Criterion			What it Measures	Data Source	Analysis Methodology
Transit Benefits/Ridership Potential	1	Travel Time (minutes)	Measure of the time it would take for a transit vehicle to travel between endpoints using the given alignment	Roadway speed limits and traffic control inputs from Ogden GIS file	Travel time is calculated for each segment of the alignment based on distance, posted speed limit, number of turns and number of signals/stop signs
	2	Activity Centers Served	Number of activity centers (employers, community centers, schools, etc.) within a quarter mile (1,320 feet) of a given alignment	Stakeholder input	Activity centers are coded into GIS and a quarter-mile buffer is drawn around each alignment; activity centers falling within a buffer are said to be within that alignment's catchment area
	3	Access to 2015 Population	Measure of the average projected 2015 population within a quarter mile (1,320 feet) of a given alignment	WFRC 2015 population projections by TAZ	Quarter-mile buffers are drawn around each alignment in GIS; population data contained in a TAZ shapefile are then merged with the buffers such that each buffer contains a collection of TAZ fragments; population numbers are then scaled based on the percentage of the TAZ contained within the buffer area; finally, population numbers from each TAZ fractional area are combined to supply the total population projections along the alignment. Refinements will be made in areas where larger TAZs exist or contrasting land uses and/or densities are found within a single TAZ
	4	Access to 2015 Employment	Measure of the average projected 2015 employment within a quarter mile (1,320 feet) of a given alignment	WFRC 2015 employment projections by TAZ	Quarter-mile buffers are drawn around each alignment in GIS; employment data contained in a TAZ shapefile are then merged with the buffers such that each buffer contains a collection of TAZ fragments; employment numbers are then scaled based on the percentage of the TAZ contained within the buffer area; finally, employment numbers from each TAZ fractional area are combined to supply the total employment projections along the alignment. Refinements will be made in areas where larger TAZs exist or contrasting land uses and/or densities are found within a single TAZ
	5	Builds and Supports Existing Transit Service	Rating based on connectivity to existing transit routes and ridership (measured in annual weekday boardings; 2008 data) in the sub-area	UTA GIS; 2008 UTA ridership statistics	Total annual ridership is measured for each existing transit route travelling along or intersecting an alignment; 2007 stop-by-stop boarding/alighting data were also used as a supplement where available. An alignment is said to build upon existing transit service if the transit services sharing/intersecting the alignment already have high ridership
Transportation System Effects	6	UDOT Facility (% of total alignment)	Percentage of the alignment that traverses UDOT roadways	Ogden GIS	Segments of the alignment traversing UDOT facilities are added together; this total is then divided by the total alignment length
	7	Volume / Capacity (V/C)	Ratio of 2015 roadway volume to existing roadway capacity	WFRC Regional Travel Model	Using 2015 outputs from the WFRC regional model, volume-to-capacity (V/C) ratios were weighted by segment distance. These weighted segments were combined to form their respective alignments and then divided by the total alignment length. NOTE: V/C ratios were not available for all alignment segments in the WFRC model; segments without available V/C information were excluded from calculations
Economic Development Goals	8	Compatibility with Existing Land Use	Ability for the existing land use to support a high-capacity transit investment	City of Ogden Zoning Map, WSU Master Plan	Qualitative assessment of existing transit-supportive land uses in the corridor, such as higher density residential and clustered commercial within comfortable walking distance of the potential high-capacity transit investment
	9	Supports Future Land Use	Ability for the future land use to support a high-capacity transit investment	City of Ogden General Plan (Future Vision Map), WSU Master Plan, RDA Map	Qualitative analysis of a corridor's potential to support increases in density, based on Ogden's vision for future development centers and districts, its existing zoning, and the potential to introduce a transit-supportive overlay zone similar to the type currently supporting development in Ogden's CBD.
	10	Development Potential	Availability of vacant or underutilized lands to support a high-capacity transit investment	Land Use inventory and windshield survey	Qualitative assessment of a corridor's potential for redevelopment, by identifying parcels that are vacant or underutilized, with intent to identify areas suitable for transit-oriented development. (Based on a windshield survey of the corridor--not on market research)
Cost (millions $)	11	Estimated Cost	Estimated cost of project based on segment length	Assessment of costs of similar systems and technologies	Lengths of segments are multiplied by a fixed cost per mile (Streetcar = $20 million for double track and $12 million for single track) (BRT = $5 million for double and $3.5 million for single running way). These estimates are based on a dedicated guideway and include all system related capital costs. Additionally, adjustment factors will be incorporated to account for differences in constructability of a given facility. Operating and maintenance costs are not included
Env. Impacts	12	Potential Environmental Impacts	Likelihood for the alignment to have higher potential impacts due to constrained rights of way combined with the presence of sensitive resources along the corridor.	Qualitative Assessment	Qualitative assessment based on potential displacement of property, impacts to historic resources, noise and vibration impacts, or high levels of parking, traffic or other impacts to residential neighborhood areas, commercial areas or other adjacent land uses
Operations / Constructability	13	Slopes (Weighted)	Assessment of how existing topography would affect a given alignment with respect to cost and speed	Ogden GIS	Alignments are overlaid with a topography layer in GIS. Segments with slopes less than 6% are assigned a weighting factor of 0, segments with a slope of 6%-9% are assigned a factor of 5, and segments with a slope greater than 9% are assigned a factor of 10. These weightings at the segment level are then added to form their respective alignments. An alignment with a higher weighting score has more significant slope constraints than an alignment with a lower score
	14	Number of Turns	Quantification of the number of turns that would be necessary along a given alignment	Aerial photography	Alignments are overlaid with aerial photography and the number of turns each alignment must make is counted
	15	Utility Conflicts	Assessment of how a given alignment interacts with major utility corridors	Ogden GIS	Alignments are overlaid with utilities layers in GIS and areas of conflict are noted. Utilities evaulated include stormwater drainage, sewer, and fiber optics
	16	Constrained Segments (Available ROW < 24')	Roadway segments with a right-of-way width narrower than 24 feet	Measurements from aerial photography	Curb-to-curb right-of-way widths are measured for all alignment segments; those segments with a right-of-way less than 24 feet--the minimum space required for a double track dedicated transitway--are listed as constrained. The same assessment is completed for segments less than 12 feet--the minimum space required for a single track dedicated transitway
	17	Average Available ROW	Average available right-of-way for a minimum 24' transitway, assuming no travel lane removal	Measurements from aerial photography	The total number of through lanes (both directions) on a given segment is multiplied by 12 (typical lane width) and then subtracted from the total curb-to-curb right-of-way for that segment. The remainder--the available right-of-way--is then weighted by the segment's length. Measurements for each segment are then combined and divided by the total alignment length to produce an average right-of-way width for the entire alignment
Community Support	18	Public and Stakeholder Support	Potential to achieve consensus	Comment forms, dot maps, emails from public scoping period, WSU student input	Alignments with direct opposition or high controversy and low levels of advocacy receive lower scores, while alignments with known support and little opposition receive higher scores
Safety	19	Accident Potential	Future conflict points between modes resulting from introduction of the proposed transit system	Existing transportation facilities including auto travel lanes, bike lanes, and pedestrian crossings/paths	Qualitative assessment using conflict diagrams showing an as-built configuration plus the project