



Quantum COmmons, Colorado Mountain Passenger Rail, and Front Range Passenger Rail

Board of County Commissioners Work Session

August 12, 2025



JEFFERSON
COUNTY COLORADO

Context

Discussion points:

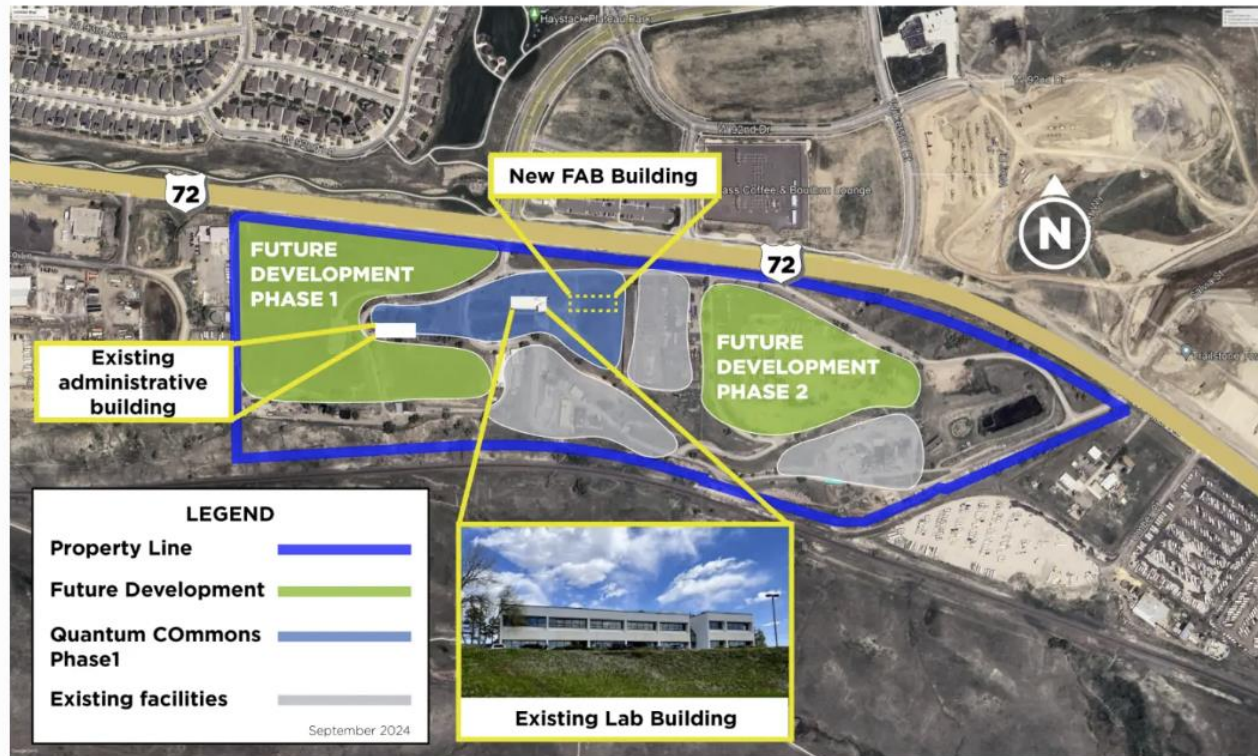
- 1. Quantum COmmons**
- 2. Mountain Passenger Rail**
- 3. Front Range Passenger Rail**



Quantum COmmons

Quantum COmmons @ Arvada

70 acres of future technology transfer development



- A state of the art campus dedicated to advancing quantum **innovation**.
- 10,000 square foot fabrication lab and cleanroom
- 17,000 square foot **open access** quantum lab
- **Collaborative** research and development

