



Eva J. Henry - District #1  
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STUDY SESSION AGENDA  
TUESDAY  
May 25, 2021

*ALL TIMES LISTED ON THIS AGENDA ARE SUBJECT TO CHANGE*

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11:00 A.M.	ATTENDEE(S): ITEM:	Adam Burg Legislative Update
11:40 A.M.	ATTENDEE(S): ITEM:	Brian Staley / Chris Chovan Federal Boulevard Multimodal Study Update and Discussion
12:40 P.M.	ATTENDEE(S):  ITEM:	Rachel Gruber, Manager of Community Affairs / Rachel Marion, Director of Government Affairs / Cristal DeHerrera, Executive Vice President, Chief of Staff / Bill Poole, Senior Vice President of Planning and Design / Michael Cloud, Director of Infrastructure DEN Presentation
1:10 P.M.	ATTENDEE(S): ITEM:	Raymond Gonzales Administrative Item Review / Commissioners Communication
1:40 P.M.	ATTENDEE(S): ITEM:	Heidi Miller Executive Session Pursuant to C.R.S. 24-6-402(4)(e) for the Purpose of Instructing Negotiators Regarding Economic Incentives
2:10 P.M.	ATTENDEE(S): ITEM:	Heidi Miller Executive Session Pursuant to C.R.S. 24-6-402(4)(a) for the Purpose of Instructing Negotiators Regarding Property Sale or Acquisition

**TO WATCH THE MEETING:**

- Watch the virtual Zoom Study Session through our [You Tube Channel](#)

(AND SUCH OTHER MATTERS OF PUBLIC BUSINESS WHICH MAY ARISE)

\*\*\*AGENDA IS SUBJECT TO CHANGE\*\*\*



## STUDY SESSION ITEM SUMMARY

<b>DATE OF STUDY SESSION:</b> May 25, 2021
<b>SUBJECT:</b> Federal Boulevard Multimodal Corridor Study Update
<b>OFFICE/DEPARTMENT:</b> Public Works
<b>CONTACT:</b> Brian Staley, PE, PTOE, Director; Chris Chovan, Senior Transportation and Mobility Planner
<b>FINACIAL IMPACT:</b> None
<b>SUPPORT/RESOURCES REQUEST:</b> None
<b>DIRECTION NEEDED:</b> General feedback and questions related to the Study
<b>RECOMMENDED ACTION:</b> Information update session

### DISCUSSION POINTS:

- Adams County, in partnership with the Cities of Westminster and Federal Heights, began the Federal Boulevard Multimodal Corridor Study last year.
- The study covers the Federal Boulevard corridor from 52<sup>nd</sup> Ave to 120<sup>th</sup> Ave.
- The discussion will focus on the activities presented at the most recent Stakeholder Working Group meeting including a review of similar corridors, discussion of mobility needs, and conceptual roadway cross sections.
- In addition, the staff will share the next steps of plan development and upcoming opportunities for public outreach.



# Plan Development Update

## Board Of Commissioners Study Session

Brian Staley, Director

Chris Chovan, Senior Transportation and Mobility Planner

May 25, 2021



# Today's Discussion

- Review of Similar Corridors
- Discussion of Mobility Needs and Goals
- Cross Sections and Right-of-Way
- Moving forward



