

# Tier 2 Mode Options



Mode defines the type of transit vehicle or technology that will be used. The initial mode options for consideration build on the previous high-capacity transit planning that narrowed the mode options to those listed below.

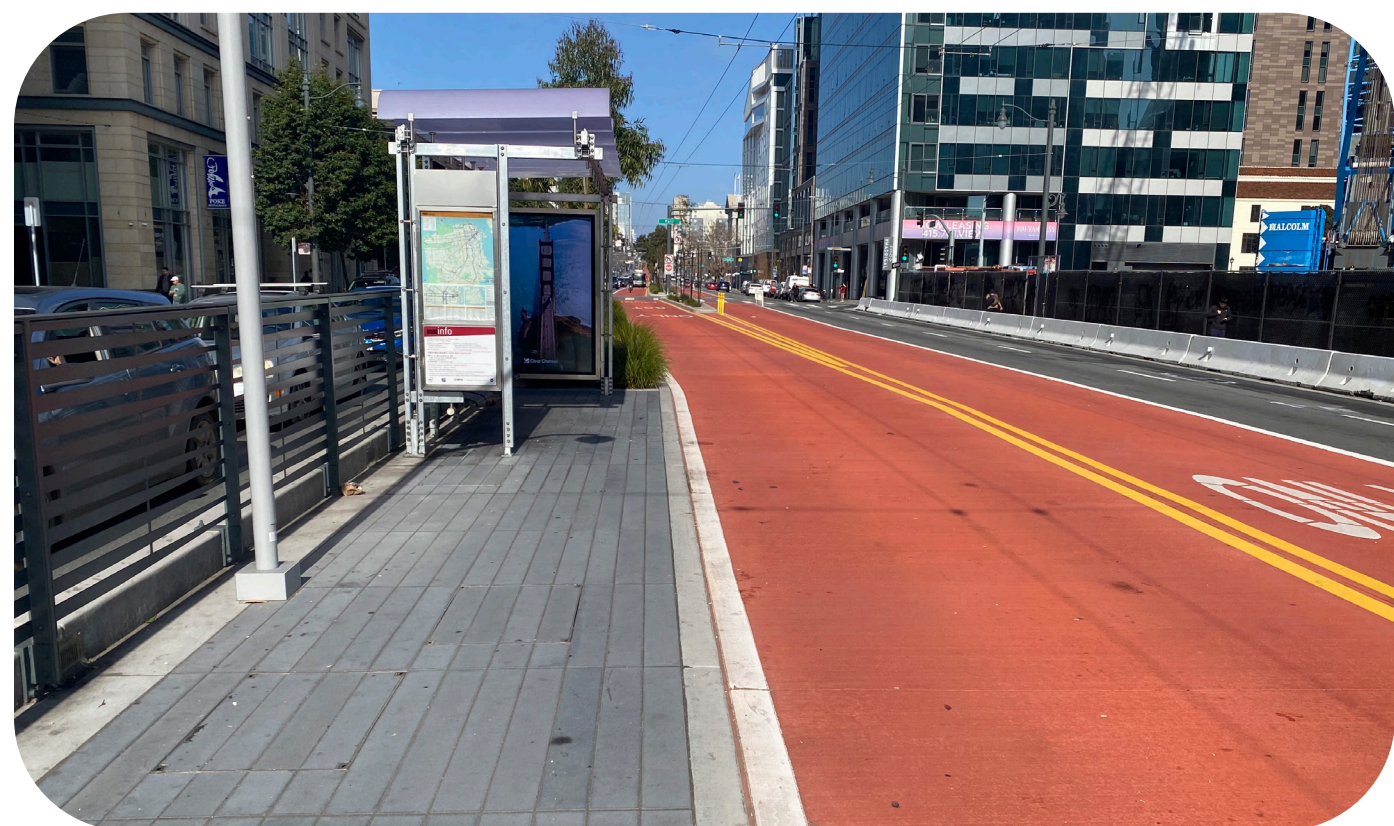


**Regional – commuter rail:**  
A heavy-rail vehicle operating within the existing freight rail corridor. Safety features are necessary due to potential interactions between freight and passenger services.



**Light rail transit (LRT):**  
A light rail vehicle operating in its own dedicated corridor. Light rail cannot safely operate on freight rail tracks and would require significant separation from freight.