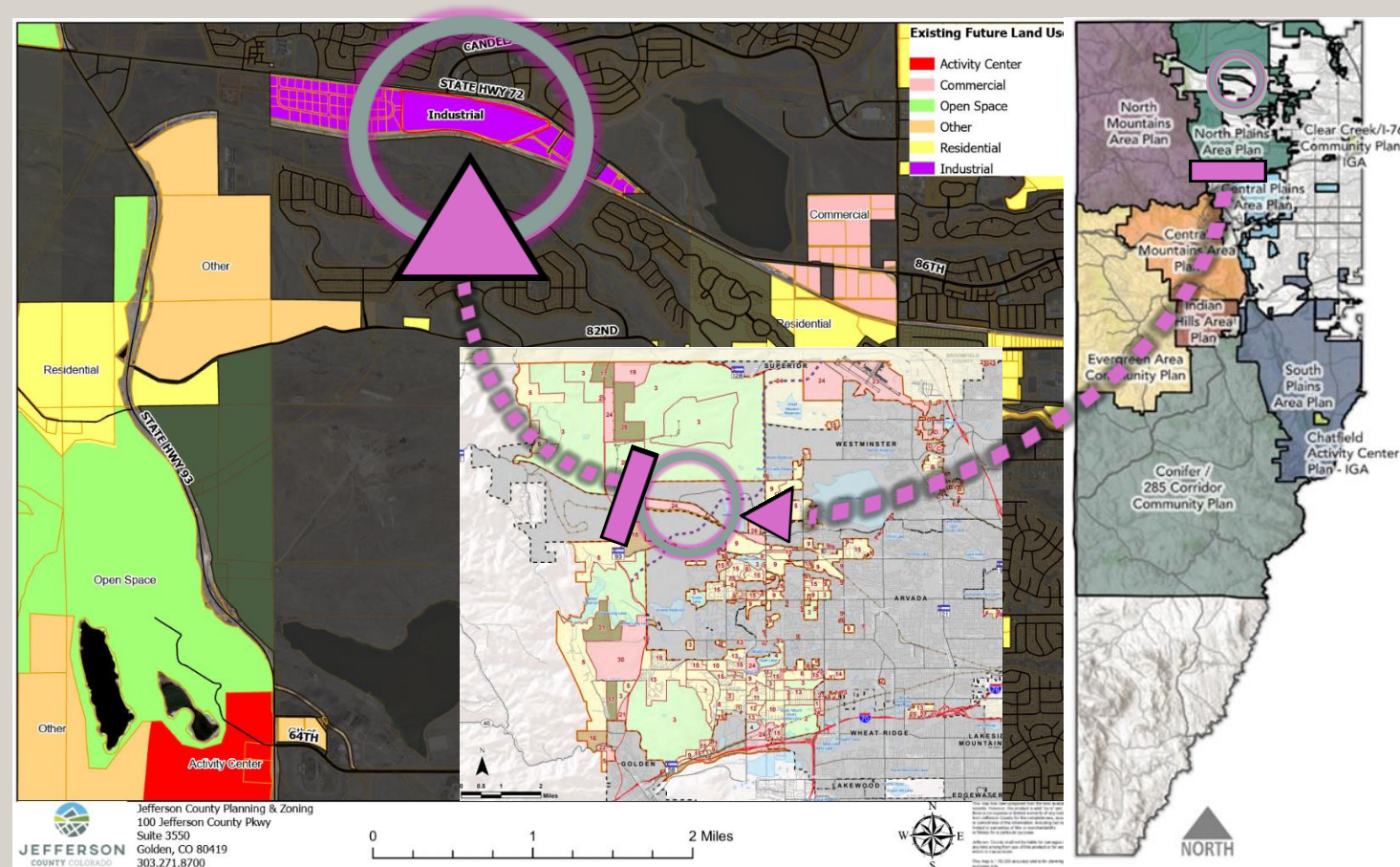


Quantum Commons

Existing CMP

- Existing Future Land Use Recommendation is **Industrial**

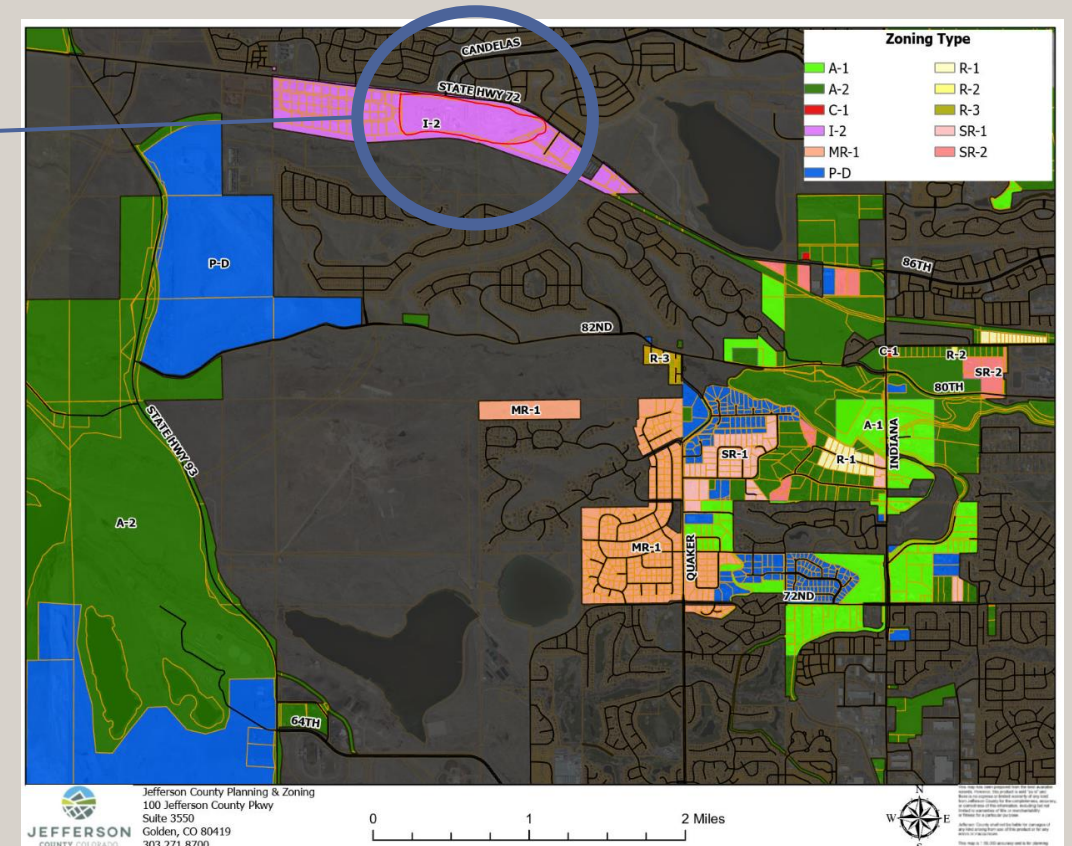
Industrial uses include uses such as manufacturing, processing or fabrication of commodities, warehousing, repair and servicing of equipment, and sale of commodities manufactured, processed, fabricated or warehoused on the premises. Screened outdoor storage is allowed. Light Industrial, Office, and Research and Development uses are also allowed in areas designated for industrial.



