



COLORADO

Department of
Transportation



**C-470 Corridor Coalition
Policy Committee Meeting
March 5, 2015**





Agenda

1. Welcome
2. Introductions
3. August 7, 2014 PC Meeting Notes
4. Interim Ramp Project Updates
5. Revised Environmental Assessment
6. Next Meeting





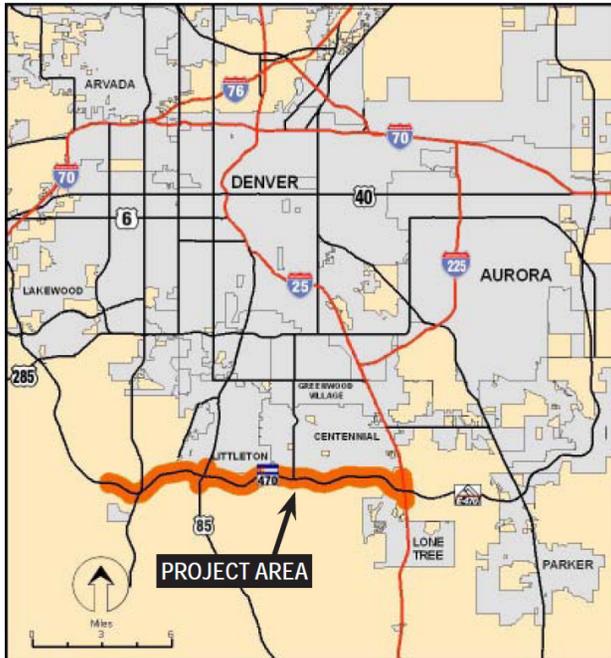
Interim RAMP Project Updates

1. Budget Update
2. Procurement Schedule
3. Project Goals
4. Level 3 Traffic and Revenue Update
5. Life Cycle Cost Analysis for Pavement





Interim Construction Project Description



C-470 Corridor Project Area



Interim Construction (\$269 million):

- Westbound - two tolled express lanes from I-25 to Colorado; one tolled express lane from Colorado to Wadsworth
- Eastbound - one tolled express lane from west of the Platte River to I-25
- Auxiliary lanes where warranted in select locations
- Direct connection ramps from I-25 to the westbound express lanes.
- Environmental mitigation including noise abatement
- Reconstruction of:
 - Bridges over the South Platte River
 - Existing pavement, and realignment of substandard curves
 - C-470 Trail with added grade separations at Quebec and Colorado



Original and Current Finance Plan

Original Finance Plan

Values in \$000

Sources	
Tax-Exempt CIBs	38,000
Tax-Exempt CABs	--
TIFIA	88,000
CDOT - RAMP	100,000
FASTER + Local	12,000
Other Public Funding	29,000
TOTAL	\$267,000

Uses	
Design & Construction	249,000
Financing Fees ¹	3,000
Interest During Construction	4,000
Debt Service Reserves	7,000
Operating Reserves ²	4,000
TOTAL	\$267,000

Current Finance Plan

Values in \$000

Sources	
Tax-Exempt CIBs	86,000
TIFIA	108,000
CDOT - RAMP	100,000
FASTER + Local (Douglas County)	12,000
O&M Loan Proceeds	2,000
TOTAL	\$308,000

Uses	
Design & Construction	269,000
Transaction Costs ¹	4,000
Interest During Construction	10,000
Project Reserves ²	25,000
TOTAL	\$308,000

¹ Includes debt issuance and related costs.

² Includes debt service, O&M, lifecycle, and ramp-up reserves, plus a pre-funded account for O&M expenditures.

