

TECHNICAL MEMORANDUM

October 1, 2026

Project# 30764

To: Brock Dillé, PE (Idaho Transportation Department)

From: Tristan Gallagher, EIT, Matthew Hagen, EIT, Chenming Zhang, Liz Kaniecki, PE, Mark Heisinger, PE, and Andy Daleiden, PE

RE: Blue Lakes and Pole Line Project - Tier 2 Alternatives Technical Memorandum

INTRODUCTION

The memorandum summarizes the Tier 2 alternatives evaluation and screening for the Blue Lakes and Pole Line Project (herein referred to as “the project”). This report presents refined concept designs for the Tier 2 alternatives and discusses their evaluation. The information in this memorandum will be used to identify the preferred alternative that will be moved forward to final design and implementation. Exhibit 1 outlines the tiered evaluation process for identifying these improvements. Figure 1 depicts the project study area.

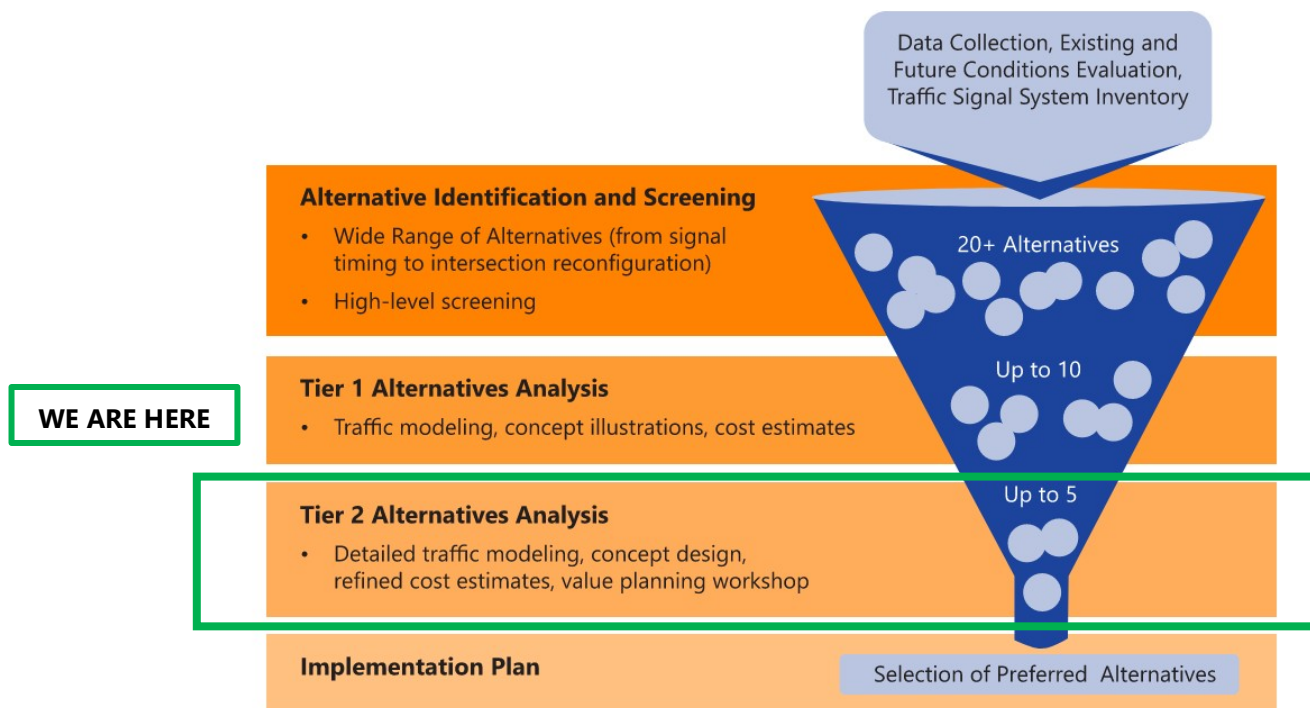
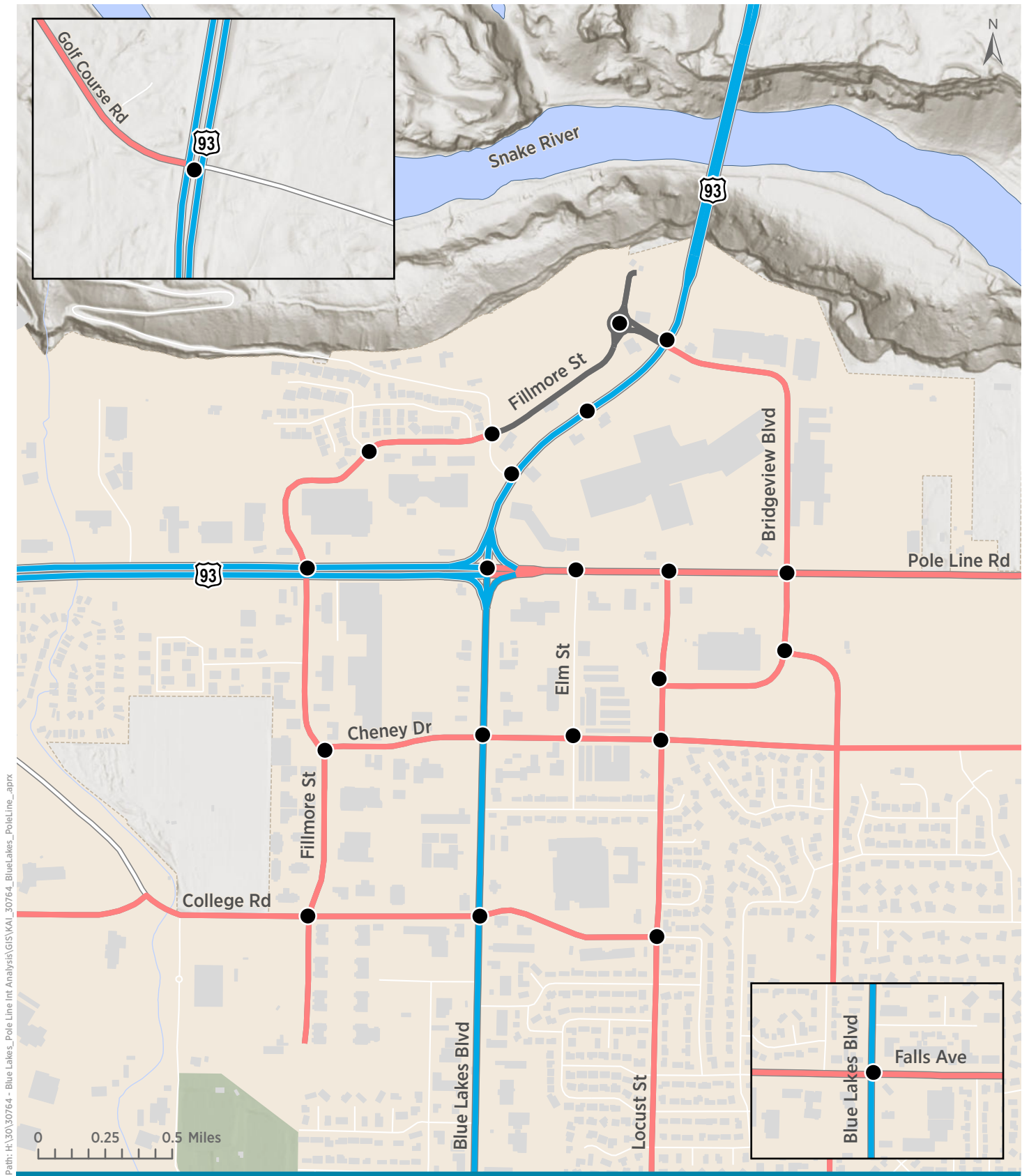


Exhibit 1. Tiered Evaluation Process



Data Sources: OpenStreetMap, ITD, City of Twin Falls

Figure 1. Project Study Area

Blue Lakes Boulevard and Pole Line Road Project

This process began with the data collection and evaluation of existing and future year 2050 No-Build conditions, which is summarized in *Technical Memorandum #1 – Existing and Future No-Build Conditions* (Reference 1). This memorandum identified the operational and safety deficiencies within the study area.

The initial screening included 20 alternatives. These alternatives were screened based on a critical-movement evaluation of weekday PM peak hour (the critical peak) traffic operations during the future year 2050 No-Build scenario and a qualitative evaluation of additional criteria (i.e., cost range, potential right-of-way (ROW) impacts, constructability). Additional details on the initial alternatives and screening can be found in *Technical Memorandum – Initial Alternatives Evaluation* (Reference 2).

Tier 1 screening was based on traffic modeling (using Synchro software), concept illustration, and other related criteria. The project team completed the Tier 1 evaluation in April 2026 and presented the results to the Technical Advisory Group (TAG) and Project Advisory Group (PAG) on April 27 and May 13, 2026, respectively, to gather feedback. As a result, five alternatives (including the No-Build alternative) moved forward into the Tier 2 evaluation as described in this memorandum. Additional details on the Tier 1 alternatives can be found in *Technical Memorandum – Tier 1 Alternatives Evaluation* (Reference 3). A full list of alternatives that were evaluated during different phases of the project are shown in Table 1.