Quantum COmmons

Existing Zoning

- Existing Zoning is **Industrial - Two (I-2)**
- Allows a broad range of manufacturing, processing, or fabrication of products
- Excludes
 - Manufacturing and storage of explosives
 - Storage of machinery or vehicles not in operating condition



Relationship between Economic Development and Transportation



Quantum COmmons

Proposed CP

*Jefferson County is a **sustainable** community that balances **innovation**, inclusivity, resiliency and stewardship.*



Quantum COmmons

Proposed CP

RESILIENCY

Jeffco views challenges as an opportunity for growth and improvement. Jeffco actively seeks to address climate change by reducing emissions and enhancing resiliency for all residents, for example, by supporting carbon-free energy and reducing waste. Jeffco is proactive in the management and efficient use of its infrastructure and resources.

STEWARDSHIP

Jeffco considers the inherent values of wildlife, natural resources, open spaces, heritage, and recreation opportunities in all decisions. Jeffco values its wildlife and natural resources for both their beauty and their role in creating a healthy ecosystem.

SUSTAINABILITY

INCLUSION

Jeffco recognizes, supports, and enhances diversity in all forms. As Jeffco grows and changes, Jeffco will maintain an inclusive environment for residents and visitors of all backgrounds and abilities. Jeffco celebrates the unique qualities of its communities and strives to maintain accessibility through programming, policy, and education.