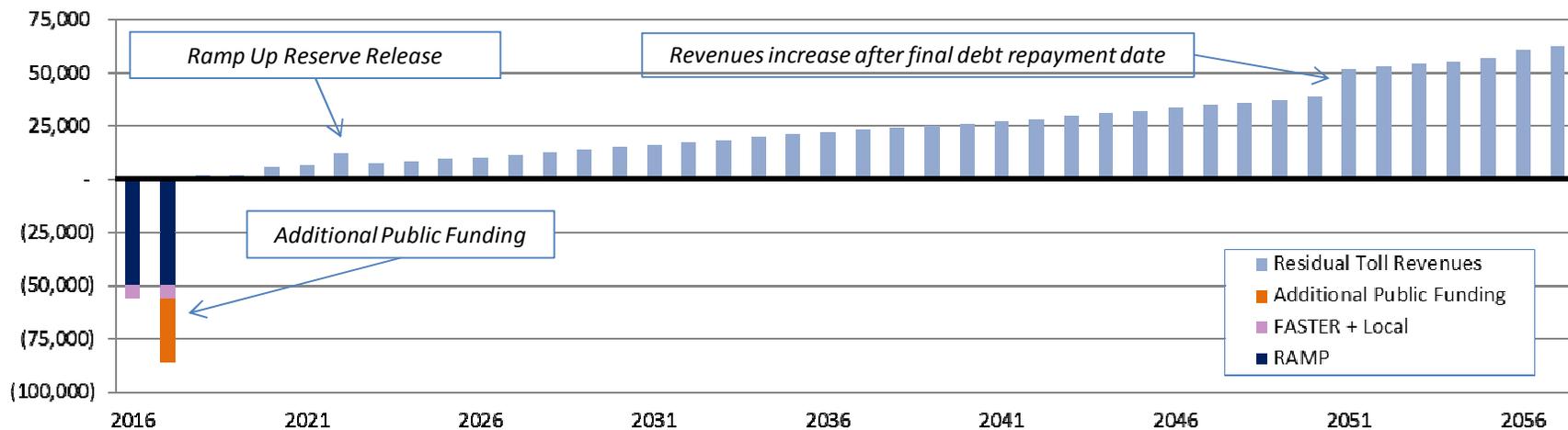




Net vs. Gross Pledge

Under the **Net Pledge** approach, debt service would be paid after O&M with the need for additional public sources to cover estimated funding gap.

- ▶ The Net Pledge approach results in a lower amount of toll-backed debt and requires approximately \$35 million of additional upfront public funding
- ▶ No contingent O&M loan would be provided
- ▶ Investors have claim to “net” toll revenue after O&M expenditures are paid
- ▶ Excess revenues after debt service are slightly higher in the new pledge case because of the lower amount of toll-backed debt (and related debt service)

