



Tower Road/Peña Boulevard Ramp, Denver Tower Road Improvements Project Update

May 22, 2017

Purpose

- Review project scope and cost estimate
- Discuss options to address cost increases
- Review Denver roadway improvements and proposal to advance project funding



Policy Questions

- How should the city address cost increases associated with the on-ramp?
- Should the city advance the Denver portion of the project?
- What intergovernmental agreement terms are acceptable to city council?



Project History

1992: Intergovernmental agreement between Commerce City, E-470 Highway Authority, and City & County of Denver governs construction of the final ramp (southbound Tower Road to westbound Peña Boulevard).

Agreement allowed construction of the 1.5-mile ramp in 2012. The IGA specified E-470 responsible for construction and design costs, while Denver was responsible for operations and maintenance.

2010-2011: City advocates for implementation through federal lobbying efforts; runs into DEN resistance.

2012-2014: Collaborative conversations with DEN and city to address Federal Aviation Administration concerns; concurrent Aerotropolis negotiations

2012-2014: Commerce City negotiates with E-470 to establish parameters for the highway authority's design and construction reimbursement

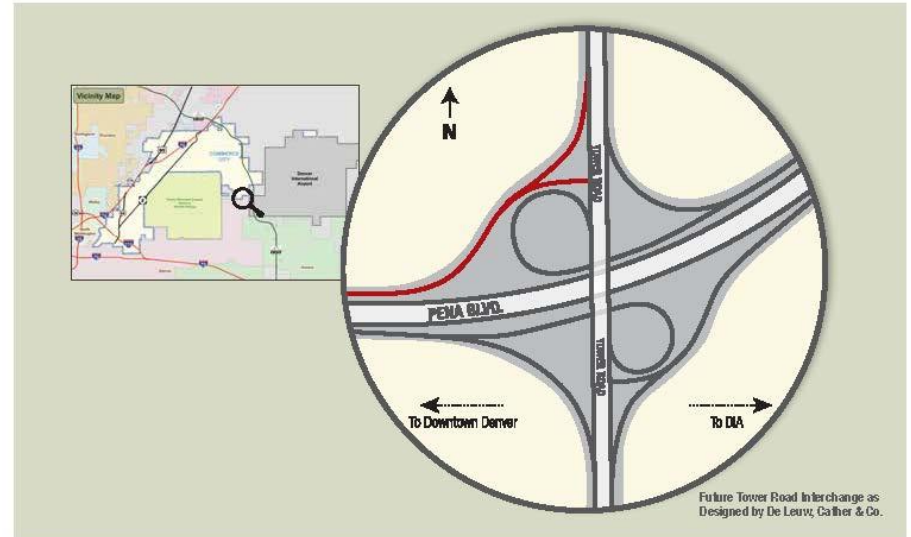
Mar 2014: Commerce City and DEN reach tentative agreement, pursue joint federal ask – estimate design beginning in 2014

Apr 2014: Commerce City & E-470 Highway Authority sign IGA regarding ramp funding, which caps E-470 contributions at \$3,204,700.



Project Scope & Estimate: 2012

- 2012 Estimate: \$3,207,700
- Project scope:
 - Building the on-ramp
 - Reconstructing portion of existing off-ramp
 - Turn lanes to Tower Road
 - Widening existing bridge
 - New signal
- Estimate basis for E-470 agreement



Project History

- Oct 2014 “Tight diamond” configuration approved by DEN, which reduced the length of the on-ramp by a mile, avoided wetland and permitting impacts, and avoided building a large box culvert to accommodate final configuration of Second Creek
- Late-2014 Begin to entertain advancing funding of Denver’s expansion of Tower Road as part of the project for several reasons:
- Important for Commerce City residents to have good access to new on-ramp; widening Commerce City’s portion of Tower Road to only to have it “bottleneck” to one lane didn’t make sense
 - Greater quantities typically results in lower unit prices and thus lower overall costs for both cities
 - Tower Road expansion wasn’t in Denver’s prioritized five year capital improvement program; need financing support
- April 2015 Tower Road Interchange Contract amendment with City and County of Denver whereby Commerce City is allowed to construct ramp and pays for a portion of maintenance costs associated with new, non-airport traffic on Pena Blvd.