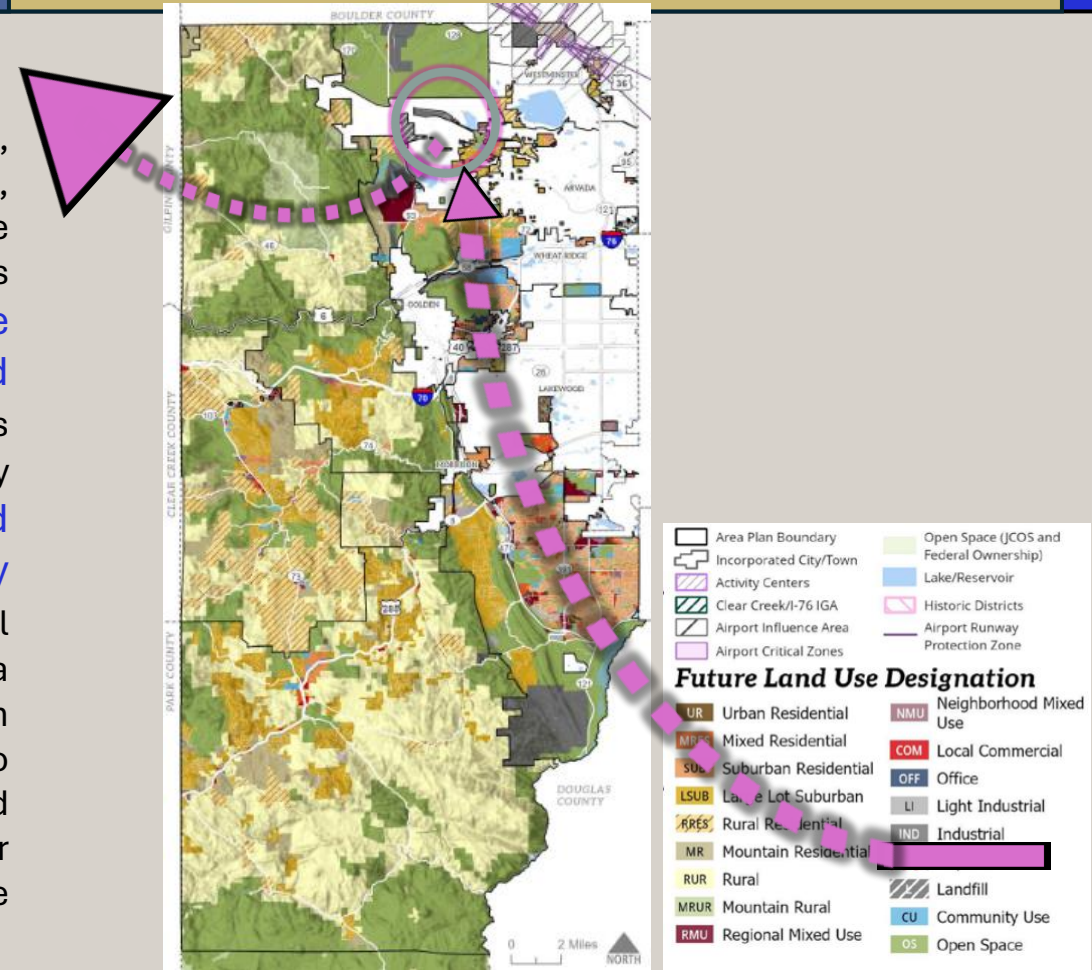
INNOVATION

Jeffco is creative and forward-thinking. Jeffco will continue to explore new and unconventional solutions to its unique challenges, including housing affordability, natural hazards, and environmental preservation. Jeffco views collaboration as a critical component of problem solving, leveraging diverse perspectives, technological integration, local knowledge, and a skilled workforce to drive economic growth and societal progress.



Proposed CP

Industrial areas provide for activities such as extraction industries, manufacturing, warehousing, extraction and processing of minerals, assembly plants, vehicle-related commercial uses, outdoor storage yards, distribution facilities, and construction. The industrial designation is intended to create an environment in which **industrial operations may be conducted with minimal impact on the natural environment and surrounding land uses.** Separation and buffering from residential uses and community gateways is strongly encouraged. These areas may have outdoor storage, which should be screened. **Industrial uses should be supported by roadways able to accommodate large and heavy vehicles.** To preserve land within Jeffco designated for office and industrial uses, any secondary use proposed for these areas should be of a supporting scale, and not be the primary use of the site. When production reserves are exhausted or it is no longer economically viable to continue extracting resources from the site, mineral extraction sites should be assessed for their ability to transition to community uses such as parks or open space. Mining and extractive use areas should comply with the Jefferson County Mineral Extraction Policy Plan (Appendix E).



Quantum COmmons

Proposed CP

Primary Uses:

Heavy manufacturing, fabrication, gravel and mineral extraction, facilities for alternative energy sources, processing, assembly, logistics, **light industrial uses**, and warehousing.

