

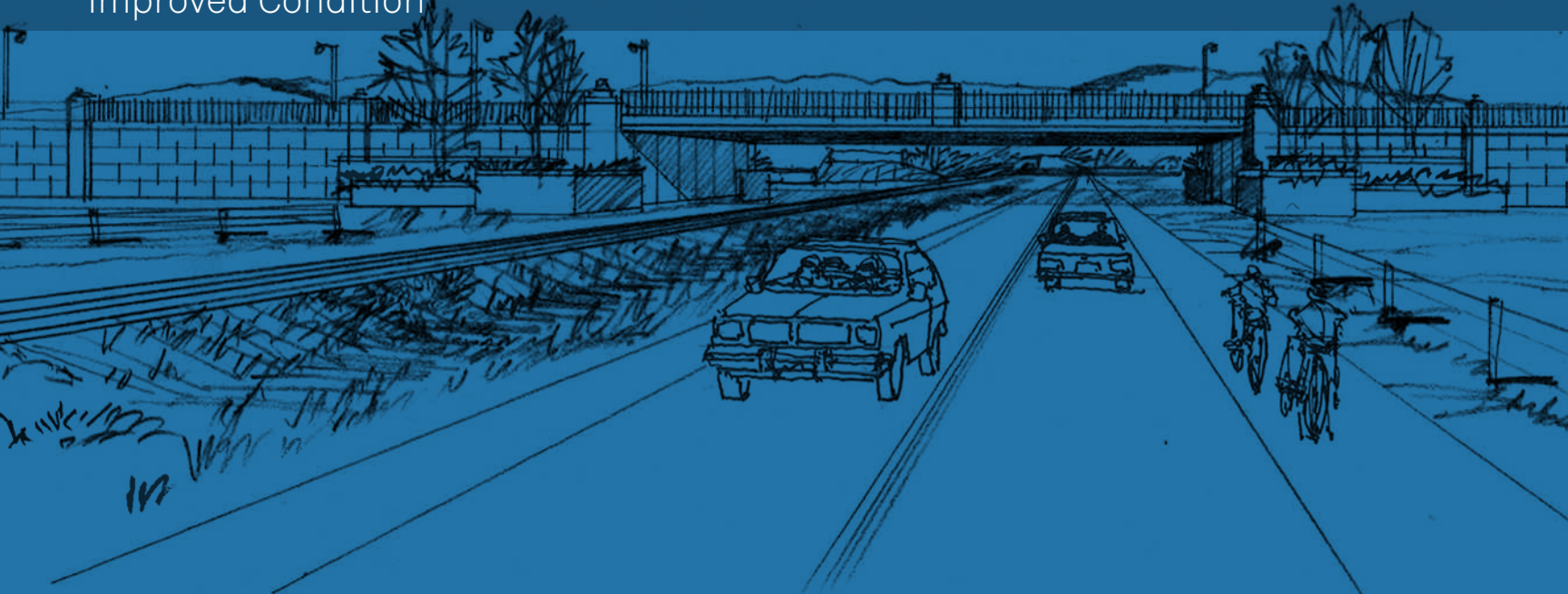
# SUNIGA/LEMAY MULTI-MODAL AND FREIGHT CONNECTIVITY PROJECT

June 4, 2015

Existing Condition



Improved Condition



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## APPENDIX (ATTACHED SEPARATELY)

- A. Mountain Vista SubArea Plan
- B. Project Development Report
- C. Benefit/Cost Analysis
- D. Letters of Support
  - Senator Michael F. Bennet, Colorado
  - Senator Cory Gardner, Colorado
  - Congressman Jared Polis, 2nd District Colorado
  - Gregory E. Dunaway, AVP Engineering Services, BNSF Railway
  - Darin Atteberry, Fort Collins City Manager
  - Terri Blackmore, Executive Director, North Front Range MPO
  - Marc Engemoen, Public Works Director, Larimer County
  - David May, President & CEO, Fort Collins Area Chamber of Commerce
  - Matt Robenalt, Executive Director, Downtown Development Authority
  - Julie Brewen, CEO/Executive Director, Fort Collins Housing Authority
  - Olga Duvall, Chair, Fort Collins Transportation Board

June 4, 2015

Secretary Anthony Foxx  
U.S. Department of Transportation  
1200 New Jersey Ave, SE  
Washington, DC 20590

Subject: TIGER Grant Application for the Fort Collins, CO - Suniga/Lemay Multi-Modal and Freight Connectivity Project

Dear Secretary Foxx:

The City of Fort Collins, Colorado is pleased to submit this application for the Department of Transportation's National Infrastructure Investments under the Consolidated and Further Continuing Appropriations Act, 2015.

The Suniga/Lemay Multi-Modal and Freight Connectivity Project is the end product of collaboration and partnerships between the City of Fort Collins, Larimer County, Downtown Development Authority, the Poudre School District, Burlington Northern Santa Fe (BNSF) Railway, the North Front Range Metropolitan Planning Organization, major landowners, major existing and future employers in Fort Collins, project site neighbors, and the general public. The City's planning process leadership manifests itself in strong support for the proposed improvements and clear and consistent support for the long-term vision supported by the proposed improvements.

This application requests funding to support a grade separation of the BNSF Railway and Lemay Avenue intersection located northeast of Downtown Fort Collins. The full project cost is \$27 Million, of which \$17 Million, or 63%, is requested of the TIGER program. The remaining \$10M (37%) would be funded through a combination of public and private sources.

The proposed improvements have been identified as a result of 30 years of community planning. This project plays a critical role in providing vital and urgent transportation infrastructure necessary to address current and anticipated needs. It embodies TIGER's emphasis on Ladders of Opportunity through building infrastructure that will increase connectivity to employment, education and other services, contribute to community revitalization and enhance the quality of life of existing and future residents. TIGER funding for the proposed improvements makes possible subsequent local government and private sector land development investments that will guide community revitalization and economic opportunity in the region over the next 25 years.

The proposed improvements are vital early components linked to the City's Mountain Vista SubArea Plan. Together, the Mountain Vista SubArea Plan and more recent Project Development Report provide the catalyst for:

- **Community Revitalization:** One of the fundamental aims of this project is to complete critical transportation improvements that will enhance connectivity for underserved neighborhoods. Residents of both the Alta Vista and Andersonville neighborhoods (located at the Vine/Lemay intersection) suffer from the constraints of severe congestion on a daily basis. This limits connectivity to employment, schools, goods and services.
- **Diverse Housing and Employment Opportunities:** This project will help facilitate the development of new housing and employment opportunity in a priority infill area near downtown Fort Collins. In recent years, this area has become the focus of increased economic activity, including the recent construction of the Woodward, Inc. Corporate Headquarters (1,700 employees) along

Lemay Drive. Safe and efficient transportation connections are necessary to sustain this new growth.

- **Multi-modal Connectivity and Safety:** A primary emphasis of this project is to foster a safe, connected, resilient and accessible system for all modes of travel. This project is a critical part of the City's Enhanced Travel Corridor network, which is intended to provide a system of multi-modal corridor connections between key activity centers, access to high frequency transit service and bicycle and pedestrian facilities.
- **Commerce and Accessibility Improvements:** The existing Vine/Lemay intersection, which includes the BNSF Railway crossing, is severely congested, with limited options to expand through or turn capacity due to land use constraints. Construction of a grade separated configuration will help alleviate congestion along existing roadways and the BNSF rail corridor, which in turn helps improve rail operations and the overall ability to move goods and services efficiently.

The transportation improvements identified in this application were part of an application submitted in the 2013 TIGER funding cycle under the title "Vine/Lemay Project." Since that time, the City has taken a number of proactive steps to advance the environmental, design and funding processes for the project, and has narrowed the project scope. The new project, Suniga/Lemay Multi-Modal and Freight Connectivity Project, focuses on the grade separation of Lemay at the BNSF (the City renamed the new Vine Drive to "Suniga Drive" in early 2015). Recent project advancements over the past two years include the following:

- The City published a detailed Project Development Report including an alternatives screening and environmental analysis process in September 2014.
- The City appropriated 1 Million dollars in 2015 funds to advance final design of the project
- The City and the BNSF have a long-standing partnership and have constructed numerous safety and freight reliability improvements throughout Fort Collins. The BNSF will contribute 5% of the theoretical cost of the grade separation as specified in 23 CFR 646.210. This demonstrates their commitment to address the City's #1 transportation capital improvement project.
- The City has secured half of the right-of-way along the Lemay Avenue realignment and is in active negotiations for the remainder of the right-of-way, which will help streamline future construction.
- The City is securing developer local street obligation funds to contribute to this project.

The project schedule focuses on the primary goal of having all pre-construction activities completed to allow for obligation of construction funds by March of 2017 at the latest, and if alternative delivery is selected, this obligation could be as early as September 2016.

Enclosed is the City of Fort Collins' grant application and supporting information referenced in the submittal. If additional information is needed for your consideration, please contact Dean Klingner, P.E., Civil Engineer, City of Fort Collins, 970-221-6511, [dklingner@fcgov.com](mailto:dklingner@fcgov.com). The City would be pleased to provide additional details about the project and the rationale for TIGER grant funding.

A handwritten signature in blue ink, appearing to read "Rick Richter".

Rick Richter  
Rick Richter  
Director of Infrastructure Services  
City of Fort Collins





## EXECUTIVE SUMMARY

The Suniga/Lemay Multi-Modal and Freight Connectivity Project is the end product of 30 years of collaboration and partnerships between a full range of public and private sector entities. The City's leadership manifests itself in strong support for the proposed improvements and land use planning. Each improvement plays a critical role in providing vital and urgent transportation infrastructure necessary to address current and anticipated needs. TIGER funding for the proposed improvements helps leverage local government and private sector land development investments that will guide economic development in the region over the next 25 years.

The proposed improvements are vital early components linked to the City's Mountain Vista SubArea Plan. Together, the Mountain Vista SubArea Plan and the proposed "enabling infrastructure" investments provide the catalyst for:

- **Community Revitalization:** Facilitates the transportation connectivity necessary to revitalize existing disadvantaged and underserved neighborhoods and link to employment citywide, thereby improving quality of life.
- **Diverse Housing and Employment Opportunities:** Directs new development and employment to a priority infill area near downtown.

