

Susan MacAdams
Transit Consultant
269 S. Beverly Drive, Unit 1187
Beverly Hills, CA 90212

August 25, 2014

Mark A. McLoughlin
Director of Environmental Services
California High-Speed Rail Authority
Southern California Regional Office
700 N Alameda, Room 3-532
Los Angeles, CA 90012

ATTN: Burbank to Los Angeles Project Section, Union Station Comment

Dear Mr. McLoughlin;

For twelve years I was a track alignment engineer and manager for METRO on the Red, Blue and Green Lines. Prior to that, I worked on transit systems in Baltimore, Boston and Washington DC. More recently (2009-2011), I was the High Speed Rail Planning Manager at METRO.

This comment pertains to the problems and solutions of building High Speed Rail (HSR) at Union Station.

To put the length of the HSR platform in perspective, the typical length of a HSR platform is 1400 feet. For comparison, the height of the World Trade Center is 1365 feet.

http://en.wikipedia.org/wiki/File:World_Trade_Center_Building_Design_with_Floor_and_Elevator_Arrangement.svg

For the HSR structure to be built along Vignes Street, the length of the HSR platform will be greater than the height of the World Trade Center. Currently there is no building of that size in the Western United States.

This structure must be built as an aerial station to maintain surface roadway circulation. The construction will displace the police department helicopter landing pad, Hooper Heliport, located on the roof of the Piper Technical Center, the world's largest rooftop airport.

The HSR Station along Vignes will also require the removal of METRO's brand new \$72

million dollar bus facility, located on the northeast and southeast corners at the intersection of Vignes Street and Cesar E. Chavez Avenue.

<http://www.google.com/#q=METRO+new+bus+facility>

Construction will also displace the County Jail's plan for expansion.

<http://touch.latimes.com/#section/-1/article/p2p-79999647/>

“The new downtown facility would be built next to the current jail site and would hold between 4,860 and 5,860 inmates, depending on the design chosen.... The construction is projected to cost between \$1.74 billion and \$2.32 billion and take seven to 10 years to complete..”

County Supervisors Molina, Yaroslavsky, Antonovich and Ridley-Thomas approved the prison expansion. (Supervisor Knabe was absent.) These Supervisors are also on the METRO Board and it is recommended that approval of the Vignes Street alignment meet with their approval before continuing further.

If the new HSR station is built underground at Vignes, the HSR tunnels will have to be built beneath the existing Red Line Subway tunnels. The bottom of the Red Line subway structure was constructed on top of the existing layer bed rock. That means HSR excavation must go below the bedrock 120 feet to build the HSR station. Passengers would have to descend 8 stories to reach the platform. Also, HSR tunnels will be twice the diameter of Red Line tunnels. Twice the diameter means four times the volume of earth will need to be removed. The cost of this alignment is extraordinary. Using the FRA's own terminology, this is a “show stopper” as the costs will far exceed the benefits, either above grade or below.

The only viable solution for HSR without building a structure as large as the World Trade Center is to move the Gold Line platform at Union Station and build run-through tracks for HSR over the 101 Freeway. The run-through option was studied by Amtrak and Caltrans ten years ago and was being further developed with Metrolink's assistance in 2010 and 2011 using HSR funding. This project is now being given full consideration by METRO, and HSR tracks should be included in the proposal.

<http://www.railpac.org/2014/06/06/whats-so-great-about-run-through-tracks-at-la-union-station/>

Moving the Gold Line Station Platform at Union Station to accommodate HSR has not been publicly discussed by the HSR Authority.

Since 2009, it was recognized that the current Gold Line station creates a choke-hold over the Union Station platform area and this limits the feasibility of building platforms long enough for HSR in the platform area. From 2010-2013, the HSR proposal was a two story structure, the size of the World Trade Center built on its side, with trains

running through the middle and across the top in Union Station to avoid moving the Gold Line Station Platform. There was no justification for this proposal, which would triple the budget for HSR. A new structure as big as the World Trade Center is not needed at Union Station. Moving the Gold Line is better, faster and cheaper.

Funding was available from the High Speed Intercity Passenger Rail Grants, \$150 million, to provide solutions to transit issues created by building a HSR station at Union Station, but the infusion of HSR money was put into the Regional Connector Project. The money was assigned before **all** the alternatives to building a HSR platforms at Union Station were discussed, including moving the Gold Line at Union Station. This appears to be a violation of Proposition 1A. The money was to be spent within a one-quarter mile radius of the HSR Station. The Regional Connector Project is beyond the one quarter mile radius of Vignes Street.

Perhaps the METRO Board has not been fully informed of the options.

Plus, there are other problems with the current design of the Gold Line Platform. When the Gold Line Foothill Extension to Azusa opens in 2015, additional passengers will arrive and depart at Union Station. At that time, there will be insufficient room on the Gold Line platform for safe passenger circulation. The platform is too small. This is a Fire-Life Safety issue.

When the single elevator is out of order on the Gold Line Platform, which happens often, disabled passengers must travel back to Chinatown to use an elevator and wait for a shuttle to return them to Union Station. A second elevator needs to be added.

In addition, there needs to be another set of stairs. The single stairway is currently overcrowded during rush hours. Passengers walking up the steps when the majority of people are going down are confronted with a sudden crush of commuters. Bicycle patrons must hoist their bikes overhead to navigate the crowds. The platform should be wider.