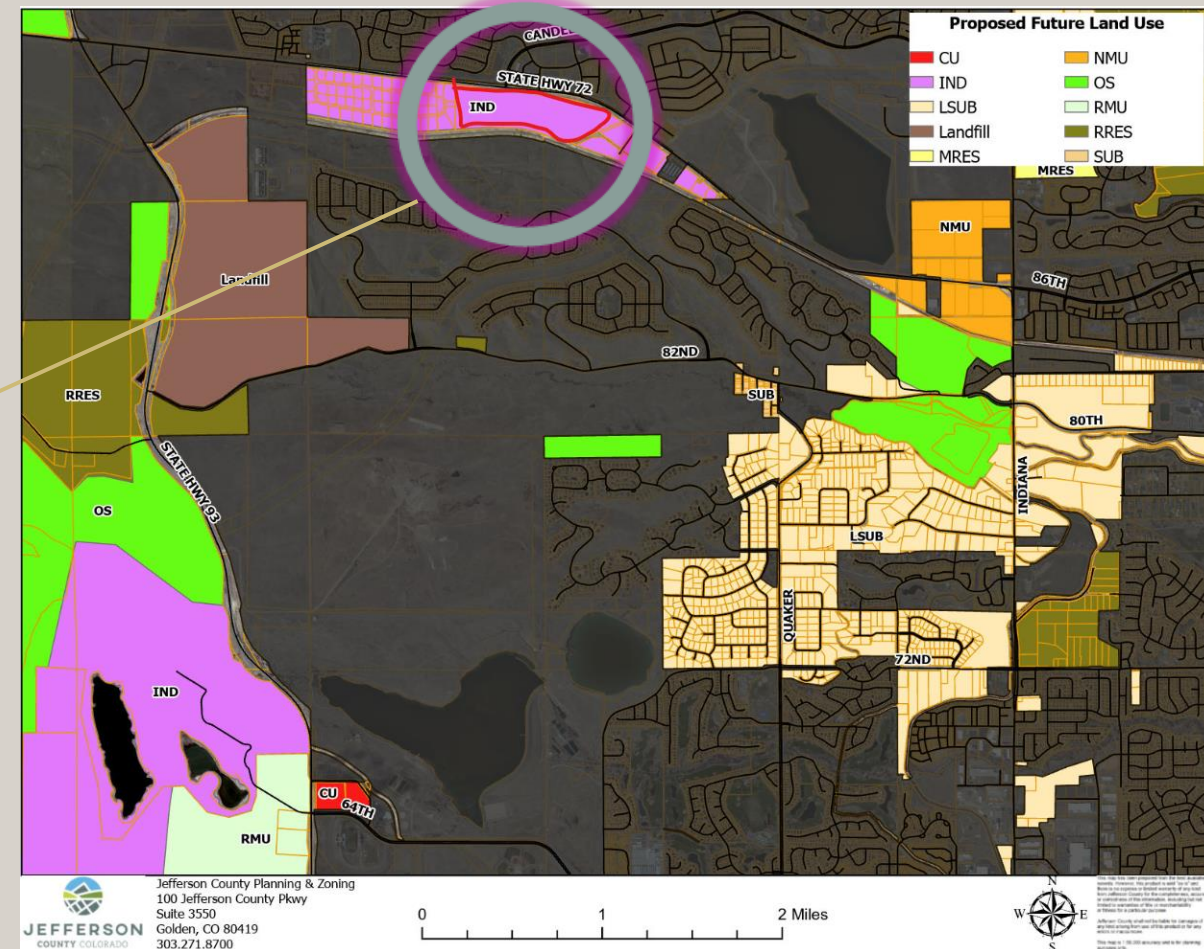
Secondary Uses:

Related and supporting retail and offices, and **research and development facilities**.

Compatible Zoning: Industrial districts.

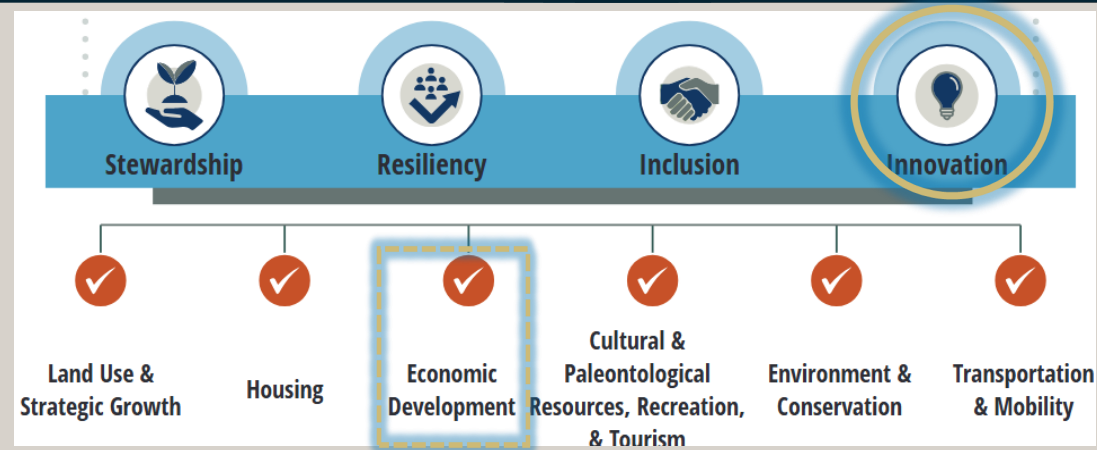
Existing County Example(s):

Coors Brewery and Lockheed Martin.



Quantum COmmons

Proposed CP



ED Goal 2. Foster a diverse and resilient economy that supports community needs, adapts to economic shifts, and integrates a variety of business opportunities.



Policy ED-2-1. Diversify Jeffco's economic base to enhance resilience against external economic shifts.

Policy ED-2-2. Promote economic growth by encouraging the use of existing Opportunity Zones (OZs) and Enterprise Zones (EZs) to stimulate targeted investment.

Policy ED-2-3. Encourage industries creating primary jobs, including aviation, aerospace, bioscience, energy, and emerging technologies such as biomass and nanotechnology.

