

Appendix D

Pros/Cons and Evaluation of Major Alternatives

Table D-1: Alternative A Pros and Cons

Lower capital costs as compared to 100% elevated ¹	Costly; requires structures over intersections ¹
Decreased auto travel times ²	Higher ROW costs ¹
Improved intersection level of service ²	High Taxpayer costs ¹
Fewer at grade crossing conflicts ²	Requires ROW at intersections ³
Some increased freight mobility ⁴	Reduced auto access to retail ³
	Inconsistent with County goals ⁴
	Lack of mobility options ⁴
	Poor N/S transit connections ⁵
	Negative environmental impact (noise and visual) ⁶



Table D-2: Alternative B Pros and Cons

Lower capital costs as compared to 100% elevated ¹	Costly; requires structures over intersections ¹
Decreased auto and transit travel times ²	Higher ROW costs ¹
Improved intersection level of service ²	Higher taxpayer costs ¹
Consistent with County goals ⁴	Requires signal upgrades to allow for crossings ¹
Significant increased transit capacity ⁴	Reduced auto access to retail ³
Transit stations may stimulate economic growth ⁴	Left turns and crossings only at signals ³
Some increased freight mobility ⁴	Requires ROW at intersections and for some transit stations ³
Strong N/S transit connections ⁵	May require elevated stations ³
	Negative environmental impact (noise and visual) ⁶



Phoenix



Transit Station Rendering



Eugene, OR

Table D-3: Alternative C Pros and Cons

Lower taxpayer costs ¹	Very costly; requires elevated structures along entire corridor ¹
Toll revenue can help finance ¹	Reduced access to land use from express lanes ³
Decreased auto travel times ²	Inconsistent with County goals ⁴
Fewer at grade crossing conflicts ²	Lack of mobility options ⁴
Provides a congestion pricing tool ²	Poor N/S transit connections ⁵
Significant increased vehicle capacity ⁴	Negative environmental impact (noise and visual) ⁶
Separates elevated auto traffic from freight traffic ⁴	

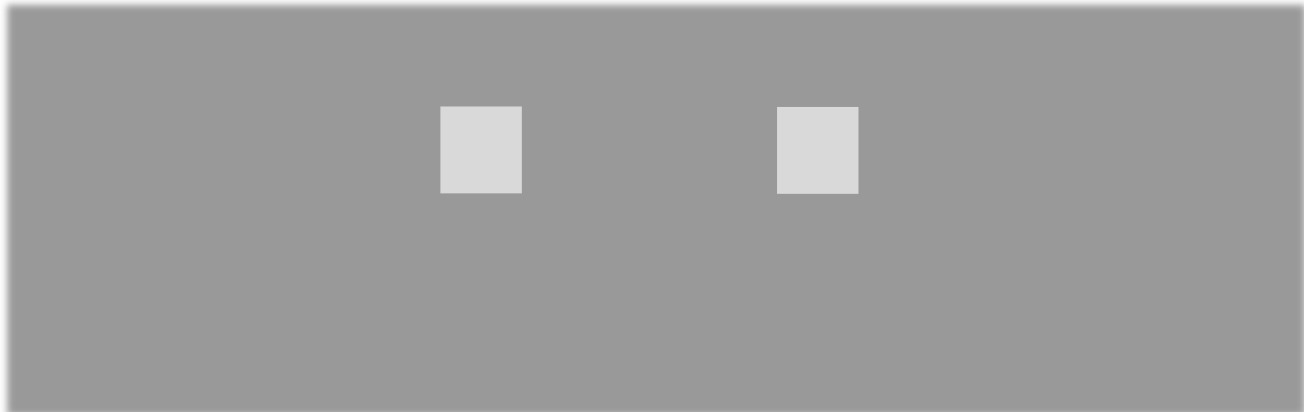


Table D-4: Alternative D Pros and Cons

Lower taxpayer cost ¹	Very costly; requires elevated structures along entire corridor ¹
Toll revenue can help finance ¹	Reduced access to land use from express lanes ³
Decreased auto and transit travel times ²	May require elevated stations ³
Fewer at-grade crossing conflicts ²	Negative environmental impact (noise and visual) ⁶
Provides a congestion pricing tool ²	
Increased vehicle capacity and some increased transit capacity ⁴	
Consistent with County goals ⁴	
Separates elevated auto traffic from freight traffic ⁴	
Transit stations may stimulate economic growth ⁴	
Improved N/S transit connections ⁵	

