

Appendix C: Summary of Pros and Cons by Alternative

Table C-1: Pros and Cons for Alternative 1 (Alternative B from Phase 1)

Elevated Lanes at Major Intersections/Bus or Rail in Separate Lanes	
<i>Pros</i>	<i>Cons</i>
Lower capital costs as compared to 100% elevated	Costly; requires structures over intersections
Decreased auto and transit travel times	Higher ROW costs
Improved intersection level of service	Higher taxpayer costs
Consistent with County goals	Requires signal upgrades to allow for crossings
Significant increased transit capacity	Reduced auto access to retail
Transit stations may stimulate economic growth	Left turns and crossings only at signal
Some increased freight mobility	Requires ROW at intersections and for some transit stations
Strong N/S transit connections	May require elevated stations
	Negative environmental impact (noise and visual)



Phoenix



Transit Station Rendering



Eugene, OR

Table C-2: Pros and Cons for Alternative 2 (Alternative C from Phase 1)

Elevated Express Lanes (entire length)/No Bus Service in Elevated Lanes	
Pros	Cons
Lower taxpayer costs	Very costly; requires elevated structures along entire corridor
Lower ROW requirements (compared to other capacity increasing alternatives)	Reduced access to land use from express lanes
Toll revenue can help finance	Inconsistent with County goals
Decreased auto travel times	Lack of mobility options
Fewer at-grade crossing conflicts	Poor N/S transit connections
Requires fewer median opening closures (compared to at-grade express lanes or guideway)	Negative environmental impact (noise and visual)
Provides a congestion pricing tool	
Significant increased vehicle capacity	
Separates elevated auto traffic from freight traffic	

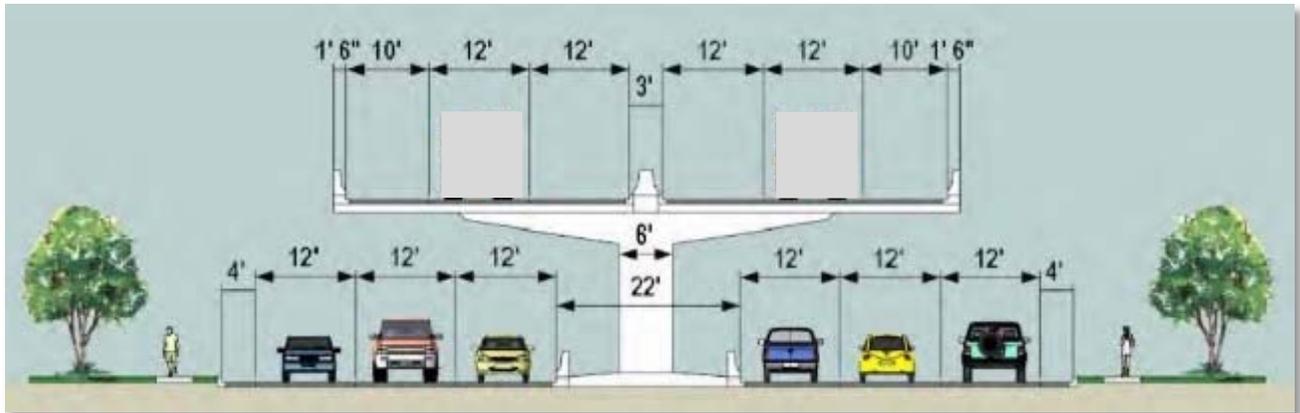


Table C-3: Pros and Cons for Alternative 3 (Alternative D from Phase 1)

Elevated Express Lanes (entire length)/Bus Service in Express Lanes	
Pros	Cons
Lower taxpayer cost	Very costly; requires elevated structures along entire corridor
Lower ROW requirements (compared to other capacity increasing alternatives)	Reduced access to land use from express lanes
Toll revenue can help finance	May require elevated stations
Decreased auto and transit travel times	Negative environmental impact (noise and visual)
Fewer at-grade crossing conflicts	
Provides a congestion pricing tool	
Requires fewer median opening closures (compared to at-grade express lanes or guideway)	
Increased vehicle capacity and some increased transit capacity	
Consistent with County goals	
Separates elevated auto traffic from freight traffic	
Transit stations may stimulate economic growth	
Improved N/S transit connections	

