To: Transportation Conformity Working Group

Date: March 10, 2010

Subject: RTIP ID# RIV520109
Perris Valley Line
Supplemental Information

During the TCWG meeting of February 23, 2010, some additional information was requested about the proposed Perris Valley Line project, a proposed extension of Metrolink 91 service from Riverside to Perris (Riverside County). The following points and responses are provided in response to TWCG requests:

1. **Question on P. 9 of form: Is the Perris Multi-Modal facility part of project? More detail on the Perris Multimodal Transit Center would be desirable to the TCWG.**

The Perris Multimodal Transit Center (PMTC) is a stand-alone project, and has been completed. The PMTC is a Riverside Transportation Agency (RTA)-managed facility for the transfer between local and regional bus routes. Proposed RTA services would use the RTA fleet of CNG-fueled buses (see attachment, which confirms RTA use of CNG for its bus fleet). The PMTC includes eight bus bays and five canopies. The facility is operated as a bus terminal by RTA prior to the opening of the proposed PVL project, and 80 temporary surface parking spaces would be provided. The plans for the PMTC contemplated the creation of the PVL and the provision of commuter rail service to the facility, providing a true multimodal facility.

The PVL Downtown Perris Station would be located southwest of I-215 and between San Jacinto Avenue and 4th Street at the existing PMTC. The only improvements to be undertaken by RCTC would include the expansion of the existing parking capacity by approximately 440 spaces, and track realignment within the ROW to allow for proper spacing between the platform and the train. With the PVL, peak hour traffic (PM cold starts) at the PMTC is estimated at 115 departures (see Table 1 below).

The air quality analyses performed for the Perris Valley Line indicate that less than significant impacts would result with the development of the PVL at the PMTC.

2. **Provide more discussion on the proposed Layover Facility. The form speaks to the fact that trains won't be idling at the Layover Facility, but more discussion would be appropriate**.

The Layover Facility is planned to be located south of the South Perris Station and parking lot, generally bounded by I-215, Mapes Road and Case Road. At the Layover Facility, there would be four trains housed to support the morning train runs; other activities at the Layover Facility would include light maintenance and servicing. The operational plans for the Layover Facility include periods of engine idling and movement of trains/locomotives around the Layover Facility.

The 12 train schedule calls for six train sets to execute the daily schedule. Under the proposed schedule, trains entering the Layover Facility after making the stop at South Perris Station

would stay for two hours or more before making the return trip to Los Angeles Union Station or would stay overnight for use the next morning. With such extended layover times, trains would be shut off rather than burning fuel over a two-hour idle time; idling would be restricted to the minutes right before a train leaves the Layover Facility. Moreover, this limited idling would be restricted to a single train at a time as individual departures would be staggered. There are also no sensitive receptors within 5,000 feet of the proposed location of the facility.

3. **Potential for bus exhaust at PVL stations was discussed, and more information was requested. Specifically, the number of bus berths at each station was requested, and the fuel type of buses that could be idling was requested.**

It has been confirmed that the RTA bus fleet is CNG-powered: see Attachment 1. Space for buses and bus layover at each PVL station is planned as shown in Table 1.

Table 1
Perris Valley Line
Proposed Station Bus Bays and Layover Space

Station	Bus Bays	Bus Layover Space
Hunter Park	4	2
Moreno Valley/March Field	3	2
Downtown Perris	N/A	N/A (See PMTC discussion)
South Perris	6	4

4. Other Information

To expand the discussion of projected operations from each of the PVL parking lots, the following excerpt from the environmental studies performed for the PVL indicates the potential peak hour cold starts that were evaluated in order to determine potential air quality impacts. These data were considered in combination with train operations, including idle time during each of the 12 train runs, for which the emissions from the entire length of the Metrolink 91 was evaluated. The analysis of parking lot conditions was prepared to assess the potential impacts to individuals from "cold start" emissions. Emissions from "cold starts" are those that could occur when peak hour riders, in this case, return to their vehicles from the train. This would occur during the evening peak periods for the PVL. The pollutant of concern is CO.

For purposes of providing a conservative, worst-case impact analysis, CO concentrations were evaluated assuming that the largest parking lot (880 spaces at the South Perris Station) was filled to capacity and that all cars would be started from a maximum "cold start" state (resting for longer than 12 hours). If impacts are less than significant using this conservative approach with maximum project conditions, then impacts under more normal project conditions would also be less than significant at this lot as well as at each of the smaller parking lot locations.

