

EAST VINE/LEMAY INTERSECTION REALIGNMENT PROJECT DEVELOPMENT REPORT



PREPARED FOR



PREPARED BY



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PREPARED FOR

CITY OF FORT COLLINS
281 NORTH COLLEGE AVENUE
FORT COLLINS, CO 80524
970-221-6376

PREPARED BY

AECOM
717 17TH STREET, SUITE 2600
DENVER, CO 80202

EXECUTIVE SUMMARY

Project Description

The Lemay Avenue realignment and intersection improvements would construct a new arterial facility and intersection slightly to the east of the existing Lemay Avenue alignment. This realignment allows for a number of interim and ultimate solutions that include new at-grade intersections or overpass/underpass of the railroad and existing E. Vine Drive.

The realignment relieves several issues that currently constrain the existing alignment and intersection, which allows for the major project improvements and benefits to be achieved.



Project Improvements and Benefits

The project will address the following primary needs:

Safety: The project will improve safety and reduce risks for pedestrians, cyclists, vehicles and the railroad. The existing crossing intersection has averaged thirteen crashes per year between 2010 and 2012 and does not fully comply with new safety standards for crossings with vehicles, bicycles and pedestrians.

Neighborhood Connectivity: The project will improve multi-modal and neighborhood connectivity by establishing safer and more connected pedestrian/cyclist options and by providing an appropriately scaled roadway network and access points that are less impacted by heavier arterial traffic.

Traffic Congestion: The project will reduce traffic delays that significantly impacts mobility when trains are operating at the existing crossing.

Project Planning

The intersection improvements and realignment of Lemay Avenue at East Vine Drive is a vital capital improvement project resulting from and evolving through decades of planning efforts that address the existing infrastructure deficiencies, neighborhood impacts and future demands of a growing community. The realignment of Lemay Avenue first appeared on the City's Master Street Plan in the early 1980s. Subsequent planning efforts have confirmed and refined the concept.

Previous Planning Efforts that Provide Basis for Project

- ✓ City Plan (various versions)
- ✓ Transportation Master Plan (various versions)
- ✓ City of Fort Collins Master Street Plan
- ✓ Northside Neighborhoods Plan (2005)
- ✓ Mountain Vista Sub-Area Plan (2010)

Project Alternatives

Three alternatives have been identified through a scoping process with an initial overview of alternative characteristics and screening. Preliminary scoping includes constructability, costs, potential environmental impacts, and improving neighborhood connectivity.

Preliminary Alternatives Scoping Summary

	Realigned Lemay - At Grade	Realigned Lemay - Overpass	Realigned Lemay - Underpass
Primary Elements	Creates Realigned Lemay and a segment of proposed New Vine to current Arterial Standards, relocating intersection away from BNSF Crossing.		
	Removes existing at-grade crossing, constructing New Lemay crossing to current safety standards	Removes existing at-grade crossing, constructing a New Lemay overpass bridge over BNSF and existing E. Vine.	Removes existing at-grade crossing, constructing a New Lemay underpass with bridges for BNSF and existing E. Vine.
Permitting and Approval Risks	PUC approvals for new at-grade crossing uncertain. BNSF approvals required and will likely require relocation of switching yard.	General PUC and BNSF approvals required. Removes at-grade crossing risk.	General PUC and BNSF approvals required. Removes at-grade crossing risk, but may be disruptive to BNSF operations.
Environmental Considerations	General noise and construction impacts	Noise and visual impacts to the historic neighborhoods	High ground water table due to proximity to Dry Creek
Neighborhood Connectivity*	The ability to maintain a pedestrian and bicycle crossing at the existing crossing location is possible, but will require both PUC and BSNF approvals. Continue to explore all complimentary strategies for improving safety and connectivity.		
Construction Risks	Constructing new at-grade crossing while keeping BNSF operational will be difficult.	General construction risks. Timing of placing bridge girders over operational tracks.	Constructability of underpass in high groundwater, and constructing BNSF tracks is complex without a shoe-fly option.
Total Project Cost	\$24 to \$25 million	\$26 to \$27 million	\$40-\$41 million

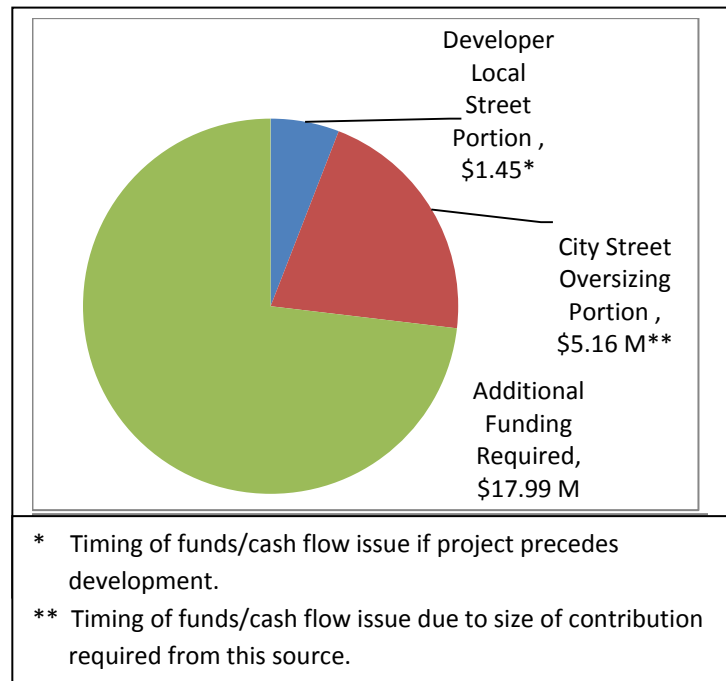
Funding

The project could use a combination of local and federal funding sources:

- **Local:** Sources include the potential future City sales tax for capital projects, developer street frontage obligations and street oversizing.
- **Federal:** Sources include the Highway Safety Improvement Program (HSIP) or Surface Transportation Program (STP), TIGER Discretionary Grant Program, and/or EDA Public Works and Economic Adjustment Assistance Programs.

Funding Scenario Example: The Realigned Lemay At-Grade Alternative Cost and Funding:

- Cost between \$24 to \$25 million.
- Funding approach could rely entirely on City funds as federal funds may be unreliable.
- The project could advance prior to full funding by advancing project design and development while other financing options for construction could be explored, such as bonds backed by sales tax revenues or federal program applications.



Project Development Next Steps

The next step in the process is to begin a more thorough data collection, preliminary design and funding evaluations that will address the following key questions:

- Is the added long-term cost/benefit of realignment and grade separation necessary to address anticipated 2035 congestion and delay, or could a realignment and at-grade intersection be sufficient as a near-term solution that could then transition at a later date? Will a new at-grade crossing be allowed by the PUC and BNSF, and would BNSF consider switching yard relocation?
- Is the added cost of an underpass to address visual and noise impact issues appropriate when a lower cost overpass would result in similar traffic performance without the higher cost and risk concerns, such as drainage issues, caused by the underpass?
- Does the currently unknown cost of relocation of the railroad switching yard and its ability to reduce railroad crossing/switching-related system congestion justify the expenditure?
- Can the existing at-grade crossing of existing E. Vine and existing Lemay remain in a limited configuration for pedestrians/cyclists.