**Bus rapid transit (BRT):** BRT can operate similarly to a train, using dedicated bus lanes with significant amenities at stops (raised platforms, benches, real-time displays, etc.). This study explores three potential configurations:



**BRT – exclusive guideway:**  
Buses run in center lanes and are physically separated from other traffic.



**BRT – business access and transit (BAT) lanes:**  
Buses run in outside lanes, primarily used for buses, but other vehicles may use the lanes to access adjacent businesses and residences or as right-turn lanes.



**BRT – mixed traffic:**  
Buses run in general purpose lanes with other vehicles. Includes some improvements like BRT stop amenities and signal priority.



# Tier 2 – Mode Evaluation

## Step 1:

Assess the suitability of different modes for high-capacity transit within Treasure Valley using the following questions:

- ❓ Does the mode improve transit connectivity and reliability?
- ❓ How does the mode fit into the existing context of the corridor?
- ❓ Is the mode financially feasible and constructable?

## Step 2:

Pair Tier 2 routes with appropriate mode.

### Proposed modes not carried forward:

#### LRT:

- » Most expensive mode.
- » Requires the most space.
- » Safety considerations if operating in the freight rail corridor.
- » Best suited for short, urban routes.

#### BRT- Mixed Traffic:

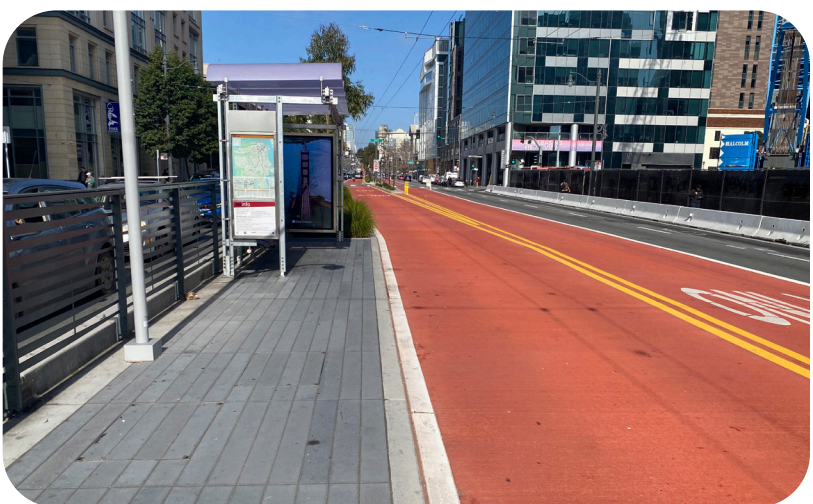
- » Less reliable service compared to other modes.
- » Requires more vehicles to maintain service frequencies.

## Mode Evaluation

### Proposed Modes Carried Forward



Regional – Commuter Rail



BRT – Exclusive Guideway



BRT – BAT Lanes

### Proposed Modes Not Carried Forward



Light Rail Transit



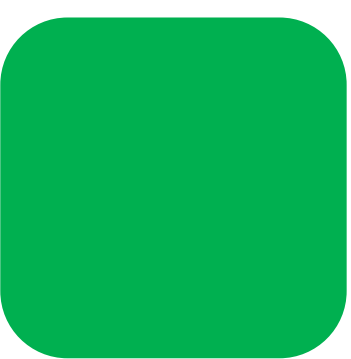
BRT – Mixed Traffic

## Modes Paired with Routes



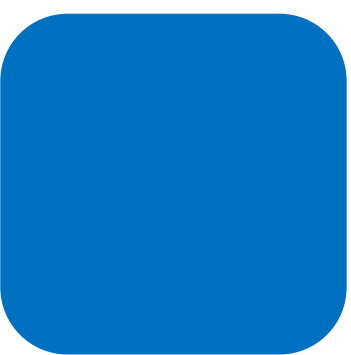
Fairview Avenue/Cherry Lane

- ▶ BRT – Exclusive Guideway (center)
- ▶ BRT – BAT Lanes



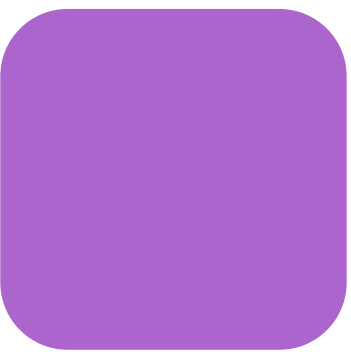
Franklin Road

- ▶ BRT – Exclusive Guideway (center)
- ▶ BRT – BAT Lanes (side)



I-84/I-184

- ▶ BRT – BAT Lanes (side)