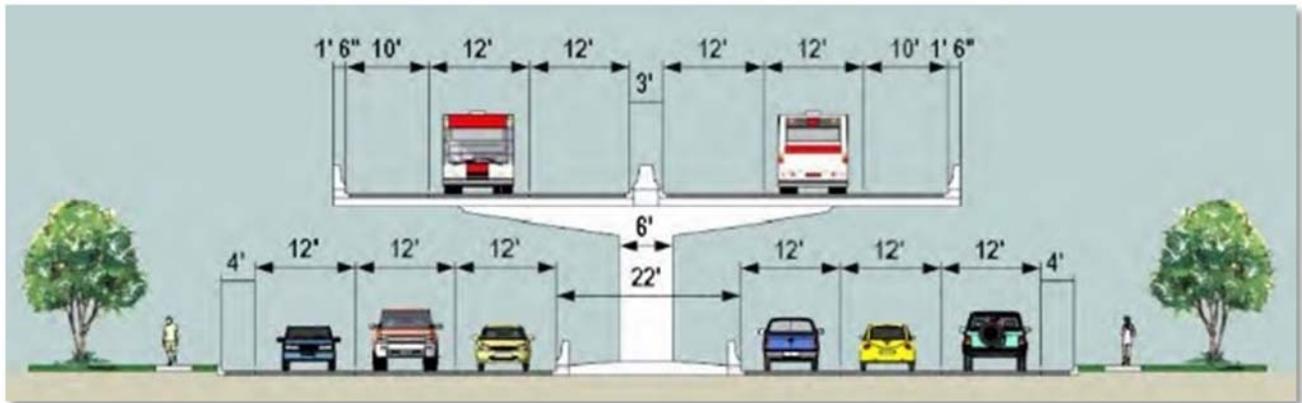


Table C-4: Pros and Cons for Alternative 4 (Alternative F Modified from Phase 1)

Elevated Express Lanes at Major Intersections, Express Lanes on Ground for Remainder of Corridor, Bus Service in Express Lanes	
<i>Pros</i>	<i>Cons</i>
Costs low relative to elevated alternatives	Reduced access to land use from express lanes
Toll revenue can help finance	Left turns and crossings only at signal
Decreased auto and transit travel times	Increased ROW requirements (compared to other capacity increasing alternatives)
Provides a congestion pricing tool	Requires more median opening closures (compared to elevated express lanes)
Increased vehicle capacity and some increased transit capacity	
Separate express auto traffic from freight traffic	
Transit stations may stimulate economic growth	
Improved N/S transit connections	
Neutral environmental impact (noise and visual)	



Miami



**Existing Local Bus Route 54
 (SR 56 & Bruce B Downs)**

Table C-5: Pros and Cons for Alternative 5 (Alternative G Modified from Phase 1)

Elevated Express Lanes at Major Intersections, Express Lanes on Ground for Remainder of Corridor, Bus or Rail in Separate Lanes	
Pros	Cons
Costs low relative to elevated alternatives	Significant costs with express lanes and dedicated transit Guideway
Toll revenue can help finance	High taxpayer cost for transit
Decreased auto and transit travel times	Reduced access to land use from express lanes
Provides a congestion pricing tool	Left turns and crossings only at signals
Consistent with County goals	Some negative environmental impact (noise and visual) if rail used
Significant increased auto and transit capacity	Increased ROW requirements (compared to other capacity increasing alternatives)
Separates express auto traffic from freight traffic	Requires more median opening closures (compared to elevated express lanes)
Transit stations may stimulate economic growth	
Strong N/S transit connections	

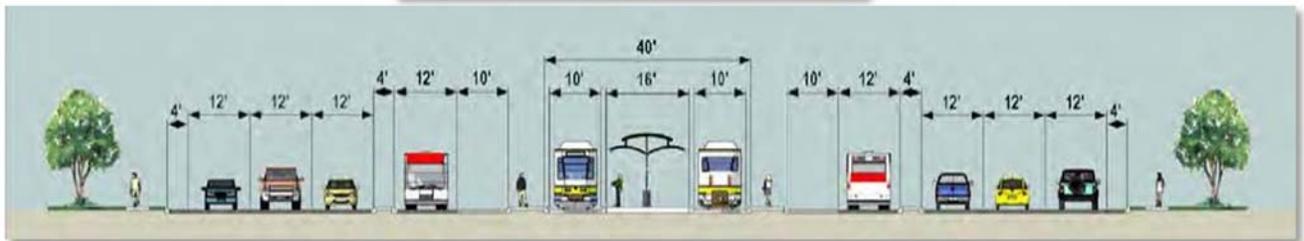


Table C-6: Pros and Cons for Alternative 6 (Alternative H from Phase 1)

