



City of Arts & Innovation

City Council Memorandum

TO: HONORABLE MAYOR AND CITY COUNCIL DATE: MAY 5, 2015

FROM: PUBLIC WORKS DEPARTMENT WARDS: ALL

SUBJECT: PRIORITIZATION OF GRADE SEPARATION PROJECTS FOR CONCEPTUAL DESIGN AND FUTURE FUNDING OPPORTUNITIES

ISSUE:

The issue for City Council consideration is to prioritize additional railroad grade separations for conceptual design and future funding opportunities.

RECOMMENDATION:

That the City Council approve the Madison Street/Burlington Northern Santa Fe (BNSF), Third Street/BNSF, Spruce Street/BNSF and Jackson Street/BNSF rail crossings for conceptual grade separation design and future funding opportunities.

CITY COUNCIL MEETING OF MARCH 17, 2015:

On March 17, 2015, the City Council received a report on the prioritization of grade separation projects. Following discussion, the City Council continued discussion of the Madison Street/BNSF, Third Street/BNSF, Spruce Street/BNSF and Jackson Street/BNSF rail crossings for up to 30 days and requested staff return with data on all locations including pedestrian, bicycle, and commercial traffic counts within 30 days. The results of the vehicle classification, pedestrian, and bicycle counts are summarized in Attachment 4.

Per the 24-hour vehicle classification counts (Attachment 4), 38 large school and passenger buses cross the tracks at Madison Street daily. This figure does not include any small school buses which are classified under the two-axle six-tire vehicle count in the 24-hour vehicle classification counts survey. This explains the discrepancy with the number of school buses (115) supplied by Riverside Unified School District (Table 3). Staff have confirmed with RUSD that 20 large school and approximately 100 small school buses cross the tracks daily.

COMMITTEE RECOMMENDATION:

On June 12, 2014, the Transportation Committee (Committee), with Chair Adams, Vice Chair Mac Arthur and Member Melendrez present, received a report on the prioritization of grade separation projects and unanimously recommended that the City Council prioritize the Madison Street/BNSF, Third Street/BNSF, Spruce Street/BNSF, and Jackson Street/BNSF rail crossings for conceptual grade separation design and future funding opportunities including providing alternative options for Madison Street and noting the importance of gathering input from all

Councilmembers.

BACKGROUND:

Mitigating the impacts of the numerous at-grade rail crossings in the City has been a long-standing priority of the City Council. However, the high cost and limited funding available to grade separate at-grade highway-rail crossings poses a significant financial challenge. Beginning in the early 2000's, several State and Federal Legislators encouraged the City Council to work with the Riverside County Transportation Commission (RCTC) to prioritize future grade separation locations and complete as much design work as possible to get specific projects ready to bid. Consequently, on August 9, 2005, the City Council prioritized the six at-grade rail crossings listed in Table 1.

1.	Columbia Avenue/BNSF
2.	Magnolia Avenue/Union Pacific Railroad Co. (UP)
3.	Third Street/BNSF
4.	One grade separation between Arlington Avenue and Monroe Street with Madison Street as the preferred location and Mary and Adams Streets as the second and third alternate locations
5.	Iowa Avenue/BNSF
6.	Tyler Street/BNSF

During this period, RCTC developed a Grade Separation Funding Strategy and Countywide project priority list which was adopted in 2006. Proposition 1B was also approved by State voters in 2006 ultimately resulting in \$152.7 million being allocated to grade separate 12 rail crossings in Riverside County.

On July 24, 2007, the City Council directed the Public Works Department to eliminate the Arlington Avenue to Monroe Street study and approved Mary Street as the location of a grade separation in this corridor. The City Council also added Streeter Avenue/UP and Riverside Avenue/UP as priority crossings and directed the Public Works Department to begin preliminary design for each location. Work on the Mary Street grade separation was stalled due to a lack of funding and the project was removed from the priority ranking in October 2009. The Tyler Street grade separation was also removed from the priority ranking in 2009 after extensive studies determined that improvements to the Tyler Street/State Route 91 Interchange would more effectively reduce congestion.

On April 10, 2008, the California Transportation Commission (CTC) approved \$80.5 million under the Proposition 1B Trade Corridor Improvement Fund (TCIF) Program for six railroad grade separation projects in the City: 1) Columbia Avenue, 2) Iowa Avenue, 3) Third Street, 4) Riverside Avenue, 5) Streeter Avenue, and 6) Magnolia Avenue. All of the TCIF projects with the exception of Third Street are either complete or under construction. The City Council approved delaying the Third Street grade separation in February 2011. The project was subsequently removed from the TCIF program since the project was significantly underfunded and could not meet the TCIF deadline for start of construction.

Although funding for additional grade separations is now very limited, it remains a top legislative priority for the City and RCTC. On January 30, 2014, RCTC conducted a workshop which included a presentation entitled "Goods Movement – What's Next". RCTC's presentation

included a summary of their 2014 Legislative Platform for Goods Movement. The key points included: ensuring TCIF projects are delivered; supporting priority grade separations by seeking other funding opportunities such as State (Section 190) Grade Separation or High Speed Rail funds and issuing future calls for projects as funding becomes available; supporting a comprehensive approach including highway improvements in key areas, quiet zones and other safety improvements, and use of cleaner fuels; advocate for Federal support of freight projects; and protecting Congestion Mitigation Air Quality Funds by ensuring grade separations remain eligible.