Project Scope & Estimate: 2014

- 2014 Estimate

Item	Cost
Design & Environmental	\$316,950
On-Ramp Construction	\$2,641,280
Const. Management	\$396,190
Total	\$3,354,420

- Project Scope:

- Building the on-ramp
- Reconstructing portion of existing off-ramp
- Turn lanes to Tower Road
- Widening existing Peña Boulevard bridge
- New signal

- Assumptions

- Minor roadway improvements and upgrade to existing traffic signals
- No acceleration/deceleration lanes needed on Tower Road
- NEPA process only will be required if federal funding is used to construct the ramp

- Plan was to incorporate into 2K Tower Road widening project







Tower Road Widening Projects

City of Commerce City
Public Works Department

Legend

Tower Road Widening - 80th Ave to 103rd Ave 

Tower Road Widening - 80th Ave to Pena Blvd Eastbound Ramps
& Pena Blvd Westbound On-ramp 



2 mi



Project History

- June 2015 Project “split” from Tower Road Widening Project due to federal environmental clearance requirements from DEN
- Fall 2015 City begins preliminary wetland delineation & environmental analysis
- Denver Tower Road widening discussion continues
- Develop Design & Engineering Request for Proposal with Denver staff
- Commerce City agrees to pay 100% of design and engineering costs for ramp/widening project.
- May 2016 Award environmental and design services contract for the Tower Road at Pena Boulevard Roadway Improvements Project
- July 2016 Environmental and design work begins
- Oct 2016 30% design complete



Project Scope: Tower Road at Peña Boulevard Roadway Improvements

- On-Ramp:
 - Construct a free right turn lane for westbound off ramp to northbound Tower Road
 - Add free right turn lane for southbound Tower Road to westbound on ramp
 - Correct substandard curves
 - Portion of the expanded drainage systems for water detention & improved water quality
 - Portion of street lighting
 - Reconstruct a portion of the existing westbound Peña off-ramp in a new intersection configuration
 - Replace existing traffic signal
 - Construct expanded bridge over West Fork of Second Creek
- Denver Road Improvements:
 - Adding an additional northbound and southbound travel lane
 - Adding curb and gutter to outer edge of through lanes
 - Portion of the expanded drainage systems for water detention & improved water quality
 - Portion of street lighting