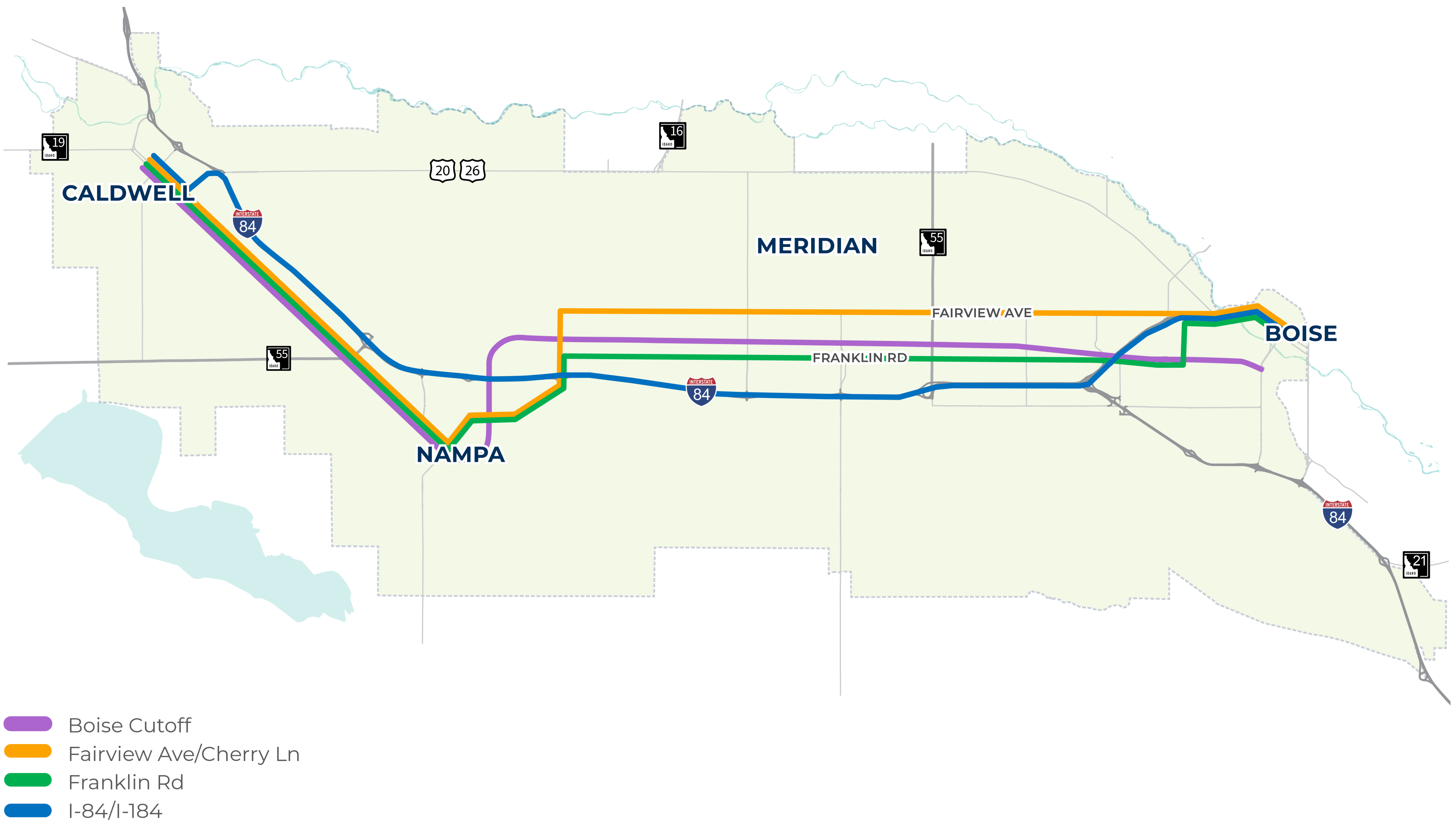
Boise Cutoff

- ▶ Regional – Commuter Rail



# Tier 2

## ROUTE OPTIONS



 Map not to scale

# Tier 2 Evaluation



**Step 3:** Assess each option along with its mode based on the criteria below that build on the goals and objectives from the purpose and need.