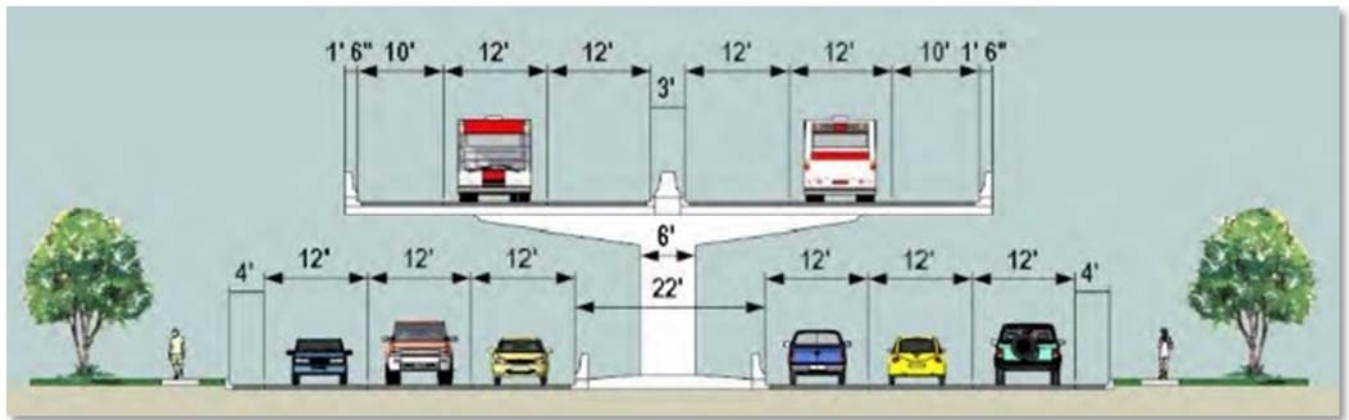


Table D-5: Alternative E Pros and Cons

Low-cost alternative ¹	Does not reduce auto travel times ²
Low taxpayer cost ¹	No additional vehicle capacity or improvement in traffic congestion ²
Slightly decreased transit travel times ²	Not effective if intersections are overly congested (buses cannot get to queue jump) ²
Keeps transit at grade for easy access to community ³	May require some ROW for queue jump lane ³
Some increased transit capacity ⁴	Reduced freight mobility ⁴
BRT Light is consistent with County goals ⁴	
Improved N/S transit connections ⁵	
No negative environmental impacts (noise and visual) ⁶	



Table D-6: Alternative F Pros and Cons

Costs low relative to elevated alternatives ¹	Reduced access to land use from express lanes ³
Toll revenue can help finance ¹	Left turns and crossings only at signal ³
Decreased auto and transit travel times ²	
Provides a congestion pricing tool ²	
Increased vehicle capacity and some increased transit capacity ⁴	
Separate express auto traffic from freight traffic ⁴	
Transit stations may stimulate economic growth ⁴	
Improved N/S transit connections ⁵	
Neutral environmental impact (noise and visual) ⁶	



Miami



Table D-7: Alternative G Pros and Cons

Costs low relative to elevated alternatives ¹	Significant costs with express lanes and dedicated transit guideway ¹
Toll revenue can help finance ¹	High taxpayer cost for transit ¹
Decreased auto and transit travel times ²	Reduced access to land use from express lanes ³
Provides a congestion pricing tool ²	Left turns and crossings only at signals ³
Consistent with County goals ⁴	Some negative environmental impact (noise and visual) if rail used ⁶
Significant increased auto and transit capacity ⁴	
Separates express auto traffic from freight traffic ⁴	
Transit stations may stimulate economic growth ⁴	
Strong N/S transit connections ⁵	

