

UTAH TRANSIT AUTHORITY (UTA) FRONTRUNNER EXTENSION – OGDEN TO BRIGHAM CITY, UT

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Project Summary

UTA is planning to extend the FrontRunner commuter rail line (Fig. 1) from Ogden, Utah, to Brigham City, Utah, to enhance interurban transportation in Northern Utah between Box Elder, Weber, and Davis counties. UTA asked SpotOn Engineering to perform a feasibility analysis on extending the FrontRunner commuter rail line northward and to design a possible station location for the Brigham City area.



Figure 1. FrontRunner Train

Alternatives

The following alternatives were considered for extension of the FrontRunner rail line: I-15, Utah-Idaho Corridor (UIC), Highway 89, along the base of the mountain, and doing nothing. Each route is shown in Fig. 2.

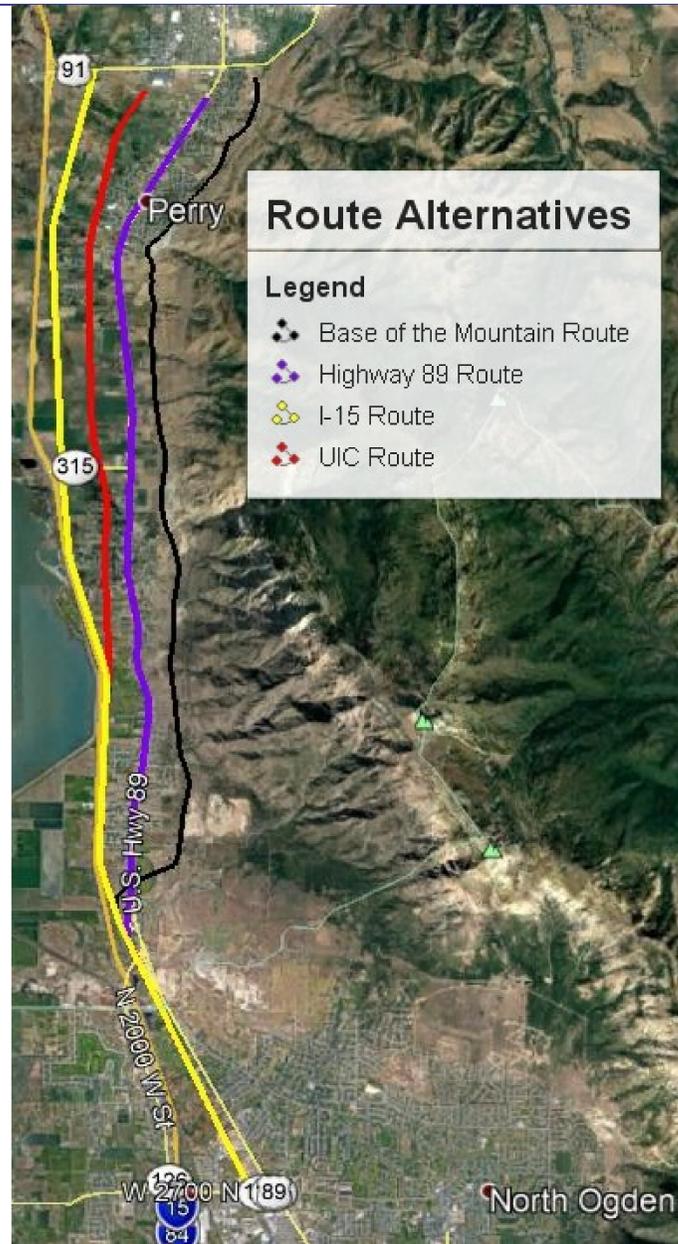


Figure 2. Route Alternatives

Category	Weight	A1: I-15	A2: US-89	A3: Mtn	A4: UIC	A5: DN
Transportation Benefits	30%	0.70	0.50	0.50	0.60	0.60
Traveler Protection	25%	0.80	0.20	0.60	0.40	1.00
Environmental	25%	0.55	0.80	0.45	0.80	0.80
Economic benefits	10%	0.70	0.40	0.30	0.70	0.40
Cost	10%	0.75	0.40	0.45	0.45	1.00
Weighted Score		69%	48%	49%	60%	77%