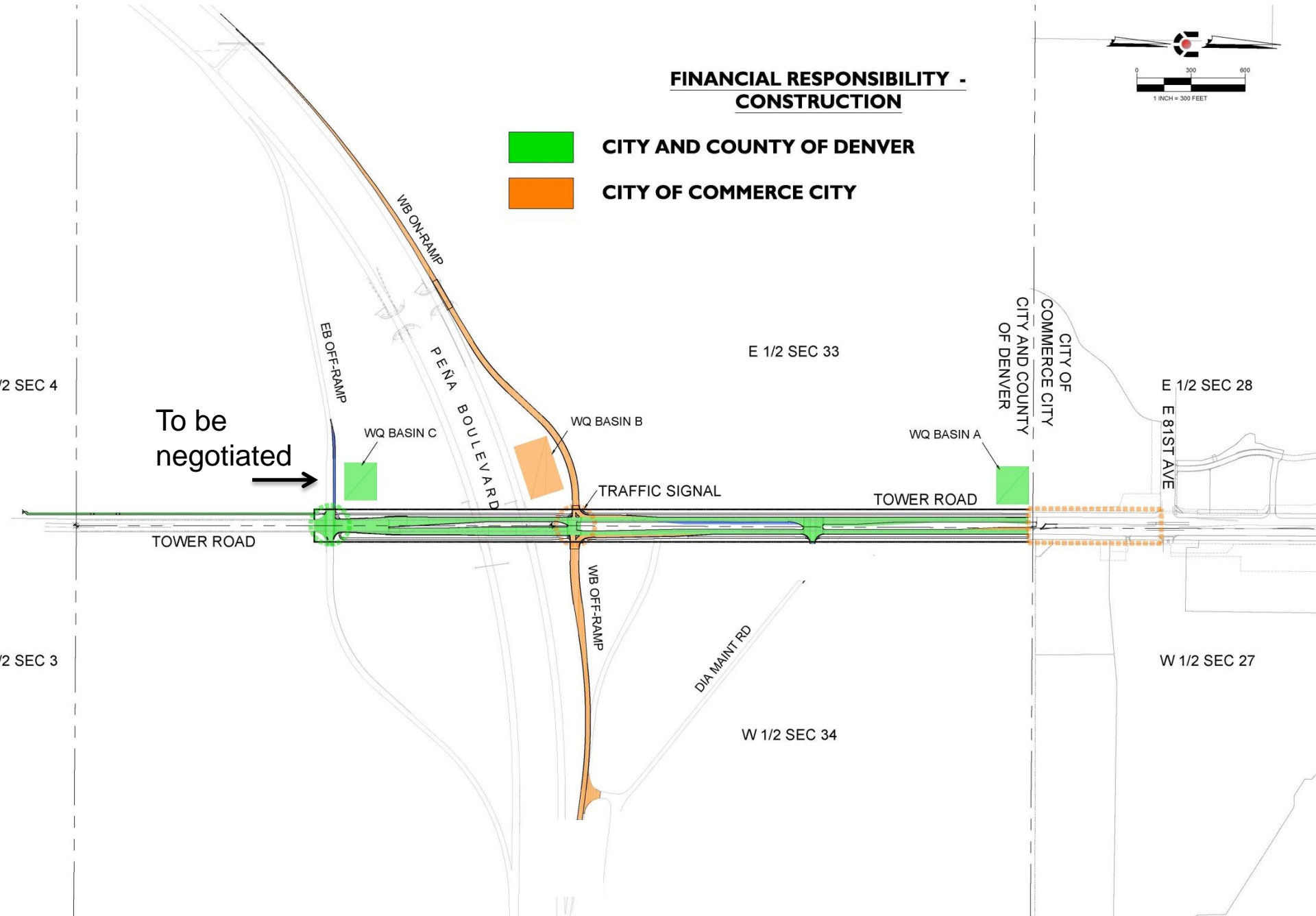
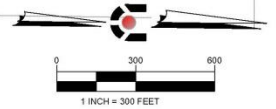


**FINANCIAL RESPONSIBILITY -
CONSTRUCTION**



CITY AND COUNTY OF DENVER

CITY OF COMMERCE CITY



Oct 2016 Project Cost Estimate

- 30 percent design

Item	Cost
Design & Environmental	\$825,000
On-Ramp Construction	\$4,615,400
Construction Management	\$277,000
Total:	\$5,717,400
Denver Portion:	\$6,103,000
Combined Total:	\$11,820,400

- Cost increases:
 - Required NEPA process
 - Detailed design with more accurate quantities
 - Higher construction costs
 - Scope changes



April 2017 Project Cost Estimate

- 60 percent design

Item	Cost
Design & Environmental	\$870,000
On-Ramp Construction	\$7,447,754
Construction Management	\$400,000
Commerce City Total:	\$8,717,754
Denver Portion:	\$5,458,617
<i>Denver Scope Alternates:</i>	<i>\$1,072,756</i>
Combined Total:	\$15,249,127

- Significant Cost variances
 - Old unit prices
 - Quantity errors
 - Market conditions
- Construction costs include a 15% contingency and 6% Minor Contract Revisions
- Denver has determined that Commerce City does not need to adhere to their social cost elements such as MBE/WBE, DBE, public art, etc.



