



COLORADO

Department of
Transportation

**C-470 Tolled Express Lanes Segment 1
Design-Build Project
Optional Informational Meeting
January 28th, 2015**

**EXPRESS
LANES | C
470**



Project Partners and Stakeholders

CDOT
HPTE
FHWA



C-470 Corridor Coalition:

- Douglas, Arapahoe, and Jefferson Counties
- Cities of Lone Tree, Centennial, Littleton, Greenwood Village, the Highlands Ranch Metropolitan District, Castle Rock, and Parker
- DRCOG
- RTD



Project Management Team

CDOT Project Director, Jerome Estes
CDOT Project Manager, Bruce Naylor

FHWA

OMPD

C-470 Corridor Coalition Representatives (Douglas County
and City of Lone Tree)

Wilson & Company (Procurement Support)



Project History

2006 - Original Environmental Assessment (EA)

- CDOT Completes EA - Tolled Express Lanes
- No Funding - Improvements not Constructed

2011 and 2012:

- C-470 Corridor Coalition forms to identify an implementable funding solution
- 3 Funding Alternatives Presented to Public (All-Toll, Tax Initiative, and Express Lanes)

February 2013:

- C-470 Coalition Selects Express Lanes as Preferred Funding Alternative



Revised Environmental Assessment

- Why?** Changes in Funding - Time - Project Change - New Tools - New Data
- What?** Proposed Action is revised from 2006. The affected environment is being assessed and the Revised EA will document environmental consequences.
- When?** The Revised EA will be completed in early 2015. A Public Hearing will be held in Spring 2015. A decision document is expected in September 2015.



Project Purpose

The purpose of this project is to **address congestion** from Kipling Parkway to I-25, **reduce traveler delay**, and **improve reliability** for corridor users. The project seeks to select an implementable transportation alternative that provides reliability, maintains travel times; provides reliable travel choices to accommodate an expected increase in the intensity and duration of congestion forecasted for the design year 2035.

The project need is based on:

Population and employment growth

Congestion

Delay

Travel Time Reliability



Un-prioritized Project Goals

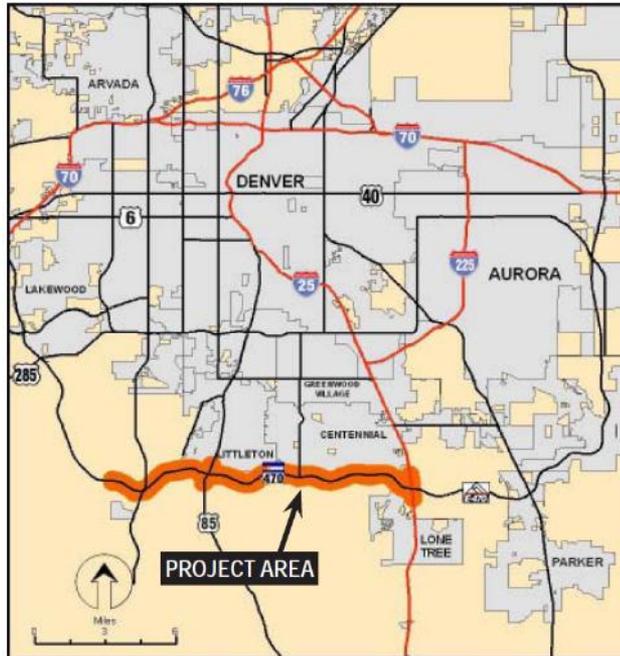
- A. Optimize traffic operations on C-470 within the project budget**
 - Once operational, optimize trip reliability in the tolled express lanes by maintaining a 45 mph minimum operating speed.
 - Preserve the existing general purpose lanes by providing improvements that enable them to operate at levels better than the no-action condition.
- B. Optimize scope of improvements within the project budget**
- C. Optimize operating and life-cycle maintenance costs**
- D. Minimize impacts to the traveling public during project construction and future construction**
- E. Achieve the following project schedule milestones**
 - Expenditure of RAMP funding by December 31, 2017
 - Tolled express lanes are operational by [to be determined]
 - Tolled express lanes are generating revenue by [to be determined]



Key Components/Major Elements

Construction:

- 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.
- Water-quality features and noise barriers
- ITS elements and tolling equipment



C-470 Corridor Project Area

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



Proposed Typical Sections



Proposed C-470 Interim - 1 Tolloed Express Lane in each direction plus 2 General Purpose Lanes in each direction with Auxiliary Lanes (select locations)

General Purpose Lanes – Continuous lanes that do not require the user to pay a toll, consistent with the two existing lanes on C-470.