# Similar Corridors

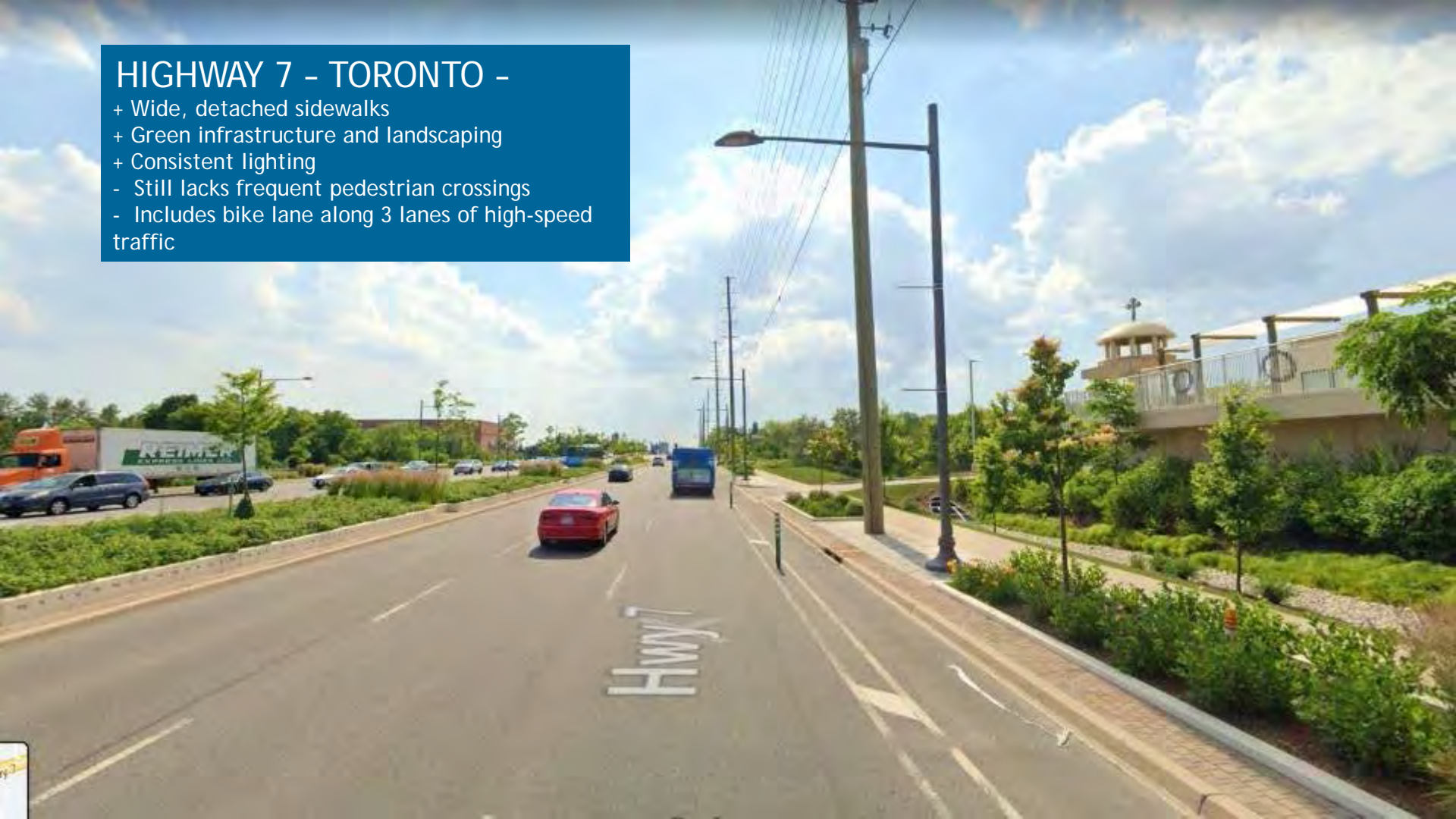
## HIGHWAY 7 - TORONTO - BEFORE





## HIGHWAY 7 - TORONTO -

- + Wide, detached sidewalks
- + Green infrastructure and landscaping
- + Consistent lighting
- Still lacks frequent pedestrian crossings
- Includes bike lane along 3 lanes of high-speed traffic



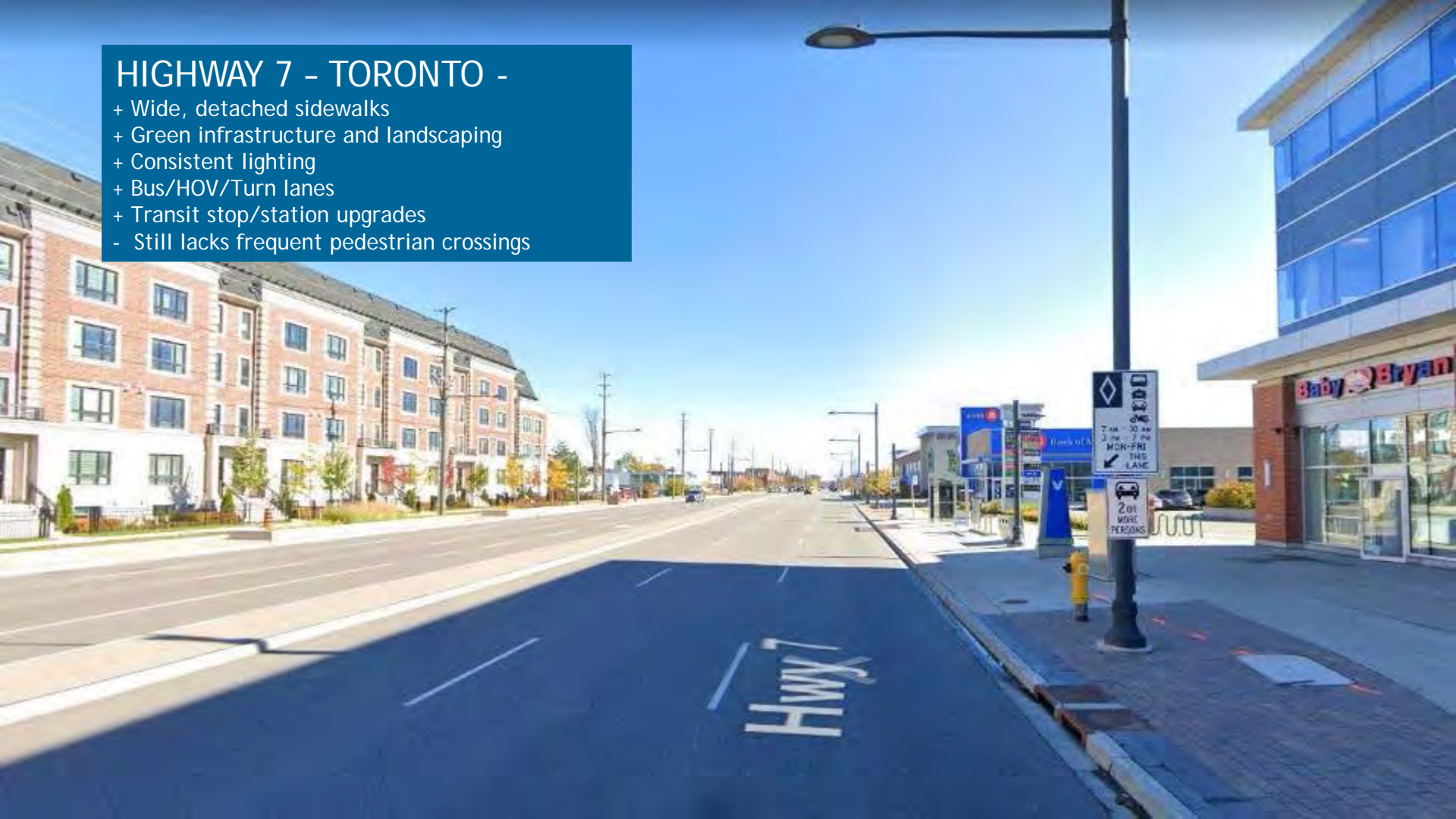
## HIGHWAY 7 - TORONTO - BEFORE





## HIGHWAY 7 - TORONTO -

- + Wide, detached sidewalks
- + Green infrastructure and landscaping
- + Consistent lighting
- + Bus/HOV/Turn lanes
- + Transit stop/station upgrades
- Still lacks frequent pedestrian crossings



## 11<sup>th</sup> AVE - EUGENE, OREGON - BEFORE



## 11<sup>th</sup> AVE - EUGENE, OREGON - AFTER

- + Wide, detached sidewalks
- + Green infrastructure and landscaping
- + Consistent lighting
- + Bus/Turn lanes
- + Transit stop/station upgrades
- + Pedestrian signal at transit stop/trail connection





