's Intended outcome from this charge is to provide the City with a set of affirmative approaches to should consider that provides mobility choices serving all people's needs. The PWG offers these recommendations and suggestions to the City for its consideration both in crafting a response to Metro's SR-710 Project EIR, but also as consideration for a future mobility construct and operating system that equally supports people's needs, a sustainable environment's needs, and a vibrant and thriving economy's needs.

The PWG requests that the City review these recommendations as a holistic mobility system. It is recommended that the City compare/contrast the benefits and deficiencies of the *Pasadena Preferred*

Alternative with the benefits and deficiencies put forth in the Metro SR-710 Project EIR, with a specific focus on:

- Access & mobility
- System capacity
- Cost-effectiveness

Every member of the PWG appreciates the opportunity to serve our great City, and stands ready to assist our City leadership in this endeavor moving forward.