- **Multi-modal Connectivity and Safety:** Fosters a safe, connected resilient and accessible system for all modes of travel.
- **Commerce and Accessibility Improvements:** Alleviates congestion along the BNSF rail corridor to help enhance operations and the overall ability to move goods and services.

A variety of quotes from the Mountain Vista SubArea Plan are presented in this application. The plan itself is presented at Appendix A.

## Submittal Highlights

### State of Good Repair

Vine Drive and Lemay Avenue are in a poor state of repair characterized by deficient bridges, substandard conditions and accelerating deterioration caused by increasing truck and automobile volumes. Neither roadway meets City standards for their current roadway designations or their existing and projected traffic volumes. This project would improve the resiliency of the transportation system through separating roadway from rail and creating a more direct and efficient connection into and out of downtown. This project would also focus on improving the multi-modal transportation system to serve all modes safely and efficiently.



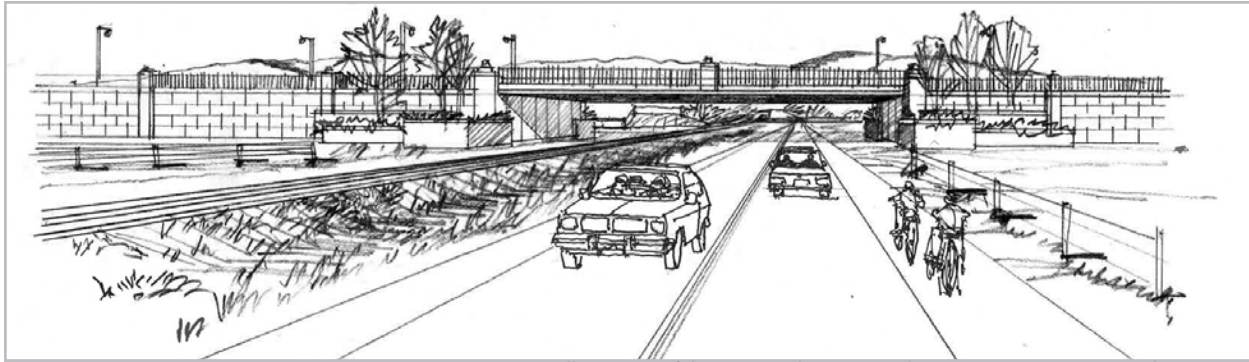


Figure 1: Illustration of the Proposed Lemay Grade Separation over BNSF and Vine Drive

### Economic Competitiveness

One of the fundamental aims of this project is to complete critical improvements that will increase opportunity for economic growth. If no improvements are made in the near future, the existing sub-standard roadway network will continue to deteriorate and unmanageable congestion will increase. This delay and the related impacts will deter private sector investment and the expansion of existing economic enterprises and activity under both short-term and long-term scenarios. These conditions will make it difficult for the City to attract new enterprises, and may cause some enterprises to relocate entirely, fueling a cycle of economic downturn.

### Quality of Life and Sustainability

The proposed improvements will enhance conditions at two historic residential areas, reduce congestion, and make the entire area more accessible. The project will enhance modal connectivity and improve accessibility and transport for economically disadvantaged populations. Life-cycle analysis is integrated into the City's Asset Management Program and contract requirements along with Value Engineering (VE).

Survey results collected as part of the 2009 Pedestrian Plan indicated that both Vine Drive and Lemay Drive rank in the top three least favorite places to walk in the City of Fort Collins.

### Safety

The proposed improvements address substantive safety issues by replacing non-standard facilities and replacing an at grade railroad crossings with a grade separated facility.

### Innovation

The project is a model of innovative project delivery. The project has been innovative from the beginning, including a highly collaborative and accelerated project delivery. The project will include features that reduce capital and long-term costs, protect the environment, improve mode choice and safety, and preserve long-term multi-modal benefits.

### Partnership

The Suniga/Lemay Multi-Modal and Freight Connectivity Project is the end product of 30 years of collaboration and partnerships between a full range of public and private sector entities. The City's leadership manifests itself in strong support for the proposed improvements and land use planning.

### Costs and Benefits

The cost of the grade separation of the Suniga/Lemay intersection totals \$27 million.

The local contribution to this project is \$10 Million, which represents a 37% match toward the overall \$27 Million project cost. The funding request of the TIGER program is \$17 Million. Detailed project costs are outlined in Appendix B, the Project Development Report.

The table below shows the cost breakdown of the major project components.

Improvement	Cost
Grade Separation of the BNSF/Lemay Intersection	\$ 12M
Construction of Four-Lane Arterial Roadways	\$ 8M
Bicycle/Pedestrian Facilities and Landscaping	\$ 6M
Neighborhood Street (Local Street) Construction	\$ 1M
	\$ 27M

The table below shows the approximate sources of local funding which constitute \$10M toward the overall \$27M project.

Local Funding Sources	Cost
1. City of Ft. Collins 2015 Appropriation to Project	\$ 1M
3. Street Over-sizing	\$ 5M
4. Local Street Developer Obligation	\$ 1.5M
5. City General Fund	\$ 2.5M
TOTAL	\$ 10M

***In addition to the local funding sources above, BNSF is committed to contributing 5% of the grade separation cost. The exact dollar amount will be confirmed in the coming months.***

The table below outlines anticipated benefits of the project with associated metrics.

Benefit Category	Measured Benefit
Travel Time Savings, Total Delay Reduction	23,157 hours per year \$466,614 per year
Total Crash Reduction Cost Savings	\$173,570 per year
Fuel Savings	32,224 gallons per year \$112,784 per year
Emissions Reductions	CO = 2,312 kg per year NOx = 441 kg per year VOC = 522 kg per year
Other Benefits (Not Quantified)	Road Maintenance Savings Emergency Vehicle Response Increased Population (+13,347) Additional Jobs (+15,065)

### Project Readiness and Approvals

This project has been envisioned and included in major City transportation plans for over 30 years. This extensive and long range planning would provide immediate improvements in mobility and access for existing neighborhoods, and would maximize the potential for integrated land use and transportation as the area grows and develops over time.

The City has advanced the project design by completing conceptual design and an alternatives analysis in 2014, as well as appropriating \$1M in funding in 2015 to advance the design and right-of-way review. The Vine/Lemay Project Development Report (published in September 2014) provides a robust description of the purpose and need, range of alternatives and environmental impacts. This study will assist in streamlining future NEPA clearance as federal funding becomes available.

The project is currently envisioned to be delivered using traditional design-bid-build approach, however if phasing of the improvements becomes critical the City is prepared to deliver via an innovative Contractor Manager/General Contractor (CMGC) method or Design- Build (DB) method. These alternative delivery methods would be considered if they are determined to appropriately manage risk for cost, schedule, and quality.

The calculated regional output for the project is \$46M. The regional earnings would be \$13.3M.





## A. PROJECT DESCRIPTION

The project involves the realignment of Lemay Avenue and construction of a new bridge over the railroad and Vine Drive, which directly parallels the railroad. This new bridge will allow existing Vine Drive to be reduced to a collector street with a more robust arterial and multi-modal version of Suniga Drive constructed approximately one thousand feet to the north, thereby eliminating the at-grade railroad crossing, and associated safety and congestion effects of an intersection and roadway directly adjacent and parallel to the railroad.

The City of Fort Collins will provide 37 percent (\$10 Million) of the \$27 Million project cost with the balance (\$17 Million) requested of the TIGER program. The source of the local funds comes from a dedicated City appropriation to the project, City General Fund monies, BNSF contribution, developer obligation, and partner agency funds.

Although the Colorado Public Utilities Commission could ultimately require three grade-separated railroad crossings in this area (per the Mountain Vista SubArea Plan), the top priority for a grade separation is at the BNSF/Lemay Railroad crossing. Both the Union Pacific Railroad (UPRR) and BNSF railroad lines serve the northeast portion of Fort Collins. Their

operations include a shared railroad switching yard along the existing Vine Drive between Lemay Avenue and Timberline Road, and a UPRR switching yard along Riverside Avenue between Mulberry Street and Lincoln Avenue. Both are secondary lines providing additional capacity to other BNSF and UPRR railroad facilities in Weld County. The existing at grade crossing at the Vine/Lemay intersection operates at Level of Service F conditions on a regular basis. This occurs primarily when long, slow-moving trains impede north/south traffic flow as they pass through the intersection. Long queues on Lemay often prohibit residential ingress and egress north and south of Vine.

The grade separation would delay the need for the other grade separations while allowing a substantial amount of planned development to occur and associated infrastructure funding to accrue. Specifically, the new development would help cover costs for the remaining improvements as development occurs.



The project will help facilitate connectivity for all modes of travel, including enhancements for bicyclists, pedestrians and transit users.

#### Enhanced Bicycle Travel

The City's 2014 Bicycle Master Plan integrates best practices and innovative thinking to develop a comprehensive set of strategies for safe and comfortable bicycling citywide. As part of the plan, all streets proposed with this project (existing Vine, Lemay and Suniga) will incorporate state of the art bicycle facilities based on the concept of improving safety, comfort and accessibility for cyclists of all ages and skill levels.



#### Transit Accommodations

Bus Route 8 currently serves the western edge of this subarea and runs through northeast Fort Collins via Vine Drive, Lemay Avenue, Conifer Street and College Avenue. This route provides connections to the River District, the Larimer County Department of Human Services, the North College Corridor, and Old Town Fort Collins.



This project is currently envisioned to be delivered using traditional design-bid-build approach, however if phasing of the improvements becomes critical the City is prepared to deliver via an innovative Contractor Manager/General Contractor (CMGC) method or Design-Build (DB) method. These alternative delivery methods would be considered if they are determined to appropriately manage risk for cost, schedule, and quality.

In summary, these improvements have been identified as a result of 30 years of community planning. The project plays a critical role in providing vital and urgent transportation infrastructure necessary to address current and anticipated needs.