The parking lot CO hot spot analysis considered emissions from all three vehicular emissions categories: engine start, idle time, and the distance traveled within the lot. Emissions factors were ascertained using EMFAC2007 emissions model. Dispersion modeling was conducted using the ISC-ST3 dispersion model, using EMFAC2007-generated emissions factors and

SCAQMD supplied meteorology data collected from their Riverside wind monitoring station. EMFAC2007 emissions factors, ISC dispersion modeling output, and detailed emissions calculation worksheets are provided in Attachment 2 (see Appendix B in the attached Air Quality Technical Report).

In carrying out the analysis, a key modeling assumption was to place sensitive receptors around the proposed 880-space parking lot perimeter, set back at a distance of 25 meters. This assumption is conservative, as actual locations where individuals would likely have a one-hour exposure duration to parking lot CO emissions would be greater than 25 meters from any of the five parking lot locations. Based on the above-described approach, the maximum off-site CO concentration at any sensitive receptor location would be 12.0 parts per million and 8.4 parts per million for the one-hour and eight-hour averaging periods, respectively. These worst-case concentrations are below the NAAQS of 35 parts per million and 9 parts per million for the one-hour and eight-hour averaging periods, respectively. They are also below the CAAQS one-hour concentration not exceeding 20 ppm, and the eight-hour concentration of nine ppm; the results are summarized in Table 2, below.

Table 2
Parking Lot Carbon Monoxide Analysis

Parking Lot	1-Hour Concentration (ppm)	Significant Impact?		8-Hour Concentration (ppm)	Significant Impact?	
		CAAQS (20 ppm)	NAAQS (35 ppm)		CAAQS (9 ppm)	NAAQS (9 ppm)
South Perris Station	7.2	NO	NO	5.0	NO	NO

Concentrations measured at model default distance of 25 meters. CAAQS – California Ambient Air Quality Standard, NAAQS – National Ambient Air Quality Standard. Analysis done for lot at full capacity (880 cars) and all cars leaving during PM peak hour.

The following traffic analysis provides a description of the determination of the peak hour traffic volumes related to each station, and identifies the periods when project-generated traffic from parking lots would be the greatest. From the data collected, the weekday AM and PM peak traffic hours throughout the entire PVL study area typically occur during the 7:15 to 8:15 AM and 4:30 to 5:30 PM periods, respectively. However, peak PVL ridership periods within the study area are from 5 to 7 AM and 5 to 7 PM based on ridership projections (before and after the existing AM and PM peak travel times for area traffic, respectively, with a little overlap in the PM peak). This is due to the travel times of PVL passengers to/from stations depending on their desired arrival/departure times in Los Angeles, with taking approximately one hour 15 minutes to two hours and 20 minutes of train travel time into account. For analysis purposes, the 6-7 AM and 5-6 PM analysis hours were selected since the combination of project-generated traffic and background volumes would be highest.

Table 3 below lists the auto trips by station during the AM and PM analysis hours.

Table 3

Perris Valley Line
Auto-Trip Generation

Station	AM					PM				
	Park-and-Ride		Drop-off/ Pick-up		Bus	Park-and-Ride		Drop-off/ Pick-up		Bus
	In	Out	In	Out		In	Out	In	Out	
Hunter Park	146	2	63	63	2	1	111	47	47	2
Moreno Valley/ March Field	129	1	37	37	4	1	30	28	28	4
Downtown Perris	75	2	19	19	5	4	115	29	29	5
South Perris	174	0	31	31	3	0	268	47	47	3
Total	**524**	**5**	**150**	**150**	**14**	**6**	**524**	**151**	**151**	**14**

As shown in the table, at the largest parking lot (the proposed 880 space lot at the South Perris Station), the total peak period trip generation is projected to be 268 trips. This is substantially lower than the total capacity of the lot, which was evaluated for the CO analysis, as noted above. Therefore, the evaluation of potential parking lot CO hot spots demonstrates that CAAQS and NAAQS would not be contravened.

emphasizes that transportation facilities, such as arterial trafficways, should enhance their physical settings by preserving scenic, aesthetic, historic and environmental resources while maintaining safety and mobility. The Regional Non-Motorized Plan focuses on desirable alternatives to single occupancy vehicles such as transit use to reduce the number of vehicle trips and vehicle miles traveled, thereby improving air quality and helping to relieve congestion and gridlock.

C. Fare Structure

In March 2009, a fare study was completed, resulting in the following fare structure approved and adopted by the Board of Directors to take effect June 28, 2009.