The Opportunity Zone (OZ) program provides a federal tax incentive for investors to invest in low-income urban and rural communities through favorable treatment of reinvested capital gains and forgiveness of tax on new capital gains. Jeffco has five designated OZ zones.

ED Goal 3. Support workforce development, enhance educational partnerships, and attract targeted industries to ensure long-term economic growth and a high quality of life.



Policy ED-3-1. Collaborate with local educational institutions to enhance vocational training and workforce development.

Policy ED-3-2. Enhance workforce training and education programs to bridge skill gaps and strengthen community resilience.

Policy ED-3-3. Consider the creation of a County Revitalization Authority (CRA) to access additional funding for revitalization projects.

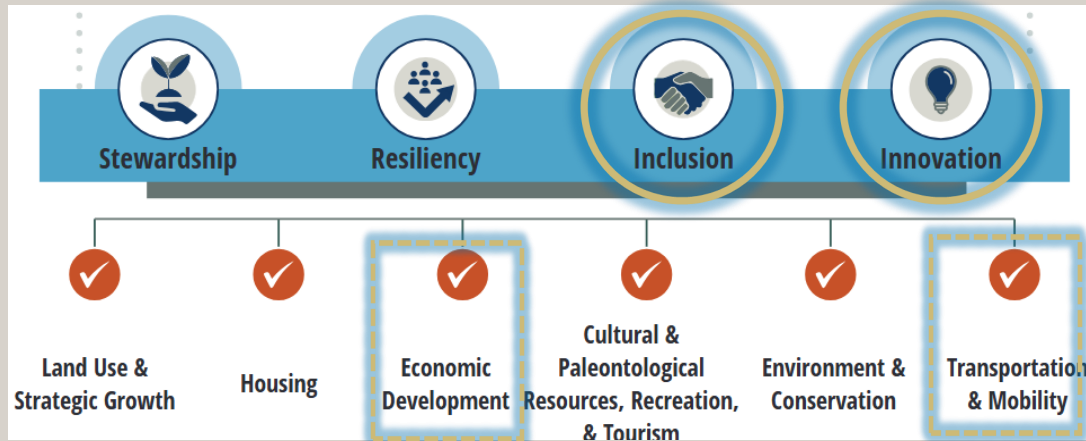
Policy ED-3-4. Support a diverse employment base that provides ongoing job opportunities for individuals at all age, education, and skill set levels.



Quantum COmmons

Proposed CP

GOALS & POLICIES



ED Goal 5. Support economic vitality through enhanced connectivity and access.

Policy ED-5-1. Develop economic opportunities aligned with Rocky Mountain Metropolitan Airport (RMMA), including enhanced opportunities to coordinate with Front Range Passenger Rail.

Policy ED-5-2. Support the viability of RMMA through appropriate land use planning adjacent to the airport, and in line with its growth plans including community outreach and mitigation of potential negative impacts.

Policy ED-5-3. Foster economic development around RMMA to strengthen supportive industry, office, and limited commercial and capitalize on airport-related opportunities.

Policy ED-5-4. Maintain and improve infrastructure to facilitate goods movement and access to employment hubs.

Policy ED-5-5. Improve regional and local connectivity to strengthen economic competitiveness.

Policy ED-5-6. Ensure transportation planning supports job centers with efficient, multimodal access.

Policy ED-5-7. Encourage development patterns that enable shared access and support major transportation corridors.

Policy ED-5-8. Coordinate local planning with regional transit initiatives to connect housing, jobs, and services.



At the potential Quantum Commons site, existing zoning provides for industrial land uses. The current Comprehensive Plan recommends industrial land uses, including office, research and development land uses. The proposed comprehensive plan recommends industrial land uses and various proposed goals/policies/visions encourage innovative land uses.





Colorado Mountain Passenger Rail

Colorado Mountain Passenger Rail





Mountain Passenger Rail

Timeline



Ongoing stakeholder updates
continue past service plan development

Mountain Rail Coalition

Stakeholder Committee Meetings

- Last meeting hosted on July 17, 2025
- Upcoming meetings
 - October 16
 - January 15



Mountain Rail Key Milestones

- June 2025 Open House
 - [Presentation](#) slides
- Moffit tunnel 25-year agreement with Union Pacific
- Winter Park Express Season Service implemented
- Most station locations have been finalized