# CENTRAL AVE - ALBUQUERQUE, NM - BEFORE



## CENTRAL AVE – ALBUQUERQUE, NM - AFTER

- + Green infrastructure and landscaping in median
- + Upgraded lighting
- + Center-running bus rapid transit facilities
- + Transit stop/station upgrades
- + Incorporate public art





## COLFAX & PARK AVE - BEFORE

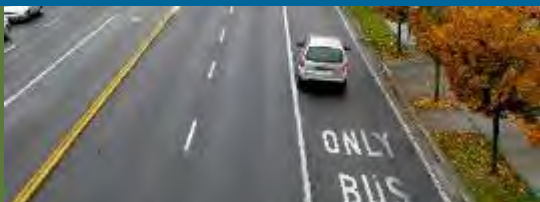


## COLFAX & PARK AVE - AFTER

- + Low-cost crossing enhancements
- + Major reductions in pedestrian-involved crashes



# OTHER BUILT EXAMPLES



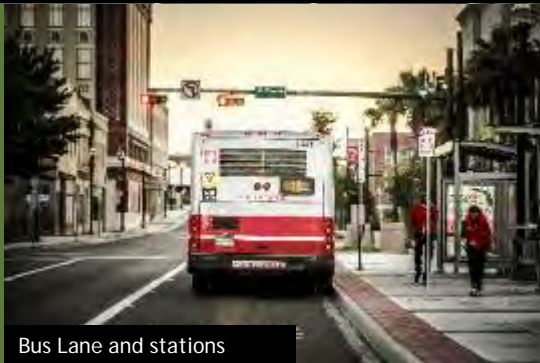
Business Access Transit Lane and tree lawn



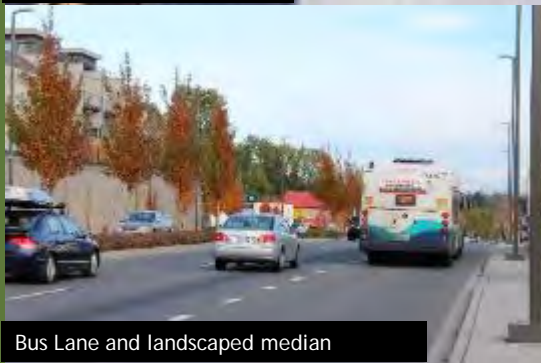
Bus Lane and stations



Landscaping and Stormwater Treatments



Bus Lane and stations



Bus Lane and landscaped median



Landscaping and Stormwater Treatments



Bus Lane and stations



Multi-use Sidewalk and Stormwater Treatments



Detached Sidewalk and Landscaping

# Draft Mobility Needs and Goals

- Focus on **safe, equitable, consistent**, and **high-quality** options
- Build on **existing multimodal facilities** (trails, rail, etc.)
- Identify **attainable alternatives** to driving alone
- Generate recommendations for **walking, rolling, biking, transit, driving**, and **freight**

# Draft Modal Visions & Potential Elements

# Pedestrians

## Existing Conditions and Stakeholder Input

- Many pedestrian crashes
- Difficult to cross
- Important issue for most stakeholders

## Objectives for Improvements

- Greater connectivity
- Encourage addressing sidewalk concerns
- Improve safety for pedestrians



# Pedestrians



Attached Sidewalk - 8' wide



Detached Multi-use Path - 10' wide



Detached Sidewalk - 8' wide



Enhanced Safety for all Users at Intersections - various treatments



Safer Pedestrian Crossings: Signals, Rectangular Rapid Flashing Beacons (RRFBs) & High Intensity Activated Crosswalks (HAWKs)

Key



Recommended corridor-wide



Not Recommended

# Transit

## Existing Conditions and Stakeholder Input

- Slower bus speeds due to congestion
- Record ridership
- Advocate for quality transit amenities
- Improve service


## Objectives for Improvements

- Lack of multimodal connections to bus stops
- Safer access to bus stops and shelters
- More frequent service
- Prepare for ridership growth
- Opportunity for development, redevelopment, and land preservation


# Transit



Semi-exclusive dedicated bus lanes (lanes that are reserved for buses and right turning vehicles)



Federal - 50th	Clear Creek - Federal Station - Gate B	Westminster Station	Federal - T2nd	Federal - 104th	Front Range Community College	108th & Murray Gate C
5:05A	5:05A	5:22A	---	---	---	---
5:45A	5:45A	---	5:55A	6:05A	---	6:05A
6:10A	6:10A	6:22A	---	---	---	---
6:25A	6:25A	6:33A	---	---	---	---
6:55A	6:55A	6:45A	---	---	---	---
6:40A	6:40A	---	6:42A	7:00A	7:05A	---
6:55A	6:55A	7:05A	---	---	---	---
7:05A	7:05A	7:15A	---	---	---	---
7:15A	7:15A	7:25A	---	---	---	---
7:25A	7:25A	7:35A	---	---	---	---



Service Enhancements - more frequent service (every 10 minutes), Timed Transfers to other routes and increased hours of service



Transit bypass lanes (dedicated lanes for bus approaches to intersections) at key locations, coupled with transit signal priority 'queue jumps'



Stop/Station Enhancements - ADA accessible bus shelters, relocated bus stops, sidewalk connections, multilingual information

Key



Recommended corridor-wide



Not Recommended

# Bicycles

## Existing Conditions and Stakeholder Input

- Minimal on-street bike infrastructure
- Not a designated bike corridor
- Encourage development of complete bike network
- Advocate for underpasses for all ages and abilities

## Objectives for Improvements

- Concern over air quality
- More bike connections to neighborhoods
- Reduce emissions/pollution
- Addresses congestion management



# Bicycles



**Expanded connections to adjacent side paths**



**Dedicated Bike Lane along Lowell Boulevard**



**Dedicated Bike Lane along Federal Boulevard**

Key



Recommended  
corridor-wide



Not  
Recommended



# Trails

## Existing Conditions and Stakeholder Input

- Five regional trails
- Address missing greenway trail and infrastructure
- Encourage accessible connections
- Greater connectivity to existing trails

