

Level 2 Overview

Level 2 alternative evaluation included consideration of two modal options on the Common Ground Segment (Figure 1). The Common Ground Segment starts at the Draper FrontRunner station and terminates in Lehi at the Traverse Mountain station north of SR-92. The two mode options are:

**Rail** – Two rail options have been developed, including a Diesel Multiple Unit (DMU) service that could interline with FrontRunner, and a light rail transit (LRT) service. These rail options would provide attractive, high-quality transit service with enhanced station area amenities and fully exclusive operations, where rail would operate in dedicated lanes separate from traffic. The rail option would require a satellite maintenance base to support operations. See Figure 2 for the Common Ground Segment Level 2 Rail Alternative.



*TEXRail DMU Service*



*UTA TRAX Blue Line*

**Bus Rapid Transit (BRT)** – A “gold standard” BRT option has been developed to provide high-quality transit service that performs like rail. The BRT option also provides an attractive, high-quality transit service with enhanced station area amenities. The BRT would provide exclusive transit operations in nearly 90% of the Common Ground Segment. BRT is less expensive than rail and provides flexibility for phased options to implement transit service. A BRT guideway with dedicated lanes also provides flexibility to accommodate multiple bus routes to and from multiple destinations in the region. See Figure 3 for the Common Ground Segment Level 2 BRT Alternative.