Tolloed Express Lanes – Continuous lanes that require the user to pay a toll. These lanes are separated from the General Purpose Lanes by a painted buffer.

Auxiliary Lanes – Lanes added to the right of the General Purpose Lanes connecting the on-ramp at one interchange to the off-ramp at the next interchange. Auxiliary lanes will improve safety and traffic performance. Auxiliary lanes will not be tolled.



Proposed Typical Sections



Proposed C-470 Ultimate - 2 Tolled Express Lanes in each direction plus 2 General Purpose Lanes in each direction with Auxiliary Lanes (select locations)

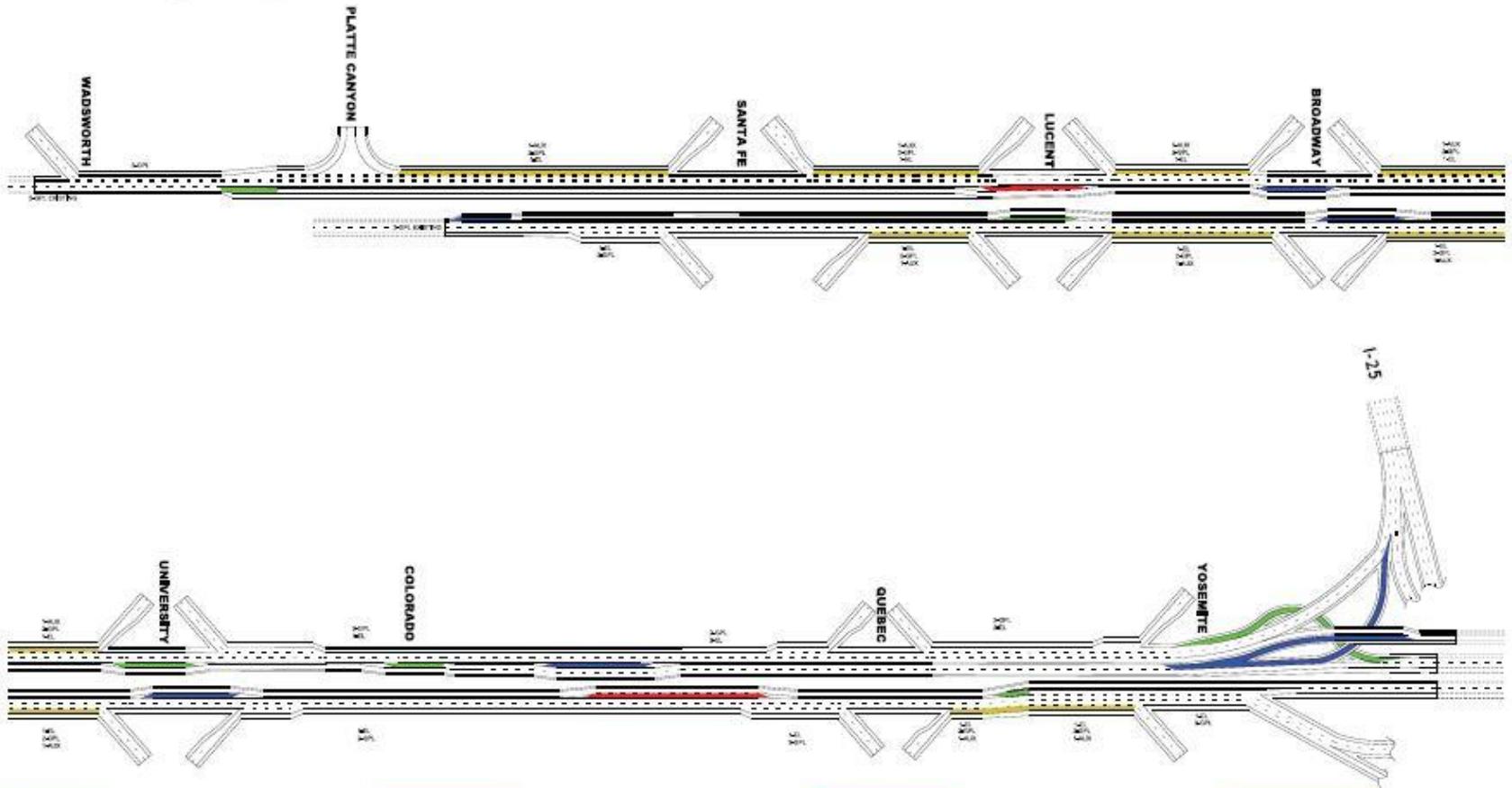
General Purpose Lanes – Continuous lanes that do not require the user to pay a toll, consistent with the two existing lanes on C-470.