Fare Category	Current	Proposed June 2009
Regular Fixed-Route One-Way Fares		
Cash-adult	$1.25	$1.50
Cash-senior	$0.60	$0.70
Cash – disabled	$0.60	$0.70
Cash – child	$0.25	$0.25
Cash – youth	$1.25	$1.50
Regular Fixed-Route Fare Passes		
Daypass-adult	$3.75	$4.00
Daypass-senior	$1.85	$2.00
Daypass-disabled	$1.85	$2.00
Daypass – youth	$3.75	$4.00
7-day pass	$12.00	$16.00
30-day pass – adult	$43.00	$50.00
30-day pass – senior	$21.00	$23.00
30-day pass – disabled	$21.00	$23.00
30-day pass – youth	$32.00	$35.00

Fare Category	Current	Proposed June 2009
CommuterLink One-Way Fares		
Cash-adult	$2.25	$3.00
Cash-senior/disabled	$0.60	$2.00
Universal Fixed-Route Fare Passes		
Daypass-adult	$3.75	$7.00
Daypass-senior	$1.85	$5.00
Daypass-disabled	$1.85	$5.00
30-day pass – adult	$43.00	$75.00
30-day pass – senior	$21.00	$50.00
30-day pass – disabled	$21.00	$50.00
Dial-A-Ride Fares		
DAR Single Trip Fare	$2.50	$3.00
DAR 10-Trip Ticket Book	$25.00	$30.00

D. Vehicles in Fleet

RTA's March 2009 fleet totals 165 vehicles for its fixed-route services. There are 102 Compressed Natural Gas (CNG)-powered 40-ft. buses currently used for directly operated fixed routes; 63 small buses and vans for contracted fixed routes which consist of 13 CNG 32-ft. buses; 42 Type II and VII vehicles; 5 trolleys, and 3 30-ft. diesel buses which are used as spares. RTA also has an additional 58 vehicles employed for paratransit services, for a total of 223 revenue service vehicles. *Refer to Table 1 for detailed inventory of the RTA fleet.*

The CNG 40-ft. buses are used to operate directly services that generally occur in more densely populated areas such as Riverside, Corona, Moreno Valley, Perris and surrounding communities while the 32-ft. CNG buses and 22-ft. buses are typically used as CommuterLink vehicles on contracted fixed-routes or for local service in lower-density communities. All RTA vehicles comply with clean fuel policies and come fully equipped with ADA accessible wheelchair lifts, including

the paratransit vans. In addition, all fixed-route buses and service vehicles are equipped with bicycle racks.

In FY 2009 RTA operated a total of 147 fixed-route peak hour vehicles that will decrease in FY 2010 to 136 fixed-route peak-hour vehicles throughout the service area.

E. Potential Population to Be Served

While RTA services are expanding among the public in general, the Agency continues to increase and expand its commuter services as a market segment having growth potential. Many customers perceive the branding of the CommuterLinks to be an important facet of this service. Many of those vehicles include amenities such as the upholstered seating, wireless internet, and on-board satellite television service. To expand on this market base, RTA is launching new express routes from San Jacinto/Hemet to Riverside and San Jacinto/Hemet to Escondido, which will begin in summer 2009. Additionally, the Route 149 is proposed to become CommuterLink Route 216 in winter 2010.

Another significant group of potential new customers that was identified in the 2007 Comprehensive Operational Analysis (COA) Study are students in high school and college. RTA is committed to working with school districts, colleges and universities to improve access to public transit. For middle and high schools, RTA compiles and updates a database containing information on facility locations, bell schedules and district boundaries for routing and scheduling purposes. At the college level, RTA continues to develop and build relationships with college and university officials to improve transportation for their students.

RTA operates three cooperative pass subsidy programs with local colleges and universities. The first is the University of California, Riverside (UCR) University Pass Program (UPASS) which began September 2006; the second is the Riverside Community College District (RCCD) Go-Pass Program which was inaugurated in August 2008; and the third is the La Sierra University UPASS Program which was launched January 2009. All programs allow students with a valid identification card from these campuses to receive complimentary access to any of RTA's fixed-routes. RTA anticipates expansion of these programs to also include California Baptist University for the 2010 academic year.

F. Facilities

Operational Facilities

RTA's primary facility is located in the City of Riverside and houses the Administration, Operations, and Maintenance departments with approximately 320 active employees at this site. RTA's secondary facility is located in Hemet which opened in June 2000. It now has approximately 54 employees assigned to the Maintenance and Operations departments. The Hemet facility is utilized for routes