Maintain Existing 6 General Purpose Lanes, Bus or Rail in Separate Lanes on Ground	
Pros	Cons
Significant reduction in transit travel time	Costly; infrastructure costs, high cost per rider (if rail)
Transit stations may stimulate economic growth	High taxpayer costs
Consistent with County goals	Requires signal upgrades to allow for crossings
Significant increase in transit capacity	Requires ROW for rail maintenance and some stations
Strong N/S transit connections	Increased ROW requirements (compared to other capacity increasing alternatives)
	Requires more median opening closures (compared to elevated express lanes)
	No additional vehicle capacity only at signals
	Left turns and crossings only at signals
	Reduced freight mobility
	Some negative environmental impact (noise and visual)

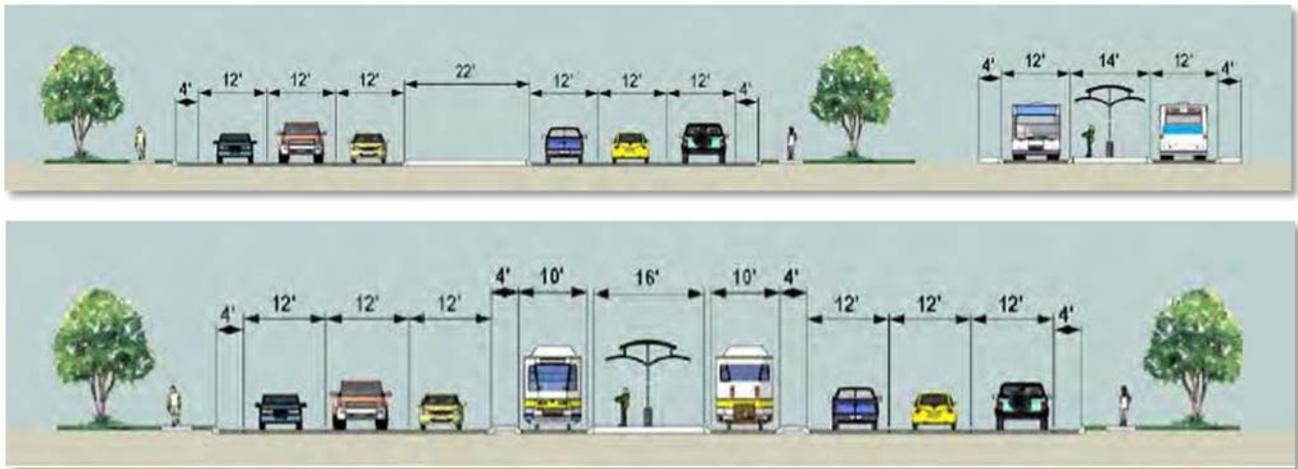


Table C-7: Pros and Cons for Alternative 7

Complementary Alternative: Continuous Flow Intersection (CFI)	
Pros	Cons
Removes left turns from intersection, allowing for more efficient traffic signal operations	Access to corner properties limited on two quadrants
Fewer conflict points than conventional intersections	Additional signalized intersections requires additional traffic signals
Additional points of refuge for pedestrians along crossing (shorter crossing segments)	Longer pedestrian crossings (may require phased/staged crossing)
Lower delay and fewer stops on major street could reduce rear-end crash rates	Required right-of-way likely larger than conventional intersection
Potentially lower cost than interchange/overpass	