## Objectives for Improvements

- Option for commuters
- Provide a connection to Camenisch Park
- Enhance connection to natural resources

# Trails



Wayfinding



Expanded connections to existing regional trails



Connections to other modal options

Key



Recommended  
corridor-wide



Not  
Recommended

# Streetscapes

## Existing Conditions and Stakeholder Input

- Lack of unifying streetscape elements
- No sidewalk uniformity
- Prioritize wayfinding to key destinations
- Reduce urban heat island effect

## Objectives for Improvements

- Aesthetic consistency
- Tree canopy
- Enhances traffic calming
- Greater user comfort

# Streetscapes



Street Lighting and Pedestrian Amenities



Green drainage elements



Brick or hardscape median



Public Art/Gateway Elements



Improved Signage - Inventory and reassessment

Key



Recommended  
corridor-wide



Not  
Recommended

# Auto Safety and Operations

## Existing Conditions and Stakeholder Input

- Inadequate sight distance
- Non-compliant signals equipment
- Insufficient ADA facilities
- Improve traffic operations along the corridor
- Meet Vision Zero goals

## Objectives for Improvements

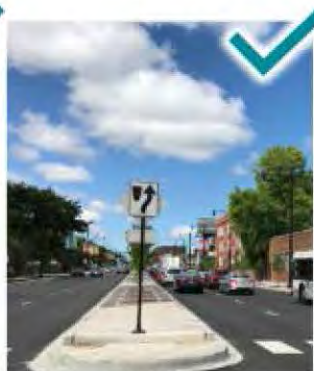
- Manage congestion
- Vehicle speed
- Improve travel time
- Improve safety
- Reduce congestion



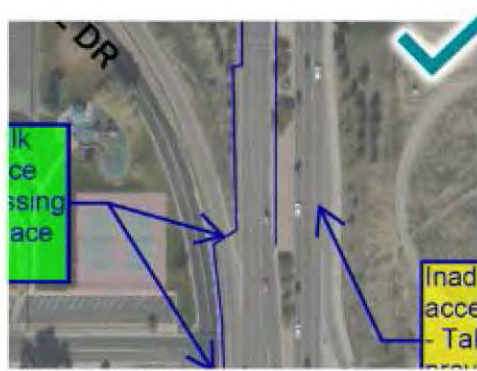
# Auto Safety and Operations



Update signal equipment - Signal Rebuilds



Raised medians



Interchange improvements

Key



Recommended  
corridor-wide



Not  
Recommended



Improved left turn treatments



ADA compliant design



Consistent corridor speed limits and signal progression based on lower target speeds

# Cross Sections and Right-of-Way

# Cross Section

## Corridor-Wide Vision

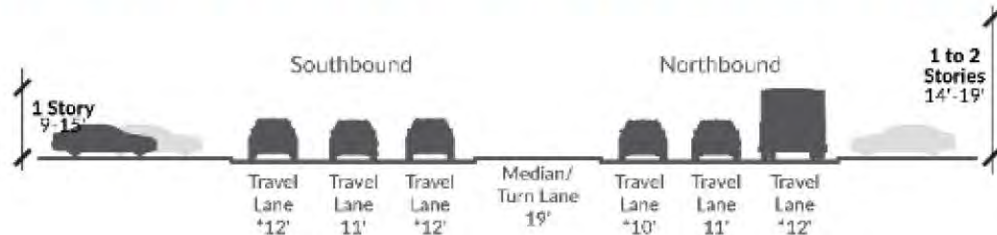


# Zone A

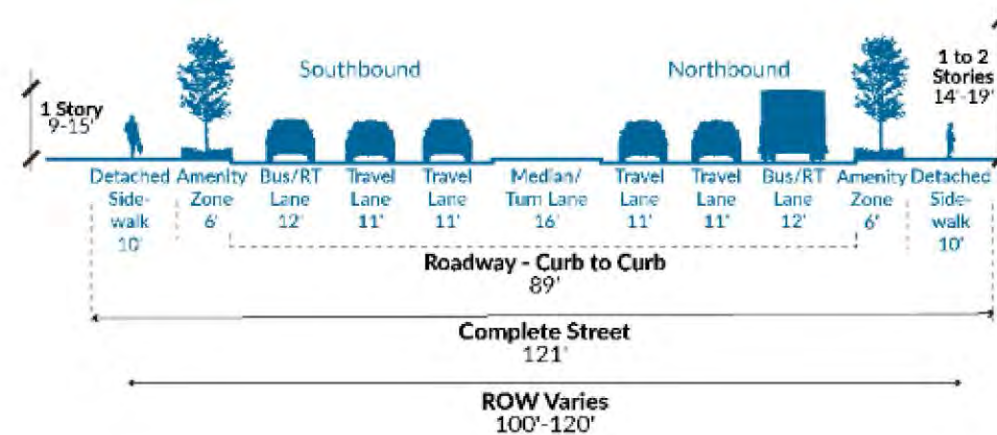
## Zone A Representative Location: Between 65th Avenue and Longfellow Place



### Existing Condition



### Proposed Condition





# Zone B

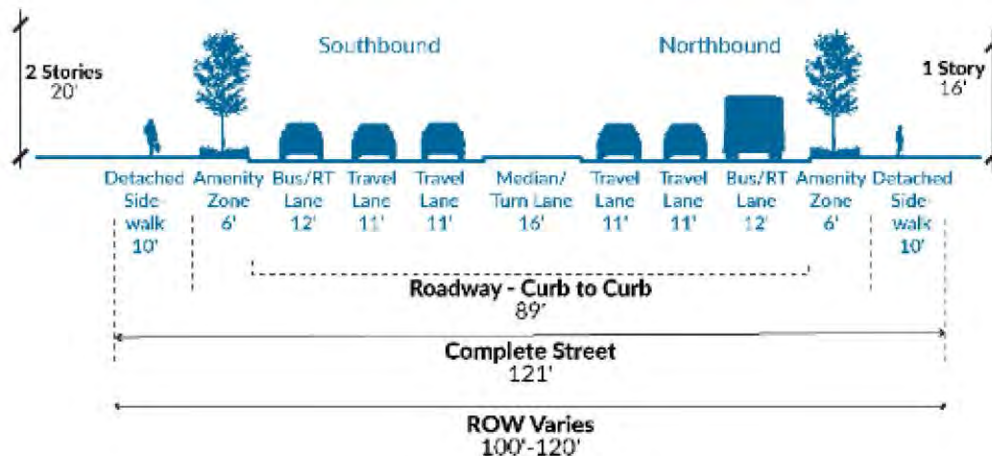
## Zone B Representative Location: Between 73rd Avenue and 74th Avenue