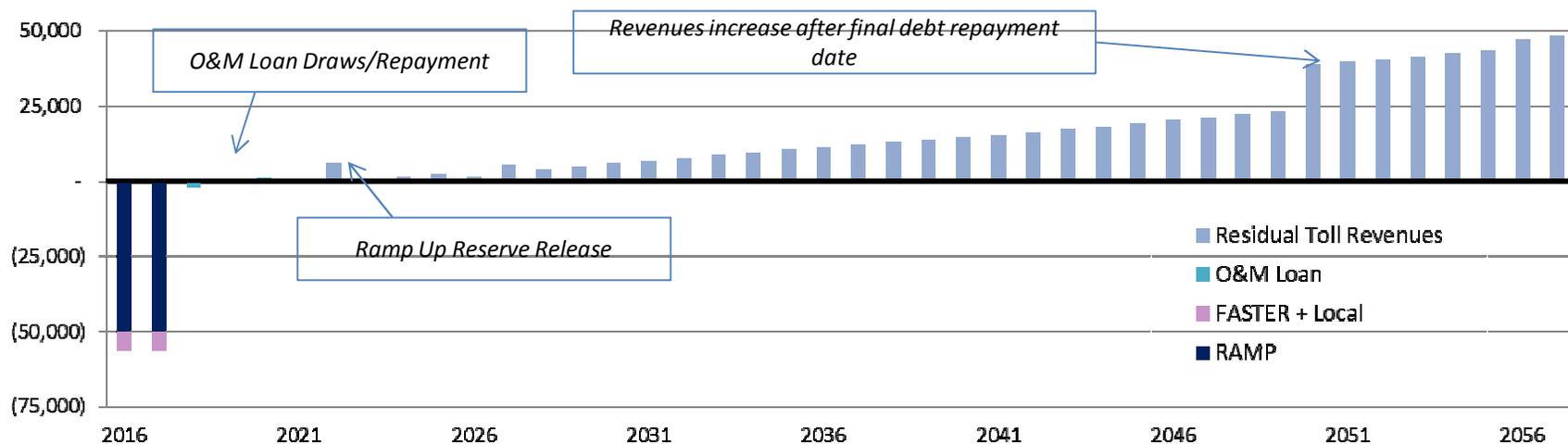




Net vs. Gross Pledge

Under the **Gross Pledge** approach, debt service would be paid before O&M with a contingent loan made available by CDOT in the event toll revenues after debt service are insufficient to cover O&M.

- ▶ The gross pledge allows for more toll-backed debt, eliminating the need for additional upfront public funds
- ▶ The key feature of this approach is a contingent O&M loan provided by CDOT
- ▶ The O&M loan is a credit enhancement tool for investment-grade debt structuring
- ▶ Loan draws made as needed during first 5-10 years of operation (only used in year one if base case revenues are achieved) in the event toll revenues are insufficient to cover both debt service and O&M
- ▶ Repayment of the loan would occur during periods of where toll revenues exceed debt service and O&M





Net vs. Gross Pledge

How the Toll Proceeds are pledged have the following impact on the Projects' affordability:

- Net Pledge:
 - Approximately \$35M in upfront capital is need to fund the Scope
 - Toll revenues above P&I Payments are anticipated in Year 3
- ***Gross Pledge (recommended):***
 - ***Approximately \$2M would be drawn from a loan at substantial completion***
 - ***That \$2M loan would be repaid within the first 5 years of operations***