*Cleveland's Healthline BRT*



*UTA UVX BRT*

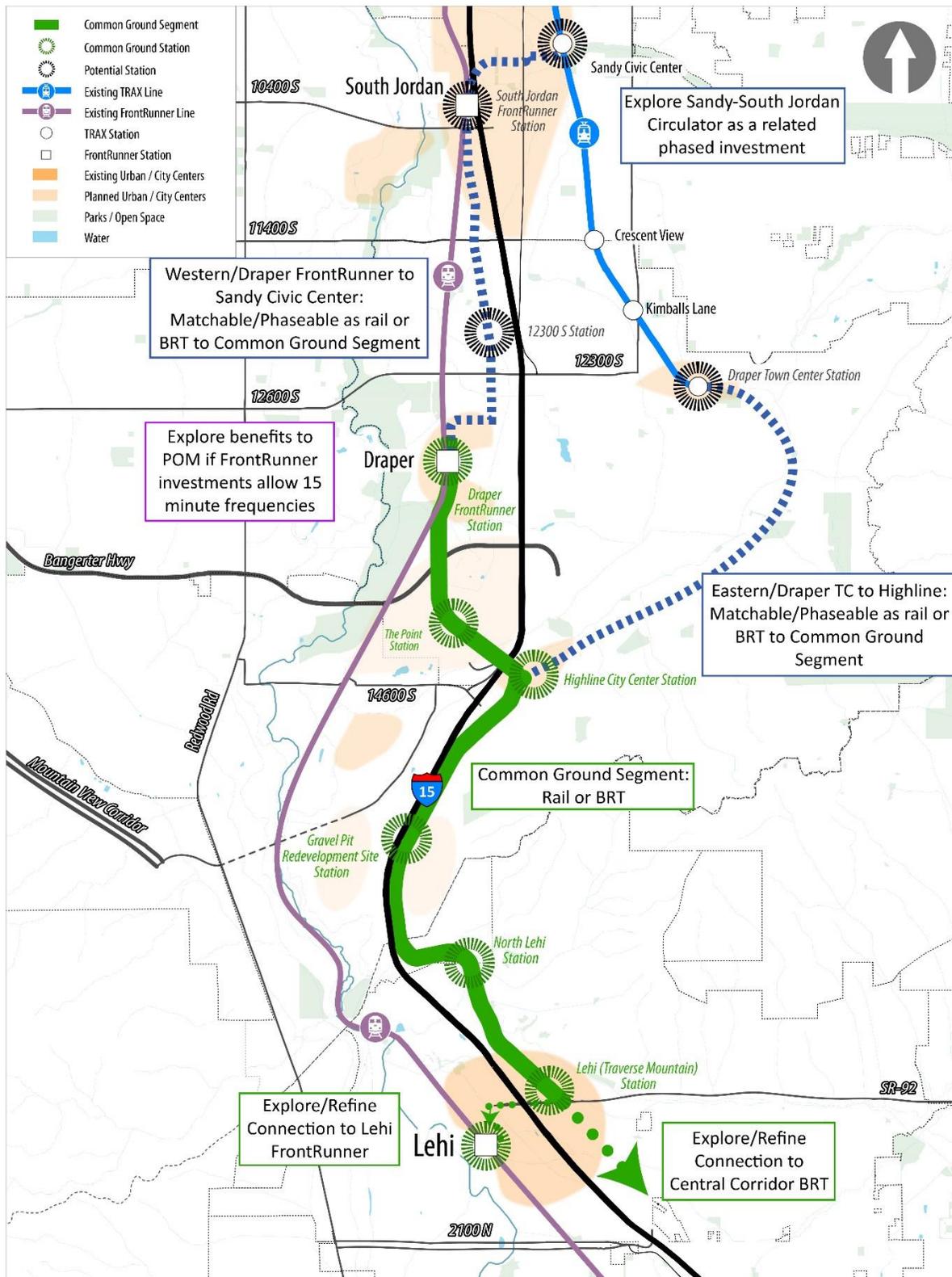


Figure 1. Common Ground Segment

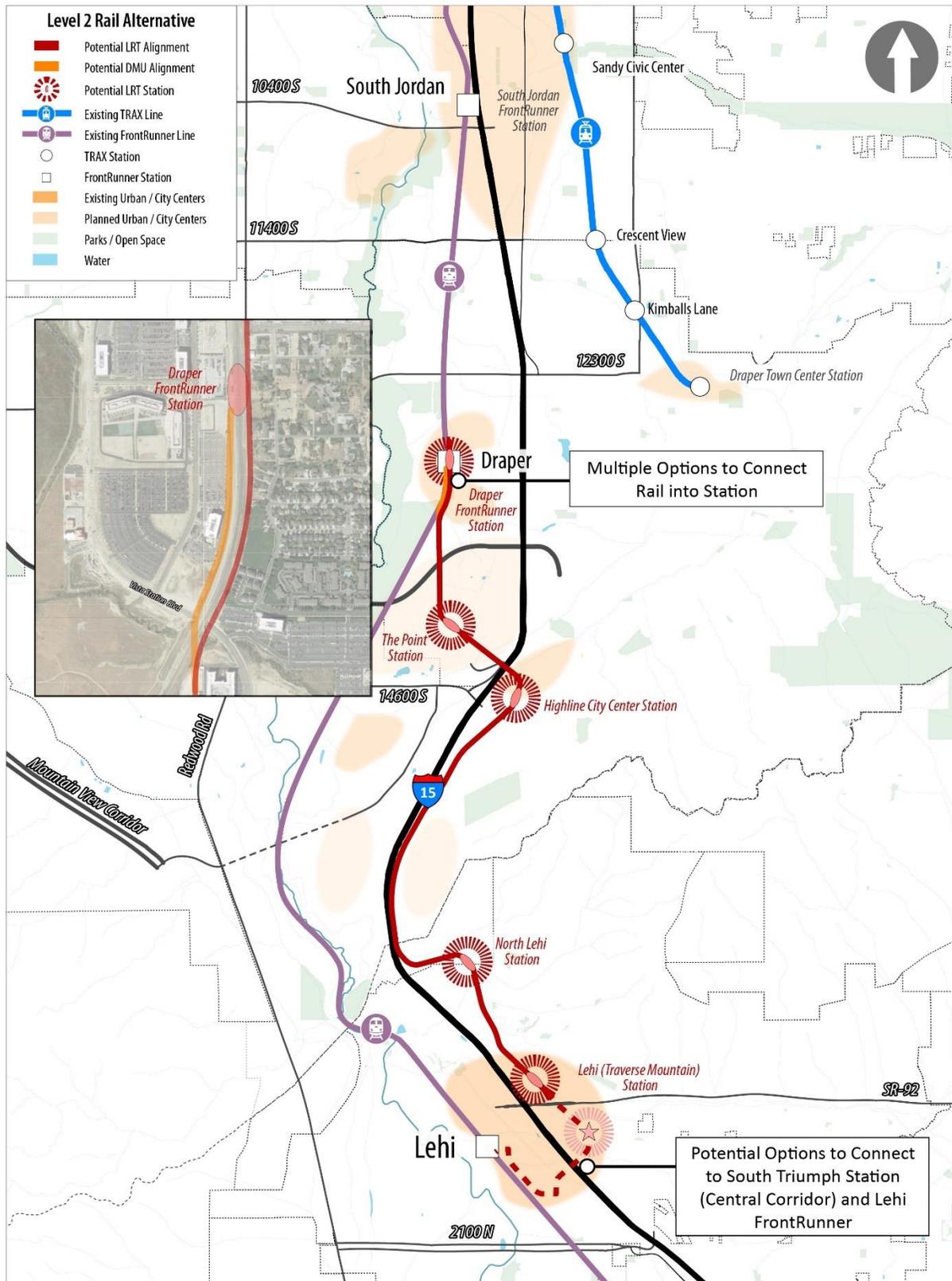


Figure 2. Level 2 Rail Alternative

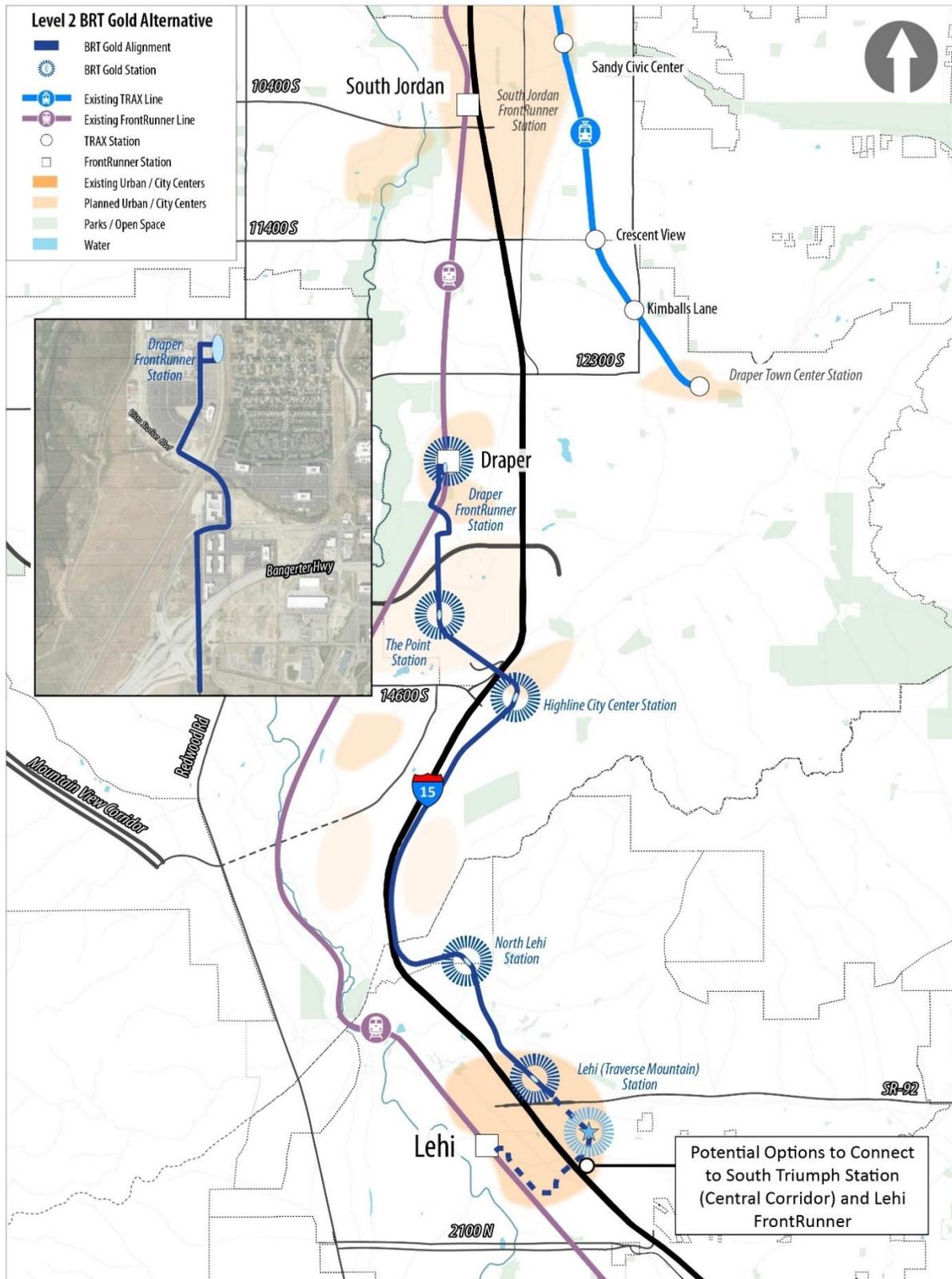


Figure 3. Level 2 BRT Alternative

## Key Findings

The Level 2 evaluation added more detail on economic development opportunities and how the transit investment could be leveraged to support planned developments while still improving local and regional mobility. It included updated information on capital costs, operating conditions, station area measures, forecasts of the economic development value in station areas/planned communities, and updated ridership forecasts. Case studies, as well as individual workshops with affected stakeholders, provided more insights into specific communities each station would serve, and covered factors related to the key mode decision to be made, as well as the ability of each mode to create a world-class transit investment that integrates and connects key development areas along the corridor. Key findings from the Level 2 alternative evaluation include:

- **Highlighted areas of similarity**