### Existing Condition



### Proposed Condition

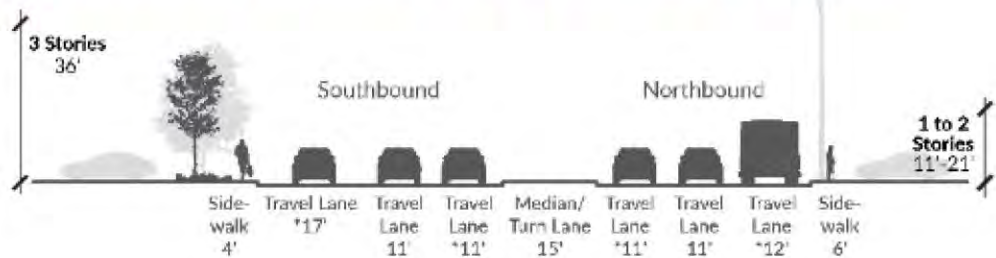


## Zone C

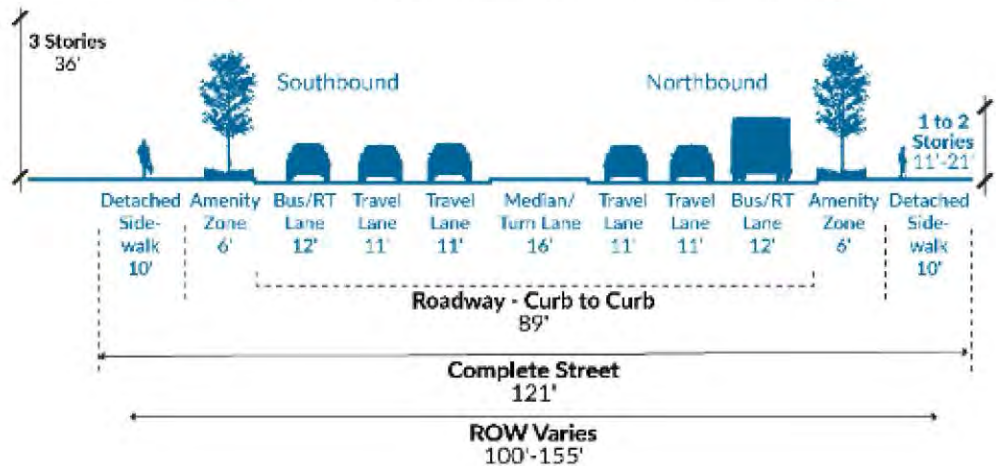
Zone C Representative Location: Between 91st Avenue and 91st Place



### Existing Condition



### Proposed Condition

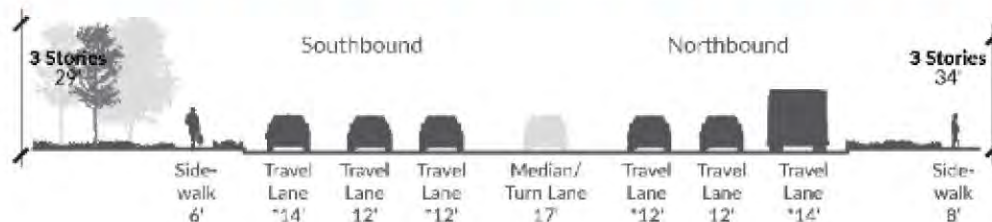


# Zone D

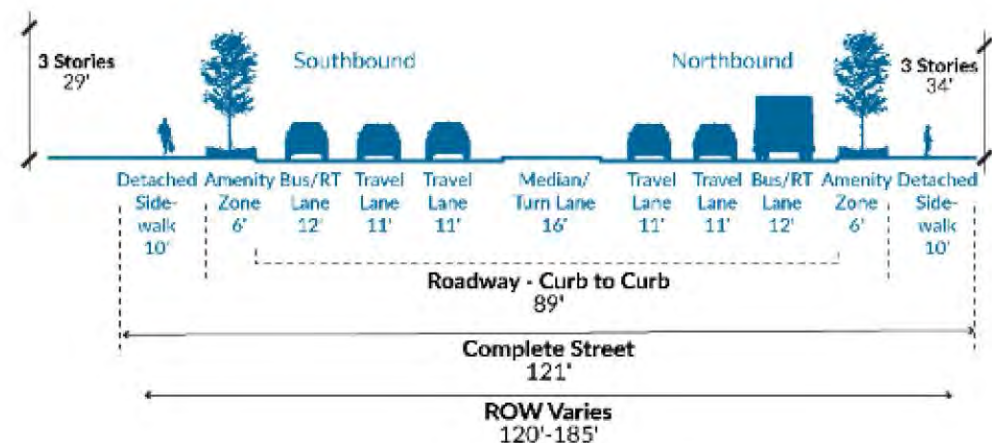
## Zone D Representative Location: Between 107th Avenue and 108th Avenue



### Existing Condition



### Proposed Condition



# Key Takeaways

## Right-of-Way (ROW) and Other Impacts

- Most parcels are affected for typically minor ROW acquisitions
  - Varies along corridor
  - Most ROW needs impact parking to some extent
  - Few structures are impacted
- Modifications to interchanges and bridges will be needed



# Next Steps

- Digital Survey
  - Online public meeting
  - Recommendations
- 
- *Plan Completion expected in August/September*
  - *Additional briefing(s) via Study Session expected this summer*