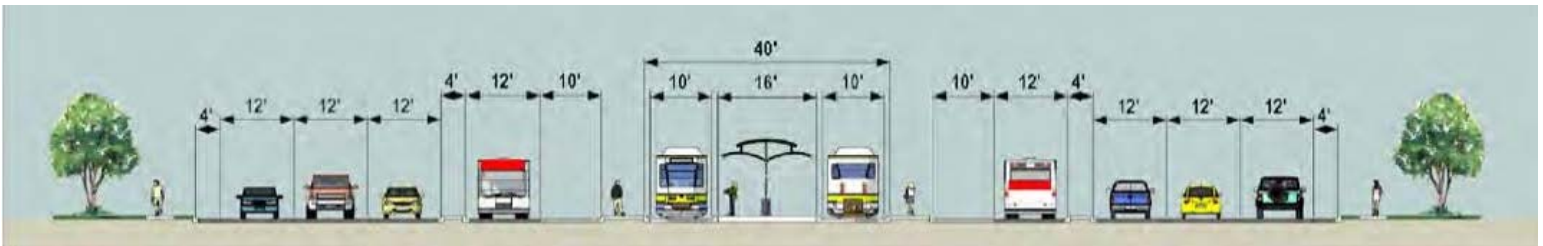


Table D-8: Alternative H Pros and Cons

Significant reduction in transit travel time ²	Costly; infrastructure costs, high cost per rider (if rail) ¹
Transit stations may stimulate economic growth ⁴	High taxpayer costs ¹
Consistent with County goals ⁴	Requires signal upgrades to allow for crossings ¹
Significant increase in transit capacity ⁴	Requires ROW for rail maintenance and some stations ¹
Strong N/S transit connections ⁵	No additional vehicle capacity only at signals ³
	Left turns and crossings only at signals ³
	Reduced freight mobility ⁴
	Some negative environmental impact (noise and visual) ⁶

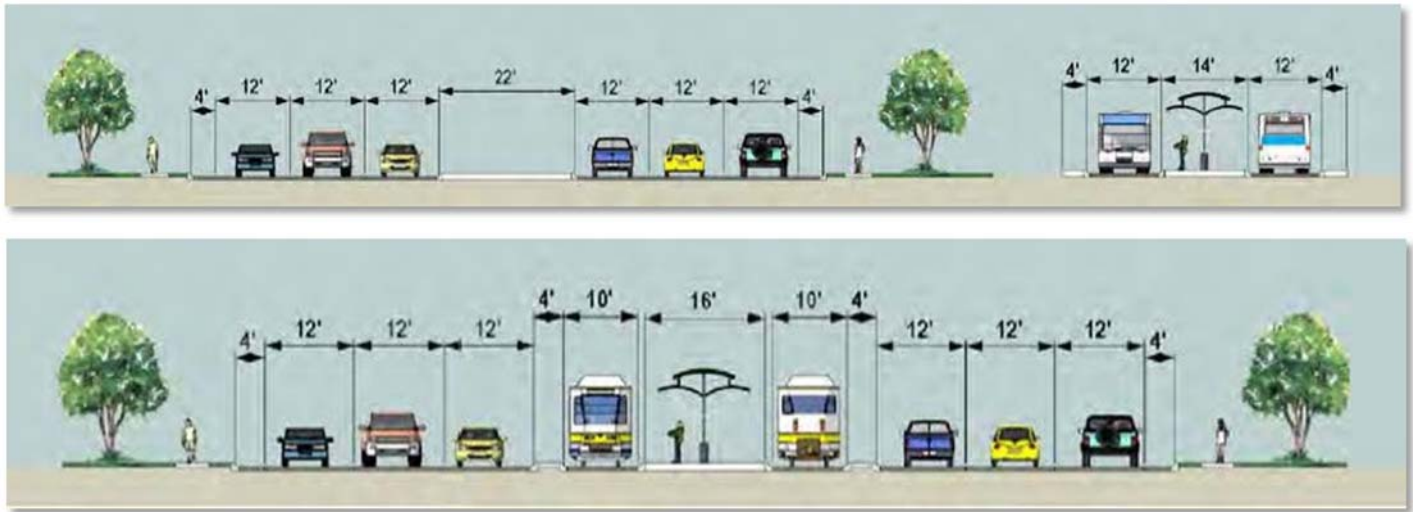


Table D-9: Alternative I Pros and Cons

Decreased transit travel times ²	Very costly, high cost per rider ¹
Fewer at grade crossing conflicts ²	High taxpayer costs ¹
Consistent with County goals ⁴	No additional vehicle capacity or improvement in traffic congestion ²
Significant increased transit capacity ⁴	Reduced freight mobility ⁴
Transit stations may stimulate economic growth ⁴	Negative environmental impact (noise and visual) ⁶
Strong N/S transit connections ⁵	