Table C-8: Pros and Cons for Alternative 8

Complementary Alternative: Parallel Flow Intersection (PFI)	
Pros	Cons
Fewer conflict points than conventional intersections	Left-turning vehicles are stopped multiple times
Protected pedestrian crossing at the Main Junction	Access to corner properties is limited on all four quadrants
Removes left turns from intersection, allowing for more efficient traffic signal operations	Pedestrian crossings are longer and require three signal phases to complete
Lower delay and fewer stops on major street could reduce rear-end crash rates	Additional signalized intersections requires additional traffic signals
Potentially lower cost than interchange/ overpass	Wrong-way driving potential is related to bypass junction geometry
	Required right-of-way likely larger than conventional intersection

Anatomy of a PFI

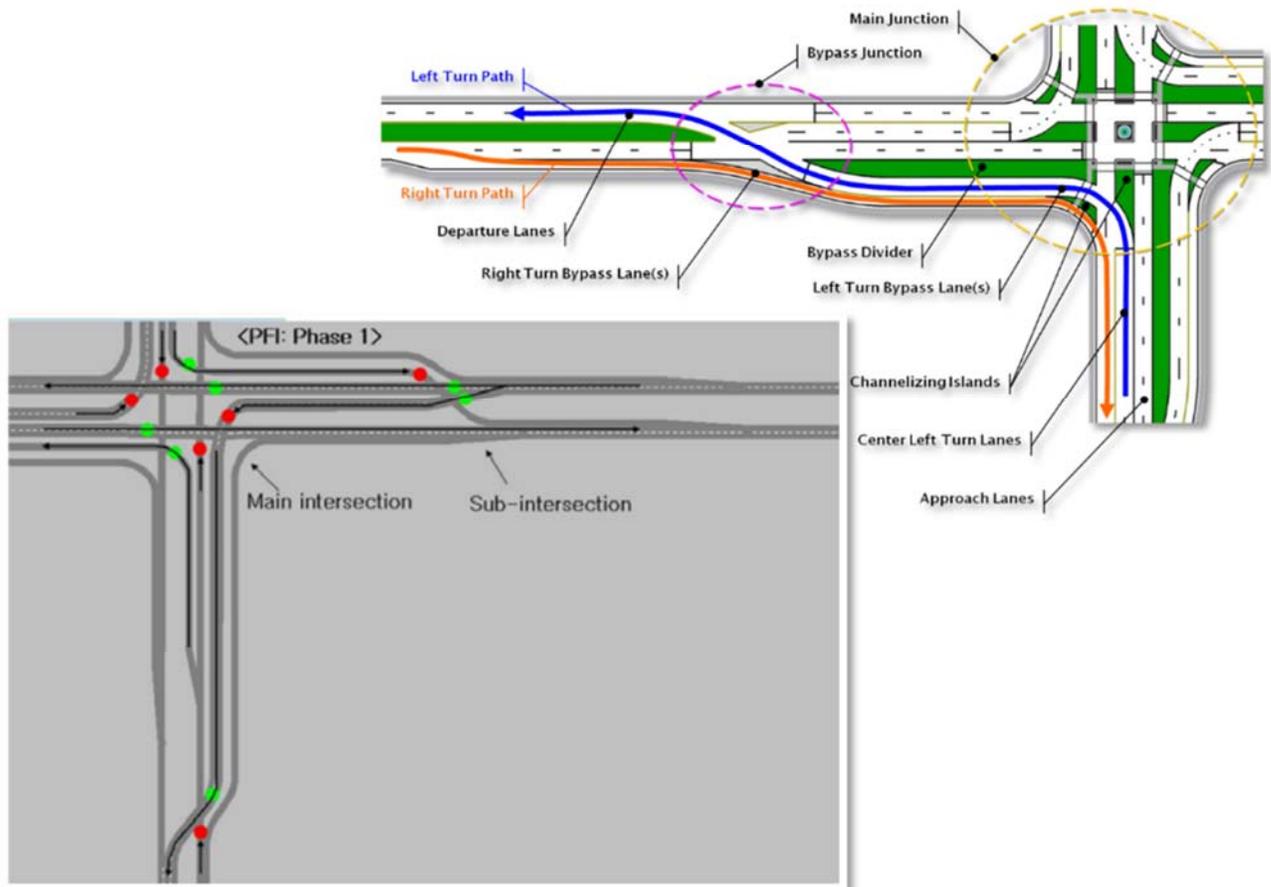


Table C-9: Pros and Cons for Alternative 9

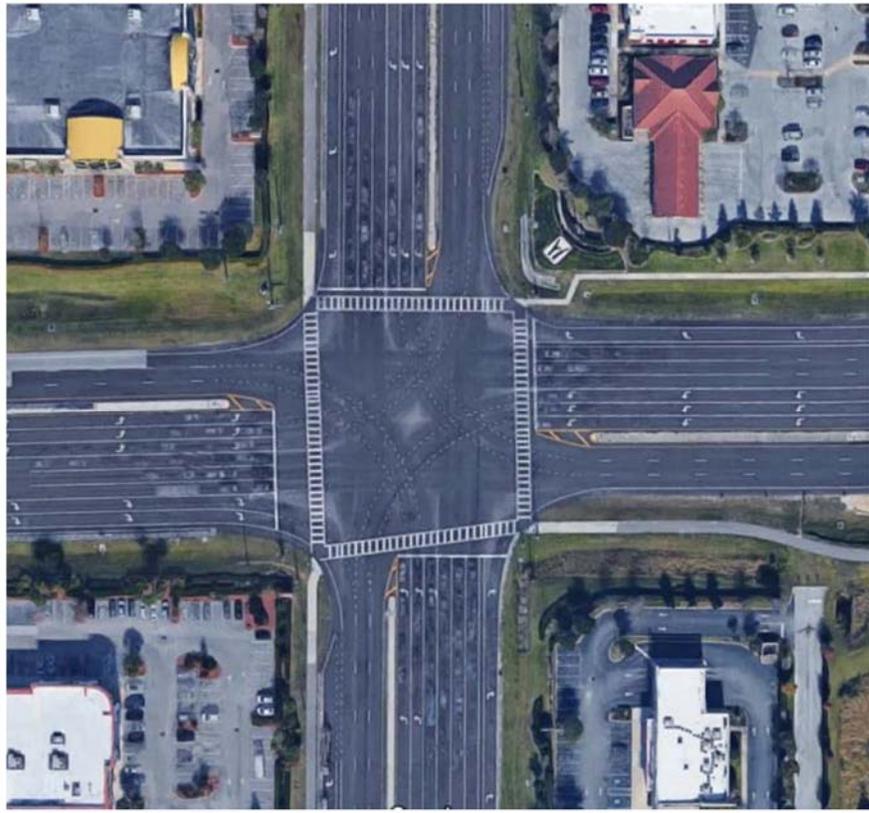
Complementary Alternative: Frontage/Bypass Roads	
Pros	Cons
Separates local trips from longer-distance through trips	May be higher cost if ROW required
Alternative route if main road has closed or blocked lanes	Creates more significant points to access frontage
Improved access to adjacent land use	Inconsistent with County goals unless used with relevant transit investment
Increased freight mobility	Poor N/S transit connections unless used with relevant transit investment