- Alternative 1: No-Build
 - Only includes signal timing and coordination adjustments
- Alternative 1D: Ultimate No-Build (Baseline Alternative for Tier 2 Screening)
 - This alternative identifies improvements that address traffic operations and safety deficiencies within the entire project study area, while avoiding major re-configurations to the Blue Lakes Boulevard and Pole Line Road intersection. The purpose of Alternative 1D is to present potential, conceptual improvements that address systemwide deficiencies, while also providing an alternative that serves as a basis of comparison for alternatives that include significant re-configurations to the Blue Lakes Boulevard and Pole Line Road intersection. All improvements included in Alternative 1D are also incorporated into the other Tier 2 alternatives, establishing a consistent set of off-site roadway and intersection improvements across all scenarios. As such, the benefits, challenges, and additional considerations identified for Alternative 1D generally apply to the other alternatives as well.
- Alternative 2: Widen Blue Lakes Boulevard
- Alternative 4: Widen Blue Lakes Boulevard + Triple Eastbound Left-Turn (EBL)
- Alternative 6: Single-Point Urban Interchange (SPUI)

These alternatives are shown in Figure 2 through Figure 6 and described further in subsequent sections.

Table 1. Evaluation Screening Results for Initial, Tier 1, and Tier 2 Alternatives¹

ID	Alternative	Initial Screening Results	Tier 1 Evaluation Results	Tier 2 Evaluation Results
NB	Alternative 1: No-Build Alternative (With Signal Timing Improvements)	Tier 1 (For Comparison)	Tier 2 (For Comparison)	-
NB1D	Alternative 1D: Ultimate No-Build (Network Buildout outside of BL/PL)		Tier 2²	Remove
Conventional Intersection Improvements				
C1	Alternative 2: Widen Blue Lakes Boulevard	Tier 1	Tier 2	Preferred Alternative
C2	Widen Pole Line Road + Dual SB Left Turn Lanes	Remove	-	-
C3	Additional Lanes on Each Approach	Remove	-	-
C4	Alternative 3: Triple EB Left-Turns + 3 NB Lanes + Signalized Dual SB Right-Turns	Tier 1	Remove	-
C5	Alternative 4: Widen Blue Lakes Boulevard to 3-Lanes + Triple EB Left-Turn Lanes	Tier 1	Tier 2	Remove
Other Intersection Types				
R1	Multi-lane Roundabout	Remove	-	-
High-Capacity Intersections				
HC1	Full Displaced Left-Turn (All Approaches)	Remove	-	-
HC2	Alternative 5: Partial Displaced Left-Turn (EB and WB Approaches)	Tier 1	Remove	-
HC3	Median U-Turn (Partial - Only NBL & SBL)	Remove	-	-
HC4	Median U-Turn (Partial - Only NBL & SBL) + Widen Blue Lakes Boulevard	Remove	-	-
HC5A	Quadrant Intersections (Partial - NBL & SBL Only, via College Rd)	Remove	-	-
HC5B	Quadrant Intersections (Partial - NBL & SBL Only, via Cheney Dr)	Remove	-	-
HC6	Quadrant Intersections (Full)	Remove	-	-
HC7	Jughandles	Remove	-	-
HC8	Jughandles + Widen Blue Lakes Boulevard	Remove	-	-
Grade-Separated Alternatives				
GR1	Alternative 6: Single-Point Intersection (NB & SB Runs Free)	Tier 1	Tier 2	Interest in Long-Term Implementation
GR2	EB Left-Turn Flyover Ramp	Tier 1	Remove	-
GR3	Alternative 7: EB Left-Turn Flyover Ramp + WBL Movement Removal	Remove	-	-
GR4	Echelon Interchange	Remove	-	-
GR5	Alternative 8: Center-Turn Overpass	Tier 1	Remove	-

¹ **Bold** text indicates alternatives that were selected for the Tier 2 evaluation.

² This alternative maintains the existing roadway configuration while incorporating signal timing improvements, access management measures, off-site intersection improvements, and modifications to the near-term configuration at Blue Lakes Boulevard and Pole Line Road. It was created through the Tier 1 process and evaluation.



Legend



Existing Traffic Signal
New Traffic Signal

Alternative 1 - No Build
City of Twin Falls, Idaho

Figure
2



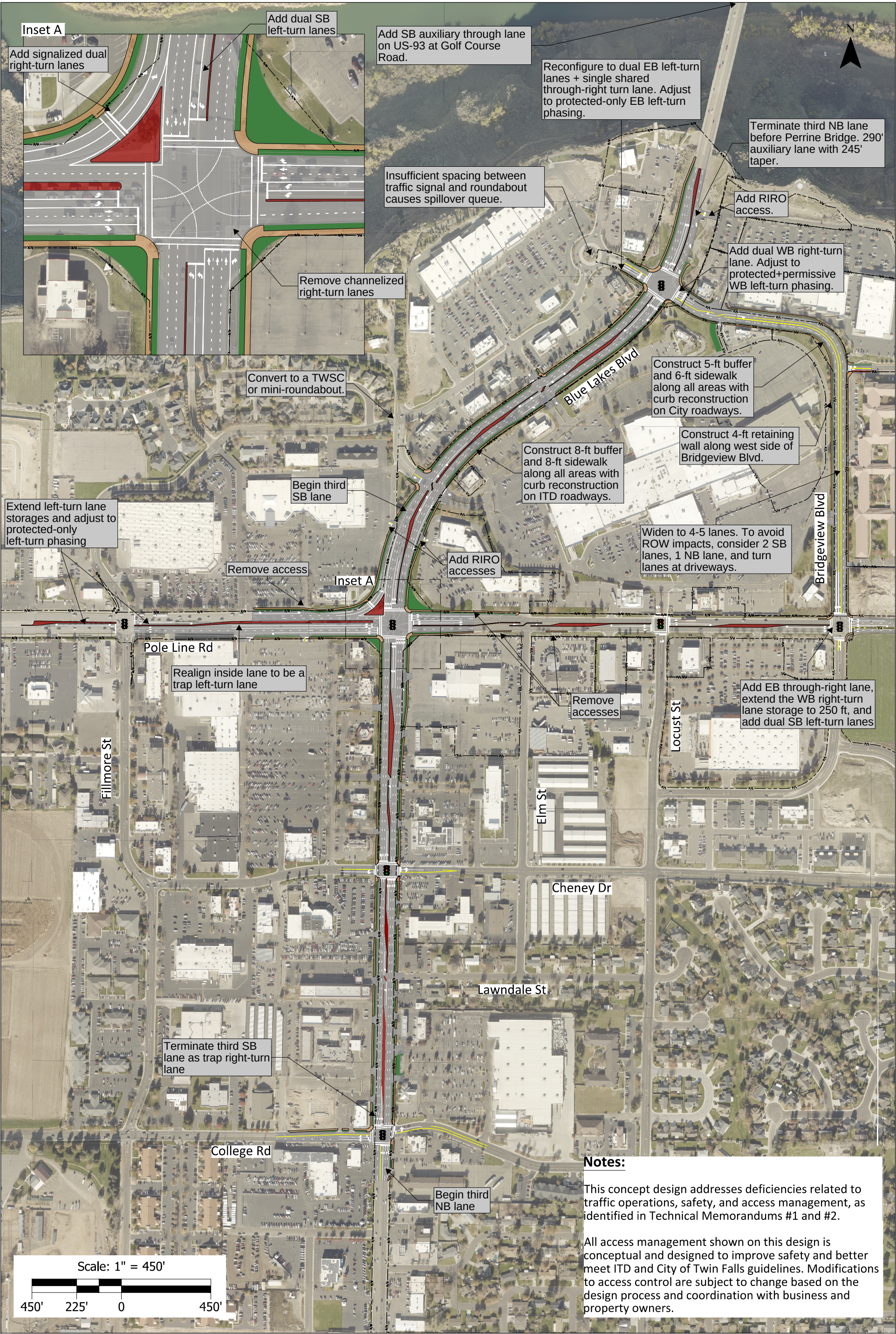
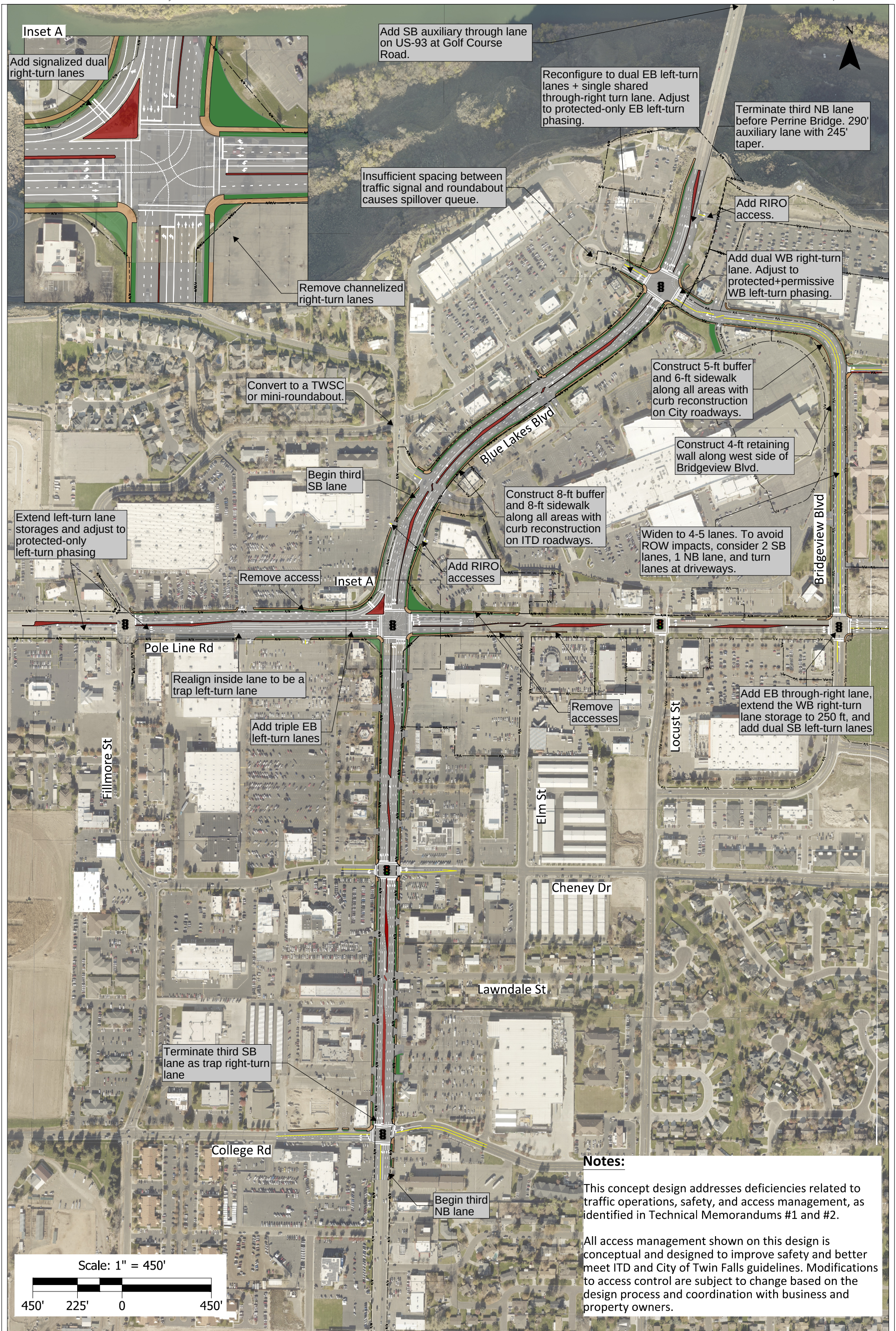