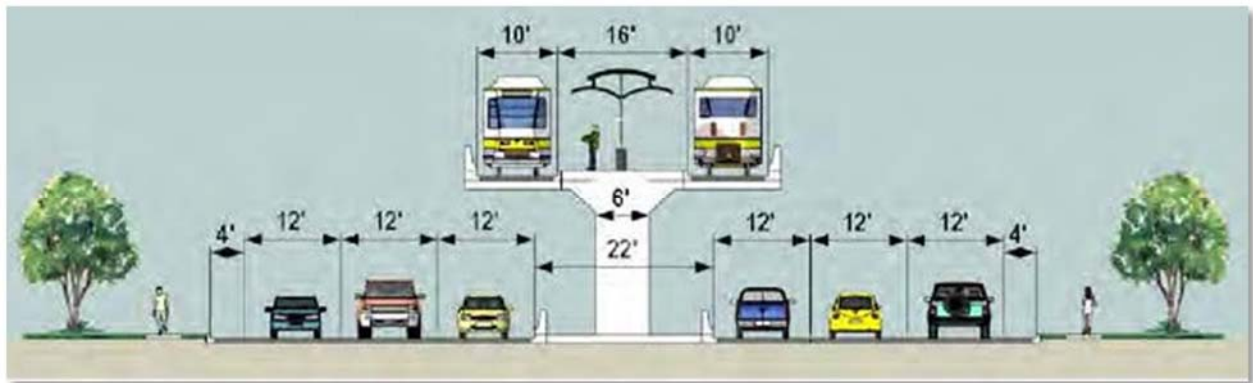
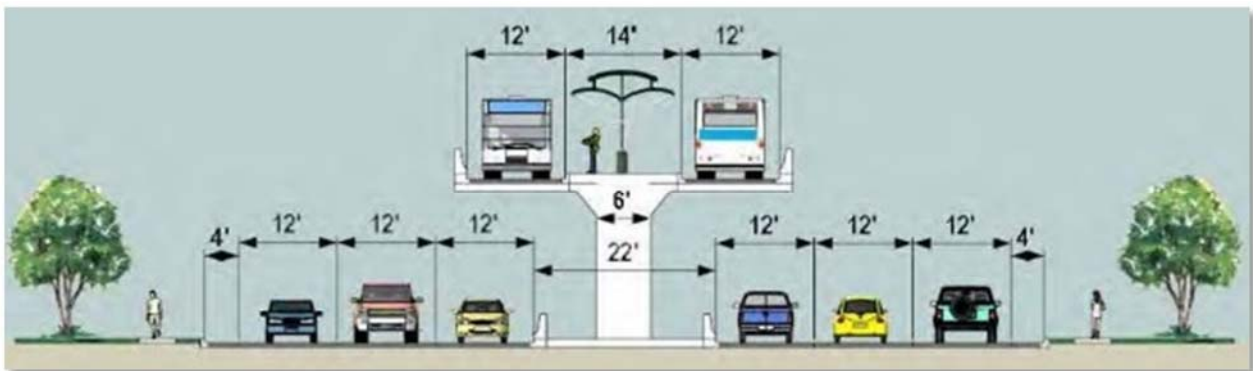


Table D-10: Alternative J Pros and Cons

No increased out-of-pocket costs ¹	No additional vehicle capacity or improvement in traffic congestion ²
No environmental impact (noise and visual) ⁶	Congestion negatively impacts access to land use ³
	Inconsistent with County goals ⁴
	Lack of mobility options ⁴
	Loss of economic development due to congestion ⁴
	Reduced freight mobility ⁴
	Poor N/S transit connections ⁵



Table D-11: Add-On Alternative Pros and Cons

Lower cost ¹	Restricted access close to intersections ³
Decreased travel time for through traffic ²	Inconsistent with County goals unless used with relevant transit investment ⁴
Increased intersection capacity ²	Poor N/S transit connections unless used with relevant transit investment ⁵
Increased freight mobility ⁴	
No environment impact (noise and visual) ⁶	
Separates local trips from longer-distance through trips ²	May be higher cost if ROW required ¹
Alternative route if main road has closed or blocked lanes ²	Creates more significant points to access frontage ²
Improved access to adjacent land use ³	Inconsistent with County goals unless used with relevant transit investment ⁴
Increased freight mobility ⁴	Poor N/S transit connections unless used with relevant transit investment ⁵
Limited environmental impact (noise and visual) ⁶	
Low cost ¹	No additional vehicle capacity ²
May reduce vehicle trips by promoting motorcycle use ²	More conflicts at intersections ²
Minimal impact to business access	Inconsistent with County goals unless used with relevant transit investment ⁴
Potential increase in freight mobility ⁴	Poor N/S transit connections unless used with relevant transit investment ⁵
Little to no environmental impact ⁶	