Goals	Objectives/Measures
Improve transit connectivity and mode share	<ul style="list-style-type: none"><li>» Does the option connect key origins and destinations?</li><li>» Does the option provide access to important community resources (e.g., healthcare, grocery stores, government facilities.)?</li><li>» Does the option connect areas with the potential for high transit usage?</li><li>» Does the option connect to population and employment centers?</li></ul>
Improve transit reliability, and expand travel choices and mobility	<ul style="list-style-type: none"><li>» Does the option integrate with the existing and planned transit network?</li><li>» Is the option reliable and predictable for users?</li><li>» To what magnitude are traffic operations potentially impacted?</li><li>» Does the option connect to existing and planned trails, sidewalks, and/or bike lanes?</li></ul>
Develop compatible plans for high-capacity transit, land use, and transportation	<ul style="list-style-type: none"><li>» Does the option go through areas with transit supportive land uses (employment centers and higher density housing)?</li><li>» Does the option present environmental challenges?</li><li>» Does the option manage impacts and/or enhance opportunities to support freight/goods movement?</li></ul>
Advance financially feasible solutions	<ul style="list-style-type: none"><li>» To what extent does this option align with available funding opportunities?</li><li>» Can the corridor be protected or preserved for future high-capacity transit service?</li><li>» How difficult would it be to implement the option?</li></ul>



# Tier 2 Evaluation Summary



Below is a summary of how each route/mode combination scored against one another when applying the criteria.

Goal	Evaluation Criteria	Fairview Avenue/ Cherry Lane		Franklin Road		I-84/ I-184	Boise Cutoff
		BRT – Exclusive	BRT – BAT	BRT – Exclusive	BRT – BAT	BRT – BAT	Commuter Rail
Improve transit connectivity and mode share	Connects key origins and destinations (activity centers)?						
	Connects community services (healthcare, grocery stores, etc.)?						
	Connects areas of potential high transit usage (seniors, students, etc.)?						
	Serves high share of the region’s population (current and future)?						
	Serves high share of the region’s jobs (current and future)?						
Improve transit reliability	Provides exclusivity and priority for transit?						
	Presents potential impacts to traffic?						
Expand travel choices and mobility	Integrates with the transit network?						
	Integrates with active transportation (bike, pedestrians)?						
Develop compatible plans for high-capacity transit, land use, and transportation	Serves planned existing or future transit supportive development opportunities?						
	Presents potential environmental issues?						
	Supports freight/goods movement?						
Advance financially feasible solutions	Aligns with federal, local, and private funding opportunities?						
	Preserves the corridor for future high-capacity transit service?						
	Increases complexity of implementation?						
Draft Tier 2 Scoring		Carry Forward				Carry Forward	Carry Forward



## High-Capacity Transit Planning and Environmental Linkages Study

NOTICE: All draft and final planning products produced during this PEL process may be adopted during a subsequent environmental review process in accordance with 23 USC 168, with the goal of not revisiting during future National Environmental Policy Act (NEPA) processes.

# Tier 2 Evaluation Results



Below describes the major findings from the Tier 2 evaluation. Each remaining option was evaluated against the criteria and each other.

## Boise Cutoff

### COMMUTER RAIL

#### Benefits:

- » Passes through key regional activity centers.
- » Provides exclusive and reliable service, as trains get priority at crossings and travel in dedicated right-of-way.
- » Fewer environmental challenges or impacts.
- » Requires the least amount of property acquisitions.
- » Track and crossing upgrades may improve freight efficiency.

#### Considerations:

- » Serves lower share of the region’s population and jobs (current and future).
- » Feasibility dependent on negotiations with railroad owners and operators.

## I-84/I-184

### BRT – BAT

#### Benefits:

- » Passes through communities with higher likelihood of using transit.
- » Serves a higher share of the region’s jobs (current and future).
- » Provides exclusive and reliable service as buses would operate in dedicated lanes.
- » Fewer anticipated traffic impacts.
- » Intersects many existing and future transit routes.
- » Fewer environmental challenges or impacts.
- » Requires fewer number of property acquisitions.
- » Potentially lower cost to implement.

#### Considerations:

- » Passes through fewer key regional activity centers.
- » Intersects fewer existing and future pedestrian and bicycle facilities.

## Fairview Avenue/Cherry Lane & Franklin Road

### BRT – BAT & BRT – EXCLUSIVE

Fairview Avenue/Cherry Lane and Franklin Road (arterial routes) score similarly for numerous criteria. Both routes:

#### Benefits:

- » Provides connections to key destinations, community resources, jobs, existing and future transit, and pedestrian and bicycle facilities.
- » Passes through communities with higher likelihood of using transit.
- » Serves high share of the region’s population and jobs (current and future).

#### Considerations:

- » Presents moderate to high traffic impacts.
- » Requires significant roadway widening to construct and high number of property acquisitions.
- » Impacts a large number of historic sites.
- » Potentially complex and costly to implement.

