

AGENDA ITEM SUMMARY

November 19, 2013

City Council

STAFF

Tracy Dyer, Chief Construction Inspector
Dean Klingner, Engineer & Capital Project Manager

SUBJECT

Items Relating to the Drake-Shields Intersection Improvement Project.

EXECUTIVE SUMMARY

- A. Resolution 2013-092 Authorizing the Mayor to Execute an Intergovernmental Agreement with the Colorado Department of Transportation in Support of the Drake/Shields Intersection Improvements Project.
- B. First Reading of Ordinance No. 165, 2013, Appropriating Unanticipated Grant Revenue in the Capital Projects Fund for the Drake Road and Shields Street Intersection Improvement Project.

The purpose of this item is to appropriate unanticipated federal grant revenue for intersection improvements partially funded through Building on Basics funding.

STAFF RECOMMENDATION

Staff recommends adoption of the Resolution and Ordinance on First Reading.

BACKGROUND / DISCUSSION

The Engineering Department completed an Arterial Intersection Prioritization Study in 2011 that listed the Shields Street and Drake Road intersection as one of the top ranked locations for needed safety and operational improvements. Existing problems that brought this intersection to the top of the list include: higher than average vehicle accident rates, significant congestion and intersection delay. The project will include multi-modal facility improvements to create a safer and more efficient intersection for all users.

Anticipated construction of this project is tentatively schedule for 2015, after preliminary design, right of way acquisition, utility relocations and final design is completed. A project location map is included as **Attachment 1**.

Project Goals:

- Improve safety and overall efficiency for vehicles, bicycles and pedestrians.
- Reduce the accident rate by adding dedicated right turn lanes to separate through moving vehicles from turning vehicles, and reducing the Shields Street/Davidson Drive intersection to a 3/4 movement.
- Improve air quality by reducing vehicle wait time (delay) at both locations.

Under direction of the City, Muller Engineering completed a traffic model analysis for the northbound and southbound right turn lanes. This examination was a component of the Arterial Intersection Prioritization Study. A turn lane exhibit from the Study is included as **Attachment 2**.

The City's Engineering staff recommends a continuance of these efforts already made by initiating and completing a biddable design, right-of-way acquisition, and construction of the proposed improvements.

FINANCIAL / ECONOMIC IMPACT

This Ordinance authorizes the appropriation of unanticipated federal grant revenue into the City of Fort Collins Building on Basics (BOB) Intersection Improvements Fund for design, right-of-way acquisition and construction of the dedicated right turn lane for northbound and southbound Shields Street to Drake Road. This scope will also include the design and implementation of a 3/4 movement through the Davidson Road/Shields Intersection.

The Federal Hazard Elimination grant, in the amount of \$887,400 is a Fiscal Year 2014 allotment, meaning the money is available now. The City applied for this funding through the Federal Hazard Elimination application process in early 2012. Obtaining the Hazard Elimination grant was a competitive process. Staff's grant application was backed by creating measurable reductions in vehicle delay and improved air quality.

The following table lists the funding sources and amounts associated with the Hazard Elimination grant:

Funding Summary (2013-2014)	
<i>Funding Source</i>	<i>Funding Amount</i>
CMAQ Federal Hazard Elimination Grant (via CDOT)	\$887,400
Building on Basics Intersection Existing Appropriations (City Match)	\$98,600
Total Anticipated Funding	\$986,000

Short and long term economic benefits of the reconstructed intersection will be realized by the following:

- Safety improvements resulting in fewer accidents
- Easing of traffic congestion resulting in reduced fuel consumption
- Decrease in accident and delay costs (as calculated per the Highway Safety Manual)

ENVIRONMENTAL IMPACTS

The project will have a positive impact on short and long term air quality by reducing vehicle delay, total stops, as well as fuel consumption and vehicle emissions.

BOARD / COMMISSION RECOMMENDATION

This project will go to the Transportation Board for comment after the preliminary design phase is completed.

PUBLIC OUTREACH

City staff is currently working on a project website through the Engineering homepage as the first resource for public outreach. A detailed communication plan is being developed and will be implemented with the preliminary design phase through construction. The communication plan will highlight milestone dates, affected interests and specific outreach methods.

The project team will host one or more public open houses and keep the project website updated with current design information.