This project has garnered a broad range of support from the congressional level to the local level. Letters of Support, provided in Appendix D, include the following:

*Senator Michael F. Bennet, Colorado*

*Senator Cory Gardner, Colorado*

*Congressman Jared Polis, 2nd District Colorado*

*Gregory E. Dunaway, BNSF Railway*

*Darin Atteberry, Fort Collins City Manager*

*Terri Blackmore, Executive Director, North Front Range MPO*

*Marc Engemoen, Public Works Director, Larimer County*

*David May, President & CEO, Fort Collins Area Chamber of Commerce*

*Matt Robenalt, Executive Director, Downtown Development Authority*

*Julie Brewen, CEO/Executive Director, Fort Collins Housing Authority*

*Olga Duvall, Chair, Fort Collins Transportation Board*

## B. PROJECT LOCATION

The project is located within the 1,500 acre Mountain Vista SubArea, a primarily undeveloped area within the northeast portion of the City of Fort Collins, Colorado. The national, state, regional and local settings of the proposed improvements are presented in Figures 2-5. The Mountain Vista SubArea is projected to accommodate a significant portion of Fort Collins' future growth. Figures 2-5 clarify the strategic importance of the project area relative to the Interstate system, Colorado's state highway system and the planning and development conditions in Fort Collins.

### Importance to the Region and Community

Investment in the proposed project is necessary for the health and continued prosperity of Downtown Fort Collins and management of the City's and Colorado's economic growth. This grade separation of BNSF/ Lemay is part of the City's larger strategy to revitalize existing neighborhoods, provide more efficient and direct access to employment, and improve quality of life for existing and future residents. Federal funding for the anticipated improvements is critical because strong, smart and phased growth in this area is constrained by "enabling" infrastructure with costs that exceed the capacity of traditional, innovative and private sector funding mechanisms in place in Fort Collins.

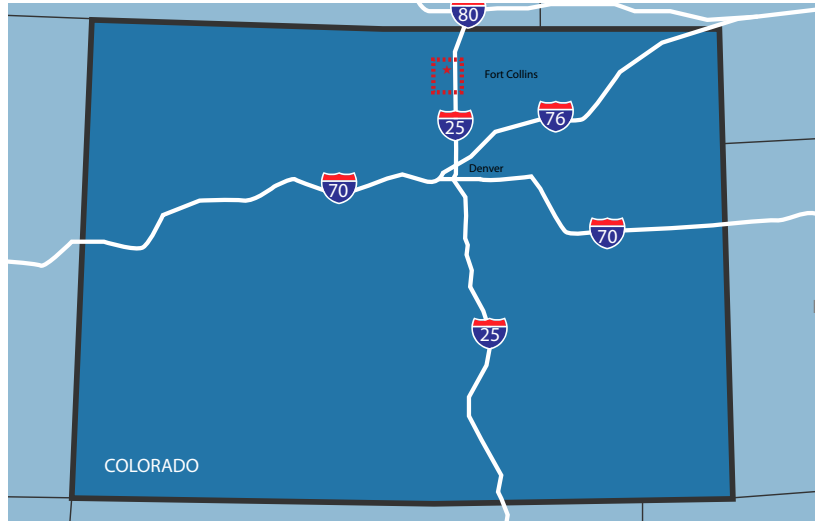


Figure 2: National and State Setting

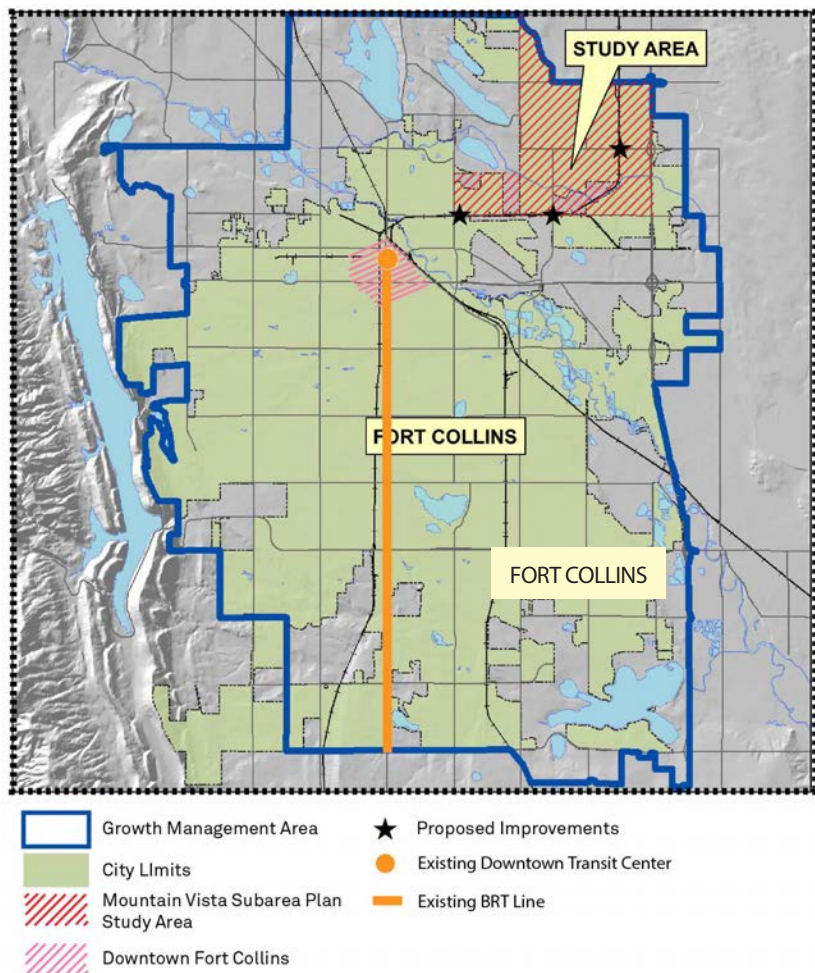
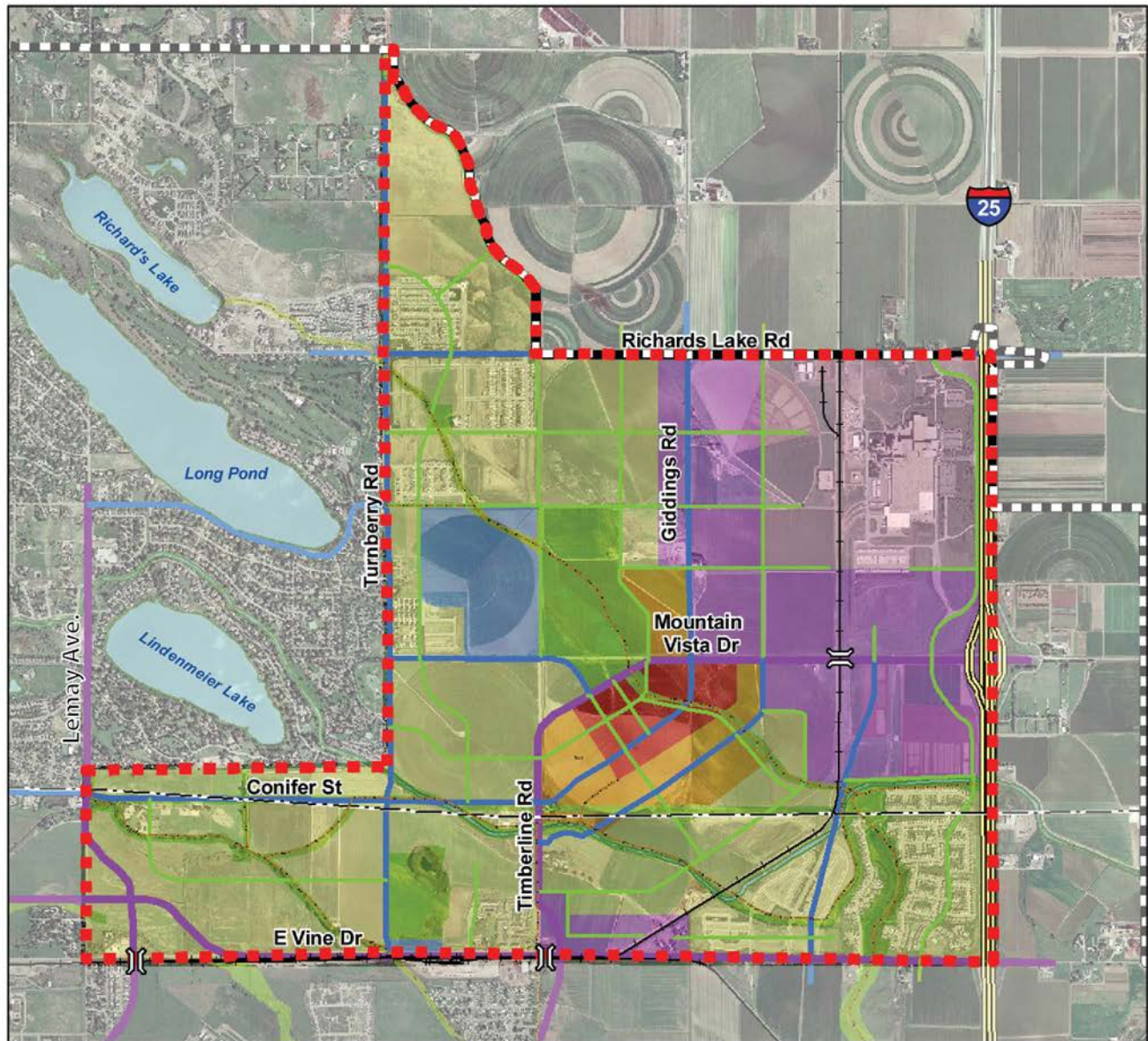


Figure 3: Regional and Local Setting (N.T.S.)