Figure 4. Route Evaluation Criteria

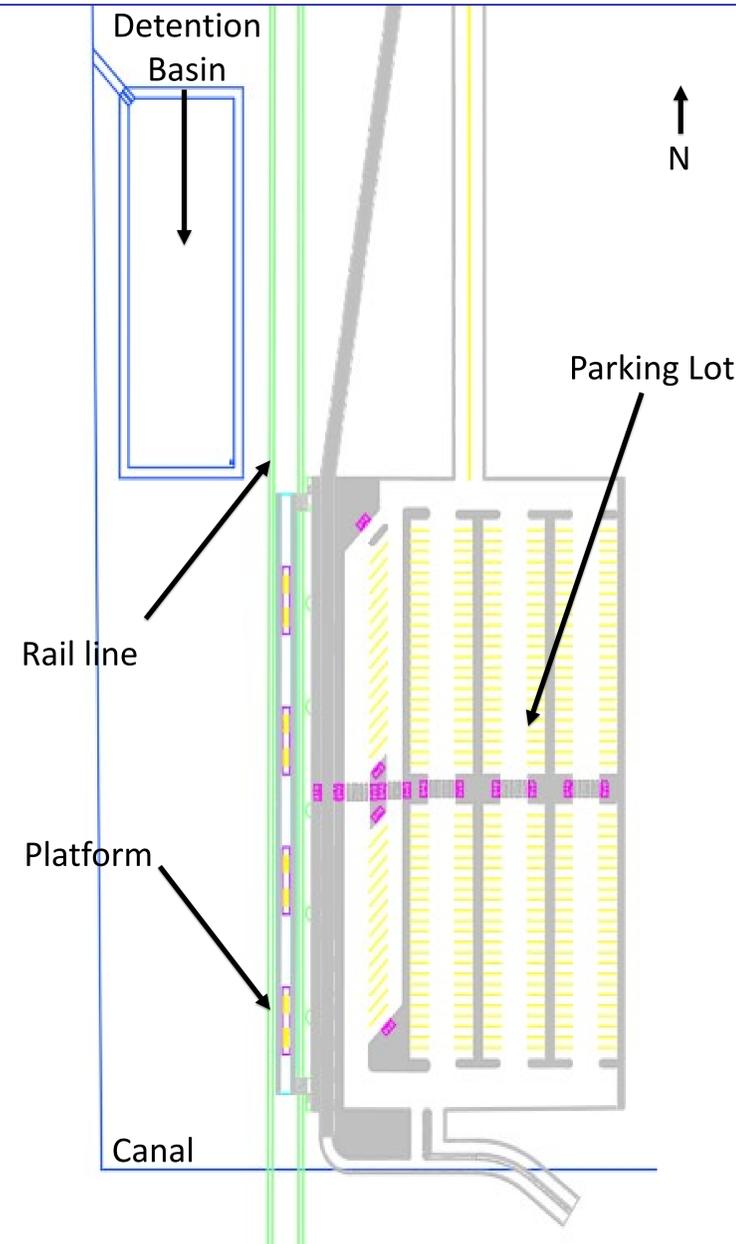


Figure 3. Station Location Design

Process

Each alternative was evaluated based on the weighted criteria shown in Fig. 4. Each alternative was given a score from 1 to 5 with 5 being the most favorable and 1 being the least favorable. Scores were then summed and multiplied by their respected weights to determine the most favorable alternative.



Figure 5. FrontRunner Station

Results

The evaluation shows there is no current need for the FrontRunner Extension. The population currently does not support the need of extending public transportation from Ogden to Brigham City.

Despite no current need for the extension, the selected alternative for the FrontRunner rail line extension is along I-15. A projected station location, parking lot, and detention basin has been allotted in Brigham City (Fig. 3).