Figure 4



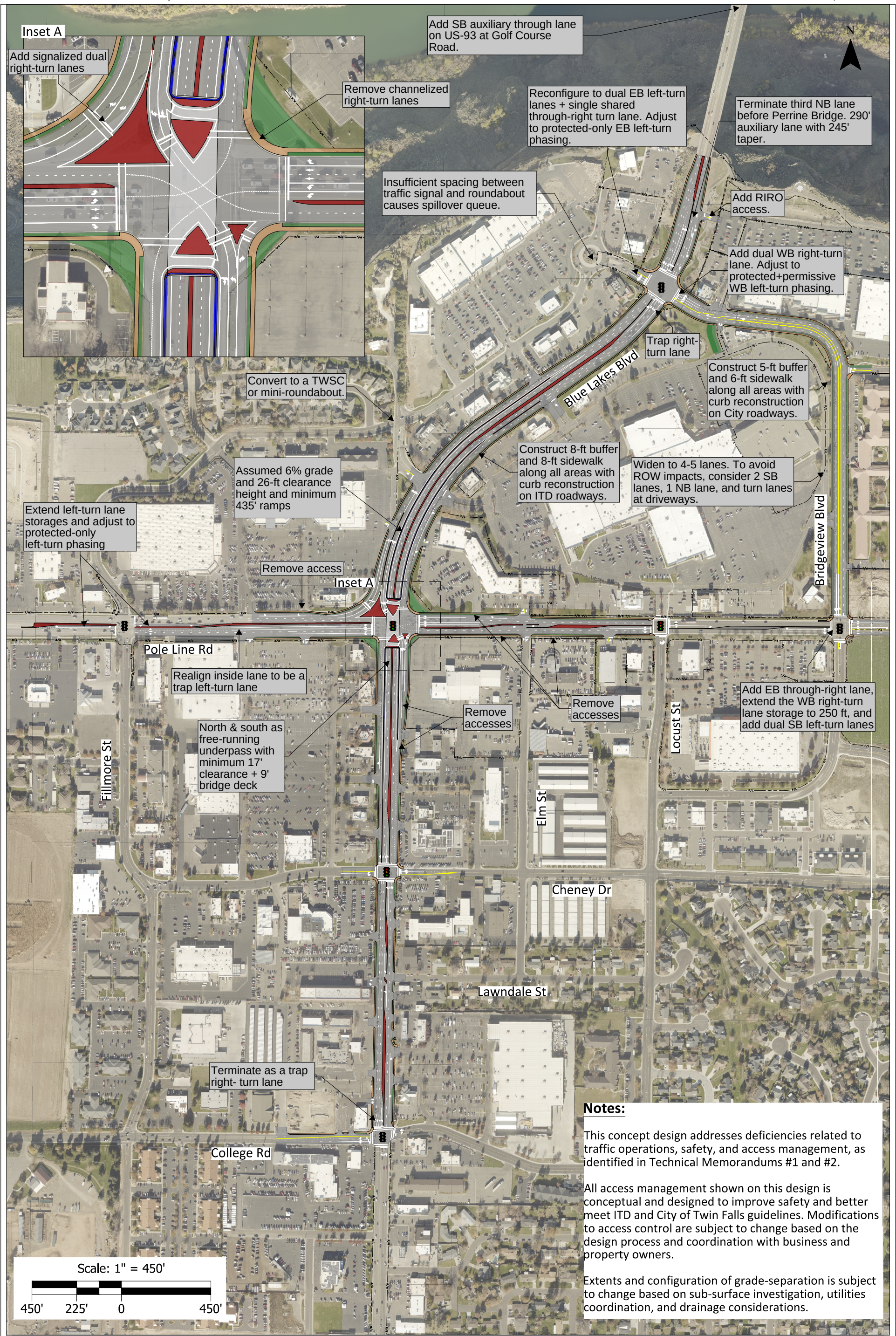
Notes:

This concept design addresses deficiencies related to traffic operations, safety, and access management, as identified in Technical Memorandums #1 and #2.

All access management shown on this design is conceptual and designed to improve safety and better meet ITD and City of Twin Falls guidelines. Modifications to access control are subject to change based on the design process and coordination with business and property owners.

Alternative 4 - Triple EBL & Blue Lakes Widening
City of Twin Falls, Idaho

Figure 5



TIER 2 SCREENING PROCESS

This section outlines the screening criteria used for the Tier 2 evaluation. The Tier 2 alternatives screening process includes concept designs, cost estimates and VISSIM modeling. These items build on the evaluation completed through the Tier 1 evaluation process. The Tier 1 Alternatives Technical Memorandum outlines additional information detailing the criteria beyond what is described in this section. This section focuses on the newly analyzed pieces (concept designs, microsimulation, and refined cost estimates) that are incorporated into the screening process for Tier 2.

Screening Criteria

Table 2 summarizes the metrics used to evaluate and compare the Tier 2 alternatives.

Table 2. Tier 2 Screening Criteria

Alternative Criteria	Metrics
VISSIM Traffic Operations (Future PM Peak Hour)	<ul style="list-style-type: none"> ■ Intersection Level Metrics <ul style="list-style-type: none"> - Level of Service (LOS) - Delay (seconds) - Eastbound Left Turn Queues (feet) ■ Network Level Metrics <ul style="list-style-type: none"> - Average Vehicle Delay (seconds) - Latent Demand (vehicles) - Average Stops per Vehicle (stops)
Safety	<ul style="list-style-type: none"> ■ Safety Impacts such as Conflict Points, Presence of Known Risk Factors (e.g., Right-Turn Slip Lanes), Grade-Separation
Pedestrian & Bicycle	<ul style="list-style-type: none"> ■ Pedestrian and Bicycle Impacts
Familiarity & Ease of Use	<ul style="list-style-type: none"> ■ Prevalence of Treatment-Type in Region and State ■ Driver Usability
Freight	<ul style="list-style-type: none"> ■ Capacity Improvements to Movements with High-Freight Volumes
Right of Way (ROW)	<ul style="list-style-type: none"> ■ Impacted Square Feet
Access Impacts	<ul style="list-style-type: none"> ■ Number of Restricted, Removed, and New Accesses
Cost Estimate	<ul style="list-style-type: none"> ■ Planning-Level Cost Estimate

Microsimulation

A microsimulation model developed in PTV VISSIM (referred to as VISSIM) is a time-step, vehicle-based traffic operations model that simulates the movement and interaction of individual vehicles, pedestrians, and other road users within a defined transportation network. Unlike deterministic methods in the Highway Capacity Manual (HCM), which estimate average delay and level of service under steady-state assumptions, VISSIM represents stochastic driver behavior, lane-changing decisions, car-following dynamics, signal control logic, and network effects at a granular level (typically 0.1 -second resolution). This allows the model to capture spillback, queue interaction between closely spaced intersections, and operational nuances that are not well represented in isolated intersection or macroscopic analysis, such as in Synchro (tool used in Initial Alternatives and Tier 1 Evaluation).

The purpose of developing a VISSIM model at this stage of the project is to evaluate network-level operational performance under the five alternatives. The project team developed a VISSIM model by creating a detailed representation of the roadway network, and intersection geometry, traffic control devices. Traffic demand is then incorporated using turning movement counts and origin-destination matrix estimation. The existing model is calibrated and validated against observed field data, such as traffic volumes and lane utilizations to ensure that the simulation accurately represents existing conditions. Once calibrated and validated, the project team used this base model to incorporate each alternative and evaluate the year 2050 weekday PM peak hour traffic operations.