## Legend

### Land Use

- Community Commercial (CC)
- Employment (E)
- Industrial (I)
- Low Density Mixed Use Neighborhood (LMN)
- Medium Density Mixed Use Neighborhood (MMN)
- School (PSD)
- Community Park (POL)

### Streets

- Collector
- 2-Lane Arterial
- 4-Lane Arterial
- 6-Lane Arterial
- Interstate 25

### Other Features

- Mountain Vista Subarea Boundary
- Power Line
- Trail
- ++++ Railroad
- Growth Management Area

|| Grade Separated Rail Crossing

■ Water

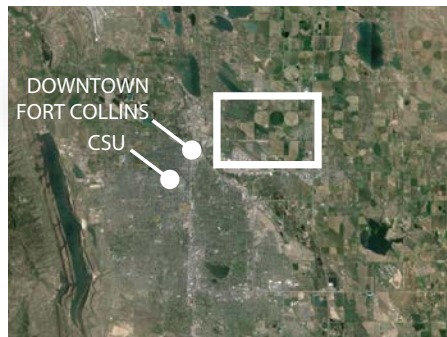
■ Natural Areas/ Ditch Corridors



0 2,500 5,000  
Feet

Figure 4: Mountain Vista Framework Plan





Vicinity Map

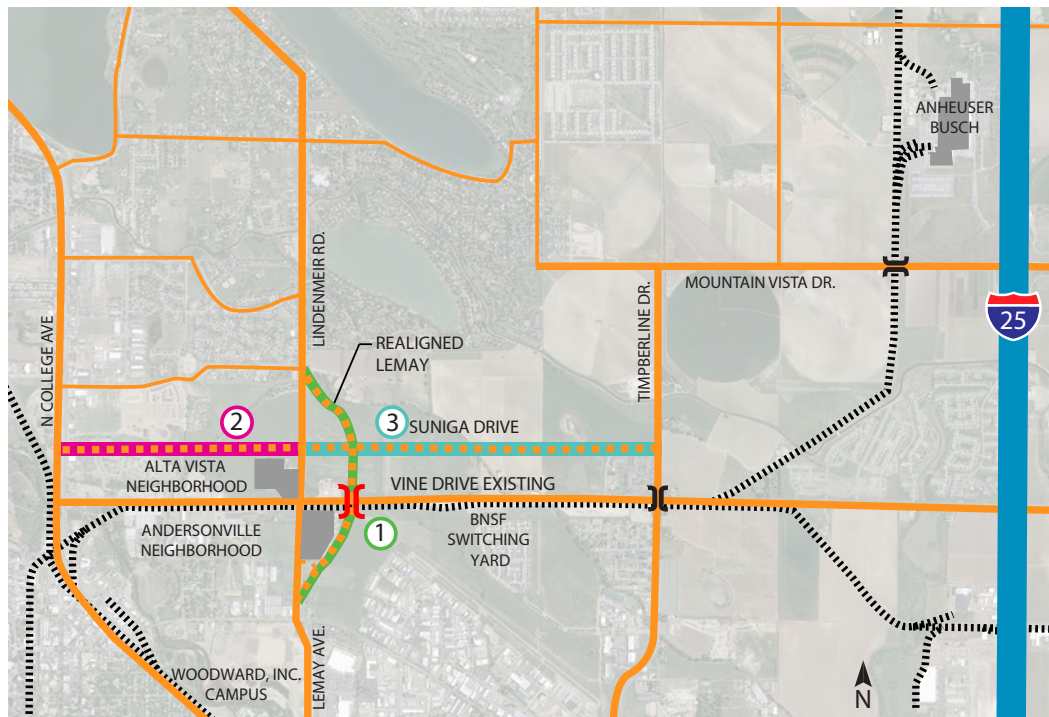


Figure 5: Vine/Lemay Intersection Local Context Map

Improvement	
①	Grade Separation of the Vine/Lemay RR Intersection
②*	Proposed Suniga Drive from College to Lemay
③*	Proposed Suniga Drive from Lemay to Timberline

\*Future development (not included as part of this funding request)

#### LEGEND

- PROPOSED GRADE SEPARATED RAIL CROSSING
- OTHER FUTURE GRADE SEPARATED RAIL CROSSING
- STREET (EXISTING)
- STREET (PROPOSED)
- RAILROAD
- INTERSTATE



## C. PROJECT PARTIES

The project is the end product of collaboration and partnerships between the City of Fort Collins, Larimer County, CDOT, utilities, the Poudre School District, BNSF Railroad, the North Front Range Metropolitan Planning Organization, major landowners, major existing and future employers in Fort Collins (Anheuser Busch and Woodward), project site neighbors, and the general public. The City's planning process leadership manifests itself in strong support for the proposed improvements and clear and consistent support for the long-term vision supported by the proposed improvements. Please refer to Appendix D for letters of support.

## D. GRANT FUNDS & SOURCES

This project proposes a grade separation of the Vine/Lemay Intersection with a realignment of Lemay Avenue to the east (see Figure 6).

The following table shows the total cost of project improvements (\$27M), of which \$17M (63%) is requested of the TIGER Discretionary Grant program.

Improvement	Cost
Grade Separation of the Vine/ BNSF/ Lemay Intersection	\$ 12M
Construction of Four-Lane Arterial Roadways	\$ 8M
Bicycle/Pedestrian Facilities and Landscaping	\$ 6M
Neighborhood Street (Local Street) Construction	\$ 1M
	\$ 27M

The following table shows the sources of local funding which constitute \$10M (37%) of the \$27M project.

Local Funding Sources		Cost
1.	City of Ft. Collins 2015 Appropriation to Project	\$ 1M
3.	Street Over-sizing	\$ 5M
4.	Local Street Developer Obligation	\$ 1.5M
5.	City General Fund	\$ 2.5M
TOTAL		\$ 10M

***In addition to the local funding sources above, BNSF is committed to contributing 5% of the grade separation cost. The exact dollar amount will be confirmed in the coming months.***





Figure 6: Proposed Project Design



## E. SELECTION CRITERIA

### I. Primary selection criteria

The proposed improvements are a high priority for the state, region and local communities.

The long term outcomes of investing TIGER funding for construction of the project are in direct alignment with the TIGER grant goals. The long-term outcomes, or benefits, are measurable and significant. The following discussions describe and quantify long-term benefits of this project.

#### a. State of Good Repair

- i. The project is part of and consistent with relevant state, local or regional efforts to maintain transportation facilities in a state of good repair.

Vine Drive and Lemay Avenue are in a poor state of repair characterized by deficient bridges, substandard conditions and accelerating deterioration caused by increasing truck and automobile volumes. Structures along Vine Drive are over 60 years old. Structures along Lemay Avenue are over 45 years old. Two bridges along these roads are functionally obsolete due to inadequate width and are in a state of rapid deterioration. Neither roadway meets City standards for their current roadway designations or their existing and projected traffic volumes.

The existing street network in the project area lacks basic facilities for pedestrians and continuous routes for bicycles creating an unsafe and discouraging environment for these modes of travel.

The existing at grade Vine/Lemay intersection fails to meet current standards and operates with failing levels of service due to capacity and long, slow trains passing through the intersection. Existing intersection design deficiencies include:

- Level of Service F traffic operations
- Lack of auxiliary lanes
- Small turning radii requiring Jersey barriers for protection



Photo 1: Vine/Lemay Intersection Looking West



Photo 2: Vine/Lemay Intersection Looking Northeast at Jersey Barriers and Lack of Pedestrian and Bicycle Facilities and a Lack of Turning Lanes



Photo 3: Vine/Lemay Intersection Looking West at Traffic Operations and Congestion

- Lack of adequate facilities for pedestrians, and inadequate, discontinuous facilities for cyclists

Photos 1-5 clarify existing conditions.

The project will replace existing pavements with 30-year design life pavement. The inadequate bridges will be replaced with structures with a design life of 75 years. The new infrastructure will allow safe travel for autos, commercial trucks, public transit, bicyclists and pedestrians while meeting estimated traffic demands through 2035.

- ii. The project will rehabilitate, reconstruct and upgrade a current surface transportation project that threatens future economic growth and stability due to its poor condition.

Investment in this project is inherently necessary for the continued viability and resiliency of the transportation network in the greater Fort Collins area and management of Colorado's economic growth. If left unimproved, the poor condition of the roadway network will threaten future transportation efficiency, mobility of goods and people and economic growth. This project directly addresses those concerns. In addition, it would improve the ability to withstand the occurrence of an emergency or major disaster by grade separating roadway from rail operations, and by creating a more direct and efficient link for entry and exit into the heart of downtown.

TIGER grant funding is needed to supplement City funding programs. Without supplemental funding for the project, existing residents and employees of businesses in the vicinity will suffer from inadequate infrastructure for all modes and unnecessary delays due to rail movements. This funding and timing gap will allow accelerated deterioration of these roadways and will encourage unplanned growth in agricultural areas away from the City Center.

#### State Benefits

Colorado's roadway network has deteriorated and a lack of funding for improvements is a serious impediment to economic growth and future development. The economic health of Fort Collins, Colorado's 5th largest City, is a key contributor to the economic health of Colorado as



Photo 4: Railroad Facilities and Operations Looking East from a Location Just East of the Vine/Lemay/BNSF Intersection



Photo 5: Deficient Structure Located on Lemay Avenue Looking North.

a whole. Investment in the project will strengthen the interdependent national, state and local roadway network by enhancing offline roadway conditions and critical system interconnectivity.

#### Regional Benefits

North Central Colorado and Larimer County, especially the northeast region of Fort Collins, face growth pressures that require coordinated land use planning and critical infrastructure investments that are beyond existing local and state funding capabilities. The roadway system to accommodate this planned growth is deteriorated and incomplete. The traditional grid network in the established areas of Fort Collins does not extend to this area. In fact, the only north/south roadways connecting completely through this area are US 287 (College Avenue), Lemay Avenue and I-25. US Highway 287 and Lemay Avenue are one mile apart. I-25 is another three miles east

of Lemay Avenue. The roadway network and the lack of capacity along Vine Drive and Lemay Avenue and through the Vine/Lemay/BNSF intersection create long-term gaps in the regional roadway network. The planned improvements would substantially enhance system resiliency and interconnectivity while reducing roadway delays.