  - **Economic Development** – The project supports major new developments that would generate substantive taxable land value for the region and add new jobs and housing for residents, along with retail uses generating additional sales tax revenues. Benefits between rail and BRT are expected to be similar if high-quality BRT is implemented with features on par with a rail investment (dedicated lanes/guideways, platform loading, signalization priority, load frequency during peak hours, and other enhanced station area amenities that give property owners/developers a level of certainty about the long-term nature of the improvements).
  - **Land Use** – Pairing this world-class transit investment with integrated station area planning would maximize the success of the investment for either BRT or rail. Features such as a robust multi-modal access, placemaking, and innovative policies would help drive ridership and allow a station to become a part of the local urban fabric.
  - **Ridership** – Ridership is similar between BRT and rail. Opportunities to optimize ridership through terminus location and connection to Lehi FrontRunner, and frequency of service would continue to be explored. Continued model refinements would be explored in future phases of study and would include detailed review of underlying socioeconomic data and opportunities to catalyze land use and associated data.
- **Highlighted areas of strong differentiation**
  - **Cost** – BRT \$350-450M | Rail – \$450-650M for DMU; \$600-850M for LRT
  - **Cost Effectiveness** – Based on the difference in capital costs between BRT and rail and the similarities in ridership, BRT would be a more cost-effective mode to implement.
  - **Constructability** – Complexity of construction and associated risk is substantively reduced with BRT compared to rail.
  - **Operational Considerations** – Operations of BRT would be more easily accommodated within the existing transit system compared to rail. Rail would likely require an independent (and adjacent) satellite operations and maintenance facility for service.
  - **Timing and Implementation** – Once funding is fully secured for environmental through final design and construction, timeline for BRT would be reduced compared to rail. Options for flexibility in phased construction and implementation are more readily available for BRT.
  - **Transit integration** – If desired, providing additional connections to South Triumph (Central Corridor) and to Lehi FrontRunner would be more flexible and less costly with BRT than rail and provide a more seamless connection with Central Corridor.