Tolled Express Lanes – Continuous lanes that require the user to pay a toll. These lanes are separated from the General Purpose Lanes by a painted buffer.

Auxiliary Lanes – Lanes added to the right of the General Purpose Lanes connecting the on-ramp at one interchange to the off-ramp at the next interchange. Auxiliary lanes will improve safety and traffic performance. Auxiliary lanes will not be tolled.



Access to the Tolled Express Lanes – Draft – Ingress/Egress Subject to Further Study



E-470

Ingress

From these locations vehicles may enter the tolled express lanes from the general purpose lanes

Egress

From these locations vehicles may exit the tolled express lanes to the general purpose lanes

**Combined
Ingress / Egress**

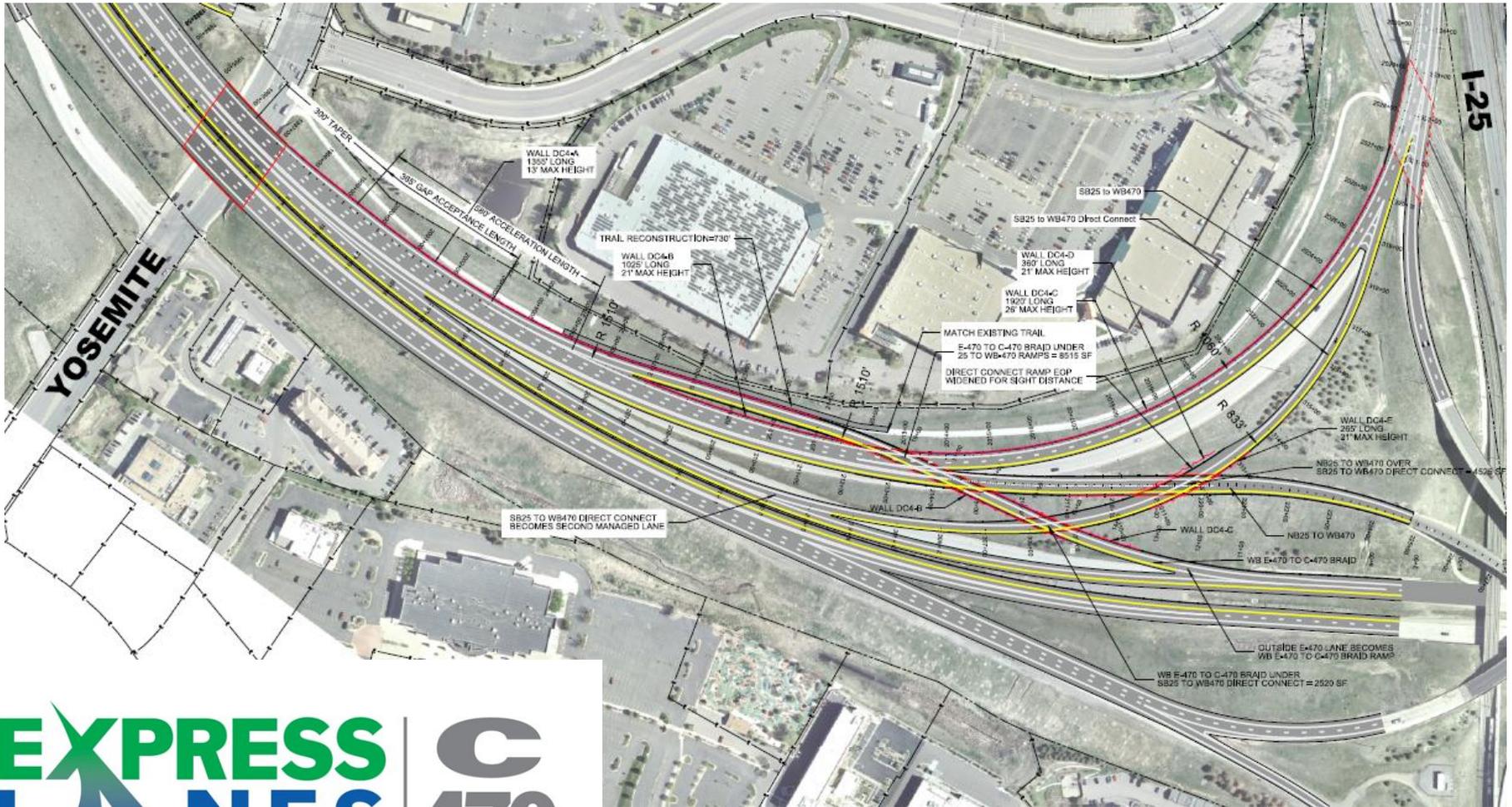
From these locations vehicles may enter or exit the tolled express lanes to/from the general purpose