#### Local Community Benefits

Plans for grade separating Lemay Avenue from the BNSF Railroad, have been developed for over the last 30 years by the City of Fort Collins and regional partners. The City of Fort Collins ensures that all parts of the City are served by an adequate, robust, and multi-modal transportation network through policy tools such as the Adequate Public Facilities Ordinance. Without Federal funding, the City is at risk of being forced to deny development proposals in the Mountain Vista master-planned area of northeast Fort Collins because Vine Drive, Lemay Avenue and the Lemay/BNSF crossing do not pass the City's "minimum level of service criteria" in their existing condition of disrepair.

One of the fundamental aims of this project is to complete critical improvements that will enhance connectivity for existing underserved neighborhoods and increase opportunity for economic growth. Residents of both the Alta Vista and Andersonville neighborhoods (located at the Vine/Lemay intersection) suffer from the constraints of congestion. Community outreach confirms that many struggle with egress from their neighborhoods on a consistent, daily basis due to traffic back-ups along Lemay. This limits connectivity to employment, schools and goods and services.

The community of Fort Collins has established a strong economic foothold, and has adopted plans for future residential, commercial and industrial growth that is infeasible without the project. If no improvements are made in the near future, the existing sub-standard roadway network will continue to deteriorate and unmanageable congestion will increase. This delay and the related impacts will deter private

sector investment and the expansion of existing economic enterprises and activity under both short-term and long-term scenarios. These conditions will make it difficult for the City to attract new enterprises, and may cause some enterprises to relocate entirely.

iii. The project is appropriately capitalized up front and uses asset management approaches that optimize long-term cost structure.

Funding for City infrastructure is rooted in traditional municipal tax base mechanisms supplemented by a dedicated local ¼ cent sales tax and the City's development impact fee system requiring private sector improvements including street over-sizing requirements. In order to appropriately allocate the City's financial resources, Fort Collins prioritizes planning improvements and uses a well-established Asset Management system to evaluate transportation infrastructure conditions to efficiently plan and maximize maintenance investments. The proposed improvements are too costly for immediate or short-term funding by the City or State of Colorado. The City of Fort Collins has a strong track record for maintenance of City transportation infrastructure assets.

iv. This project includes a sustainable source of revenue available for long-term operations and maintenance.

Pavement and bridge management systems are used by the City to determine the optimal time for surface treatment repairs and reconstruction based on minimizing life cycle costs. The proposed project has been prioritized through an infrastructure assessment and would be managed by the City's established system performance management tools. The infrastructure assessment characterizes investments that will reduce life cycle costs.

The requested TIGER funds will not be used for maintenance or operations of the project. When complete, all of the improvements will fall under the City's jurisdiction.



## b. Economic Competitiveness

This project brings multiple benefits. The primary benefit is for the local community – both in improving access and creating ladders of opportunity related to job growth. This project will help revitalize the area, and will improve the community’s local and regional access to employment, education and goods and services. The grade separation will alleviate congestion and delays, thereby enhancing long-term efficiency and reliability in the transportation network. This is crucial for the two neighborhoods closest to the intersection, who will benefit from decreased travel time and transportation costs due to existing delays.

In addition, the project will increase the economic productivity of the larger area, which is situated northeast of Downtown in a traditionally underserved area. In recent years, this area has become a focus of new economic activity, as reflected in the current construction of the Woodward, Inc. Corporate Headquarters along Lemay Drive south of the Vine/Lemay intersection. Woodward’s campus will house between 600 and 700 employees on opening day (late 2015) and will gradually ramp up to approximately 1,700 employees. This project will enhance employee access to the campus, and will help alleviate congestion pressures along Lemay Drive.

Finally, the project will facilitate efficient and reliable freight movement through removing an at-grade crossing of the BNSF Railroad. This improvement will help boost economic productivity and efficiency in the moving of goods and services, while enhancing safety for all modes of transportation and for all users.

A full benefit cost analysis is included as Appendix C. In summary:

- The project will improve long-term efficiency, reliability and cost-competitiveness in the movement of workers and goods.
- The project will make improvements that allow for new investments in expansion,

hiring, or other growth of private sector production in economically distressed areas.

- The City will strive to ensure that a reasonable balance between employment and housing is maintained as well as a balance between basic and non-basic jobs. The primary intent is to create a relative balance between the wages generated by various types of employment and housing prices.

The primary intent of this project is to provide Ladders of Opportunity which increase connectivity, support workforce development and revitalize the larger area.

## c. Quality of Life

- The project will enhance user mobility through creation of more convenient transportation options.

The Mountain Vista Subarea Plan identified a transportation network to provide access, mobility, and connectivity for all travel modes. The Subarea Plan recommended three grade-separated railroad crossings including the proposed grade separation at Vine/BNSF/Lemay. The new realignment of Lemay separates the street intersection from the railroad crossing. In the short-term, this would allow additional capacity at both the intersection and crossing.

Currently the existing intersection of Vine and Lemay, which includes the BNSF railroad crossing, is severely congested, with limited options to expand turn capacity due to existing land use and natural constraints. Lemay as a major north/south arterial is severely constricted at this point. Creating a by-pass with a grade separated crossing and moving the major intersection north will be more convenient for the significant through traffic in this area. This project will also move the majority of traffic away from the two adjacent residential areas, while still providing access.

ii. The project will enhance modal connectivity and reduces congestion on existing modal assets.

The existing roadway network is failing to meet current travel demands, in particular the Level of Service at the intersection of Vine and Lemay is rated 'F', with daily delays during peak traffic exacerbated by freight rail operations. The congestion is causing changes to travel behavior that are inefficient and adversely affecting regional travel. Recent figures specific to the Union Pacific rail crossing at Vine and Riverside Drives (in close proximity to the project area) indicate that over a 7 year period between 2007 and 2014, the duration of preemptions increased approximately three minutes. The number of preemptions longer than 15 minutes increased from 10 (in 2007) to 86 (in 2014) and the longest duration between 6:00 AM and 6:00 PM increased from approximately 22 minutes to 1 hour 11 minutes. All of these figures demonstrate a trend that the City is experiencing at rail crossings citywide, including the Vine/Lemay intersection. By grade separating the Vine/BNSF/Lemay intersection and realigning Lemay, not only will congestion be reduced, but there will also be benefits related to changes in travel patterns that will result in higher efficiency and reduced congestion throughout the transportation system.

iii. The project will improve accessibility and transport for economically disadvantaged populations, non-drivers, senior citizens and persons with disabilities and will make goods, commodities, and services more readily available to these groups.

The single-family neighborhoods of Alta Vista and Andersonville are located immediately adjacent to the Lemay/BNSF intersection. These historic neighborhoods are currently occupied by a primarily Hispanic population with lower average household incomes than other neighborhoods within the City of Fort Collins.

The Alta Vista neighborhood contains the northernmost collection of historic adobe structures in North America. This culturally and historically important neighborhood is one of the

original groups of residences associated with the former sugar beet industry in Fort Collins, which was prosperous from the turn of the century through World War II. The neighborhood is eligible for designation as Fort Collins Landmark, and is eligible for listing in the National Register of Historic Places and the Colorado State Register of Historic Places.

The primary access to both of these neighborhoods is from Lemay and Vine. Access to both neighborhoods is frequently constrained by traffic congestion.

The proposed design for grade separation will move these major arterials away from these neighborhoods while retaining existing access points for the residents. The grade separation bypass alignment will shift traffic further away from existing residences while substantially reducing traffic congestion. The project will make the entire area more accessible, and separate local traffic from growing through traffic.

iv. The project results from a planning process which coordinated transportation land use planning decisions and encouraged community participation in the process.

The project provides convenient, healthy and sustainable transportation options:

- The project will enhance user mobility through creation of more convenient transportation options.
- The project will enhance modal connectivity and reduces congestion on existing modal assets.
- The project will improve accessibility and transport for economically disadvantaged populations, non-drivers, senior citizens and persons with disabilities and will make goods, commodities, and services more readily available to these groups.
- The project results from a planning process which coordinated transportation land use planning decisions and encouraged community participation in the process.

This project has emerged as a vital component of a series of planning processes and outcomes including:

- East Vine/Lemay Intersection Realignment Project Development Report (2014)
- City of Ft. Collins Bicycle Plan (2014)
- Lincoln Corridor Plan (2014)
- Pedestrian Plan (2011)
- Plan Fort Collins (2011)
- City Plan (2011)
- City of Fort Collins Master Street Plan (2011)
- City of Fort Collins Capital Improvement Plan (2011)
- Mountain Vista Sub-Area Plan (2010)
- Suniga 30% Design Plans (2009)
- Transport Strategic Operating Plan (2009)
- Northside Neighborhoods Plan (2005)
- I-25 Corridor Plan (2001)
- Larimer County Master Plan (1997)

The Mountain Vista subarea plan is the guiding policy document to implement a community-based vision. In Fort Collins, a “SubArea Plan” provides a framework of community-based principles, policies and implementation strategies recommended by the Planning & Zoning and Transportation Boards and adopted by City Council. The Mountain Vista Subarea Plan represents a strong framework between land use and transportation, and direct link to the Transportation Master Plan and City Plan (the comprehensive plan for Fort Collins). Thus, the Mountain Vista Subarea Plan is an element of City Plan and provides more detailed policy direction for future implementation decisions.

The planning process for the Subarea Plan update included extensive public involvement from property owners within the project area, including, but not limited to, Anheuser-Busch InBev, Poudre School District (PSD), service and utility providers, Burlington Northern

Santa Fe Railway, area residents, Boards and Commissions, and City Council.

The planning process was divided into three main sections. The first phase (March 2008 - August 2008) primary tasks included identifying background information associated with the project start up. The project team identified key issues, existing conditions and plan objectives. A reevaluation of the original vision, goals and policies was conducted to assess refinement of this foundational language. The team set up meetings with individual property owners and provided updates to Boards and Commissions during this phase.

Phase II (August 2008 - March 2009) focused on design. Travel demand modeling by the consultant team determined future traffic volumes and street classifications for comparison between the 1999 and 2009 street networks. A market analysis was conducted to assess support for the amount of land use designations in the subarea. In October 2008, three framework plan alternatives were developed to compare different scenarios for land use, street patterns, open lands and other public facilities. In February 2009, three Plan map options were developed to further test land use and transportation choices. Based on public feedback, the project team integrated the successful elements of each alternative into a single draft framework plan.

