Scenario	Region	Facility	Mode	Purpose	Fatality Accident per 100m VMT	Pers Injury Accident per 100m VMT	Prop Damage Accident per 100m VMT
Base Scenario	I-5 commuter region	Road	Passenger Car	On-the-Clock	0.09	15.62	80.02
Base Scenario	I-5 commuter region	Road	Passenger Car	Commute	0.02	3.87	19.84
Base Scenario	I-5 commuter region	Road	Passenger Car	Personal/Rec	0.03	4.74	24.27
Base Scenario	I-5 commuter region	Road	Truck Freight	Freight	0	0.11	4.27
Project Scenario	I-5 commuter region	Road	Passenger Car	On-the-Clock	0.07	12.49	64.01
Project Scenario	I-5 commuter region	Road	Passenger Car	Commute	0.02	3.1	15.87
Project Scenario	I-5 commuter region	Road	Passenger Car	Personal/Rec	0.02	3.79	19.42
Project Scenario	I-5 commuter region	Road	Truck Freight	Freight	0	0.09	3.42

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Scenario	Region	Category	Road	Rail	Air	Marine
Base Scenario	I-5 commuter region	Ongoing Operations	0	0	0	0
Base Scenario	I-5 commuter region	Maintenance & Rehabilitation	0	0	0	0
Project Scenario	I-5 commuter region	Ongoing Operations	0.145	0	0	0
Project Scenario	I-5 commuter region	Maintenance & Rehabilitation	0.145	0	0	0

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Scenario	Region	Facility	Local Market Size (population in 40 minute drive time)	Regional Market Size (employment in 3 hour drive time)	Activity Level (annual operations)	Average Drive Time to Terminal (minutes)	Average Drive Time to Int'l Gateway (minutes)
Base Scenario	I-5 commuter region	Road	726,948	3483726			124.9
Base Scenario	I-5 commuter region	Rail				23.8	
Base Scenario	I-5 commuter region	Air			84198	29.8	41.4
Base Scenario	I-5 commuter region	Water				15	
Project Scenario	I-5 commuter region	Road	726,948	3483726			124.9
Project Scenario	I-5 commuter region	Rail				23.8	
Project Scenario	I-5 commuter region	Air			84198	29.8	41.4
Project Scenario	I-5 commuter region	Water				15	

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Facility	Mode	Purpose	Vehicle Operating Cost $/mile (Free Flow)	Vehicle Operating Cost $/mile (Congested)	Vehicle Operating Cost $/hour (Congested or Idle)	$ per Fatalities Accident	$ per Pers Injury Accident	$ per Prop Damage Accident	Environmental Cost $/mile (Free Flow)
Road	Passenger Car	On-the-Clock	0.58	0.64	2	6000000	83520	3160	0.028
Road	Passenger Car	Commute	0.58	0.64	2	6000000	83520	3160	0.028
Road	Passenger Car	Personal/Rec	0.58	0.64	2	6000000	83520	3160	0.028
Road	Truck Freight	Freight	1.18	1.46	4.5	6000000	83520	3160	0.057

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Environmental Cost $/mile (Congested)	Environmental Cost $/hour (Congested or Idle)
0.031	0.096
0.031	0.096
0.031	0.096
0.07	0.216

Scenario	Region	Category	Road	Rail	Air	Marine
Base Scenario	I-5 commuter region	Property Acquisition	0	0	0	0
Base Scenario	I-5 commuter region	Engineering and Design	0	0	0	0
Base Scenario	I-5 commuter region	Right-of-Way (paving, rails)	0	0	0	0
Base Scenario	I-5 commuter region	Transport Structures (bridges)	0	0	0	0
Base Scenario	I-5 commuter region	Terminal Bldgs & Equipment	0	0	0	0
Base Scenario	I-5 commuter region	Vehicles	0	0	0	0
Project Scenario	I-5 commuter region	Property Acquisition	0	0	0	0
Project Scenario	I-5 commuter region	Engineering and Design	2.1	0	0	0
Project Scenario	I-5 commuter region	Right-of-Way (paving, rails)	30.4	0	0	0
Project Scenario	I-5 commuter region	Transport Structures (bridges)	1.5	0	0	0
Project Scenario	I-5 commuter region	Terminal Bldgs & Equipment	0	0	0	0
Project Scenario	I-5 commuter region	Vehicles	0	0	0	0

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Facility	Mode	Purpose	Crew Cost Factor ($/hr per crew member)	Passenger Cost Factor ($/hr per occupant)	Freight Logistics Factor ($/hr per ton)	Buffer Time Cost Factor ($/hr per veh-trip)
Road	Passenger Car	On-the-Clock	0	22.9	0	22.9
Road	Passenger Car	Commute	0	12	0	12
Road	Passenger Car	Personal/Rec	0	12	0	12
Road	Truck Freight	Freight	25.02	0	1.5	58.77