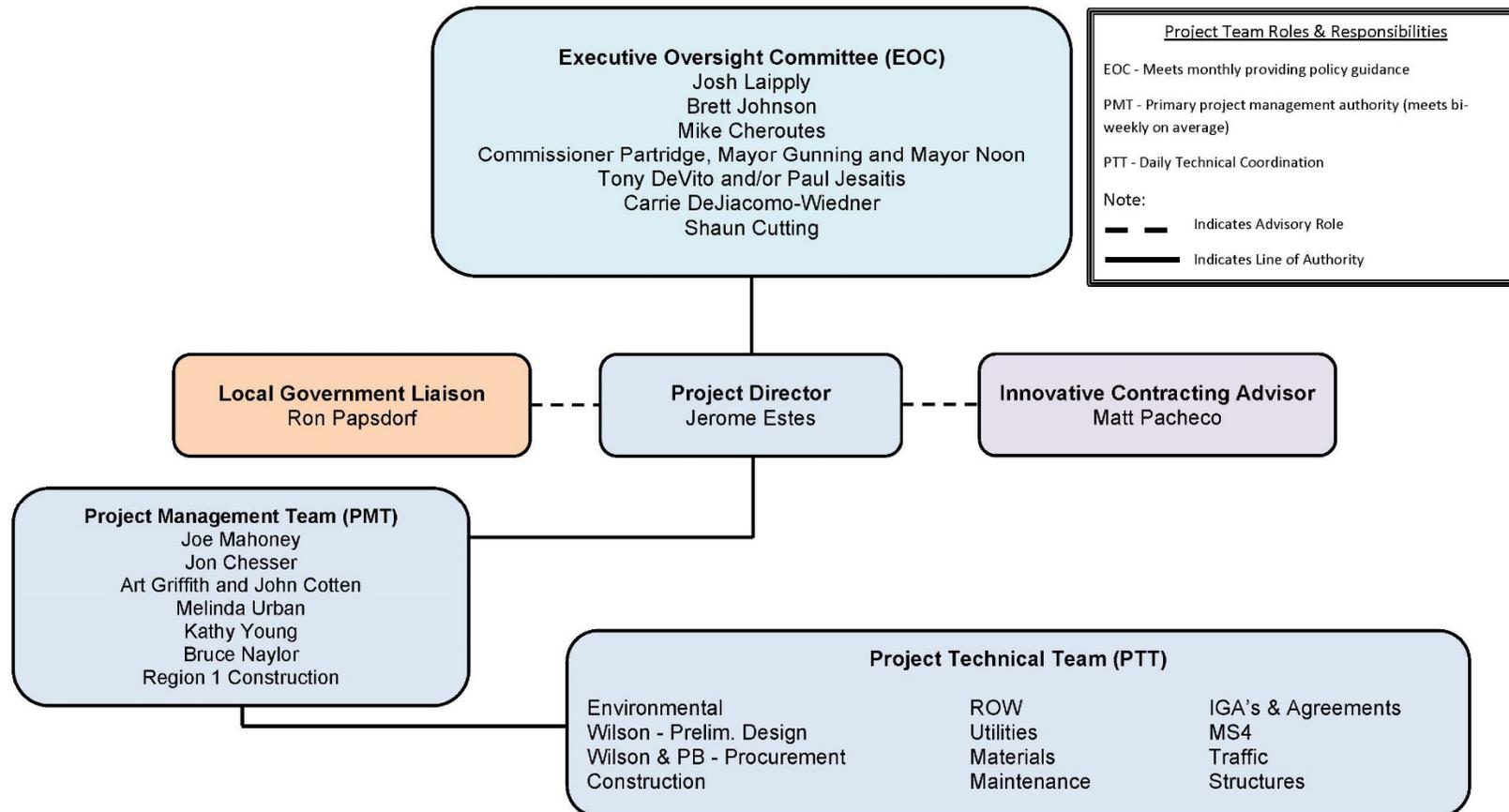




C-470 Procurement Org Chart

February 27, 2015

C-470 (Segment 1) Procurement Organization Chart





Procurement Schedule Update

Key Milestones	Date
Solicitation of Letters of Interests for DB Services	January 8, 2015
Issue Request for Qualifications	February 26, 2015
Submit TIFIA Letter of Interest	March, 2015
Issue Draft Request for Proposals	June 2015
EA Decision Document	September 2015
Issue Final Request for Proposals	September 2015
Select Design-Build Team	February 2016
Start Construction	Summer 2016





C-470 Prioritized Goals

- 1. Optimize traffic operations on C-470 within the project budget**
 - Once operational, optimize trip reliability in the tolled express lanes by maintaining a 45 mph minimum operating speed.
 - Preserve the existing general purpose lanes by providing improvements that enable them to operate at levels better than the no-action condition.
- 2. Optimize scope of improvements within the project budget**
- 3. Optimize Operating and Life Cycle Maintenance costs**
- 4. Minimize impacts to the traveling public during project construction and future construction**
- 5. Achieve the following project milestones:**
 - Expenditure of \$100M RAMP funding by December 31, 2017
 - Work cooperatively with the E-470 Public Highway Authority on the planning, installation, and testing of tolling infrastructure; culminating in the Tolling Final Acceptance Test starting on the date listed in the contract.





Other Updates

Level 3 Traffic and Revenue Study

- Validation of Level 2 T&R Gross Revenues (January)
- Stated Preference Survey

Pavement – Life Cycle Cost Analysis

- Underway
- Expected to be complete in May





Summary of Recent Public Outreach

Traffic Noise Open Houses

- February 10th and 11th
- Presented noise study findings and recommendations
- Currently responding to comments received