A pair of up and down escalators should be added.

But there is no room for escalators at the current location of the Gold Line Platform at Union Station. Nor is there room to widen the platform.

The solution is to relocate the Gold Line platform by moving the platform closer to the Union Station Building into the old baggage handling area. Previously, rail tracks were located in this area and were used for Post Office business, such as letters and packages. These tracks were later removed and the area became a parking lot for Amtrak employees and baggage handling.

Currently METRO proposes to build a busway in this area.

http://media.metro.net/board/Items/2014/07_july/20140717workshopitem2.pdf

The busway could be located elsewhere, perhaps on the Alameda side of Union Station, which is currently a parking lot, or in the area now occupied by the apartment building. Trackway expansion in the Union Station platform area is limited to previous trackway locations. Finding another location for the busway is less difficult than finding another area for a rail transit platform. Rail lines are governed by the California Public Utilities Commission (CPUC) and there are strict rules for overhead catenary clearances which are far greater than the clearances for buses and trucks (CPUC General Order 95). At present, these clearances at Union Station are intact. Rail expansion would be simplified.

Originally, back in the 1990's, METRO Planning designed the Orange Line in San Fernando Valley as a transit line. Instead, for cost reduction purposes, the busway was built. But the success of the busway has generated discussions to change the busway into to a transit line. Doing so today will be extremely difficult and expensive and disruptive to the current patronage.

<http://www.sfvbj.com/news/2014/aug/01/valley-rail-coalition-track/>

If METRO uses the old trackway area behind Union Station as a busway, then the public loses out on the potential for the area to become a transit station for the Gold Line. METRO Board and the HSR Authority should consider retaining this area for rail transit expansion only.

If the Gold Line was re-located, then there would be sufficient room in the current train yard to add the longer High Speed Rail Platforms. With this option, there would be no need for the added construction expense of building a HSR along Vignes Street or building a double decker HSR platform within Union Station.

For further clarification, it is the current location of the Gold Line tracks north of the platform that creates a choke-hold over the remainder of the rail yard. There is no room for High Speed Rail platforms unless the Gold Line curve that leads north to Chinatown is re-built.

In the early 1990's, preliminary plans for the Gold Line at Union Station also suggested a platform location in the old baggage handling area. The passenger circulation patterns were streamlined compared to today's arrangement, commuters could have easily transferred to the Red Line by going down an escalator from the Gold Line platform to the Red Line Alameda entranceway, just behind the current Starbucks at Union Station. If that alignment had been built, passengers today could descend by escalators into the atrium and be met by the aroma of hot coffee and freshly baked goods. Passengers transferring from the Red Line to the Gold would not need to walk through the crowded passenger tunnel.

But this alignment was not chosen in the 1990's because Catellus, the property management company created from a merger of Santa Fe and Southern Pacific Railroads, owned the Union Station property at that time, and that alignment had other problems. Just north of the current Gold Line Platform are the Garden Tracks. These tracks are reserved for private owners to park their antique rail cars. When Catellus owned the railyard, these tracks could not be disturbed. That forced the Gold Line to go over the Garden Tracks. Going up, over and around the Garden tracks is what creates the choke-hold pattern over the northern part of the rail yard.

But in 2011, METRO purchased the Union Station property. The Garden Track storage facility could now be moved to the Metrolink/Amtrak Yard near Washington Boulevard.

When standing on the current Gold Line Platform at Union Station and observing the tracks to Chinatown, you can see that the tracks climb higher than would be necessary if those antique rail cars weren't stored in that location. The tracks also swing slightly east into the railyard instead of traveling directly westward into Chinatown.

Metrolink engineers were aware of this choke-hold and supported the idea of moving the Gold Line Platform, but this proposal has not been discussed publicly at HSR meetings.

As there are new METRO Board Members, the idea of moving the Gold Line at Union Station should be discussed publicly. The Foothill Extension will be opening in 2015 and there will be increased patronage. A larger platform will be required for safety reasons.

With the proposed location for the Gold Line platform at Union Station, a new bridge over the 101 Freeway should be built. A more streamlined alignment connecting the new platform to the existing Alameda alignment is possible. The old zig zag bridge could be utilized as a storage track for rush hour trains and the required track connections could use yard design criteria as these tracks would now become non-mainline. But this proposal is outside the range of this discussion.

If the Gold Line station platform is relocated and there is sufficient space at Union Station for HSR platforms, then there is no need for a second large HSR terminal in Burbank or San Fernando. The FAA rules on electromagnetic interference (see my previous comment posted on the Burbank to Palmdale section) will not allow HSR to build an at-grade station at Burbank and will require a below grade construction. The Crenshaw Line at LAX must comply by these same FAA rules and that alignment will be built in a trench. Building a HSR Station at Burbank Airport will require a 35 foot deep trench.

The most significantly halfway point for a HSR stop between Union Station and Palmdale that serves the majority of the San Fernando and Santa Clarita Valley residents is downtown San Fernando City. An aerial HSR station in that location should accommodate Metrolink and freight passage as well. But since 2011, this location has not receive the same attention and funding from HSR as Burbank Airport. In the future,

this location should be considered in all future planning discussions.

Thank you for your attention to this matter.

Susan MacAdams

310-994-8407

susan.macadams@gmail.com