Auxiliary Lanes

Additional lanes that are continuous from one interchange on-ramp to the next interchange off-ramp



Direct Connection Concept





Design-Build Contract

Design Services:

- Finalization of all design and preparation of construction documents
- Review by CDOT for completeness and conformance with technical requirements

Construction Services:

- Construction of all project elements
- Installation of Tolling infrastructure and coordination with HPTE for integration with toll system



Design-Build Procurement

Request for Qualifications:

- Anticipated release February 26, 2015
- Will be provided to firms who provide LOIs
- Anticipate one 1-on-1 meeting with teams, scheduled upon request
- Shortlisting 3 firms
- Ex-parte communications, all contact through CDOT Project Director, Jerome Estes



Design-Build Procurement

Request for Proposals:

- Anticipated release June, 2015
- Provided to short-listed teams only
- Industry review meetings
- Confidential one 1-on-1 meeting for:
 - Alternative Configuration Concepts (ACCs)
 - Alternative Technical Concepts (ATCs)
- Award based on best-value
 - Technical proposal
 - Cost proposal

Anticipate Additional Requested Elements (AREs):

- To include project elements of ultimate design



Design-Build Procurement

DBE Participation:

- DBE Requirements are being determined

Owner Controlled Insurance Program (OCIP):

- Project will require participation in OCIP

Quality Control/Quality Assurance:

- Anticipate Contractor QC/QA
- CDOT Owner Verification Testing (OVT)



Design-Build Information

Anticipated information to be provided includes:

- 30% Preliminary design plans
- Preliminary drainage and water quality report
- Traffic modeling from Traffic & Revenue study
- Aerial and topographical survey
- As-built information
- Utility mapping and potholing
- Geotechnical data and reports
- Revised EA
- Utility agreements
- ROW Plans, obtaining ROW and easements