# Thank You!



**FEDERAL BOULEVARD**

MULTIMODAL TRANSPORTATION STUDY



# ADAMS COUNTY STUDY SESSION

MAY 25, 2021

CRISTAL DEHERRERA, CHIEF OF STAFF  
RACHEL MARION, SENIOR DIRECTOR OF GOVERNMENT AFFAIRS  
DENVER INTERNATIONAL AIRPORT



# DEN BY THE NUMBERS

2019

Passenger Traffic:

2020

**69.9 million**

**33.7 million**

U.S. Rank:

**5<sup>th</sup>**

**3<sup>rd</sup>**

World Rank:

**16<sup>th</sup>**

**7<sup>th</sup>**

Number of Routes:

(July – Dec) **211**

**187** (July – Dec)

Passenger Profile:

**36% Connecting**

**41% Connecting**



# COVID-19 FINANCIAL IMPACT

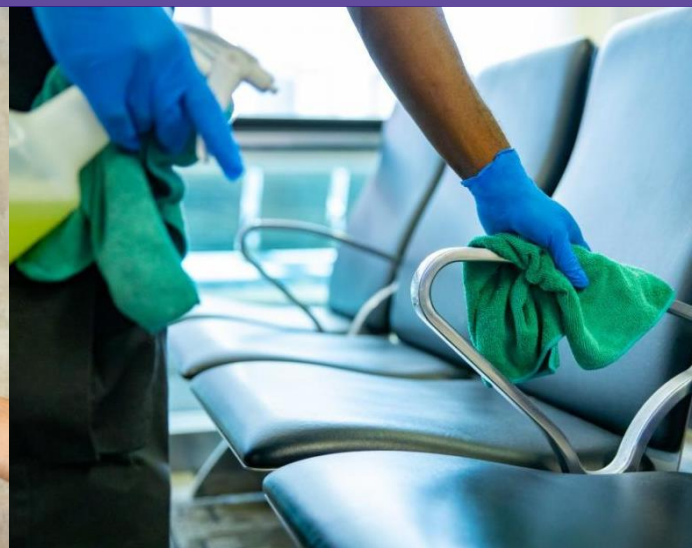


- Developed three recovery scenarios and the associated financial model
- We chose the middle as the base case with a projected \$400 million revenue loss for 2020
- As a result, we:
  - Reduced our costs by \$50 million
  - Renegotiated our largest contracts
  - Put a freeze on hiring, travel and discretionary spending
  - Required all employees to take eight furlough days
- At the same time, we gave relief to all our partners (airlines, concessions, rental cars and farmers) that included combinations of:
  - Deferral of rent payments for a limited amount of time
  - Removal of Minimum Annual Guarantees
  - Allowed flexibility in hours and permitted temporary or permanent closures without penalty
  - Airlines, concessions, rental cars and DEN all received federal relief

# PASSENGER SAFETY/COVID-19 RESPONSE



- Health and safety of passengers and employees is number one priority
- Limiting the spread of COVID-19 through frequent cleaning, Plexiglass barriers, hand sanitizer stations and disinfecting wipes
- Additional signage and messaging to help traffic flow and support social distancing
- COVID-19 testing for ticketed passengers



# EATS DELIVERED



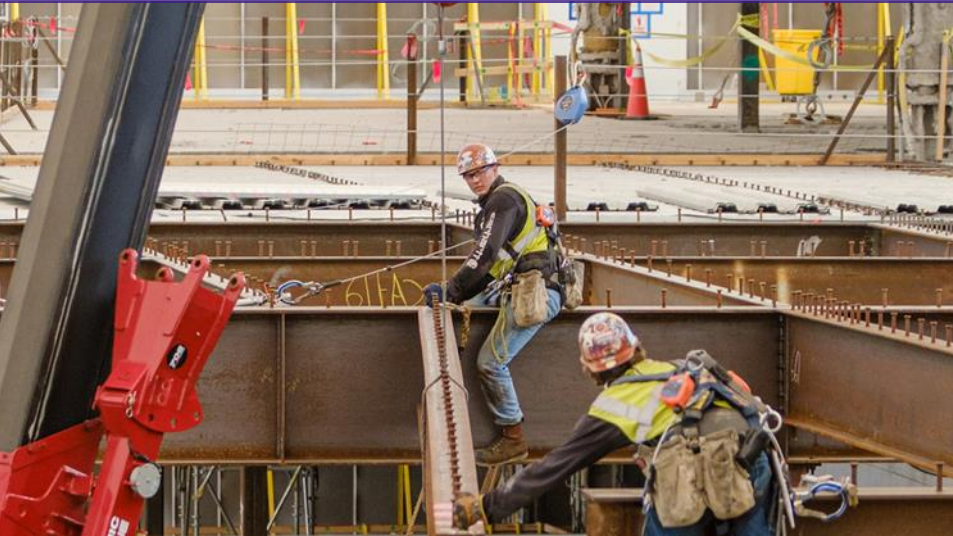
- To enhance the passenger experience and provide a more touchless experience, we implemented Eats Delivered in 2020
- App-based delivery service for food and travel amenities
- Download the AtYourGate app to place your order, pay and have it delivered to you in approximately 30 minutes or less



# COVID-19 CONSTRUCTION IMPACT



- It was also important for us to maintain and create jobs, where possible
  - Continued forward with our major projects: Gate Expansion, Great Hall, Peña Boulevard
  - Reprioritized \$3.5 billion Capital Improvement Program to leverage low passenger traffic to expedite certain projects