Phase III (March 2009 - September 2009) developed the final plan document. The Plan incorporates updated analysis data, land use and transportation recommendations, and implementation strategies to achieve the Plan.

The team also coordinated public events throughout the planning process:

- Six meetings with major property owners.
- Four public open houses.
- Three City Council work sessions.
- Seven meetings with individual neighborhoods.



- Nine updates to the Planning & Zoning Board.
- Three updates to the Transportation Board.

The original schedule was extended several times to thoroughly address public concerns.

The multi-modal transportation outcomes link the City's emerging bus rapid transit system, existing bus service and bicycle and pedestrian infrastructure plans with the new Mountain Vista roadway network and street cross-sections and supporting facilities. The City's Structure Plan, Master Street Plan, and zoning designations establish a foundation and direction for the SubArea's future development decisions.

The project is a critical part of the City's Enhance Travel Corridor network. Both City Plan and Transportation Master Plan identify four Enhanced Travel Corridors (ETCs). The purpose of these corridors is to provide multi-modal connections between key activity centers and access to high frequency transit service and bicycle and pedestrian facilities.

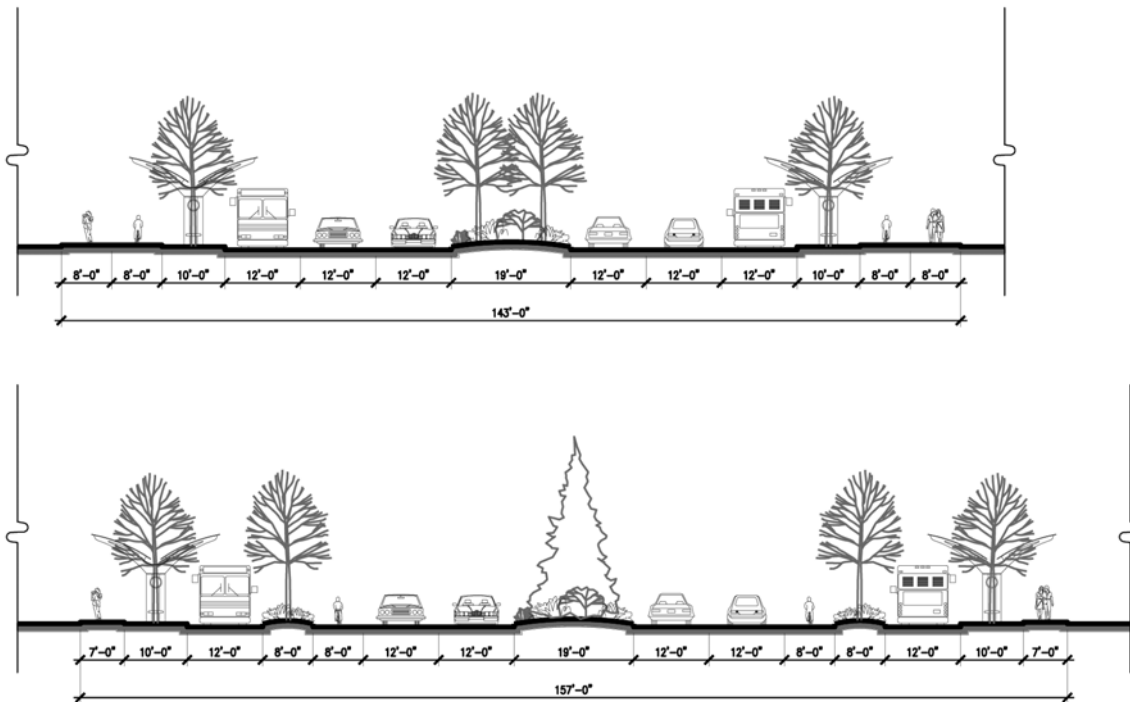


Figure 7: Multi-modal Street Cross-Section Options for Suniga, Lemay and Other Mountain Vista SubArea Plan Roadways



Examples of planned street cross-sections are shown in Figure 7. Realignment of Suniga Drive is a major component of the ETC planned for northeast Fort Collins.

The project will incorporate bicycle, pedestrian and transit needs into the project. All the roadways will be built to the City of Fort Collins standards which are complete streets, with full bike lanes, separated sidewalks and transit facilities. The City of Fort Collins was recently recognized as a Platinum level bike friendly city by the League of American Bicyclists. This project provides a critical element of bicycle infrastructure both north/south on the Lemay realignment and east/west on Suniga.

The housing element of the plan helps the jobs/housing balance within the City, supports the downtown and provides affordable housing within a diverse mix of zoning designations.

At this point, the planning process has effectively addressed community planning controversies.

#### d. Environmental Sustainability

In March 2015, the Fort Collins City Council unanimously adopted some of the most aggressive goals in the nation to reduce community greenhouse gas emissions: 20 percent below 2005 by 2020 and 80 percent by 2030, which would put the community on a path to be carbon neutral by 2050. The City's 2015 Climate Action Framework lays out the path to achieve these goals, many of which relate to transportation, environmental sustainability and smart growth. This project helps further the Climate Action Framework by making transport faster and more convenient, enhancing multi-modal options and facilitating development close to the urban core.

The following are anticipated sustainability benefits from this project:

- Congestion reduction realized by the project is estimated to be 23,157 hours per year.
- Annual air pollutant emission reductions would be substantial (CO -1,856 kg/year, NOx -352 kg/year, VOCs – 416 kg per year).
- Interconnected traffic signals that reduce delay and stop and-go traffic conditions. LED traffic signals will also reduce energy consumption by 80%.
- Use of local materials that reduce the embodied energy of construction.
- The incorporation of Low Impact Development best practices to reduce storm water impacts.
- The grade-separation, and elimination of the railroad at-grade crossing, creates a “quiet-zone”. These improvements will eliminate the need for the train to sound a warning horn (which is required) at the intersection. This has a major positive impact to the neighborhoods and residents living adjacent to the project.

In order to control City operation and maintenance costs, the City recently instituted a set of Low Impact Development (LID) Standards

that will apply to this project. The standards require industry best practices for controlling costs. One primary focus area is improving storm water quality and minimizing site runoff. Another focus area involves long-term roadside maintenance and watering costs. These costs are minimized by low maintenance and naturally sustaining vegetative plantings. This approach has been recently developed through the City's Streetscape Standards which emphasize low-water, native, and xeric planting concepts. With respect to energy costs, the new facilities will use Liquid Emitting Diode (LED) traffic signal indications. LED traffic signals are proven to require 80% less energy than incandescent indications. Additional environmental benefits will include:

- 25,698 gallons per year in fuel savings
- Water savings from efficient urban development and design
- Energy efficiency, reduce dependence on oil and reduced greenhouse gas emissions.

The City's recently adopted Lincoln Corridor Plan envisions a “Great Street” and model for sustainable practices. It reflects the City's commitment to innovations in green infrastructure and investment in the long-term viability of streets within the transportation system.



### e. Safety

The grade-separation of the Vine and Lemay intersection from the BNSF railroad eliminates a difficult at-grade crossing of this railroad line, with inherent safety benefits. The new alignments and intersections will be built to current safety standards, upgrading a situation that is outdated and substandard. In addition, the project would reduce delays for emergency services, thereby improving safety for area residents.

Completion of the grade separation improvement alone would result in a \$174,572 accident reduction cost savings per year.

The grade separation savings result from the elimination of the at grade highway-rail crossing and from the intersection improvements that will be constructed. There were two components to the crash reduction:

1. Reduction in train/car crashes and
2. Reduction in other intersection crashes.
3. The safety benefits were evaluated using two methods:
4. Federal Railroad Administration (FRA) Web Accident Prediction System (WBAPS).
5. Methodology in the Highway Safety Manual, 1st Edition, described in section 4.4.2.13 "Excess Expected Average Crash Frequency with EB Adjustment."

The FRA Web Accident Prediction System estimates the number of train-motor vehicle crashes that can be expected with the current at grade configuration. The Highway Safety Manual methodology estimates the number of expected multi-vehicle, single-vehicle, and pedestrian crashes at an intersection. The two results were summed to get the final benefit estimate.

The Federal Highway Administration has established crash cost estimates based on crash severity. Those values are published in the Highway Safety Manual (HSM) in 2001 dollars.

Using the methodology described in the HSM to convert to current values the following cost values were used:

**Fatal Crash = \$5,377,400**

**Injury Crash = \$84,100**

**Property Damage Only Crash = \$9,700**

From 2010 through 2012 there was an average of thirteen crashes per year at the Vine/Suniga intersection. With the improvements it is estimated that this number of crashes will be reduced by 52 percent on an annual basis. That results in an overall safety savings of \$174,572 per year or 4.35 million present value dollars.



Photo 6: Existing Congestion Along Lemay Avenue Looking South.



## II. Secondary selection criteria

### a. Innovation

The project is a model of innovative project delivery. The project has been innovative from the beginning, including a highly collaborative and accelerated project delivery. The project will include features that reduce capital and long-term costs, protect the environment, improve mode choice and safety, and preserve long-term multi-modal benefits.