ATTACHMENTS

- 1. : Project location map (PDF)
- 2. : Arterial Intersection Prioritization Study (PDF)



Attachment 7.1: Project location map (Drake Shields Intersection Improvements)



Goals:		Accident Reduction	Practical	Reliable	Livable	Multi-modal	Sustainable	Supports Economic Development
Intersection	Proposed Improvements	Rating	Rating	Rating	Rating	Rating	Rating	Rating
Projects carried forward to Level 3 Concept Design								
Horsetooth/Timberline (Options 1 & 2)	N/S Dual Lefts; SB Rt Turn Lane	●	●	●	●	●	●	●
Drake/Shields (Options 2, 3 & 4)	N/S Dual Lefts; NB/SB Rt Turn Lanes	●	●	●	●	●	●	●
Westbury/Shields	Add NB Th Lane on S Leg	○	●	●	●	●	●	○
Kechter Rd/Timberline	NB Rt Turn Lane	○	●	●	●	●	●	○
Drake/Lemay (Option 2)	SB Rt Turn Lane	●	●	●	●	●	●	●
Shields/Davidson	Add Median to Restrict Side Street Left Turns	●	●	○	●	●	●	●
Horsetooth/College (US 287) (Option 2)	N/S Dual Lefts	●	○	●	●	●	●	●
Vine/Shields	Roundabout	○	●	●	●	●	●	●
Drake/Lemay (Options 1 & 2)	EB Dual Lt; SB Rt Turn Lane	●	●	●	●	●	●	●
Harmony/Corbett	SB Rt Accel Lane	●	●	●	●	●	●	●
Projects to be completed as part of another street improvement project								
Harmony/Timberline	EB Rt Turn Lane	●	●	●	●	●	●	●
Harmony/Lemay	NB Rt Turn Lane	●	●	●	●	●	●	●
Mulberry/Lemay	EB Dual Left	●	●	●	●	●	●	●
Projects not carried forward past Level 2 Screening								
Drake/Bay/McClelland	Pedestrian Overpass/Underpass; Left Turn Median	○	○	●	●	●	●	●
Shields/LaPorte	Roundabout	○	●	●	●	●	●	●
Horsetooth/Lemay (E)	EB Rt Decel Lane; EB Free Right	●	●	●	●	●	●	●
Prospect/Timberline	EB Rt Accel Lane	●	●	●	●	○	●	●
Horsetooth/Lemay (W)	WB Rt Decel Lane; WB Free Right	○	●	●	●	○	●	○
Mulberry/College (US 287) (Option 1)	SB Dual Left	○	●	○	○	○	○	○
Prospect/College (US 287)	Extend WB Lt Turn Lane	○	●	○	○	○	○	○
Prospect/Lemay	EB Rt Turn Lane	○	●	○	○	○	○	○
Drake/College (US 287)	E/W Dual Lefts	●	○	●	○	●	○	●
Mulberry/Link Lane (Option 2)	Offset E/W Lefts to Improve Site Distance	○	●	○	○	○	○	○
Harmony/McMurry	SB Dual Left	○	●	○	○	○	○	○
Prospect/Prospect Parkway	NB Dual Left	○	○	○	○	○	○	○
Vine/Lemay	N/S Lt Turn Lanes	○	○	○	○	○	○	○
Mulberry/College (US 287) (Option 2)	WB Dual Left; Convert WB RT to Th/Rt	○	●	○	○	○	○	○
Horsetooth/Taft Hill	SB Dual Left	○	○	○	○	○	○	○
Drake/Shields (Option 1)	E/W Dual Lefts	○	○	○	○	○	○	○

Relative Ratings

- Most Addresses Goals
-
-
-
- Least Addresses Goals

Table 4 - Summary of Level 2 Evaluation

RESOLUTION 2013-092
OF THE COUNCIL OF THE CITY OF FORT COLLINS
AUTHORIZING THE MAYOR TO EXECUTE AN INTERGOVERNMENTAL
AGREEMENT WITH THE COLORADO DEPARTMENT OF
TRANSPORTATION IN SUPPORT OF THE DRAKE/SHIELDS INTERSECTION
IMPROVEMENTS PROJECT

WHEREAS, in 2011, the City's Engineering Department completed an Arterial Intersection Prioritization Study that listed the Shields Street/Drake Road intersection (the "Intersection") as one of the top-ranked locations in the City for needed safety and operational improvements; and