Scan QR code
to view the
website



Metro West Rail Station

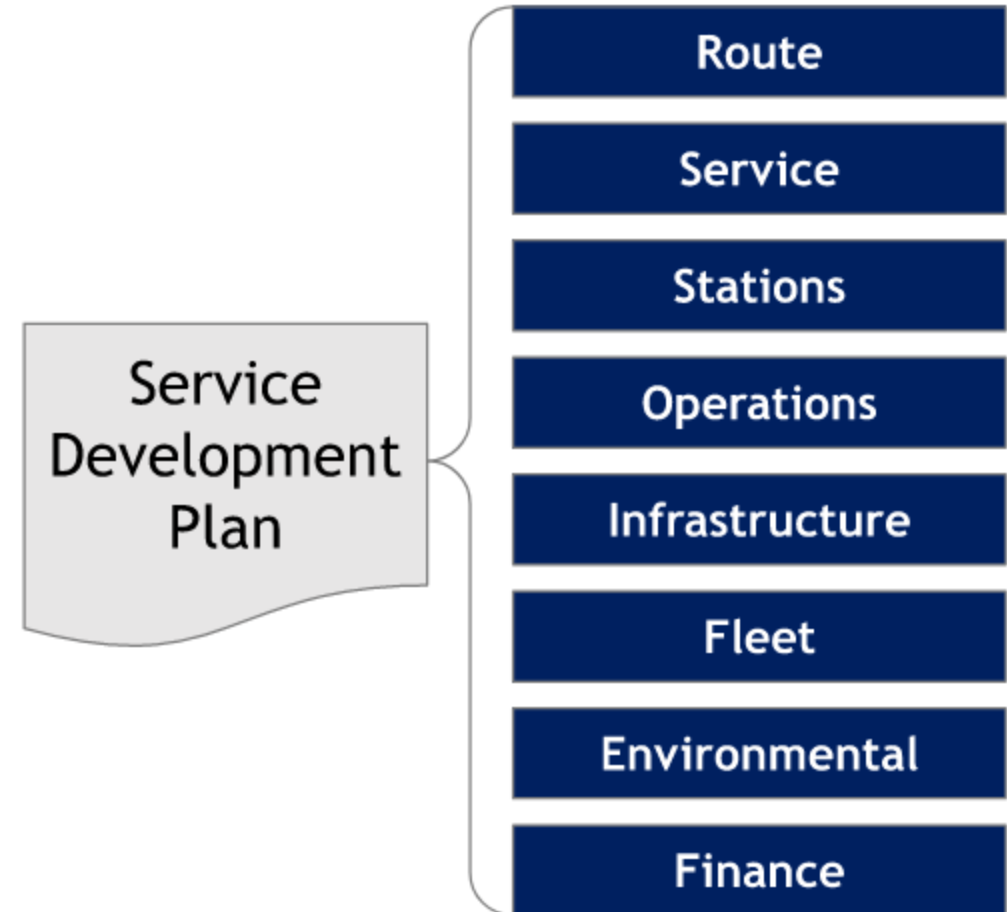
- Sub-station planning to begin late summer/fall 2025
 - Timeline proposes to complete by end of year
- Five station location sites identified for analysis
 - Planned as in-fill station to be constructed later than initial service





What is a Service Development Plan (SDP)?

- Determines operational and financial feasibility
- Defines all essential elements of planning and operations
- Includes an alternatives analysis
- Leverages industry best practices, including FRA's planning process
- Streamlines the subsequent permitting process





Mountain Passenger Rail Phase 1: Short Pattern

First Trip

- One daily round trip between Denver and Granby (originating in Denver)
- Service begins November 2026
- Service is approximately 76 rail miles
- Utilizes existing stations: Denver Union Station, Winter Park Resort, Fraser-Winter Park, and Granby.
- Layover and light maintenance facility in Denver and a layover facility in Granby.

Second Trip

- Adds second daily round trip between Denver and Granby (originating in Granby)
- May add two new infill stops: West Metro and Rollinsville along the Union Pacific Railroad (UPRR) Moffat Tunnel Subdivision
- Provides access to Denver Union Station via a new connection to the RTD G Line, located just west of RTD Clear Creek/Federal Station

Mountain Rail service is in addition to the existing Winter Park Express and California Zephyr services.



Short Pattern Initiation: November 2026

- Operator and used rolling stock procurement
- FRA regulatory approvals for service start
- Design and construction of Granby Layover Facility
- Design and construction of Denver Layover Facility