The following performance measures were obtained via VISSIM:

■ **Intersection Level Metrics:**

- **LOS:** Level of Service, a qualitative measure of intersection operating conditions (A–F) based primarily on average control delay, where LOS A represents free-flowing operating conditions (best case scenario) and LOS F represents a highly congested condition (worst case scenario).
- **Delay:** Average control delay experienced by vehicles at an intersection and approaches, including time spent slowing, stopping, and waiting to proceed.
- **Queuing:** The average and maximum length of vehicle queues formed at an intersection approach or movement, reflecting the extent of congestion and available storage utilization.

■ **Network Level Metrics:**

- **Average Vehicle Delay:** Average additional travel time experienced by vehicles compared to free-flow conditions across the entire network across all vehicles traveling.
- **Latent Demand:** The number of vehicles that could not enter the network during the simulation because of congestion or insufficient network capacity.
- **Average Stops per vehicle:** Average number of stops each vehicle traveling in the network can experience due to stop at intersections by traffic signal or stop control and congestion in the network.
- **Travel Time:** Total time in seconds that the average vehicle takes between the chosen start and end point.

Using these metrics noted above, Table 3 summarizes the performance metrics across the alternatives.

Table 3. VISSIM Network Performance Metrics

Performance Metric Category (PM Peak Hour)	Existing Conditions No-Build	Future (Year 2050) Conditions				
		Alt 1: No-Build	Alt 1D: Ultimate No-Build	Alt 2: Widen BL	Alt 4: Triple EBL	Alt 6: SPUI
	Blue Lakes Boulevard and Pole Line Road Intersection					
Level of Service	D	F	F	E	E	C
Average Vehicle Delay (seconds)	36	92	110	67	69	33
Maximum Eastbound Left Queue (feet)	675	1,375 ¹	1,350 ¹	1,250	550	400
Average Eastbound Left Queue (feet)	125	975	1,050	650	250	50
	Network Level Results (Entire Study Area)					
Average Vehicle Delay (seconds)	76	527	428 (-19%)	173 (33%)	174 (33%)	232 (44%)
Latent Demand (vehicles)	0	4,105	2,945	828	900	1,310
Average Stops per Vehicle (stops)	3	15	12	5	5	7
	Travel Time Results for Routes Within Study Area (Seconds) ²					
US 93 SB	379	1,135	906 (-20%)	553 (-51%)	550 (-52%)	740 (-35%)
US 93 NB	377	1,539	1,561 (1%)	574 (-63%)	615 (-60%)	432 (-72%)
US 93 SB to Pole Line WB	340	1,133	777 (-31%)	489 (-57%)	481 (-58%)	759 (-33%)
US 93 SB to Pole Line EB	290	1,089	656 (-40%)	384 (-65%)	383 (-65%)	754 (-31%)
Pole Line EB to US 93 NB	352	1,315	1,248 (-5%)	733 (-44%)	665 (-49%)	413 (-69%)
Pole Line EB	247	1,055	726 (-31%)	413 (-61%)	396 (-62%)	347 (-67%)
Pole Line WB	286	680	540 (-21%)	446 (-34%)	467 (-31%)	365 (-46%)
Pole Line WB to US 93 NB	209	823	326 (-60%)	299 (-64%)	296 (-64%)	344 (-58%)
Pole Line WB to Blue Lake SB	710	666	523 (-22%)	544 (-18%)	546 (-18%)	511 (-23%)
Blue Lake NB to Pole Line EB	259	1,015	964 (-5%)	407 (-60%)	411 (-59%)	393 (-61%)
Overall Travel Time Changes			1% to -60%	-18% to -65%	-18% to -65%	-23% to -72%

¹Queue spillback extends >800 feet past Pole Line Road / Fillmore Street intersection ²Values shown in parentheses represent the percentage change compared to Alternative 1.

Alternative 1D provides some network benefits (an almost 20% reduction in vehicle delay), but does not improve intersection capacity at the Blue Lakes Boulevard / Pole Line Road intersection.

Alternatives 2 and 4 perform similarly and provide the greatest amount of benefit (e.g., greatest reduction in overall vehicle delay), at the network level. Overall intersection delay is also similar at the Blue Lakes Boulevard / Pole Line Road intersection between the two alternatives. The primary benefit that Alternative 4 provides, compared to Alternative 2, is reduction of the eastbound left-turn queue at the Blue Lakes Boulevard / Pole Line Road intersection. Alternative 2 has a maximum eastbound left-turn queue of 1,250 feet, or about the length of the available storage (however, queue spillback into the Pole Line Road / Fillmore Street intersection is mostly eliminated, compared to Alternative 1D). Alternative 4 has a maximum eastbound left-turn queue of 550 feet. Travel time within the system for the route with the eastbound left-turn movement (Pole Line Road EB to US 93 NB) is 10% faster for Alternative 4 compared to Alternative 2.

Alternative 6 provides the greatest reduction in average vehicle delay at the Blue Lakes Boulevard / Pole Line Road intersection as well as a significant eastbound left-turn queue length reduction. Alternative 6 does not operate as well as Alternatives 2 and 4 at a network level. Alternative 6 requires the highest number of access restrictions due to grade-separation and roadway widenings and trips are re-routed to other intersections, increasing vehicle delay and vehicle queues at those intersections. For example, northbound left-turns increase by approximately 100% at the Blue Lakes Boulevard / Bridgeview Boulevard intersection due to the closure of other northbound left-turns on Blue Lakes Boulevard. To accommodate the increased left-turn volume and avoid queue spill-back into the northbound-through movement, signal time is reduced at conflicting movements, including the southbound-through. This causes significant southbound queue spill-back onto the Perrine Bridge and impacts US 93 southbound travel time (as seen in Table 3).

Concept Designs

The project team developed concept designs for each alternative (shown in Figure 2 through Figure 6). The concept designs include intersection lane re-configurations, right-of-way impacts, driveway impacts, sidewalk detailing, landscape and median design, and the project extents. These designs were used to estimate quantities to help create cost estimates and support an improved visualization of each alternative. The concept designs are subject to change based in the design process and from further input from ITD, the City of Twin Falls, businesses and property owners, and other regional partners.

The concept designs were developed using planning-level design criteria based on available Idaho Transportation Department (ITD), City of Twin Falls, American Association of State Highway and Transportation Officials (AASHTO), and Idaho Standards for Public Works Construction (ISPMC) references. Key design criteria include the following:

- 35-mile-per-hour design and posted speed (maintains existing),
- 12-foot travel lanes, 14-foot medians where applicable
- 8-foot sidewalks and 8-foot landscape buffers on ITD roadways; 6-foot sidewalks and 5-foot buffers on City roadways,
- 35-foot curb return radii, and a WB-67 design vehicle for turning movement review.

These criteria were applied consistently across alternatives to support comparable concept layouts, quantity development, and planning-level cost estimates. A summary of the primary design criteria and source references is provided in Attachment A.

No detailed topographic or boundary survey was used for concept design development. Existing conditions were interpreted from available high-resolution aerial imagery from the City of Twin Falls GIS database, parcel/right-of-way information, and other readily available data sources. As a result, the limits of impacts shown in the concept designs should be considered approximate and suitable for planning-level comparison only. Additional survey, utility mapping, and design refinement would be required during future project development to confirm existing conditions, verify right-of-way and property line locations, and refine the extent of property, driveway, grading, drainage, and utility impacts. Table 4 summarizes the right-of-way impacts per alternative.

Table 4. Right-of-Way Impacts

	Alt 1: No-Build	Alt 1D: Ultimate No-Build	Alt 2: Widen BL	Alt 4: Triple EBL	Alt 6: SPUI
Right-of-Way Impact (acres)	No Impact	1.9	4.6	5.0	5.3

The primary components of each alternative that require ROW are listed below:

- **Alternative 1D:** Widening of Bridgeview Boulevard, turn lane re-configurations at Blue Lakes Boulevard / Pole Line Road intersection
- **Alternative 2:** Widening of Blue Lakes Boulevard to three lanes per direction from Perrine Bridge to College Road. *Also includes Alternative 1D components.*
- **Alternative 4:** Widening of Blue Lakes Boulevard to three lanes per direction from Perrine Bridge to College Road, widening of Pole Line Road to accommodate third eastbound left-turn lane. *Also includes Alternative 1D components.*
- **Alternative 6:** Footprint of interchange structure and on- and off-ramps (including widening of Blue Lakes Boulevard up and down stream of ramps), widening of Bridgeview Boulevard

Cost Estimates

The project team developed planning-level cost estimates for each Tier 2 alternative based on the concept designs and unit costs from recent Idaho Transportation Department (ITD) projects. The planning-level cost estimates reflect the following:

- anticipated extent of roadway reconstruction,
- pavement widening,
- sidewalk improvements,
- drainage modifications,
- utility adjustments,
- traffic signal improvements, and
- other major project elements identified in the concept designs including the grade-separated elements of the single-point urban interchange (Alternative 6).

Areas shown as reconstruction in the concept figures were assumed to require corresponding construction activities in the cost estimates. A 20% contingency was included to account for the planning-level nature of the designs. Right-of-way costs are not included in the estimates but were considered separately as part of the Tier 2 evaluation (Reference 2). Additionally, these estimates do not include inflation, representing year 2026 costs. Inflation and further detail of the cost estimates will be considered in the refinement of the preferred alternative.

Table 5 summarizes the planning-level cost estimate for each alternative. Detailed cost estimate sheets, including quantities, and key assumptions, are provided in Attachment B. Alternatives 2, 4, and 6 include the costs of Alternative 1D as most components of Alternative 1D are carried into the other alternatives.

