

Alternatives Comparison			
Alternative	Alternative 1 Frontage Road Modifications	Alternative 2A ParCLO	Alternative 2B DDI
Estimated Construction Cost	\$30M-\$40M	\$100M-\$110M	\$110M-\$120M
Right-of-Way Impacts	Anticipated: - Required right-of-way = 4 parcels - Total takes = none - Temporary construction easements = 1	Anticipated: - Required right-of-way = 25 parcels - Total takes = 7 - Additional temporary construction and drainage easements	Anticipated: - Required right-of-way = 30 parcels - Total takes = 9 - Additional temporary construction and drainage easements
Utility Impacts	Potential for: - Minimal storm sewer modifications - Underground utility rerouting to avoid proposed drainage	Potential for: - major gas main replacement / relocation - sanitary sewer relocation - major aerial utility relocations along SR 0413 - minor aerial utility relocations at proposed roundabouts - Underground utility rerouting in areas of proposed drainage	Potential for: - major gas main replacement / relocation - sanitary sewer relocation - major aerial utility relocations along SR 0413 - minor aerial utility relocations at proposed roundabouts - Underground utility rerouting in areas of proposed drainage
Environmental Impacts	None anticipated	Potential wetland / stream impacts and hazardous waste impacts	Potential wetland / stream impacts and hazardous waste impacts
Structure Impacts	1 superstructure replacement SR 0001 over SR 2008 (West Highland Avenue) 1 full structure replacement of West Interchange Road over SR 0001	1 superstructure replacement: SR 0001 over SR 2008 (West Highland Avenue) 3 full structure replacements: West Interchange Road over SR 0001, SR 0413 (PA 413 / Pine Street) over SR 0001, Corn Crib Lane over SR 0001 - Additional retaining walls and potential noise walls	1 superstructure replacement: SR 0001 over SR 2008 (West Highland Avenue) 3 full structure replacements: West Interchange Road over SR 0001, SR 0413 (PA 413 / Pine Street) over SR 0001, Corn Crib Lane over SR 0001 - Additional retaining walls and potential noise walls - Two additional structures or one additional structure plus additional span on SR 0413 structure

Alternatives Comparison (cont.)			
Design Exceptions	4	None anticipated	None Anticipated
Constructability	Moderate complexity	Most complexity	Most complexity
Public Input	Public not in favor predominantly due to lack of potential for noise mitigation	Elected officials indicated preference for interchange option due to potential for noise mitigation. There is also some concern from the general public regarding the effects on traffic on the local road network.	Elected officials indicated preference for interchange option due to potential for noise mitigation. There is also some concern from the general public regarding the effects on traffic on the local road network.
Traffic Operations	- SR 0001 ramp merges / diverges expected to operate acceptably - Study area intersections expected to operate similarly to No Build conditions	- SR 0001 ramp merges / diverges expected to operate acceptably - Interchange intersections expected to operate acceptably in AM (PM) peak hours - SR 0413 & Gillam / SB Ramps - LOS C (C) - SR 0413 & Woods/NB Ramps - LOS B (B) - Adjacent study area intersections expected to experience increased delay and queues due to added volume	- SR 0001 ramp merges / diverges expected to operate acceptably - Interchange intersections expected to operate acceptably in AM (PM) peak hours - SR 0413 & SB Ramps: - LOS B (B) - LOS A (A) - SR 0413 & NB Ramps - LOS A (B) - LOS A (A) - Adjacent study area intersections expected to experience increased delay and queues due to added volume
Safety	Predicted Crash Frequency Freeway Segments - similar to other Alternatives	Predicted Crash Frequency - Freeway Segments - similar to other Alternatives - Interchange Intersections – 10 or less, but higher than other alternatives	Predicted Crash Frequency - Freeway Segments - similar to other Alternatives - Interchange Intersections – 3 or less, lower than other alternatives
Access	- Access between SR 0001 mainline and Frontage Roads consolidated to the beginning and end of the frontage roads - No change in local road access to Frontage Roads	- Frontage Roads Removed - Access between SR 0001 mainline and local road network consolidated to 2 interchanges - Full Access between SR 0413 and Gillam Avenue and Woods Drive intersections is maintained	- Frontage Roads Removed - Access between SR 0001 mainline and local road network consolidated to 2 interchanges - Access provided between SR 0001 Southbound and Gillam Avenue - Access between SR 0413 and Gillam Avenue removed - Access between SR 0413 and Woods Drive restricted to right-in/right-out only on Woods Drive