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Scenario	Region	Period	Facility	Mode	Purpose	Period Veh-Trips	Period VMT	Period VHT	Fraction Congested	Buffer Time (hrs per Trip)	Avg Crew Members per Veh	Avg Veh Occupancy	Freight Tons per Veh	Toll Charges per Trip	Fraction of trips: internal	Fraction of trips: incoming	Fraction of trips: outgoing	Fraction of trips: through
Base Scenario	I-5 commuter region	Peak Period NB	Road	Passenger Car	On-the-Clock	2035000	14861000	329000	0.28	0.106	0	1.1	0	0	0.63	0.03	0	0.34
Base Scenario	I-5 commuter region	Peak Period NB	Road	Passenger Car	Commute	8209000	59933000	1327500	0.28	0.106	0	1.1	0	0	0.63	0.03	0	0.34
Base Scenario	I-5 commuter region	Peak Period NB	Road	Passenger Car	Personal/Rec	6710000	48992000	1085000	0.28	0.106	0	2	0	0	0.63	0.03	0	0.34
Base Scenario	I-5 commuter region	Peak Period NB	Road	Truck Freight	Freight	1980000	15299000	339000	0.28	0.106	1	0	41	0	0.25	0.4	0	0.35
Base Scenario	I-5 commuter region	Peak Period SB	Road	Passenger Car	On-the-Clock	1839000	14569000	298000	0.29	0.067	0	1.1	0	0	0.63	0	0.14	0.23
Base Scenario	I-5 commuter region	Peak Period SB	Road	Passenger Car	Commute	7417000	58758000	1203000	0.29	0.067	0	1.1	0	0	0.63	0	0.14	0.23
Base Scenario	I-5 commuter region	Peak Period SB	Road	Passenger Car	Personal/Rec	6063000	48031000	983000	0.29	0.067	0	2	0	0	0.63	0	0.14	0.23
Base Scenario	I-5 commuter region	Peak Period SB	Road	Truck Freight	Freight	1797000	14999000	307000	0.29	0.067	0	0	41	0	0.25	0	0.35	0.4
Project Scenario	I-5 commuter region	Peak Period NB	Road	Passenger Car	On-the-Clock	2035000	14861000	276000	0.07	0.094	0	1.1	0	0	0.63	0.03	0	0.34
Project Scenario	I-5 commuter region	Peak Period NB	Road	Passenger Car	Commute	8209000	59933000	1114000	0.07	0.094	0	1.1	0	0	0.63	0.03	0	0.34
Project Scenario	I-5 commuter region	Peak Period NB	Road	Passenger Car	Personal/Rec	6710000	48992000	911000	0.07	0.094	0	2	0	0	0.63	0.03	0	0.34
Project Scenario	I-5 commuter region	Peak Period NB	Road	Truck Freight	Freight	1980000	15299000	284000	0.07	0.094	1	0	41	0	0.25	0.4	0	0.35
Project Scenario	I-5 commuter region	Peak Period SB	Road	Passenger Car	On-the-Clock	1839000	14569000	273000	0	0.058	0	1.1	0	0	0.63	0	0.14	0.23
Project Scenario	I-5 commuter region	Peak Period SB	Road	Passenger Car	Commute	7417000	58758000	1100000	0	0.058	0	1.1	0	0	0.63	0	0.14	0.23
Project Scenario	I-5 commuter region	Peak Period SB	Road	Passenger Car	Personal/Rec	6063000	48031000	899000	0	0.058	0	2	0	0	0.63	0	0.14	0.23
Project Scenario	I-5 commuter region	Peak Period SB	Road	Truck Freight	Freight	1797000	14999000	281000	0	0.058	0	0	41	0	0.25	0	0.35	0.4

Facility Type	Road	Rail	Air	Marine
Right-of-Way (paving, rails)	20	15	30	40
Transport Structures (bridges)	30	40	40	40
Terminal Bldgs & Equipment	40	40	50	40
Vehicles	15	25	20	30

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REPORT 5a: BENEFIT/COST REPORT - BY MODE (NATIONAL PERSPECTIVE)

Analysis Year:	2015	Project:	Updated TIGER III for I-5 JBLM corridor 3% discount
Constant $ Year:	2010	Region:	National
Base Scenario:	Base Scenario	Period:	All Periods
Project Scenario:	Project Scenario		

Present Value of Benefit Stream ($m 2010 Const dollars)

