

Comparison of North Legacy to Legacy Connection Study Options

Criteria	Option 1	Option 2
Direct connection to I-15	Connection to I-15 is provided at the north end of the study area near Lund Lane. A collector/distributor system is developed north of the Park Lane interchange to allow for movements to the North Legacy Parkway. Operationally, these connections continue to function with acceptable levels of service through 2030, but could potentially degrade to unacceptable delays by 2040. Points of potential congestion will be the system connection to I-15 due to the tight radii of the ramps. Traffic with a destination of North Legacy will continue to move through the I-15/Park Lane/US-89 interchange, causing it to suffer with the increasing traffic.	Connection to I-15 is provided at the north end of the study area near Lund Lane. A collector/distributor system is developed north of the Park Lane interchange to allow for the movements to Legacy Parkway. Operationally, these connections continue to function with acceptable levels of service through 2030, but could potentially degrade to unacceptable delays by 2040. Points of potential congestion will be the system connection to I-15 due to the tight radii of the ramps. Traffic with a destination of North Legacy will continue to move through the I-15/Park Lane/US-89 interchange, causing it to experience additional delays with the increasing traffic.
Direct connection to the Legacy Parkway	Connection to the existing Legacy Parkway is made at the south end of the study area, south of Glovers Lane. This connection will result in impacts to adjoining wetlands, and the Great Salt Lake floodplain, which could be a fatal flaw in the environmental analysis. Obtaining permits from Federal and State agencies with environmental oversight would be a long and expensive process.	Connection to the existing Legacy Parkway is made south of Glovers Lane. This connection will result in major impacts to adjoining wetlands, and the Great Salt Lake floodplain, which could be a fatal flaw in the environmental analysis. Obtaining permits from Federal and State agencies with environmental oversight would be a long and expensive process.
Local access to the Legacy/North Legacy Parkway.	It is expected that local access will be made by connecting to the existing Park Lane.	Potential local access connections could be available at 1100 West, or at Clark Lane. Further study would be required to determine the best option for the local street network. The location of this corridor far away from the major commercial areas in Farmington would discourage the use of Legacy Parkway as an alternative to I-15. The increase in travel time necessary to access Legacy Highway would likely result in a disproportionate percentage of traffic choosing to use the I-15 corridor. Traffic on the local street network could also increase as drivers search for multiple alternate paths to access I-15 at points other than the Park Lane interchange.
Meet the transportation needs based on 2040 traffic predictions	Overall, this option will function at adequate levels, but it is anticipated that the study area will be at or near failure by the design year of 2040.	This option would result in increased traffic on I-15 and an under-utilized Legacy Parkway through the study area. It is likely that the Park Lane interchange would fail sooner with this option than when compared to the other studied concepts.
Analysis	By providing local access to Park Lane near the commercial developments, some traffic will be encouraged to use Legacy Parkway, drawing traffic away from the I-15 Park Lane interchange. However, all users whose ultimate destination is SB I-15 will continue to use the Park Lane ramps to access I-15, since the North Legacy/I-15 system interchange is sited north of the commercial development. There is some concern that the wide right-of-way will have negative impacts on adjacent neighborhoods, acting as a wall between neighborhoods. The impacts to wildlife and wetlands would likely face similar challenges experienced by the construction of the Legacy Parkway.	This concept has fewer impacts on neighborhoods as a dividing force. The impacts to wildlife and wetlands would likely face similar challenges experienced by the construction of the Legacy Parkway. Impacts to the local transportation system are somewhat unfavorable. Operational characteristics for the regional network are the least desirable of all the concepts reviewed.
Planning Level Rough Cost Estimate	Total cost: \$330 million: Construction: \$200 mill / Right-of-Way: \$100 mill / Environmental Mitigation: \$30 mill	Total cost: \$310 million: Construction: \$200 million / Right-of-Way: \$50 million / Environmental Mitigation: \$60 million

Criteria	Option 3	Option 4
Direct connection to I-15	Direct connection to I-15 is made between Glovers Lane and State Street. This option has the advantage of routing traffic bound for the North Legacy Parkway away from the Park Lane interchange. The ramps at this south interchange have a higher design speed than the north interchange option.	Although this proposed alignment parallels I-15 near Lund Lane, the actual connection with I-15 occurs between State Street and Glovers Lane. To extend between Park Lane and State Street, the Parkway Connection must be elevated above Park Lane and the Station Park commercial development.
Direct connection to the Legacy Parkway	Direct connection to the Legacy Parkway is made at the same system interchange with I-15. Overall land impacts are somewhat less by combining both direct connections in the same area. Wetland/wildlife impacts are reduced by creating this connection north of Glovers Lane.	Direct connection to the existing Legacy Parkway is in the same location as the I-15 connection.
Local access to the Legacy/North Legacy Parkway.	It is expected that local access will be made to connect to the existing Park Lane. Local access provided to this street will encourage the use of Legacy due to the close proximity to commercial development, and the ability to avoid the Park Lane interchange by using the Legacy interchange.	This option provides the least favorable local access connections to the Legacy Parkway. A local connection could potentially be constructed somewhere between Sheppard Lane and Park Lane. However, because of the distance from commercial centers and out of direction travel, that connection does little to improve congestion on the local street network or draw traffic away from the Park Lane interchange.
Meet the transportation needs based on 2040 traffic predictions	Our review of this concept indicates that the system interchanges function well to the 2040 design year. Traffic at the Park Lane interchange is congested, although the availability to use the Legacy Parkway helps to alleviate some of this traffic.	Our review indicates that this option will operate I-15 at an adequate level of service through the 2040 design year.
Analysis	Similar to Option 1, there is concern that the wide right-of-way will have negative impacts on adjacent neighborhoods, acting as a wall between neighborhoods. The impacts to wildlife and wetlands are less than the first two options, but not entirely avoided. This option is the most favorable to the local transportation system, and has the best operational characteristics for the regional network.	This option is the least favorable of all options for the local transportation system, although the regional system functions adequately with this option. This option will incur major impacts over the Station Park commercial development and the Park Lane area.
Planning Level Rough Cost Estimate	Total cost: \$260 million: Construction: \$150 mill. / Right-of-Way: \$100 mill / Environmental Mitigation: \$10 million.	Total cost: \$410 million: Construction: \$300 mill. / Right-of-Way: \$100 mill. / Environmental Mitigation: \$10 mill.

After reviewing these four options, the technical analysis concluded that **Option 3** best met the study criteria provided.