WHEREAS, the Intersection has experienced a higher-than-average vehicle accident rate and also experiences significant traffic congestion and delay; and

WHEREAS, City staff is recommending the proposed construction of improvements at the Intersection that would improve safety and overall efficiency for vehicles, bicycles and pedestrians and help reduce the accident rate at the Intersection; and

WHEREAS, these improvements would consist of adding dedicated right turn lanes to separate through traffic from turning vehicles and reducing the Shield Street/Davidson Drive intersection to a three-quarter movement intersection; and

WHEREAS, the proposed improvements to the Intersection would also improve air quality by reducing vehicle wait time; and

WHEREAS, in 2012, the City applied for Federal Hazard Elimination grant funds and has obtained a grant for fiscal year 2014 in the amount of \$887,400 which, when coupled with Building on Basics intersection existing appropriations as a City match in the amount of \$98,600 is sufficient to fund the project which is anticipated to cost \$986,000; and

WHEREAS, the City Council has determined that it is in the best interests City that the Mayor execute an intergovernmental agreement with the Colorado Department of Transportation for the purpose of obtaining a Federal Hazard Elimination grant in the amount of \$887,400 in support of the Intersection improvement project.

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF FORT COLLINS that the Mayor is hereby authorized to execute an intergovernmental agreement with the Colorado Department of Transportation in support of the Drake/Shields Intersection Improvements Project which will afford the City Federal Hazard Elimination grant funds in the amount of \$887,400 with City to provide matching funds in the amount of \$98,600 to be obtained through Building on Basics intersection existing appropriations.

Passed and adopted at a regular meeting of the Council of the City of Fort Collins this 19th day of November, A.D. 2013.

Mayor

ATTEST:

Deputy City Clerk

ORDINANCE NO. 165, 2013
OF THE COUNCIL OF THE CITY OF FORT COLLINS
APPROPRIATING UNANTICIPATED GRANT REVENUE IN THE
CAPITAL PROJECTS FUND FOR THE DRAKE ROAD AND SHIELDS STREET
INTERSECTION IMPROVEMENT PROJECT

WHEREAS, in 2011, the City's Engineering Department completed an Arterial Intersection Prioritization Study in which the Drake Road and Shields Street intersection was identified as a location in need of safety and operational improvements; and

WHEREAS, existing problems with the intersection include higher than average vehicle accident rates, significant congestion, and intersection delays; and

WHEREAS, the Drake Road and Shields Street intersection improvements are tentatively scheduled for 2015, after completion of the preliminary design, right of way acquisition, utility relocations, and final design; and

WHEREAS, the City has received a Colorado Department of Transportation - Federal Hazard Elimination grant in the amount of \$887,400 for improvements to reduce vehicle delays at the Drake Road and Shields Street intersection; and

WHEREAS, this Ordinance appropriates the federal grant funds into the Capital Projects Fund for the Drake/Shields Intersection Improvement Project, to be used for design, right-of-way acquisition, and construction of the dedicated right turn lane for northbound and southbound Shields Street to Drake Road; and

WHEREAS, the grant requires matching funds from the City in the amount of \$98,600, which funds are available from existing appropriations in the Intersection Improvements and Traffic Signals Project; and

WHEREAS, Article V, Section 9, of the City Charter permits the City Council to make supplemental appropriations by ordinance at any time during the fiscal year, provided that the total amount of such supplemental appropriations, in combination with all previous appropriations for that fiscal year, does not exceed the current estimate of actual and anticipated revenues to be received during the fiscal year; and

WHEREAS, City staff has determined that the appropriation of the federal grant funds will not cause the total amount appropriated in the Capital Projects Fund to exceed the current estimate of actual and anticipated revenues to be received during the fiscal year.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF FORT COLLINS that there is hereby appropriated from unanticipated grant revenue in the Capital Projects Fund the sum of EIGHT HUNDRED EIGHTY-SEVEN THOUSAND FOUR HUNDRED DOLLARS (\$887,400) for expenditure on the Drake/Shields Intersection Improvement Project.

Introduced, considered favorably on first reading, and ordered published this 19th day of November, A.D. 2013, and to be presented for final passage on the 3rd day of December, A.D. 2013.

Mayor

ATTEST:

Deputy City Clerk

Passed and adopted on final reading on the 3rd day of December, A.D. 2013.

Mayor

ATTEST:

City Clerk