Highlands Ranch Community Association - General Update

- February 17th

Highlands Ranch Metro District Board - General Update

- February 24th

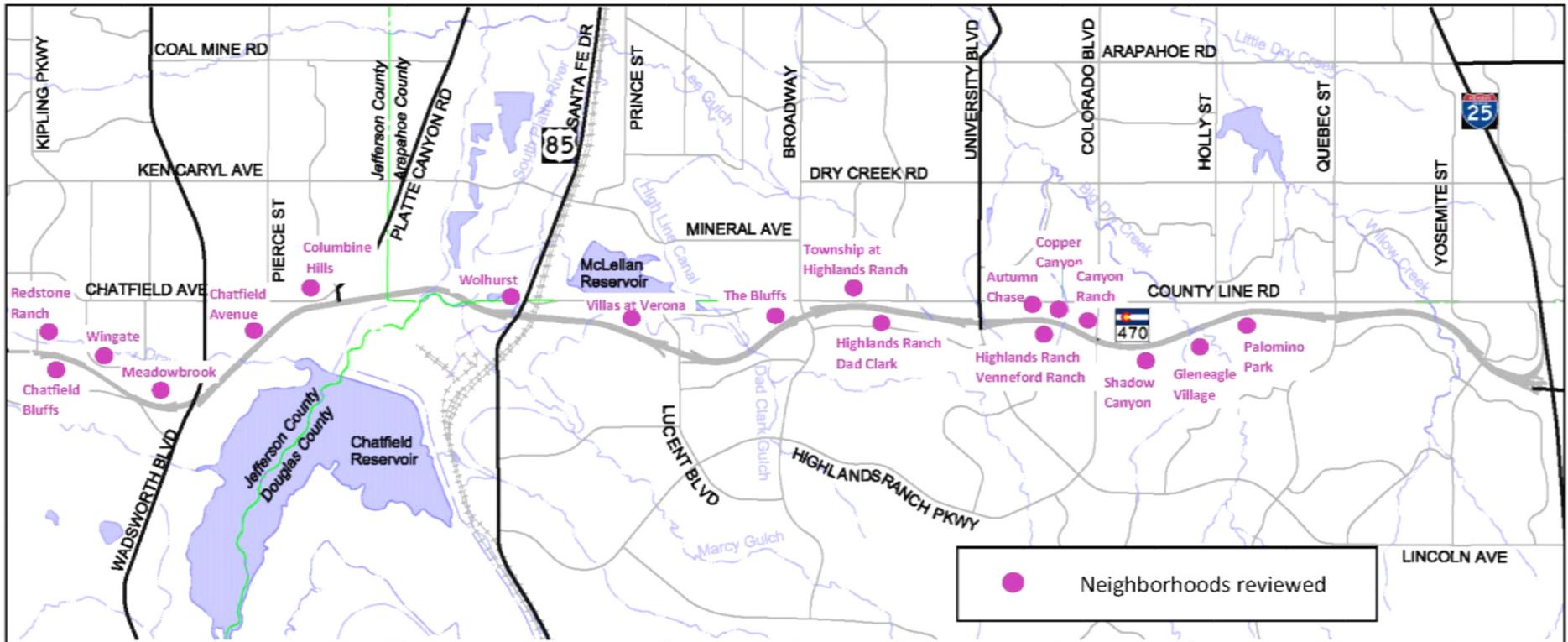
Upcoming Littleton City Council - General Update

- Planned for March 24th



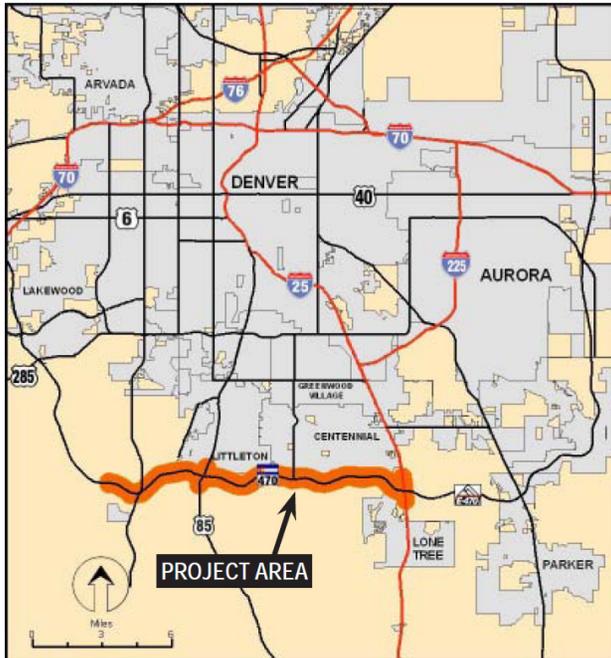


Traffic Noise –Neighborhoods Studied





Traffic Noise – Impact Analysis



C-470 Corridor Project Area



Traffic Noise Modeling:

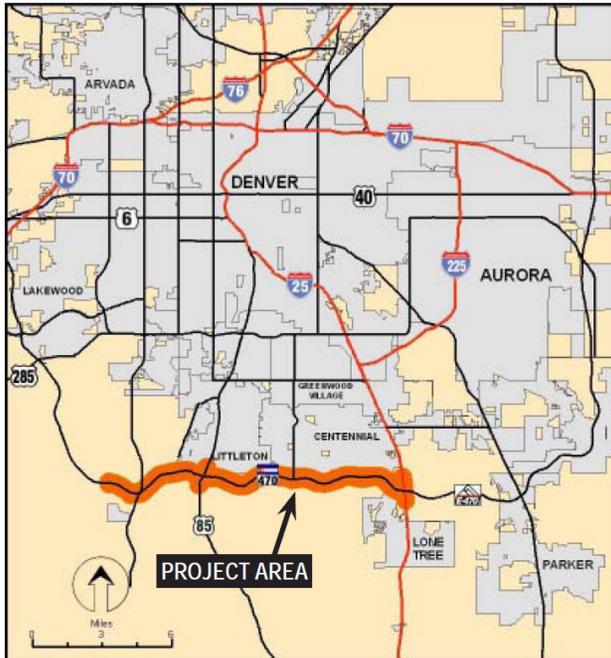
- Measured existing traffic noise.
- Developed noise model for the Proposed Project based on measured noise and future conditions.
- Noise model predicts future noise levels at receptors with the Proposed Project.

Traffic Noise Impacts:

- Do future noise levels increase by 10 decibels or more with the Proposed Project?
- Do future noise levels equal or exceed 66 decibels with the Proposed Project?
- Mitigation analysis is only performed for impacted properties.



Traffic Noise – Mitigation Analysis



C-470 Corridor Project Area

Traffic Noise Mitigation Criteria:

- Is mitigation feasible?
- Is mitigation reasonable?
- Does the community want it?

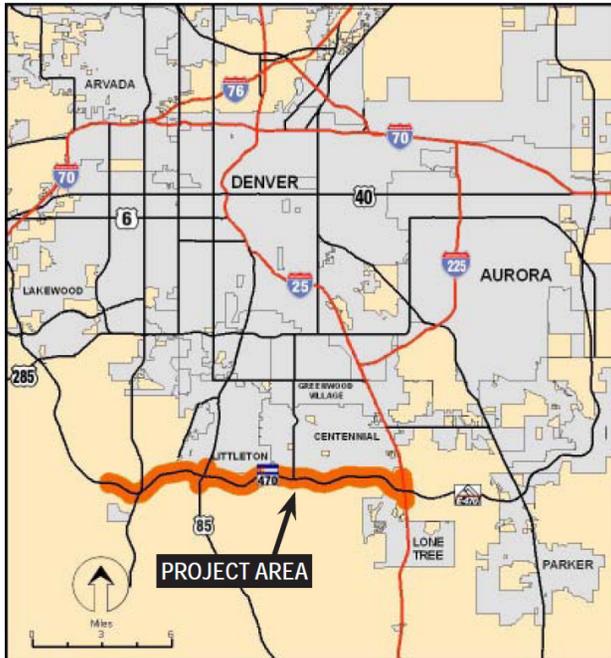
Is it Feasible:

- Future noise reduced by 5 decibels?
- Maximum height 20 feet?
- Fatal flaws related to drainage, terrain, maintenance, or safety?