# GREAT HALL PROJECT



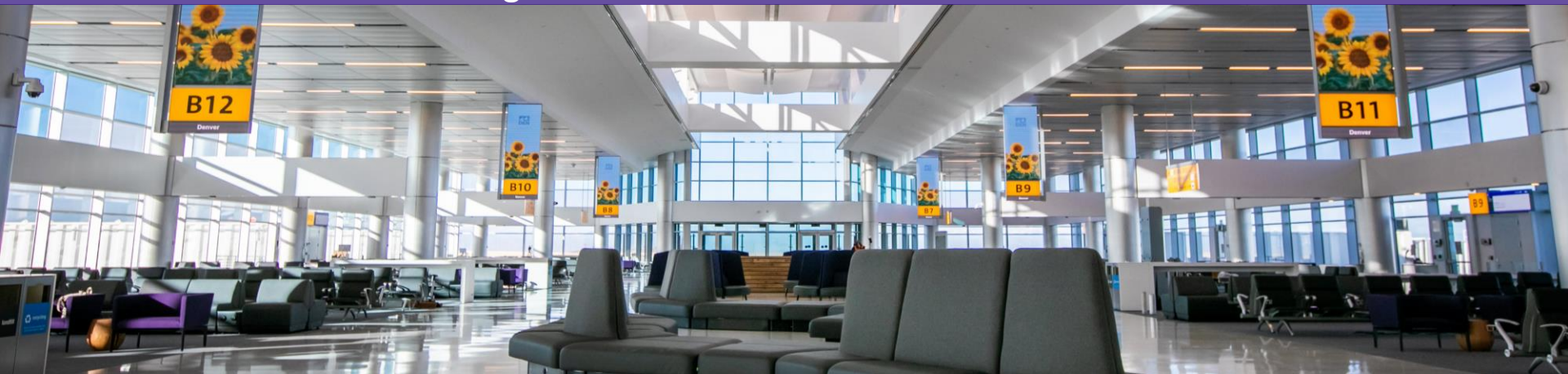
- Improves security of TSA checkpoints
- Meets passenger growth demands
  - Terminal only built for 50 million annual passengers
  - 69 million annual passengers in 2019
  - 39 new gates operational by early 2022; first gates opened November of 2020
- Enhances passenger experience and operational efficiency



# GATE EXPANSION



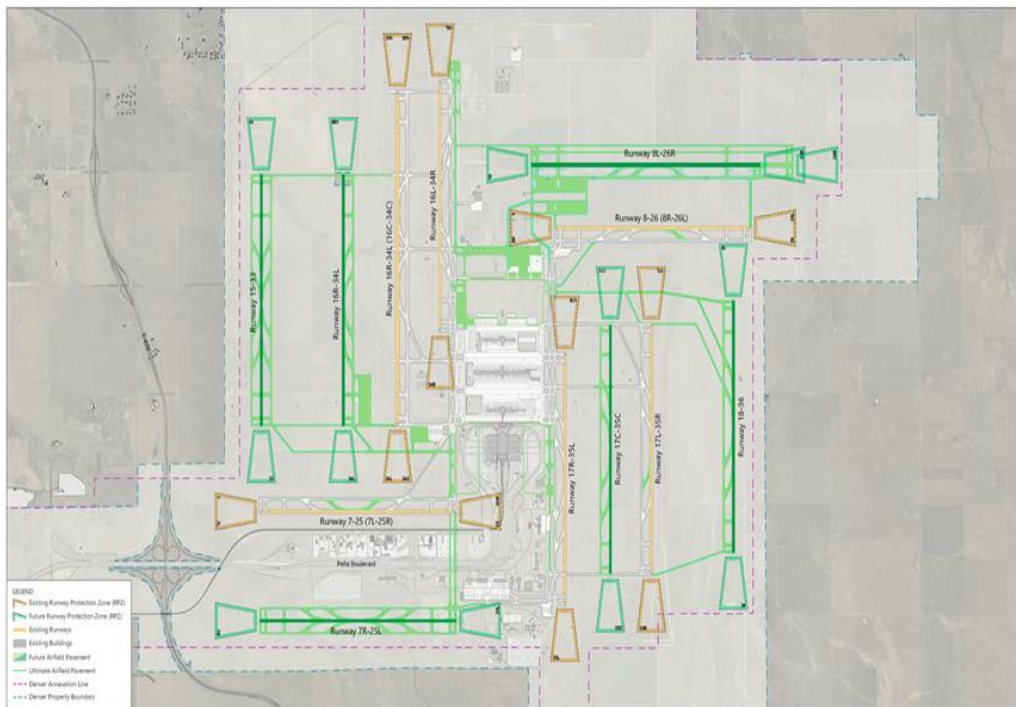
- \$1.5 billion program
- Adds 39 gates, all operational by early 2022
- Over 1,000 construction workers
- New terraces at the end of the concourses, new restrooms, new signage, conveyances and systems
- On time and on budget



# Designed for Growth

## DEN Master Plan & History

- DEN's 53 square miles of land can accommodate up to **12 runways** with an estimated capacity of **1.23 million aircraft landings and takeoffs**.
- In 1989, an Environmental Impact Statement was completed for the initial 6 runways, with the intent to perform additional reviews for future buildout.
- DEN's land was purchased to accommodate these 12 runways and associated clear zones to **protect the Airport and its neighbors** from noise, and other environmental impacts



# DEN BY THE NUMBERS



Airport Ranking  
In the U.S.