#### Collaborative Comprehensive Community Planning

The project is critical component of master-planned growth in northeast Fort Collins that has a 30-year history of collaboration and a result embraced by the community and region. The project improvements are a well-defined implementation priority set forth in a series of planning documents, including:

- East Vine/Lemay Intersection Realignment Project Development Report (2014)
- City of Ft. Collins Bicycle Plan (2014)
- Lincoln Corridor Plan (2014)
- Pedestrian Plan (2011)
- Plan Fort Collins (2011)
- City Plan (2011)
- City of Fort Collins Master Street Plan (2011)
- City of Fort Collins Capital Improvement Plan (2011)
- Mountain Vista Sub-Area Plan (2010)
- Suniga 30% Design Plans (2009)

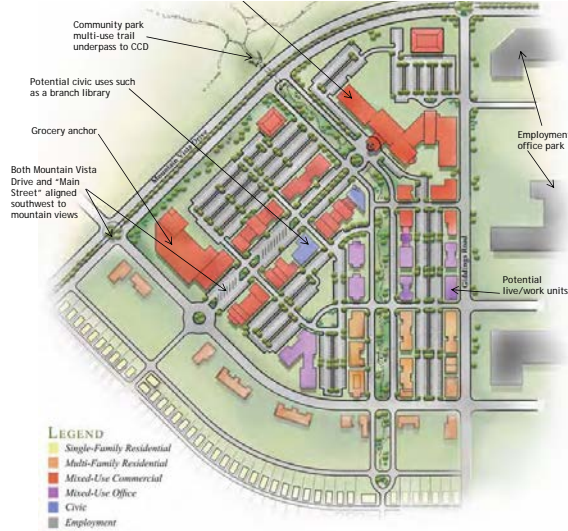
- Transport Strategic Operating Plan (2009)
- Northside Neighborhoods Plan (2005)
- I-25 Corridor Plan (2001)
- Larimer County Master Plan (1997)

#### Safe, Integrated, Multi-modal Connectivity

The roadway cross-sections and grade separation provide distinct facilities and routes for buses, other motor vehicles, cyclists and pedestrians, along with connectivity to the City's emerging light rail system. The transportation network will provide access, mobility, and connectivity for all travel modes. Residents, businesses, and visitors will have a choice of traveling via automobile, walking, bicycling and transit.

Multi-modal transportation needs in this subarea are vitally connected to city, county and regional transportation systems. The multi-modal transportation network and land uses in this subarea were planned in conjunction with each other.

Key connections for all travel modes will be provided between the Community Commercial District, Employment and Industrial Districts, Community Park, and other activity centers. The transportation network in this subarea will also emphasize connections to other destinations in Fort Collins and neighboring communities. The proposed improvements open the door to transit in the planning area.



Consistent with the Land Use Code, the transportation system within this subarea will have: 1) Arterial corridors providing safe and efficient multi-modal access to and through the subarea, including major features such as railroad under/overpasses (where necessary), and significant landscape mitigation features; 2) Multi-modal connections to and across the arterial corridors, including pedestrian and bicycle connections, providing convenient access to and from the local networks that serve individual developments and buildings; and 3) Integrated local networks with direct, convenient interconnections between developments and surrounding areas.

According to the Mountain Vista Subarea Plan, the extension of Suniga Drive will be designated as part of the Mountain Vista/North College Enhanced Travel Corridor (ETC). The ETC will be designed for high frequency transit service, with enhanced bicycle and pedestrian facilities. The ETC will serve as a link between downtown Fort Collins, the Timberline Road/Power Trail ETC, this subarea's Community Commercial District, Employment District, Community Park, school site, and a future park-n-ride at I-25.

### Sustainability

The planning area and infrastructure improvement reflect context-sensitive design, avoidance and minimization of environmental

impacts and embrace sustainable design in terms of project design features and specifications.

The emphasis of the Mountain Vista Plan is economic sustainability. Mountain Vista's business center will accommodate the long-term Employment and Industrial land use growth demands of Fort Collins, providing a variety of business and industry types and sizes, compatible with surrounding land uses.

### Capital Cost and Life-Cycle Cost Reduction

The City has demonstrated careful analysis of project design to reduced project capital, operation and maintenance costs. Life-cycle analysis is integrated into the City's Asset Management Program and contract requirements along with Value Engineering (VE).

VE will be applied to each of the proposed projects. The City has extensive experience VE and includes VE in all major engineering projects in the City.

### Alternative Delivery

The City of Fort Collins has identified Construction Management General Contracting (CMGC) or Design Build as a potential alternative delivery methods to reduce costs and streamline project delivery for the proposed improvements. The City and its consulting partners have broad and extensive experience with cost reductions and schedule accelerations using CMGC and Design Build approaches relative to traditional delivery methods.. The City is prepared to initiate the process immediately following confirmation of funding commitments to determine the most effective and efficient project delivery method. The goal is a high quality, cost-effective project that minimizes the time to reach construction while being compliant with all Federal-Aid regulations.

- The goal is a high quality, cost-effective project that minimizes the time to reach construction while being compliant with all Federal-Aid regulations.
- The City is currently under process to procure preliminary design and project delivery review.
- The City will complete the design/ROW process with overmatch dollars to insulate risk from the Federal Grant Funds.





## b. Partnership

### Jurisdictional & Stakeholder Collaboration

The project is the end product of collaboration and partnerships between the City of Fort Collins, Larimer County, DDA, the Poudre School District, BNSF Railroad, the North Front Range Metropolitan Planning Organization, major landowners, major existing and future employers in Fort Collins (Anheuser Busch and Woodward), project site neighbors, and the general public. Progress with other enabling infrastructure is now underway with water line construction, overall roadway planning, and associated right of way efforts.

### Disciplinary Integration

As is evident from the many collaborators and partners connected to the Mountain Vista SubArea Plan and the proposed improvements, there is a united effort to move this enabling infrastructure from planning to construction. This breadth of support from non-transportation public and private agencies is clear indication of the importance of this project in realizing the vision for centrally located, transit oriented, land development in northeast Fort Collins and the economic health of the region. The proposed

improvements will connect existing and new communities in an efficient, environmentally sustainable manner that will benefit the citizens of northern Colorado for years to come. The City and our partners are proud of this groundbreaking demonstration of regional cooperation.

Letters of Support for this project are shown in Appendix D.



## F. RESULTS OF BENEFIT/COST ANALYSIS

### Costs and Benefits

Investment of federal dollars for the proposed improvements will generate long-term benefits that are in direct alignment with the goals of the American Recovery and Reinvestment Act. The project's analysis of costs and benefits is presented in Appendix C.

The long-term outcomes, or benefits, are measurable and significant. The project enables future development designed to create 15,065 jobs on 1,256 acres of job producing land use. The grade separation alone will generate 23,157 hours of delay reduction per year and \$174,572 in accident reduction cost saving per year. Annual air pollutant emission reductions would be substantial (CO -1,856 kg/year, NOx -352 kg/year, VOCs – 416 kg per year). Railroad delay reductions and at grade crossing maintenance savings and benefits associated with improved emergency vehicle access would also be expected.

The northeast employment district is uniquely marketable with available large parcel sizes, direct access to an improved I-25 interchange, and railroad access. The economic benefits of this development are real and substantial. Important community benefit includes:

- Job Creation for Low Income Workers (through best practice hiring programs and utilization of apprenticeship programs)
- Maximum Practicable Opportunities for SBE, DBE, Veteran Owned Small Businesses and Service Disabled Veteran Small Businesses
- Use of Community Based Organizations in Connecting Disadvantaged Business Workers with Economic Opportunities
- Support for Entities that have a Sound Track Record on Labor Practices and Compliance with Federal Laws Ensuring Safety and Equity



The project is ready for implementation and will create 600 construction-related jobs.

- Best Practices in Compliance with National Civil Rights and Equal Opportunity Laws

Mountain Vista's business center will accommodate the long-term Employment and Industrial land use growth demands of Fort Collins, providing a variety of business and industry types and sizes, compatible with surrounding land uses.



“Fort Collins has weathered the recession better than many communities throughout the country,” said City Manager Darin Atteberry. “This top rating from Moody’s reflects our dedication to sound financial management and wise use of debt services; it’s great news for Fort Collins.”

According to Moody’s, the AAA issuer rating reflects a stable local economy supported by the presence of Colorado State University, sound wealth levels typical of a college town, a large tax base, favorable debt levels, and sound fiscal operations.

## G. PROJECT READINESS AND APPROVALS

### Technical Feasibility

The following highlights the key aspects of technical feasibility that achieve project readiness:

- This project has been envisioned and included in major City transportation plans for over 30 years. This extensive and long-range planning maximizes the potential for integrated land use and transportation and allows incremental accommodation of the ultimate plan as nearby properties change and develop. The recent construction of the Woodward, Inc. Corporate Campus south of the intersection along Lemay Avenue demonstrates the desirability of this area for development as well as the challenges due to increasing congestion and inadequate infrastructure.
- BNSF has expressed a commitment to fund a portion of the grade separation. The City has completed numerous projects with the BNSF including both a bicycle/pedestrian overpass and underpass in 2013 and 2014. These projects helped improve long-term safety and accessibility, were constructed with minimal disruption to railroad service and strengthened the City’s relationship with the BNSF. The City understands the BNSF and PUC processes and design standards, which will help streamline the project design and construction.
- The City has advanced the project design by completing conceptual design and an alternatives analysis in 2014, as well as appropriating \$1M in funding in 2015 to advance the design and right-of-way review.
- All of the necessary right-of-way for the southeast quadrant of the Vine/Lemay/BNSF intersection has been secured and is owned by the City of Fort Collins. The City is currently in negotiations with the lone property owner in the northeast quadrant. The City is presently preparing legal descriptions and will be making an initial right-of-way offer to the property owner in the Summer of 2015.
- The project is currently envisioned to be delivered using traditional design-bid-build approach, however if phasing of the improvements becomes critical the City is prepared to deliver via an innovative Contractor Manager/General Contractor (CMGC) method or Design-Build (DB) method. These alternative delivery methods would be considered if they are determined to appropriately manage risk for cost, schedule, and quality.

### Financial Feasibility

The City of Fort Collins has recent history with major construction projects in the area and with arterial construction projects similar in nature to this project definition. The following summarizes the capital cost break-down of the project components, and the overall Federal Grant vs. Local Match



funding for the project. The following highlights the key aspects of financial feasibility that achieve project readiness:

- The basis for the cost estimate is a thorough and professional planning process undertaken with an extensive public involvement component, multi-agency coordination, and City Council approval. The project cost estimate is outlined in detail in the City's Project Development Report (2014), attached as Appendix B. Cost magnitudes are verified by similar recently completed projects such as the reconstructed Interchange at SH 392 & I-25.
- All streets for the project will be built in accordance with the Larimer County Urban Area Street Standards and other applicable standards. Cost estimates for these street components are based on recent construction cost data for similar streets built to the same standards in the region.
- The City of Fort Collins has an AAA Credit Rating from Moody's.
- Moody's Investors Service has assigned the City of Fort Collins a AAA issuer rating with a stable outlook as part of a bond refinancing. The City is refinancing the 2004 Certificates of Participation (COP) bonds used to build the Police building and acquire various open space properties. The refinanced COPs received an Aa1 rating. The AAA rating is the highest offered by the credit rating agency; *only 4.8% of the governments rated by Moody's have received the AAA designation.*
- The City of Fort Collins has consistently managed millions of dollars' worth of federal transportation grants over the past 20+ years.
- In the past 5 years, the City has successfully managed over \$100 million worth of Federal-Aid grant projects.