Future Phases

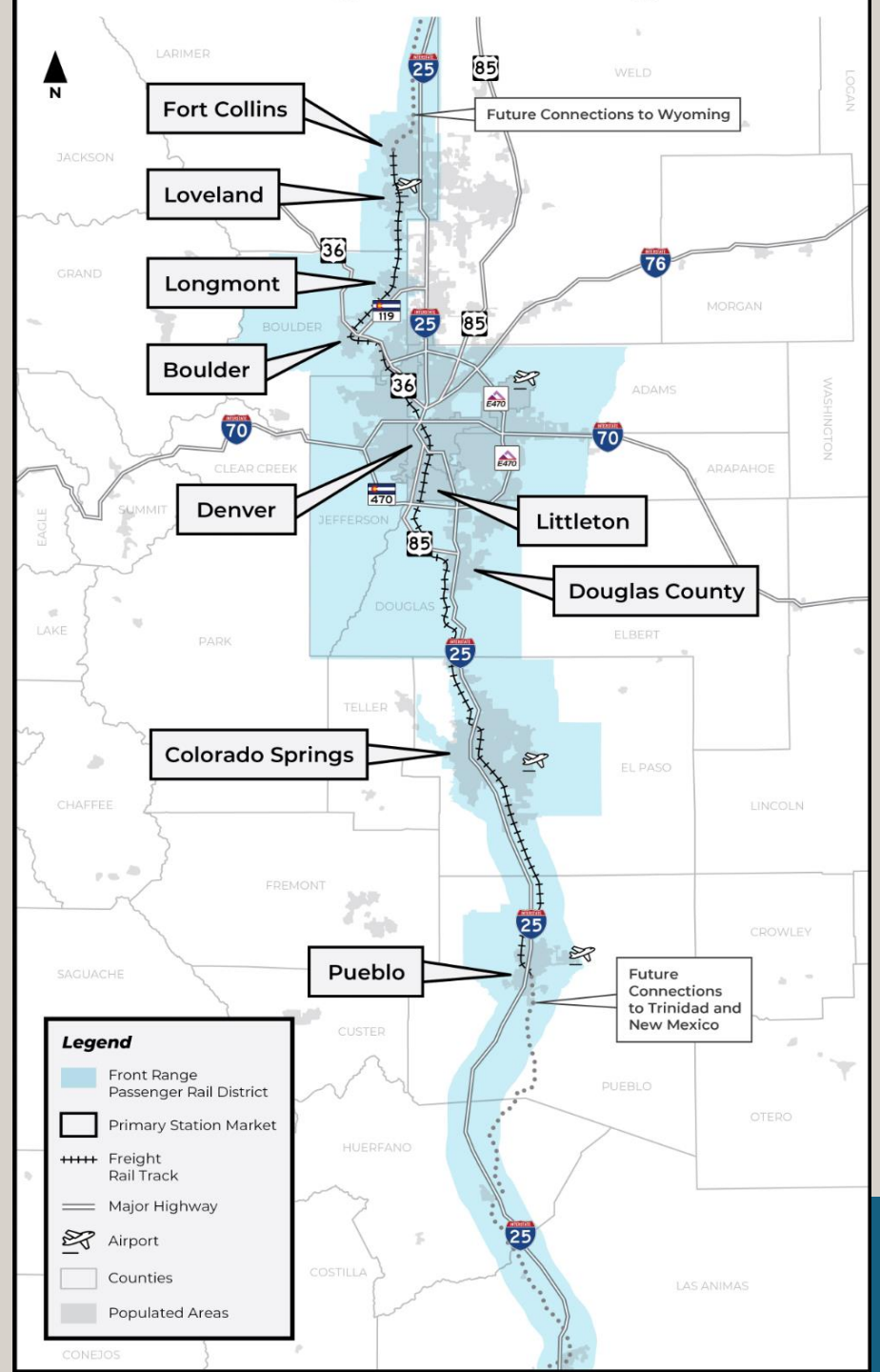
- Design and construction of new stations
- Design and construction of capacity, track and safety improvements
- Procurement of new fleet
- FRA regulatory approvals for extension of service
- Dependent on delivery model and partnership opportunities



Front Range Passenger Rail

Front Range Passenger Rail

- Starter Service expected in January 2029
 - Denver to Fort Collins
 - Service partially funded by continuous stream of revenue
- Full build-out expected by 2045
 - Connecting to Pueblo



Front Range Passenger Rail

Next Steps

- Planning Phase still underway
 - Draft Service Development Plan to be released later this year
 - Confirm costs, timing and logistics
 - Obtain approval to distribute RTD and state funding streams
 - Access agreement negotiations with BNSF
 - Interagency Agreement
 - Financing Plan
 - Public Meetings for Service Development Plan input
 - Sign up for Updates at <https://www.ridethefrontrange.com/get-involved>





Potential Funding Mechanisms



State Funding Sources:

- CDOT Funds
 - e.g. SB 24-184 - Congestion Impact Fees, MMOF
- DOLA and OEDIT Programs
 - e.g. EIAF, Prop 123, Neighborhood Centers, Housing Planning Grant, etc



Federal Grant Dollars:

- Funding may be available through Federal Railroad Administration grant programs such as Corridor ID, Fed-State Partnership, CRISI, and R&E



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Thank you for
your time!