Table 5. Planning-Level Cost Estimates¹

	Alt 1: No-Build	Alt 1D: Ultimate No-Build	Alt 2: Widen BL	Alt 4: Triple EBL	Alt 6: SPUI
Planning-Level Cost Estimate	<\$1M	\$30-40M	\$60-70M	\$65-75M	\$100-110M

¹ Further details of the planning-level cost estimates are described with each alternative in the next section. These estimates do not include costs related to right-of-way acquisition.

As presented in Table 5, Alternative 1 provides the lowest cost option by a significant margin, with Alternative 1D as the second lowest cost. Alternatives 2 and 4 provide mid-range budget options and, when compared to Alternative 1D, highlight the estimated cost difference of widening Blue Lakes Boulevard (between the south end of the Perrine Bridge to College Road) to 3-lanes in each direction (i.e., about \$30 million). The cost differences between Alternatives 2 and 4 highlight the cost of adding the triple eastbound left-turn at the Blue Lakes Boulevard / Pole Line Road intersection, estimated to be approximately \$2-5 million. Alternative 6 yields the most expensive estimate which accounts for the grade separated underpass structure. Alternative 6's earthwork, stormwater, and bridge estimates will all be further refined in the next task for the preferred alternative if it is selected.

TIER 2 ALTERNATIVES EVALUATION

The Tier 2 alternatives analysis evaluated five alternatives as listed below:

- Alternative 1: No-Build
- Alternative 1D: Ultimate No-Build
- Alternative 2: Widen Blue Lakes Blvd
- Alternative 4: Widen Blue Lakes Blvd + Triple Eastbound Left-Turn
- Alternative 6: Single Point Urban Interchange (SPUI)

These five alternatives were screened against the evaluation criteria. Table 6 shows the evaluation scoring results of the screening process. The scoring process used a scoring range of -2 (lowest score) to +2 (highest score) for five different scoring levels (-2, -1, 0, 1, 2). Table 6 also shows the weighted and unweighted results and respective rankings with the following weighted factors applied to criteria:

- Traffic Operations = 2x Weighting Factor
- Safety = 2x Weighting Factor

Table 6. Tier 2 Evaluation Scoring Results

Evaluation Criteria	Tier 2 Alternatives - Evaluation Scores				
	Alt 1: No-Build	Alt 1D: Ultimate No-Build	Alt 2: Widen BL	Alt 4: Triple EBL	Alt 6: SPUI
Traffic Operations	-2	-1	1	1	2
Safety	-1	0	0	0	0
Ped & Bike	-1	0	0	0	-1
Familiarity & Ease of Use	1	2	2	0	0
Freight	-1	1	1	1	2
Right of Way	1	0	-1	-1	-1
Access Impacts	0	-1	-1	-1	-2
<i>Total Score</i>	-3.0	1.0	2.0	0.0	0.0
Rank Un-Weighted (1=Best, 5=Worst)	5	2	1	3	3
<i>Total Weighted Score</i>	-6.0	0.0	3.0	1.0	2.0
Rank Weighted (1=Best, 5=Worst)	5	4	1	3	2
Additional Information (Not Part of Scoring)					
Planning Level Cost Estimate¹	<\$1M	\$30-40M	\$60-70M	\$65-75M	\$100-110M

¹Estimates do not include costs related to right-of-way acquisition.

As shown in Table 6, Alternative 2 is the highest ranked, followed by Alternative 6 and then Alternative 4 (utilizing the weighted scoring and ranking system).

The next section provides more context, key benefits/challenges, and the evaluation results for each alternative. VISSIM output data is provided in Attachment C. Detailed scoring results for each alternative are shown in Attachment D.

Alternative 1: No-Build

Alternative 1 is the no-build alternative. Alternative 1 provides a no-build comparison to the other alternatives. It also provides an indication of how the system may perform with signal timing and coordination.

Table 7 provides a summary of Alternative 1 performance under the Tier 2 evaluation. Alternative 1 maintains the existing roadway configuration while incorporating signal timing improvements such as left turn phasing adjustments, signal retiming, and coordination of key movements on the Pole Line Road and Blue Lakes Boulevard corridors. This alternative requires no major roadway construction, can be implemented at a low cost, and would have the least impact on existing businesses and properties. However, it is not expected to adequately address long-term operational and safety needs, and traffic conditions are projected to worsen as traffic volumes increase.

Table 7. Tier 2 Evaluation Performance (Alternative 1)

Performance Metric Category	Alternative 1	% Change
Traffic Operations (VISSIM Analysis)		
Average Vehicle Delay (Blue Lakes Boulevard and Pole Line Road Int.)	92 seconds	N.A.
Maximum / Average Eastbound Left Queue (Blue Lakes Boulevard and Pole Line Road Int.)	1,375 feet / 975 feet	
Average Vehicle Delay (Entire Study Area)	527 seconds	
Latent Demand (Entire Study Area)	4105 vehicles	
Average Stops per Vehicle (Entire Study Area)	15 stops	
Other		
Impacted ROW (square ft)	0	N.A.
Estimated Cost ¹	<\$1,000,000	

¹Estimate does not include costs related to right-of-way acquisition.

Table 8 shows the number of accesses, by type, on roadway segments within the study area. This information will provide a basis of comparison for other alternatives.

Table 8. Alternative 1 Access Configurations

Roadway Segment	RIRO ¹ Accesses		RIROLI ² Accesses		Full Accesses	
	# of Accesses	# Change	# of Accesses	# Change	# of Accesses	# Change
Blue Lakes Boulevard (Perrine Bridge to Pole Line Road)	0	No Change	0	No Change	4	No Change
Blue Lakes Boulevard (Pole Line Road to College Road)	2	No Change	0	No Change	19	No Change
Pole Line Road (Fillmore Road to Blue Lakes Boulevard)	3	No Change	2	No Change	0	No Change
Pole Line Road (Blue Lakes Boulevard to Bridgeview Boulevard)	0	No Change	0	No Change	10	No Change
Bridgeview Boulevard (Blue Lakes Boulevard to Pole Line Road)	0	No Change	0	No Change	6	No Change

¹RIRO = Right-in, right-out movements only ²RIROLI = Right-in, right-out, left-in movements only

Alternative 1D: Ultimate No-Build (NB)

Alternative 1D identifies improvements that address traffic operations and safety deficiencies within the entire project study area, while avoiding major re-configurations to the Blue Lakes Boulevard and Pole Line Road intersection. The purpose of Alternative 1D is to present potential, conceptual improvements that address systemwide deficiencies, while also providing an alternative that serves as a basis of comparison for alternatives that include significant re-configurations to the Blue Lakes Boulevard and Pole Line Road intersection (as shown in Alternatives 2, 4, and 6). Alternative 1D was developed to address the deficiencies identified in *Technical Memorandum #1: Existing and Future No-Build Evaluation* (Reference 2) and builds on the mitigations presented in *Technical Memorandum #2: Tier 1 Alternatives Evaluation* (Reference 3). Alternative 1D also presents a framework of project components that can be implemented in a phased approach while still providing benefits to the project study area.

The concept for Alternative 1D is shown in Figure 3. Major components include:

- **Access Management.** Most accesses along Blue Lakes Boulevard are converted from full access to right-in/right-out movements through the implementation of raised medians, with left-ins provided in select locations based on site access restrictions, crash history, and driveway utilization. Similar modifications are proposed along Pole Line Road between Blue Lakes Boulevard and Bridgeview Boulevard. By restricting left-in and left-out movements, the alternative better meets ITD and City spacing guidelines, improves safety by removing conflict points, and improves traffic flow, while maintaining reasonable access to adjacent properties. Access management strategies are conceptual and should be further refined through coordination between ITD, the City of Twin Falls, and adjacent business and property owners.

- **New Traffic Signals.** Traffic signals are added at the Blue Lakes Boulevard / Cheney Drive and Pole Line Road / Locust Street intersections to improve safety, traffic operations for the minor street movements, and improve access to and from the adjacent commercial areas. These signals help facilitate trips that are restricted with proposed access management on Blue Lakes Boulevard and Pole Line Road. It should be noted that the proposed traffic signal at Blue Lakes Boulevard / Cheney Drive is approximately 1,320 feet south of the Blue Lakes Boulevard / Pole Line Road traffic signal does not meet spacing guidelines as presented in IDAPA 39.03.42 (2,640 feet for signal spacing) (Reference 4). The traffic signal at Blue Lakes Boulevard / Cheney Drive meets peak, four-hour, and eight-hour signal warrants. The traffic signal at Locust Street / Pole Line Road meets the eight- and four-hour warrants and does not meet the peak hour warrant.
- **Widening Bridgeview Boulevard.** Bridgeview Boulevard, a street owned and maintained by the City of Twin Falls, is widened to provide two northbound lanes, two southbound lanes, and a center median lane. The primary purpose of this improvement is to increase the capacity of the signalized intersection at Blue Lakes Boulevard / Bridgeview Boulevard. The additional southbound lane would provide better utilization for the southbound left-turn movement and decrease the green time at the traffic signal needed for that movement (providing additional green time to the northbound movement). To avoid ROW impacts, the roadway could be configured to include two southbound lanes (to improve the lane utilization of the southbound left-turn from Blue Lakes Boulevard), one northbound lane, and turn lanes at intersections.

Table 9 provides a summary of Alternative 1D performance under the Tier 2 Evaluation. Table 9 shows the number of accesses, by type, on roadway segments within the study area, and the changes compared to Alternative 1.