Funding and Contracting

\$269M Project Estimate

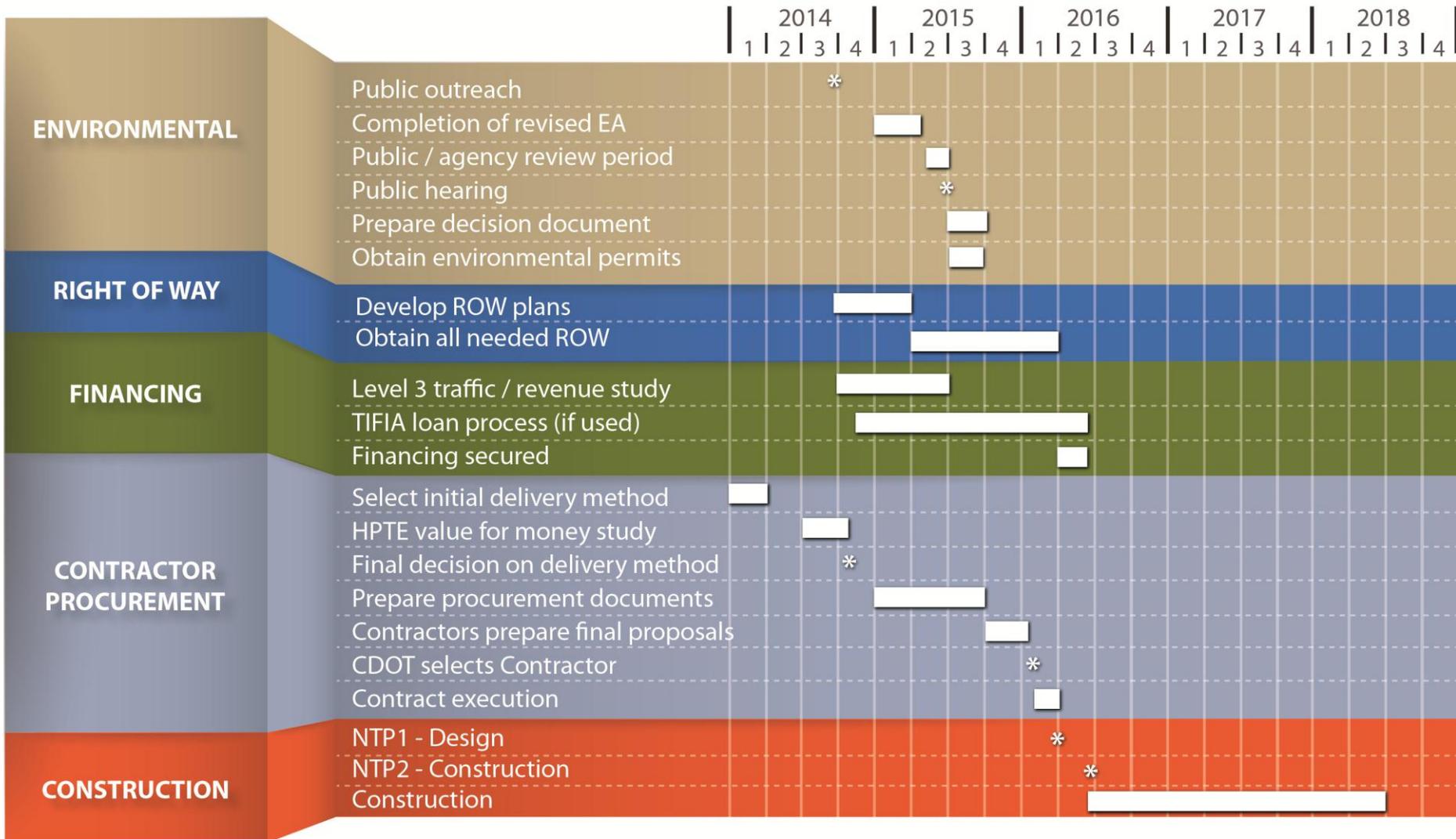
Proposed Funding Sources:

- \$117M - Federal and State
- \$142M - Projected via toll revenues
- \$10M - Douglas County (construction)





Project Schedule Overview





Anticipated Procurement Schedule

- Issued Request for LOIs January 8, 2015
- RFQ February 26, 2015
- Draft RFP June 2015
- Final RFP September 2015
- Design-Build Team Selection February 2016
- Construction Summer 2016



Communication Protocol

All project information is available on the project website:

<https://www.codot.gov/projects/c470ExpressLanes>

C-470 Tolled Express Lanes Segment 1 Design-Build project
single point of contact:

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Questions?