Traffic Noise – Mitigation Analysis



C-470 Corridor Project Area

Is it Reasonable:

- Is the mitigation cost at or below CDOT cost benefit index?
- Does at least one receptor benefit by at least 7 decibel reduction?

* This is where we are today.

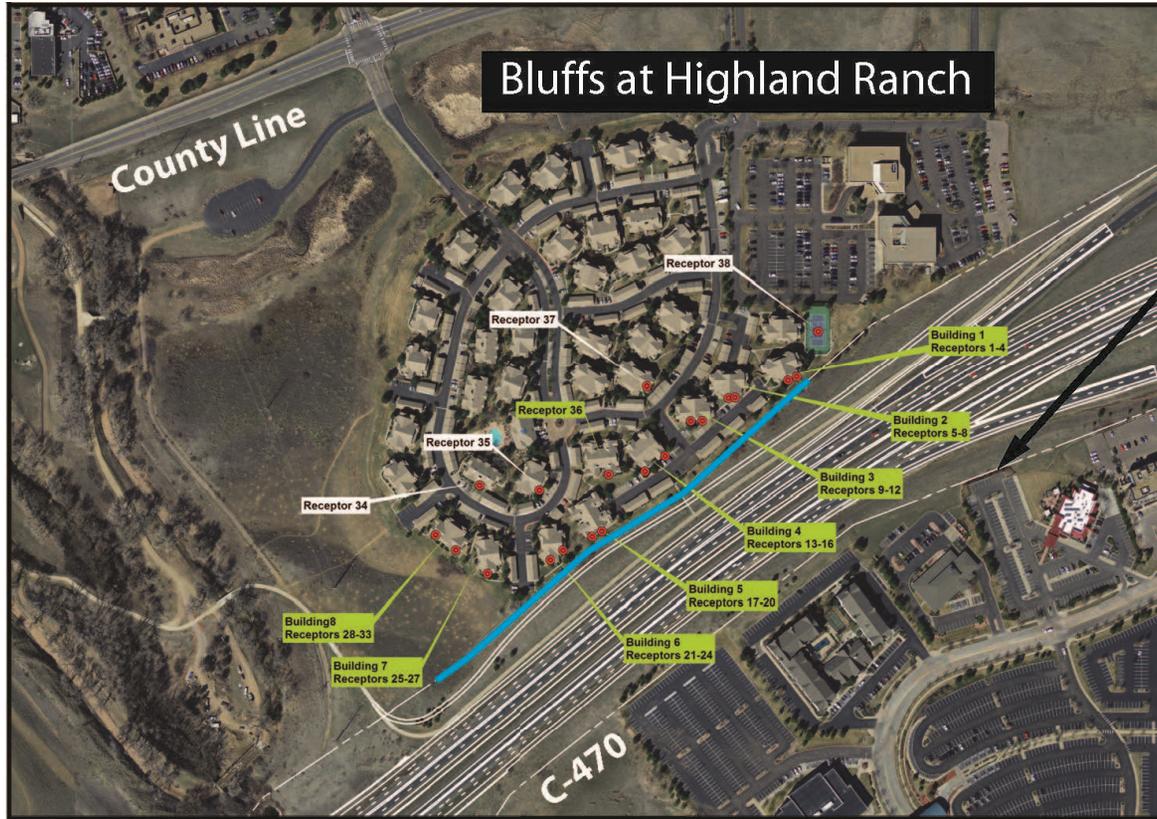
Does the community want mitigation:

- Benefitted receptor preference survey
- >50% vote of benefitted properties





Traffic Noise – Location Example



Noise Wall

Approximate	Length	1,200 ft
	Height	Min. 16 ft Max. 20 ft Avg. 17.5 ft



Upcoming EA Milestones

Public Hearing

- Anticipated for June / July

Decision Document

- Anticipated for late September – trigger for final RFP





Next PC Meeting – May 7, 2015
10:00 am
Highlands Ranch Mansion

Thank you!