Table 9. Tier 2 Evaluation Performance (Alternative 1D)¹

Performance Metric Category	Alternative 1D	% Change from Alternative 1
Traffic Operations (VISSIM Analysis)		
Average Vehicle Delay (Blue Lakes Boulevard and Pole Line Road Int.)	110 seconds	20% increase
Maximum / Average Eastbound Left Queue (Blue Lakes Boulevard and Pole Line Road Int.)	1350 feet / 1050 feet	2% decrease / 8% decrease
Average Vehicle Delay (Entire Study Area)	428 seconds	19% decrease
Latent Demand (Entire Study Area)	2945 vehicles	28% decrease
Average Stops per Vehicle (Entire Study Area)	12 stops	20% decrease
Other		
Impacted ROW	1.9 acres	N/A
Estimated Cost ²	\$30-40M	> 100% increase

¹Table only summarizes performance metrics that were evaluated in further detail in the Tier 2 evaluation. For further information regarding the Alternative's performance, see Attachment C.

²Estimate does not include costs related to right-of-way acquisition.

Alternative 1D as a network has significant improvements with overall vehicle delay, latent demand, and average vehicle stops compared to Alternative 1. Alternative 1D does not substantially improve vehicle delay or capacity at Blue Lakes Boulevard / Pole Line Road intersection. The majority of ROW impacts are due to the Bridgeview Boulevard widening. The estimated cost of all Alternative 1D components is \$30-40M.

Table 10. Alternative 1D Access Configurations¹

Roadway Segment	RIRO Accesses ²		RIROLI Accesses ³		Full Accesses	
	# of Accesses	# Change from Alt 1	# of Accesses	# Change from Alt 1	# of Accesses	# Change from Alt 1
Blue Lakes Boulevard (Perrine Bridge to Pole Line Road)	3	+1	4	+4	0	-4
Blue Lakes Boulevard (Pole Line Road to College Road)	18	+16	3	+3	0	-19
Pole Line Road (Fillmore Road to Blue Lakes Boulevard)	4	+1	0	-2	0	No Change
Pole Line Road (Blue Lakes Boulevard to Bridgeview Boulevard)	3	+3	2	+2	2	-8
Bridgeview Boulevard (Blue Lakes Boulevard to Pole Line Road)	0	No Change	2	+2	4	-4

¹ Access changes are compared to Alternative 1. ²RIRO = Right-in, right-out movements only ³RIROLI = Right-in, right-out, left-in movements only

Compared with Alternative 1 (existing conditions), all the full accesses on Blue Lake Boulevard between Perrine Bridge and Pole Line Road were modified to RIROLI accesses (i.e., left-outs are restricted at Canyon Springs Road and Perrine Street) and new RIRO accesses are added on the north of the segment to serve the northern shopping centers. Along Blue Lakes Boulevard between Pole Line Road and College Road, all full-access driveways were revised to RIRO or RIROLI access configurations. Of the 21 total accesses provided along this corridor segment, five are RIROLI accesses, with the remaining accesses operating as RIRO. On the west side of Pole Line Road, the Costco and Target accesses were converted to RIRO configurations. On the east side of Pole Line Road, full-access driveways were consolidated through the removal of three existing accesses, and raised medians were added to restrict left-in and left-out movements. Lastly, on Bridgeview Boulevard, the two full-access driveways serving the northern shopping center were converted to RIROLI access configurations through the installation of raised medians.

Table 11 summarizes the benefits, challenges, and additional considerations of Alternative 1D.

Table 11. Alternative 1D Benefits, Challenges, and Additional Considerations

Benefits	Challenges	Other Considerations
<ul style="list-style-type: none"> ■ Modification to signal timing and coordination, access modifications, and eastbound turn lane modifications (on Pole Line Road) improves system traffic operations. Average vehicle delay = 428 seconds (~20% improvement compared to Alternative 1). ■ Lower cost relative to other alternatives; Treatments can be implemented in phases to align with future traffic growth and available funding. ■ Safety is improved through addition or expansion of buffered sidewalks, re-configuration of right-turn slip lanes at the Blue Lakes Boulevard / Pole Line Road intersection, and removal of conflict points through access management. ■ New traffic signals at Blue Lakes Boulevard / Cheney Drive and Pole Line Road / Locust Street improve safety for turning vehicles and provide crossing opportunities for people walking and biking. 	<ul style="list-style-type: none"> ■ There are multiple, signalized intersections that are over-capacity with significant queue spillback, including: <ul style="list-style-type: none"> – Blue Lakes Blvd / Pole Line Road – Blue Lakes Boulevard / Bridgeview Boulevard – Pole Line Road / Filmore Street (Eastbound movement impacted by queue spillback from Pole Line Road) ■ Egress of traffic from the area west of Blue Lakes Boulevard and north of Canyon Springs Road (roadways in this area are primarily private, see Attachment E for potential mitigations). ■ Widening of Bridgeview Boulevard requires significant ROW. ■ Access restrictions on ITD and City roadways . 	<ul style="list-style-type: none"> ■ Additional coordination with adjacent property and business owners is needed to refine and implement the proposed access management modifications. ■ Further evaluation is needed to identify a phasing plan for the proposed improvements, including how the improvements may be phased with Alternatives 2, 4, or 6.

All improvements included in Alternative 1D are also incorporated into the other Tier 2 alternatives, establishing a consistent set of off-site roadway and intersection improvements across all scenarios. As such, the benefits, challenges, and additional considerations identified for Alternative 1D generally apply to the other alternatives as well. This approach allows for a direct comparison of the alternative treatments proposed at the Blue Lakes Boulevard and Pole Line Road intersection while holding other system improvements constant.

Alternative 2: Widen Blue Lakes Blvd

Alternative 2 includes all of the design components of Alternative 1D and widens Blue Lakes Boulevard to three lanes per direction from south of the Perrine Bridge to College Road. The purpose of the Blue Lakes Boulevard widening is to improve traffic operations and mitigate congestion, especially at the signalized intersections on the corridor. Table 12 provides a summary of Alternative 2 performance under the Tier 2 Evaluation. Table 13 shows the number of accesses, by type, on roadway segments within the study area, and the changes compared to Alternative 1D.

Table 12. Tier 2 Evaluation Performance (Alternative 2)¹

Performance Metric Category	Alternative 2	% Change from Alternative 1D
Traffic Operations (VISSIM Analysis)		
Average Vehicle Delay (Blue Lakes Boulevard and Pole Line Road Int.)	67 seconds	39% decrease
Maximum / Average Eastbound Left Queue (Blue Lakes Boulevard and Pole Line Road Int.)	1250 feet / 650 feet	7% decrease / 38% decrease
Average Vehicle Delay (Entire Study Area)	173 seconds	60% decrease
Latent Demand (Entire Study Area)	828 vehicles	72% decrease
Average Stops per Vehicle (Entire Study Area)	5 stops	58% decrease
Other		
Impacted ROW	4.6 acres	140% increase
Estimated Cost ²	\$60-70M	85% increase

¹Table only summarizes performance metrics that were evaluated in further detail in the Tier 2 evaluation. For further information regarding the Alternative's performance, see Attachment C.

²Estimate does not include costs related to right-of-way acquisition.

Table 13. Alternative 2 Access Configurations¹

Roadway Segment	RIRO Accesses ²		RIROLI Accesses ³		Full Accesses	
	# of Accesses	% Change from Alt 1D	# of Accesses	% Change from Alt 1D	# of Accesses	% Change from Alt 1D
Blue Lakes Boulevard (Perrine Bridge to Pole Line Road)	3	No Change	4	No Change	0	No Change
Blue Lakes Boulevard (Pole Line Road to College Road)	18	No Change	3	No Change	0	No Change
Pole Line Road (Fillmore Road to Blue Lakes Boulevard)	4	No Change	0	No Change	0	No Change
Pole Line Road (Blue Lakes Boulevard to Bridgeview Boulevard)	3	No Change	2	No Change	2	No Change
Bridgeview Boulevard (Blue Lakes Boulevard to Pole Line Road)	0	No Change	2	No Change	4	No Change

¹ Access changes are compared to Alternative 1D, not Alternative 1. ²RIRO = Right-in, right-out movements only

³RIROLI = Right-in, right-out, left-in movements only

Alternative 2 significantly improves traffic operations at the Blue Lakes Boulevard / Pole Line Road intersection and across the study area, significantly (near 60% improvement for the study area compared to Alternative 1D). The impacted ROW and cost see a significant increase from Alternative 1D (140% increase to ROW) due to the additional lanes running north and southbound on Blue Lakes Boulevard. Access modifications remain the same as Alternative 1D. However, the need to minimize and restrict left-in and out movements on Blue Lakes Boulevard is amplified by the widening of Blue Lakes Boulevard and creation of additional conflict points between turning and through vehicles.

Table 14 summarizes the benefits, challenges, and additional considerations of Alternative 2.

Table 14. Alternative 2 Benefits, Challenges, and Additional Considerations¹

Benefits	Challenges	Other Considerations
<ul style="list-style-type: none"> ■ Widening of Blue Lakes Boulevard significantly improves traffic operations within the project study area, including at the Blue Lakes Boulevard and Pole Line Road intersection. ■ Provides opportunity to improve sidewalks on Blue Lakes Boulevard in conjunction with widening. ■ Widening can avoid impacts to most buildings and structures. ■ Same benefits identified in Table 11 for Alternative 1D. 	<ul style="list-style-type: none"> ■ High ROW needs and impacts to parcels on Blue Lakes Boulevard. ■ Increased crosswalk widths. ■ Utilization of third northbound lane will be limited due to eventual need to merge back to two lanes prior to Perrine Bridge. ■ Same challenges identified in Table 11 for Alternative 1D. 	<ul style="list-style-type: none"> ■ Additional widening amplifies need to restrict left-ins and left-outs on Blue Lakes Boulevard. ■ Same other considerations identified in Table 11 for Alternative 1D.