**The analysis found that BRT – BAT (side) would have greater impacts compared to BRT – Exclusive (center).**

**BRT – BAT requires the most amount of right-of-way to construct the corridor resulting in:**

- » Greater number of historic sites impacted.
- » More property acquisitions.
- » More expensive to construct.

**BRT – Exclusive may result in:**

- » More difficulty accessing businesses.
- » Greater impacts to freight operations.





# Tier 2 Evaluation Results



## Proposed Options Not Carried Forward

### Franklin Road

Franklin Road provides similar benefits and impacts to Fairview Avenue/Cherry Lane, but there are additional factors for why the corridor is not proposed to advance to Tier 3.

- » Franklin is a critical urban freight corridor and high-capacity transit may disrupt freight operations.
- » Fewer people are forecasted to live along the route option.
- » Passes through fewer communities with higher likelihood of using transit.

Following initial outreach to study stakeholders, there was interest in combining the most promising segments of the Fairview Avenue/Cherry Lane and Franklin Road routes to connect to more key regional and community destinations.

### Fairview Avenue/Cherry Lane

#### BRT – BAT

The Fairview Avenue/Cherry Lane BRT – BAT mode option is not proposed to advance to Tier 3. While the route provides similar benefits to the exclusive BRT option, BRT – BAT would result in:

- » Greater number of property acquisitions.
- » Significant changes to the right-of-way to accommodate the service.
- » Significant impacts to a large number of historic properties.

#### LIGHT RAIL (LRT)

LRT was not carried forward following the mode evaluation. Ultimately, when compared to other modes, LRT scored lower due to several factors:

- » More expensive to construct.
- » Requires more space to safely operate in the freight rail corridor.
- » More effective in urban environments with frequent stops.
- » Incompatible with typical freight corridor design and purpose.

#### BRT MIXED TRAFFIC

BRT Mixed Traffic was not carried forward following the mode evaluation. When compared to other modes, BRT Mixed Traffic scored lower due to several key issues:

- » Buses would face congestion and delays similar to other vehicles. Delays are compounded over the 30-mile corridor.
- » BRT improvements are expensive. Potential poor return on investment if buses are delayed in traffic.
- » BRT is expected to be faster and more predictable than local service. Mixed traffic BRT would not meet rider expectations.

## Proposed Options Carried Forward to Tier 3

### Boise Cutoff

#### COMMUTER RAIL

- » Provides reliable and exclusive service to regional activity centers including downtown Caldwell, Nampa, and Meridian, while requiring shuttle service to Boise’s center.
- » Most of the infrastructure could be constructed within the existing right-of-way.
- » Fewer environmental impacts compared to other options.

### I-84/I-184

#### BRT – BAT

- » Provides similar reliability and exclusivity as Commuter Rail at a reduced cost.
- » Most of the infrastructure could be constructed within the existing right-of-way.
- » Fewer environmental impacts compared to other options.
- » Minimal traffic impacts.

### Fairview Avenue/Cherry Lane

#### BRT – EXCLUSIVE

- » Provides more connections to key destinations, community resources, jobs, existing and future transit, and pedestrian and bicycle facilities compared to Franklin Road.
- » Passes through more communities with higher likelihood of using the service.
- » Provides services to more people (current and future).
- » While the Franklin Road route is not proposed to advance into Tier 3, initial outreach to stakeholders showed interest in combining Fairview Avenue/Cherry Lane and Franklin Road routes to capture activity centers along Franklin.



## High-Capacity Transit Planning and Environmental Linkages Study

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# Tier 3 Evaluation



Three route options and the No Action are proposed to be carried forward into the Tier 3 evaluation. The Airport Connection and the Micron Connection options will be considered with the remaining routes (as appropriate) during the Tier 3 evaluation. Tier 3 will include more detailed analysis of the route’s potential performance, including considerations for stop locations, transit demand, benefits, and costs.

		Tier 1	Tier 2	Tier 3	
No Action				<div>FINAL EVALUATION</div>	Carried forward for further analysis as baseline condition
Chinden Blvd					
Ustick Road					
Fairview Avenue/ Cherry Lane					Carried forward for further analysis: BRT – Exclusive
Boise Cutoff Railroad					Carried forward for further analysis: Commuter Rail
Franklin Road					Poorer performance for feasibility, connectivity, and reliability
I-84/I-184					Carried forward for further analysis: BRT – BAT
Overland Road					
Victory Road/ Powerline Road					
Airport Connection					To be considered with other routes as options in Tier 3
Micron Connection					To be considered with other routes as options in Tier 3