Mode	(A) Traveler Benefits ($)		(B) Traveler Benefits (non-$)			(C) Shipper/ Logistics Cost ($)	(D) Business Productivity ($)	(E) Social/ Environ. (non-$)
	Vehicle Operating Costs	Time & Reliability Costs	Value of Personal Time & Reliability	Safety Cost	Additional Consumer Surplus			
Pass Car - OTC	7.1	46.8	0.0	2.0	0.0	0.0	--	--
Pass Car - Commute	28.7	49.7	49.7	1.5	0.0	0.0	--	--
Pass Car - Pers/Rec	23.4	0.0	126.0	2.4	0.0	0.0	--	--
Truck - Freight	34.1	60.0	0.0	0.0	0.0	63.9	--	--
Project Totals	**93.3**	**156.5**	**175.6**	**6.0**	**0.0**	**63.9**	**0.0**	**4.5**

Present Value of Cost Stream ($m 2010 Const dollars)

Facility Type	Startup Costs	Annual O&M Costs	Residual Value	Net Total Costs
Road	31.5	4.4	0.2	35.7
Rail	0.0	0.0	0.0	0.0
Air	0.0	0.0	0.0	0.0
Marine	0.0	0.0	0.0	0.0
Total for All Facilities	**31.5**	**4.4**	**0.2**	**35.7**

Efficiency Measures

Benefit Measure	Benefit Definition	Present Value of Benefit Stream	Present Value of Cost Stream	Net Present Value (Benefits - Costs)	Benefit/Cost Ratio
Traveler Benefit	**A+B**	431	36	396	12.10
Full User Benefit	**A+B+C**	495	36	460	13.89
Total Societal Benefit	**A+B+C+D+E**	500	36	464	14.02

Wider Measures

Impact Measure	Impact Definition	Present Value of Impact Stream	Present Value of Cost Stream	Net Present Value (Impacts - Costs)	Impact/Cost Ratio
Add'l Gross Regional Product	**GRP**	105	36	70	2.96

GRP plus Traveler non-$ Benefit	**GRP+B**	287	36	251	8.05
GRP plus Total non-$ Benefit	**GRP+B+E**	292	36	256	8.18

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REPORT 5a: BENEFIT/COST REPORT - BY MODE (NATIONAL PERSPECTIVE)

Analysis Year:	2015	Project:	Updated TIGER III for I-5 JBLM corridor 7% discount
Constant $ Year:	2010	Region:	National
Base Scenario:	Base Scenario	Period:	All Periods
Project Scenario:	Project Scenario		

Present Value of Benefit Stream ($m 2010 Const dollars)

Mode	(A) Traveler Benefits ($)		(B) Traveler Benefits (non-$)			(C) Shipper/ Logistics Cost ($)	(D) Business Productivity ($)	(E) Social/ Environ. (non-$)
	Vehicle Operating Costs	Time & Reliability Costs	Value of Personal Time & Reliability	Safety Cost	Additional Consumer Surplus			
Pass Car - OTC	4.5	29.5	0.0	1.3	0.0	0.0	--	--
Pass Car - Commute	18.1	31.3	31.3	0.9	0.0	0.0	--	--
Pass Car - Pers/Rec	14.8	0.0	79.4	1.5	0.0	0.0	--	--
Truck - Freight	21.5	37.8	0.0	0.0	0.0	40.3	--	--
Project Totals	**58.8**	**98.6**	**110.7**	**3.8**	**0.0**	**40.3**	**0.0**	**2.9**

Present Value of Cost Stream ($m 2010 Const dollars)

Facility Type	Startup Costs	Annual O&M Costs	Residual Value	Net Total Costs
Road	28.6	2.8	0.1	31.3
Rail	0.0	0.0	0.0	0.0
Air	0.0	0.0	0.0	0.0
Marine	0.0	0.0	0.0	0.0
Total for All Facilities	**28.6**	**2.8**	**0.1**	**31.3**

Efficiency Measures

Benefit Measure	Benefit Definition	Present Value of Benefit Stream	Present Value of Cost Stream	Net Present Value (Benefits - Costs)	Benefit/Cost Ratio
Traveler Benefit	A+B	272	31	241	8.68
Full User Benefit	A+B+C	312	31	281	9.96
Total Societal Benefit	A+B+C+D+E	315	31	284	10.05

Wider Measures

Impact Measure	Impact Definition	Present Value of Impact Stream	Present Value of Cost Stream	Net Present Value (Impacts - Costs)	Impact/Cost Ratio
Add'l Gross Regional Product	GRP	66	31	35	2.12

GRP plus Traveler non-$ Benefit	**GRP+B**	181	31	150	5.77
GRP plus Total non-$ Benefit	**GRP+B+E**	184	31	152	5.86

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