¹Table only summarizes benefits, challenges, and considerations that are unique to Alternative 2, other components are captured in Alternative 1D summary.

Alternative 4: Widen BL + Triple EBL

Alternative 4 further builds upon the design concept of Alternative 2. It includes the design components of Alternative 1D, the widening of Blue Lakes Boulevard to three lanes per direction from the Perrine Bridge to College Road (Alternative 2) and also adds a third left-turn lane at the Blue Lakes Boulevard / Pole Line Road intersection. Major improvements (that are not included in Alternatives 1D and 2) include the addition a third left-turn lane at the Blue Lakes Boulevard and Pole Line Road intersection. Table 15 provides a summary of Alternative 4 performance under the Tier 2 Evaluation (Reference 3). Table 16 shows the number of accesses, by type, on roadway segments within the study area, and the changes compared to Alternative 1D.

Table 15. Tier 2 Evaluation Performance (Alternative 4)¹

Performance Metric Category	Alternative 4	% Change from Alternative 1D
Traffic Operations (VISSIM Analysis)		
Average Vehicle Delay (Blue Lakes Boulevard and Pole Line Road Int.)	69 seconds	37% decrease
Maximum / Average Eastbound Left Queue (Blue Lakes Boulevard and Pole Line Road Int.)	550 feet / 250 feet	59% decrease / 76% decrease
Average Vehicle Delay (Entire Study Area)	174 seconds	59% decrease
Latent Demand (Entire Study Area)	900 vehicles	69% decrease
Average Stops per Vehicle (Entire Study Area)	5 stops	58% decrease
Other		
Impacted ROW	5.0 acres	161% increase
Estimated Cost ²	\$65-75M	90% increase

¹Table only summarizes performance metrics that were evaluated in further detail in the Tier 2 evaluation. For further information regarding the Alternative's performance, see Attachment C.

²Estimate does not include costs related to right-of-way acquisition.

Table 16. Alternative 4 Access Configurations¹

Roadway Segment	RIRO Accesses ²		RIROLI Accesses ³		Full Accesses	
	# of Accesses	% Change from Alt 1D	# of Accesses	% Change from Alt 1D	# of Accesses	% Change from Alt 1D
Blue Lakes Boulevard (Perrine Bridge to Pole Line Road)	3	No Change	4	No Change	0	No Change
Blue Lakes Boulevard (Pole Line Road to College Road)	18	No Change	3	No Change	0	No Change
Pole Line Road (Fillmore Road to Blue Lakes Boulevard)	4	No Change	0	No Change	0	No Change
Pole Line Road (Blue Lakes Boulevard to Bridgeview Boulevard)	3	No Change	2	No Change	2	No Change
Bridgeview Boulevard (Blue Lakes Boulevard to Pole Line Road)	0	No Change	2	No Change	4	No Change

¹ Access changes are compared to Alternative 1D, not Alternative 1. ²RIRO = Right-in, right-out movements only

³RIROLI = Right-in, right-out, left-in movements only

While Alternative 4 provides significant systemwide traffic operations benefits compared to Alternative 1D, the addition of the triple left-turn provides marginal improvements to vehicle delay systemwide and at the Blue Lakes Boulevard / Pole Line Road intersection (less than 1%) to Alternative 2 and increases the ROW impacts and cost (increase of 10% and 3%, respectively). The primary benefit that Alternative 4 provides, compared to Alternative 2, is reduction of the eastbound left-turn queue (approximately 50% reduction). Access modifications remain the same as Alternative 1D.

Table 17 summarizes the benefits, challenges, and additional considerations of Alternative 4.

Table 17. Alternative 4 Benefits, Challenges, and Additional Considerations¹

Benefits	Challenges	Other Considerations
<ul style="list-style-type: none"> Same benefits identified in Table 12 and Table 14 for Alternatives 1D and 2. Improves eastbound left-turn queue significantly (50% reduction from Alternative 2). 	<ul style="list-style-type: none"> Same challenges identified in Table 11 and Table 14 for Alternatives 1D and 2. Additional ROW needs on Pole Line Road (compared to Alternative 2). Third northbound lane and third left-turn lane utilization will be limited due to eventual need to merge back to two lanes prior to Perrine Bridge. 	<ul style="list-style-type: none"> Additional widening amplifies need to restrict left-ins and left-outs on Blue Lakes Boulevard. Same considerations identified in Table 11 and Table 14 for Alternatives 1D and 2.

¹Table only summarizes benefits, challenges, and considerations that are unique to Alternative 4, other components are captured in Alternatives 1D or 2 summaries.

Alternative 6: Single Point Urban Interchange (SPUI)

Alternative 6 re-configures the Blue Lakes Boulevard and Pole Line Road intersection to a grade-separated, single point urban interchange (SPUI), where the northbound and southbound through movements (Blue Lakes Boulevard) are free flowing and bypass the traffic signal at the intersection. Alternative 6 also includes the design components of Alternative 1D. The SPUI includes the following:

- Additional travel lanes on Blue Lakes Boulevard
 - Two, additional northbound through lanes (four total) from Pole Line Road to Bridgeview Boulevard, to facilitate merging of the eastbound left-turn and northbound through traffic.
 - One, additional northbound through lane (three total) from Cheney Drive to Pole Line Road to initiate the off-ramp.
 - One, additional southbound through lane (three total) from Pole Line Road to College Road to avoid merge and weaving conflicts north of Cheney Drive.
- Removal of all left-in and left-out movements between Cheney Drive and Bridgeview Drive.

The Alternative 6 concept design assumes that Blue Lakes Boulevard will function as an underpass and that the traffic signal will stay at-grade. The purpose of assuming Blue Lakes Boulevard as an underpass (as opposed to an overpass) is to avoid the visual, aesthetic impacts of a grade-separated structure. The extents and configuration of grade-separation, including the constructability and cost of an overpass versus underpass, is subject to change based on sub-surface investigations and survey data. Existing City sewage lines (ranging from 8 inches to 21 inches in diameter) exist within the anticipated footprint of the SPUI and would likely require relocation if the underpass was implemented. Table 18 provides a summary of Alternative 6 performance under the Tier 2 Evaluation. Table 19 shows the number of accesses, by type, on roadway segments within the study area, and the changes compared to Alternative 1D.

Table 18. Tier 2 Evaluation Performance (Alternative 6)¹

Performance Metric Category	Alternative 6	% Change from Alternative 1D
Traffic Operations (VISSIM Analysis)		
Average Vehicle Delay (Blue Lakes Boulevard and Pole Line Road Int.)	36 seconds	67% decrease
Maximum / Average Eastbound Left Queue (Blue Lakes Boulevard and Pole Line Road Int.)	400 feet / 50 feet	57% decrease / 95% decrease
Average Vehicle Delay (Entire Study Area)	231 seconds	46% decrease
Latent Demand (Entire Study Area)	1757 vehicles	40% decrease
Average Stops per Vehicle (Entire Study Area)	9 stops	25% decrease
Other		
Impacted ROW	5.3 acres	163% increase
Estimated Cost ²	\$100-110M	190% increase

¹Table only summarizes performance metrics that were evaluated in further detail in the Tier 2 evaluation. For further information regarding the Alternative's performance, see Attachment C.

²Estimate does not include costs related to right-of-way acquisition.

Table 19. Alternative 6 Access Configurations¹

Roadway Segment	RIRO Accesses ²		RIROLI Accesses ³		Full Accesses	
	# of Accesses	# Change from Alt 1D	# of Accesses	# Change from Alt 1D	# of Accesses	# Change from Alt 1D
Blue Lakes Boulevard (Perrine Bridge to Pole Line Road)	7	+4	0	-4	0	No Change
Blue Lakes Boulevard (Pole Line Road to College Road)	17	-1	2	-1	0	No Change
Pole Line Road (Fillmore Road to Blue Lakes Boulevard)	4	No Change	0	N.A.	0	No Change
Pole Line Road (Blue Lakes Boulevard to Bridgeview Boulevard)	3	No Change	2	N.A.	2	No Change
Bridgeview Boulevard (Blue Lakes Boulevard to Pole Line Road)	0	No Change	2	N.A.	4	No Change

¹ Access changes are compared to Alternative 1D, not Alternative 1. ²RIRO = Right-in, right-out movements only

³RIROLI = Right-in, right-out, left-in movements only

Alternative 6 provides significant traffic operations benefits at the Blue Lakes Boulevard and Pole Line Road intersection compared to Alternatives 1D, 2, and 4. The SPUI provides additional capacity and reduces intersection delay by over 60%. The intersection is projected to operate at LOS C which is lower than all other alternatives (LOS E or F). While Alternative 6 has similar ROW impacts as the other alternatives, the cost is significantly higher (~\$35M more than Alternative 4) and it requires the removal of five left-in accesses on Blue Lakes Boulevard.

Alternative 6 does not provide the same level of network benefit as Alternatives 2 or 4 (average vehicle delay is about 13% higher for Alternative 6, compared to Alternatives 2 and 4). This can be attributed to the following factors:

- **Access Restrictions:** Alternative 6 requires the highest number of access restrictions due to grade-separation and roadway widenings and trips are re-routed to other intersections, increasing vehicle delay and vehicle queues at those intersections. Most notably, northbound left-turns increase by approximately 100% at the Blue Lakes Boulevard / Bridgeview Boulevard intersection due to the closure of two, existing northbound left-turns from Blue Lakes Boulevard (to Canyon Springs Road and Perrine Street). To accommodate the increased left-turn volume and avoid queue spill-back into the northbound-through movement, green time is reduced at conflicting movements, including the southbound-through. This causes significant southbound queue spill-back onto the Perrine Bridge and impacts US 93 southbound travel time.