### Project Schedule

The City of Fort Collins has already been working through the planning phases of the project development process and early right-of-way review. The project has community support through the planning process, and has completed a detailed Project Development Report which identifies environmental resources of concern and streamlines future NEPA clearance.

The project schedule (see Figure 8) focuses on the primary goal of having all pre-construction activities completed to allow for obligation of construction funds by August of 2017 at the latest, and if alternative delivery is selected this obligation could be as early as September 2016.

The City has continually advanced the project by investing in preliminary planning, concept design and alternatives analysis. An additional \$1M has recently been appropriated to advance the project design, clearances and right-of-way review.

### Required Approvals

The project will build upon previous planning efforts to streamline the environmental clearances and reduce risks to project delivery.

- In 2014, the City completed a Project Development Report that meet the requirements of a Planning and Environmental Linkage (PEL) study. This study is intended to help streamline any future NEPA clearance by narrowing the potential design options and evaluating potential environmental resources of concern. As a result of the extensive alternatives and environmental analysis completed for this study, the City anticipates completion of a streamlined NEPA clearance in the form of a Categorical Exclusion for the federally funded improvements.

- The proposed roadway improvements have already considered and addressed the key environmental issues:
  - Historic neighborhoods and specific properties within the adjacent residential neighborhoods are protected by generous roadway buffers leaving the historic properties and surrounding contexts undisturbed by the project improvement requirements. In fact, future conditions will be less disruptive than under existing conditions.
  - The ditch north of Vine will be fully protected and will remain viable during and after construction.
  - Protection of all residential structures and neighborhoods will be achieved through realigning Lemay. Indirect impacts on existing residential uses will be reduced by buffers between neighborhood boundaries and the perimeter of the construction disruption footprints.
- There are no protected species or habitats (wetlands or other) that present the potential to complicate the environmental clearance or project permitting processes.

#### Assessment of Project Risks and Mitigation Strategies

The City of Fort Collins will employ a number of innovative methods to control risks of project delivery. They include:

#### Project Delivery Risk: Environmental Clearances

- Through the 2014 Project Development Report, the City conducted an extensive process to analyze and screen project alternatives, and to evaluate the environmental issues of key concern. This process positions the project for streamlined NEPA clearance, anticipated to be a Categorical Exclusion. The public outreach process will continue through the NEPA and final design phase to gather valuable feedback on the selected alternative.

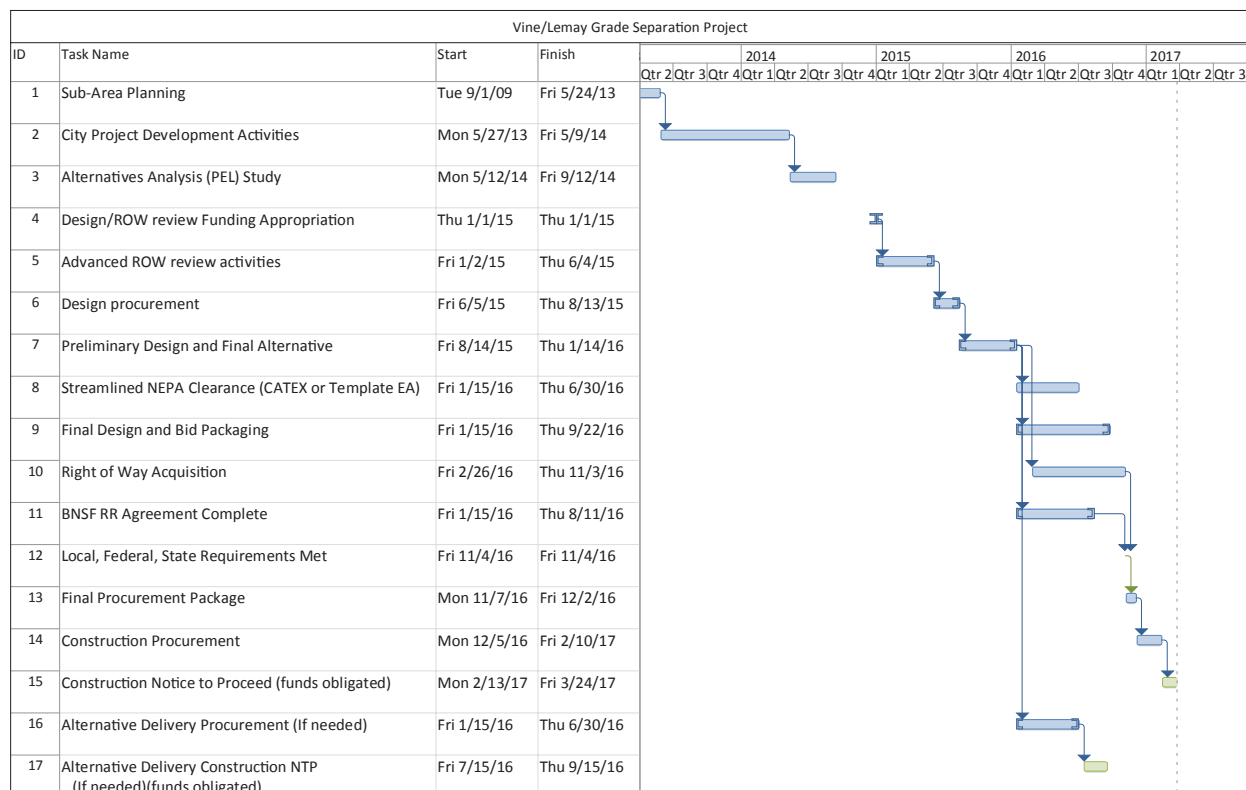


Figure 8: Project Schedule

**Project Delivery Risk: Construction Cost and Design/Construction Schedule Overlap**

- The City is committed to use alternative delivery through design/build or CM/GC if it is determined to add value by effectively managing scope, schedule and cost risks. One example of where alternative delivery could help to achieve innovation and efficiency is in the simultaneous procurement of construction contractor while final design is progressing. This can add value by involving the construction contractor earlier in the process while still maintaining control of the risks during the design phase. This example can help to achieve the highest level of control on project features that are outside of the scope and budget, and will reduce lost time due to long duration overlaps in design and construction procurement packaging. The City will evaluate project delivery options as an early action in the preliminary design phase of the project.

**Project Delivery Risk: Right of Way Acquisition**

- By engaging the design team in the Right of Way acquisition process, the City will have maximum control on the schedule to achieve timely acquisition. By investing early in the 2014 Project Development Report that includes design that anticipated the right-of-way needs and requirements, this risk is reduced by identifying, understanding critical issues and opportunities, and working early to engage with property owners. The City has already begun this process and this will result in significantly reduced risk to the project delivery.

**Project Delivery Risk: Pre-Construction Activities Cost**

- The City of Fort Collins is committed to using local funding for the pre-construction activities for the project. This will ensure the TIGER Discretionary Grant Funds are used for the construction activities that result in the highest benefits for increasing the economic competitiveness and job creation.



## H. FEDERAL WAGE RATE CERTIFICATION

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The City of Fort Collins submits this application for the funding of the Suniga/Lemay Multi-Modal and Freight Connectivity Project in northern Colorado. In response to item in the 2015 Notice of Funding Availability, the following information is provided:

### Federal Wage Rate

The City of Fort Collins certifies that it will comply with the Federal Wage Rate Certification requirements of subchapter IV of chapter 31 of title 40 of the United States Code, as required by the FY 2015 Appropriations Act.

Signed,

A handwritten signature in blue ink, appearing to read "Rick Richter".

Rick Richter  
Director of Infrastructure Services  
City of Fort Collins

## I. SUMMARY OF DIFFERENCES FROM THE PRE-APPLICATION

It is important to note that the funding request submitted in the pre-application differs from the overall budget and funding request identified in this final application.

The pre-application included the following funding request and summary of project costs:

TIGER Request: \$34,000,000

Total Project Cost: \$42,500,000

Total Federal Funding \$34,000,000

Total Non-Federal Funding: \$8,500,000

The pre-application costs included future roadway improvements that the City has determined would be best to construct separate from this project. Thus, the focus of this final application is on the funding of the grade separation of Lemay over the BNSF railroad, which is of highest priority. Future roadway improvements (including full construction of Suniga Drive) have independent utility from this project and will be constructed as future funding sources become available.

As outlined in this final application, the cost of the grade separation of Lemay over the BNSF totals \$27 million. The local contribution to this project is \$10 Million, which represents a 37% match toward the overall \$27 Million project cost. The funding request of the TIGER program is \$17 Million. The following table provides a breakdown of the cost of each major improvement.

Improvement	Cost
Grade Separation of the Vine/ BNSF/ Lemay Intersection	\$ 12M
Construction of Four-Lane Arterial Roadways	\$ 8M
Bicycle/Pedestrian Facilities and Landscaping	\$ 6M
Neighborhood Street (Local Street) Construction	\$ 1M
	\$ 27M

The following table shows the sources of local funding which constitute \$10M (37%) of the \$27M project.

Local Funding Sources		Cost
1.	City of Ft. Collins 2015 Appropriation to Project	\$ 1M
3.	Street Over-sizing	\$ 5M
4.	Local Street Developer Obligation	\$ 1.5M
5.	City General Fund	\$ 2.5M
TOTAL		\$ 10M

In addition to the local funding sources above, BNSF is committed to contributing 5% of the grade separation cost. The exact dollar amount will be confirmed in the coming months.