5th

Annual Economic  
Impact

\$33.5B

Airlines Serving  
DEN

23

Non-stop  
Destinations

216

## Passenger Traffic Growth

54M



2015

69M



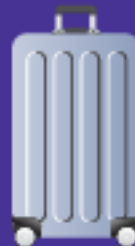
2019

82M



2025\*

92M



2030\*

102M



2035\*

110M



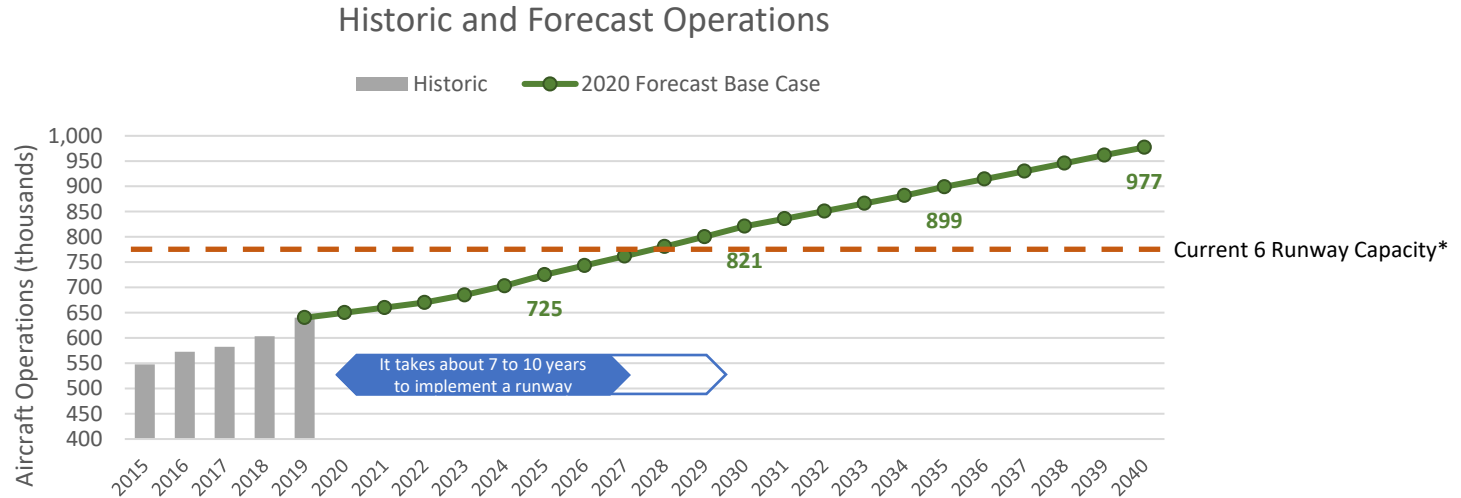
2040\*



# DEN Previous Runway Planning and Future Need



- Recent forecasts indicate that a runway could be justified as soon as 6 years, depending on COVID-19 recovery
- A new runway can take 10 years for environmental review, planning, design, and construction
- DEN has coordinated with the FAA over the past 24 months to discuss the future runway need and study requirements
- Critical that DEN takes action to maintain its level of service for the airspace system



SOURCES: InterVISTAS, Denver International Airport Aviation Activity Forecast, August 2020 (forecast); City and County of Denver, Department of Aviation, April 2019 (Historical); \*FAA Annual Service Volume Study for DEN, December 2016 (ASV), 4-minute average delay



## **DEN Future Runway Planning Studies Currently Underway**

- Airfield planning studies and analyses for subsequent Environmental Review:
  - Surrounding airspace and DEN airfield simulation modeling
  - Airfield and runway system demand and capacity analysis
  - Runway system configuration and length analysis
- Planning studies will provide data for the FAA National Environmental Policy Act (NEPA) process:
  - Purpose and need, alternatives, affected environment, and environmental consequences review
  - Planning studies will narrow down potential alternatives

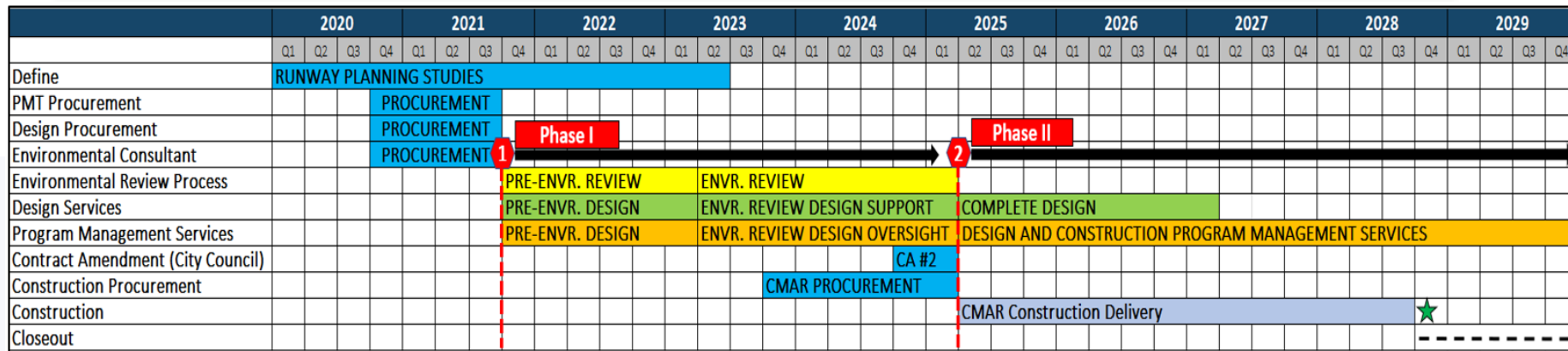
## Project Approach

- Built-in off-ramps for DEN, City and County of Denver, and FAA
  - Phase I – Environmental Review, including up to 30% design
  - Phase II – Final Design and Construction of the 7<sup>th</sup> Runway
- DEN is procuring three Professional Services consultants for Phase 1:
  - Environmental
  - Design
  - Program Management Services
- DEN must amend these contracts with City Council approval to complete Phase II
- Close coordination with FAA is required throughout to comply with Federal funding requirements

# CONCEPTUAL RUNWAY SCHEDULE



## BASELINE CONCEPTUAL SCHEDULE



Legend of Required Approvals and Key Events

- ★ - Runway Open to Air Traffic
- ⬢ - DEN Administration and Denver City Council

## RFQ PROCUREMENT SCHEDULE

- Procurement of Environmental, Designer, and Program Management Services contracts
- Phase markers are required approval points
- To meet future growth, DEN is beginning the process now in anticipation for completion in 8+ years
- Project schedule shown is high level, conceptual, and is subject to change throughout project duration

## Environmental Review – Phase I

- Public Involvement Plan (PIP) and Outreach Approach
  - Increase public awareness of the National Environmental Policy Act (NEPA) process
  - PIP provides roles of the agency and the public, schedule, coordination, and communication throughout
  - Educate the public on the challenges associated with the project
  - Encourage the public to become involved in the environmental review process
  - FAA and Environmental Consultant will be responsible for conducting public meetings/hearings, but DEN will conduct our own outreach as well.

# DENVER INTERNATIONAL AIRPORT