Potential Funding Sources: Ramp

Total Ramp Cost Estimate (60%): \$8,717,754

E-470 Authority Reimbursement: \$3,207,700

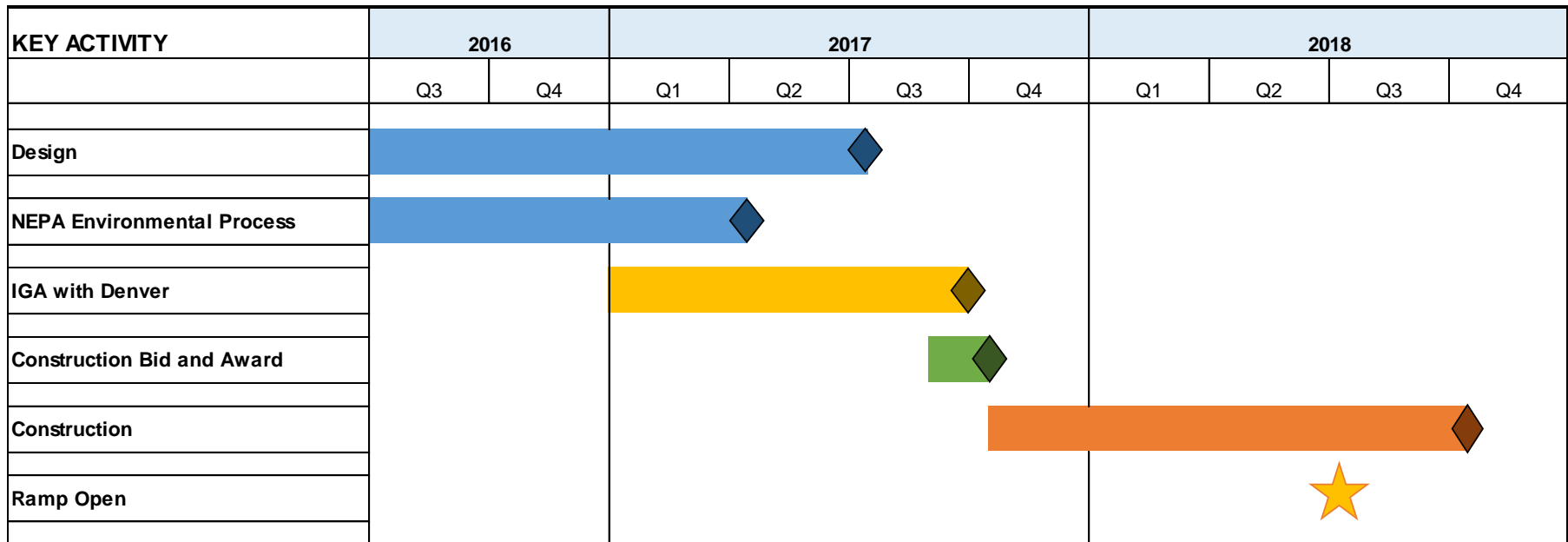
Difference: **\$5,510,054**

Assuming a \$5.6 million gap given remaining unknowns, potential funding sources

Sources	Potential Funds	Staff Recommendation
2016 (Unaudited) Excess	\$2,025,549	\$1,400,000
General Fund Balance	\$8,615,077	\$3,400,000
2018 HUTF/AdCo Road	\$2,244,947	\$800,000
T-88 Drainage Project	\$7,000,000	\$0
2K Fund Balance	\$19,200,000	\$0

Revised Project Schedule

City of Commerce City Tower Road Pena Ramp Project



Denver's Reimbursement Terms

- Denver is capping their contribution to complete the project at \$6 million
- Denver proposes paying \$1.5 million in 2017 towards project and requests Commerce City advance remainder of project cost with repayment as follows:
 - \$1M payment every year thereafter until debt is paid plus interest
 - Interest rate of 1.92% (representative of five-year bond maturity average based on the 5/12/17 market close)



Pros/Cons of Advancing Funding

- Pros

- Consistent with prior commitments
- Benefit to residents
- Aligns with federal environmental approval

- Cons

- Significant cost burden to the city
- Road widening may not occur in a timely manner
- Denver may have to complete a NEPA re-evaluation process if widening is not completed within three years
- Only building the ramp at this time could have a negative impact on securing needed licensing agreement



Potential Funding Sources

- If city council desired to advance Denver's portion of Tower Road construction, the following funding sources would be available to front approximately \$4.5 million cost (after the initial \$1.5M payment):

Sources	Potential Funds	Staff Recommendation
2016 (Unaudited) Excess	\$625,549	\$0
General Fund Balance	\$5,615,077	\$0
2018 HUTF/AdCo Road& Bridge	\$1,444,947	\$0
T-88 Drainage Project	\$7,000,000	\$0
2K Fund Balance	\$19,200,000	\$4,500,000

Policy Questions

- How should the city address cost increases associated with the on-ramp?
- Should the city advance the Denver portion of the project?
- If yes, what should the funding source be?
- If yes, what intergovernmental agreement terms are acceptable to city council?
 - Consider negotiation terms in executive session