- **Bottlenecks at Adjacent At-Grade Signals:** Capacity at the Blue Lakes Boulevard / Pole Line Road intersection increases significantly under Alternative 6, increasing the rate at which vehicles can access adjacent traffic signals. Delay and queuing increases at these intersections under Alternative 6 due to the lack of metering at the Blue Lakes Boulevard / Pole Line Road intersection and lack of excess capacity at these traffic signals. The increased delay at these traffic signals is reflected in the travel time results in Table 3.

To mitigate these factors and achieve similar or better system-wide vehicle delay as Alternatives 2 and 4, the following treatments need to be considered:

- **Blue Lakes Boulevard Widening:** The widening of Blue Lakes Boulevard to three lanes per direction south of Pole Line Road would address bottlenecks and improve vehicle flow south of the SPUI. If the SPUI is implemented at the Blue Lakes Boulevard / Pole Line Road intersection, widening south to Falls Avenue or Addison Avenue should be considered to capture the full capacity benefits (free flow travel on Blue Lakes Boulevard) provided by the SPUI.
- **Blue Lakes Boulevard / Bridgeview Boulevard Intersection:** Capacity improvements at this intersection are limited due to the presence of the Perrine Bridge north of the intersection, and the subsequent lack of alternative routes and inability to widen to three lanes per direction north of the intersection. Grade-separation of movements at this intersection, or the restriction of left-in or left-out movements, would be required for the intersection to operate under-capacity and process vehicle queues. Removal of left-in or left-out movements would severely limit access to properties and businesses west of the intersection, especially when paired with the restriction of other left-ins on Blue Lakes Boulevard required as part of Alternative 6 implementation. Grade-separation and creation of a full-movement interchange would have a high cost (an increase of at least \$20 million, excluding ROW acquisition costs) and would likely require full re-development of neighboring businesses or parcels to accommodate the interchange footprint and local road connections. In addition, potential options for interchange configurations are limited due to spacing with the SPUI at Pole Line Road (ramp merges and diverges on Blue Lakes Boulevard would have about one-quarter mile spacing). *Movement restrictions and grade-separation of this intersection were not considered as feasible options due to impacts to adjacent businesses and properties and high-cost. These options were not studied further as part of this alternative.*

Table 20 summarizes the benefits, challenges, and additional considerations of Alternative 6.

Table 20. Alternative 6 Benefits, Challenges, and Additional Considerations

Benefits	Challenges	Other Considerations
<ul style="list-style-type: none"> ■ Improves traffic operations and decreases vehicle delay at the Blue Lakes Boulevard / Pole Line Road intersection the most, compared to other alternatives. ■ The Blue Lakes Boulevard / Pole Line Road intersection operates at LOS C and with a significant amount of excess capacity, future-proofing the intersection beyond year 2050. ■ Widening and interchange structure can avoid impacts to most buildings and structures. ■ Safety benefits from removing left-turn conflicts from Blue Lakes Boulevard / Pole Line Road intersection. 	<ul style="list-style-type: none"> ■ High ROW needs and impacts to parcels on Blue Lakes Boulevard. ■ Least amount of flexibility in access management, compared to other alternatives. Requires removal of multiple left-in movements from Blue Lakes Boulevard. ■ Multi-stage (and potentially grade-separated) pedestrian crossings. ■ Potential weaving concerns for movements merging onto Blue Lakes Boulevard from SPUI on-ramps. ■ Underpass would require significant utility re-location (including sewer) and have significant stormwater drainage needs. 	<ul style="list-style-type: none"> ■ Sub-surface investigations needed to determine cost and feasibility of underpass and overpass configurations (likely to be basalt bedrock). Founding the structure on basalt and utilizing cuts in the basalt could potentially reduce the cost of retaining walls for the underpass. ■ The significant capacity improvement at the Blue Lakes Boulevard / Pole Line Road intersection creates new bottlenecks at adjacent signalized intersections, especially at Blue Lakes Boulevard / Bridgeview Boulevard and hampers the ability of the alternative to provide a systemwide benefit. ■ Improving capacity at Blue Lakes Boulevard / Bridgeview Boulevard intersection would severely impact adjacent businesses and properties and increase the alternative cost by at least 20%.

RECOMMENDATIONS & NEXT STEPS

The information below summarizes the performance of the Tier 2 alternatives:

- **Alternative 1D (Ultimate No-Build)** provides potential, conceptual improvements that address systemwide deficiencies, but fails to improve traffic operations significantly at the Blue Lakes Boulevard and Pole Line Road intersection. This alternative should be used to identify near- and long-term improvements to be phased into the transportation system, including outside of the Blue Lakes Boulevard and Pole Line Road intersection.
- **Alternative 2 (Widen Blue Lakes Boulevard)** provides the highest level of systemwide benefits (i.e., greatest reduction in overall vehicle delay). It is also the lowest cost alternative (besides Alternative 1D), but still has significant ROW impacts.
- **Alternative 4 (Widen Blue Lakes Boulevard + Triple Eastbound Left-Turns)** provides similar levels of systemwide benefits as Alternative 2, but provides improvement to the eastbound left-turn queue at the Blue Lakes Boulevard / Pole Line Road intersection. The cost and overall ROW impacts are slightly higher than Alternative 2.
- **Alternative 6 (Single Point Urban Interchange)** provides the greatest capacity benefits to the Blue Lakes Boulevard / Pole Line Road intersection. However, it is almost twice the cost of Alternatives 2 and 4 and does not provide systemwide delay benefits as those alternatives, due to required access restrictions and bottlenecks at adjacent traffic signals. Mitigation of these bottlenecks would require significant restriction of vehicle movements and/or grade-separation of adjacent traffic signals, which were not considered feasible as part of this project.

Recommendations

Based on the results of the Tier 2 evaluation, the consultant recommends selection of **Alternative 2: Widen Blue Lakes Boulevard** as the preferred alternative. The consultant recommends further conversations with business and property owners to refine access modifications.

The project team presented the Tier 2 evaluation and recommendations to the TAG and PAG in August and September 2026 to gather feedback. The goal of these conversations was to establish consensus on the preferred alternative. The TAG and PAG both agreed to select **Alternative 2: Widen Blue Lakes Boulevard** as the preferred alternative. With this selection, the project team will make refinements to the alternative and begin development of an implementation and phasing plan. In addition, **Alternative 6: Single Point Urban Interchange** received some interest for long-term implementation with a desire to start preserving ROW for the alternative. There was discussion about implementing this alternative if the Perrine Bridge was eventually widened to six lanes.

The project team also presented the Tier 2 evaluation and recommendations to business and property owners in the project area. This included one-on-one meetings with business and property owners in August and September 2026 and a Business and Property Owner (BPO) Advisory Meeting on September 17th. The purpose of these meetings was to obtain feedback on the Tier 2 alternatives and discuss potential impacts to ROW, access, or business operations. The Business and Property Owner Advisory Meeting resulted in general support for **Alternative 2: Widen Blue Lakes Boulevard** as the preferred alternative. There was also some interest in pursuing **Alternative 6: Single Point Urban Interchange** as it

provided the greatest, long-term benefit, but also concerns of the alternative's impacts to adjacent ROW and accesses.

Based on the consultant recommendation and discussions with the TAG, PAG, and Business and Property Owners, **Alternative 2: Widen Blue Lakes Boulevard** has been identified as the preferred alternative (with long-term considerations for **Alternative 6: Single Point Urban Interchange**).

Next Steps

The next steps will include refining the preferred alternative based on feedback from the TAG, PAG, and Business and Property Owners and development of an implementation and phasing plan. These refinements will take into consideration feedback already received through the TAG, PAG, and BPO meetings as well as further engagement. There will be additional one-on-one meetings with business/property owners based on property-specific impacts and requests to meet. An informational public open house and presentations to the Twin Falls City Council, Magic Valley Metropolitan Planning Organization, and other stakeholders are anticipated to occur in early-2027.

The preferred alternative will be split into different phases and implementation steps to provide ITD with near-term action items as well as improvements that can take place in the next 5, 10, and 20+ years. Ultimately, the refined and phased Alternative 2: Widen Blue Lakes Boulevard will be packaged into ITD project charters so that ITD can program and advance funding for project construction.

REFERENCES

1. Kittelson & Associates, Inc. *Existing and Future No-Build Conditions Technical Memorandum*. February 2026.
2. Kittelson & Associates, Inc. *Initial Alternatives Evaluation Technical Memorandum*. March 2026.
3. Kittelson & Associates, Inc. *Tier 1 Alternatives Evaluation Technical Memorandum*. June 2026.
4. Idaho Transportation Department (ITD). *IDAPA 39.03.42, Rules Governing Highway Right-of-Way Encroachments on State Rights-of-Way*. Effective July 1, 2024. Boise, Idaho.
5. Transportation Research Board. *Highway Capacity Manual, 7th Edition*, 2022.

ATTACHMENTS

- A. Primary Design Criteria
- B. Cost Estimation Summary
- C. VISSIM Modeling Operations
- D. Alternative Scoring Summary
- E. Filmore Street Roundabout Potential Re-Configuration
- F. US-93 and Golf Course Road SB Auxiliary Through Lane Exhibit