Limited environmental impact (noise and visual)	Through traffic must merge with mainline at major intersection creating increased congestion
Improved safety by limiting access and eliminating turns at every driveway	Promotes weaving of traffic on mainline



Southside Blvd (Jacksonville)

Table C-10: Pros and Cons for Alternative 11

Complementary Alternative: Triple Left Turns/Dual Right Turns, All Approaches to Intersection	
Pros	Cons
Reduces left turn phase time	Long crossing distances for pedestrians
Minimal ROW requirements	Increases number of potential conflict points
Minimal impact to land use access points	Increased congestion is disincentive to local area business



SR 56 @ Bruce B Downs Blvd

Table C-11: Pros and Cons for Alternative 12 (Alternative J from Phase 1)

No-Build Alternative: Maintain Existing 6 Lanes on Ground, Maintain Existing Local Bus Service	
Pros	Cons
No increased out-of-pocket costs	No additional vehicle capacity or improvement in traffic congestion
No environmental impact (noise and visual) (Note: increased congestion leads to increased environmental and noise impacts)	Congestion negatively impacts access to land use
	Inconsistent with County goals
	Lack of mobility options
	Loss of economic development due to congestion
	Reduced freight mobility
	Poor N/S transit connections
	Increased congestion impacts environment through air and noise pollution



Existing Local Bus Route 54



Existing Intersection (SR 54 @ Little Rd)