The City’s strategy of prioritizing grade separation projects and completing early design has proven effective in securing State and Federal funds. To ensure local resources are directed to the highest priority projects and that the City continues to be in a strategic position to receive Federal and State funding as it becomes available, the Public Works Department is recommending the City Council adopt a second generation of priority rail grade separation projects.

Recommended Priority Projects

The Public Works Department began evaluating rail crossings using the RCTC Countywide ranking. RCTC completed their first technical ranking of all the mainline crossings in the County in 2006. The crossings were scored on: safety, existing and future daily vehicle delay, 2035 emissions, residential noise, adjacent grade separations, and local priority. The ranking was updated by RCTC in 2012 with added criteria for being an isolated location and project readiness. The crossings were then placed in five priority groups. The 2012 RCTC Countywide ranking is attached (Attachment 1). A listing of the remaining mainline at-grade rail crossings in the City along with average daily traffic volumes and accident statics is shown in Attachment 2.

Based on a review of past City Council actions, RCTC ranking, freeway interchange locations, and local traffic patterns the Public Works Department is recommending the four crossings in Table 2 be prioritized for funding and conceptual engineering.

Table 2 – Recommended 2014 Grade Separation Priorities*
Madison Street/BNSF
Third Street/BNSF
Spruce Street/BNSF
Jackson Street/BNSF

**Locations are listed in no particular order.*

These crossings are: 1) strategically located on key arterials either adjacent to freeway interchanges or on arterials which provide cross freeway connectivity; and 2) fill in the gaps between existing grade separations (Attachment 3). The crossings, with the exception of Jackson Street/BNSF, are also identified as Priority Group 1 Crossings in RCTC’s March 2012 Grade Separation Priority. The Jackson Street/BNSF crossing is identified as a Priority Group 3 crossing in the March 2012 study.

Alternative Options for Madison Street

Alternative locations for a grade separation in the vicinity include Mary Street and Washington Street to the east and Adams Street and Jefferson Street to the west. Table 3 compares the alternative locations to Madison Street in terms of traffic volumes, vehicle hours of delay, school bus crossings, accidents, freeway connectivity, regional priority, and cost.

Of the five locations, Adams Street ranks the highest but would be extremely expensive in terms

of right-of-way acquisition and will have a long-term negative impact on one of the City's most significant business centers and revenue generators. Consequently, Adams Street is not considered buildable due to the impacts to surrounding development and costs.

The next highest ranking location is Madison Street which scores very well in all categories and can be constructed at a cost similar to other grade separation projects in the City. Mary Street ranks third but serves even less traffic and does not provide direct freeway access. Both Washington Street and Jefferson Street carry substantially less traffic and experience lower levels of vehicle delay and have limited accident history. Based on these factors, it is recommended that Madison Street be approved for further design development and be submitted for future funding opportunities. In addition, due to the direct freeway access provided by Madison Street and it being sufficiently close to the Lincoln Police Station, Utilities Operations Building, and the City's Corporation Yard Madison Street provides access to and from these facilities should a major event occur on the railroad.

Table 3 – Alternative Options for Madison Street

Location	Average Daily Traffic at Crossing	Vehicle Hours of Delay (1)	No. of School Buses (2013/14 School Year) (2)	Train Accidents: Fatal/Non-Fatal (Past 10 Years)	2012 RCTC Priority Group	Freeway Connectivity	Estimated Cost (\$MM)
Adams Street	16,020	22.9	76	3/1	1	Yes	100.0
Madison Street	14,700	19.8	115	1/1	1	Yes	35.0
Mary Street	11,600	14.1	103	1/1	3	No	35.0
Washington Street	9,010	10.2	112	0/1	3	No	30.0
Jefferson Street	7,500	8.9	109	0/1	4	No	30.0

- (1) Vehicle hours of delay per day takes queue length into consideration and quantifies the number of hours drivers are delayed per day at each crossing due to train activity.
- (2) Number of school buses obtained from Riverside Unified School District - includes all large and small school buses.

Next Steps

Subsequent to the City Council's adoption of a priority list, the Public Works Department will prepare conceptual designs and return to the Transportation Committee with these concept designs. Public Works staff will also continue to work with RCTC on potential funding opportunities, including funds made available through the successor to the Moving Ahead for Progress in the 21st Century Act (MAP 21). Although MAP 21 expired this year, and a multi-year successor act may not be approved until after the 2016 Presidential Election, it is anticipated that some level of funding for goods movement and grade separations will be included in the next reauthorization.

RCTC's funding strategy includes earmarking 25% of RCTC's Federal Congestion Mitigation and Air Quality and Surface Transportation funds to grade separations and encourages local agencies receiving grant funds from RCTC to commit 10% of their Measure A Local Streets and Roads subvention to grade separation projects. Through the years, the City has done so on the assumption these funds would be used as annual debt service for grade separation projects. However, with the City's success in obtaining grant funds and moderate construction costs during the economic downturn, it has not been necessary to issue debt to complete the projects. The annual allocation of Measure A funds has been expended each year on the grade

separation projects. The Public Works Department recommends that the City continue allocating 10% of the Measure A funds to rail projects to allow for completion of the concept design of the second generation priority grade separation projects and to fund the extension of the proposed Quiet Zone to other parts of the City.

FISCAL IMPACT:

There is no impact to the General Fund associated with this report.

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Attachments:

1. RCTC Grade Separation Priority Update Study – Table 4.3: 2012 Priority Groups
2. Proposed Railroad Crossing Priority Ranking (2014)
3. Grade Separation Map
4. Vehicle, Pedestrian, and Bicycle Counts