

AGENDA ITEM SUMMARY

City Council

December 3, 2013

STAFF

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

SUBJECT

Second 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.

EXECUTIVE SUMMARY

This Ordinance, unanimously adopted on First Reading on November 19, 2013, appropriates unanticipated federal grant revenue for intersection improvements partially funded through Building on Basics funding. At First Reading, Council requested supplemental information pertaining to this project. That information is provided as an attachment to this packet.

STAFF RECOMMENDATION

Staff recommends adoption of the Ordinance on Second Reading.

ATTACHMENTS

1. First Reading Agenda Item Summary, November 19, 2013 (w/o attachments) (PDF)
2. Ordinance No. 165, 2013 (PDF)
3. Drake Shield SR Supplemental Information (PDF)

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)

COPY

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



Planning, Development & Transportation

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Memorandum

Date: November 21, 2013

To: Mayor and City Councilmembers

Thru: Darin Atteberry, City Manager

From: Karen Cumbo, PDT Director *KC*
Rick Richter, Director of Infrastructure Services *RR*

Re: **Shields Street and Drake Road Intersection Improvements**

This memorandum provides additional information about the above referenced intersection improvements as requested by City Council at the first reading of Ordinance No. 165, 2013.

The proposed project is a minor modification to an existing improved intersection with the intent of reducing congestion and improving safety for all modes of travel, especially vehicles and bicycles. There are opportunities for landscaping and urban design improvements that will be evaluated as the design develops. These possibilities include adding landscaping to the existing median, adding or improving landscaping along the perimeter of the intersection and addition of urban design amenities. The project budget includes an allowance for these types of improvements.

The current Council action for Ordinance No 165, 2013 authorizes the initiation of design. At this time only concepts of these improvements exist; no detailed design information has been developed.

The project is based on recommendations from the 2011 Arterial Intersection Study for the addition of right turn lanes on the north and south bound movements of Shields Street and a new median to be installed at Davidson Drive / Raintree Drive. The median at Davidson will not only reduce vehicular accidents by limiting certain movements, but will provide a higher level of safety for bicyclists. This intersection has experienced a higher than expected number of bicycle accidents.

The 3-year accident history at Drake and Shields has included 97 accidents with 33 injuries and 1 fatality. The Davidson / Raintree intersection has seen 30 accidents with 13 injuries over the same period of time. Predictors for the proposed improvements forecast a 31% and 43% reduction, respectively, of accidents at these locations.