



# I-95 Economic Assessment



# Study Purpose



- Compare economic impacts of the proposed alternatives
  - Business as Usual
  - Funding improvements by tolling
  - Funding improvements by other methods
- Provide information for decision making

# Key Elements



- Review existing studies & reports
- Engage and inform the public & officials
- Analyze impacts to:
  - Freight and logistics
  - Economic development
  - Traffic
  - Economy in general
- Screen & analyze funding options

# Advisory Council



- An advisory council of external stakeholders was established to help guide study
- Members:
  - NC Retail Merchants Association
  - NC Chamber of Commerce
  - NC Trucking Association
  - NC Farm Bureau
  - NC Travel & Tourism Coalition
  - NC Travel Industry Association
  - NC State University (Agriculture & Resource Economics)
  - No Tolls I-95 Coalition

# Involving Stakeholders



## Advisory Council

- Interviews
- Meetings
- Electronic updates

## Surveys

- Trucking industry
- General public

## Interviews

- Shippers/Agriculture
- Trucking industry
- Economic developers
- Site selection consultants
- County engineers
- Tourism officials
- NCDOT management

## Website

- Study updates
- Fact sheets
- Meeting notices
- Comments
- Public survey link

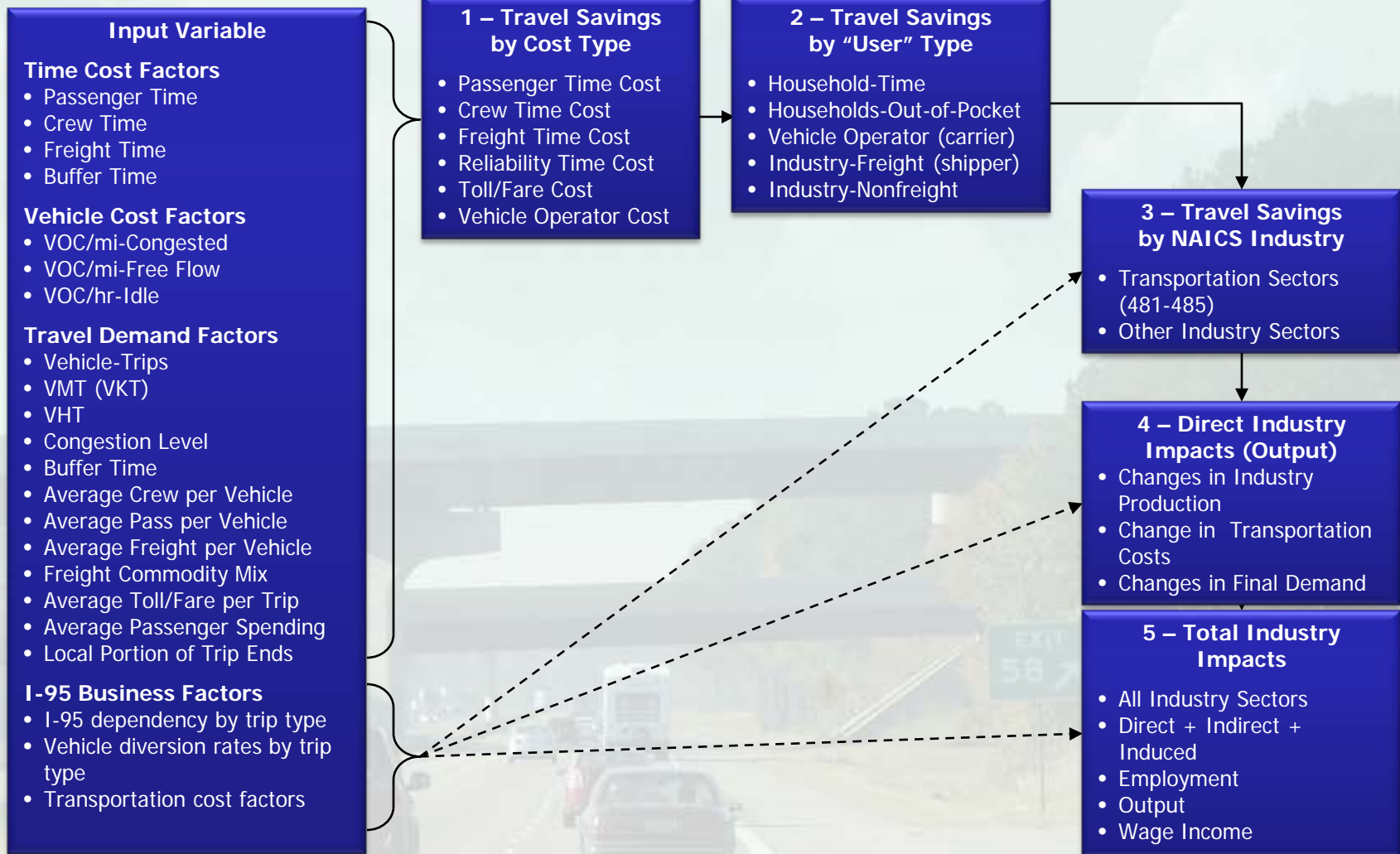
## Meetings

- No Tolls I-95 board
- Advisory Council
- NCDOT mgmt
- Public (in May)

## Focus Groups

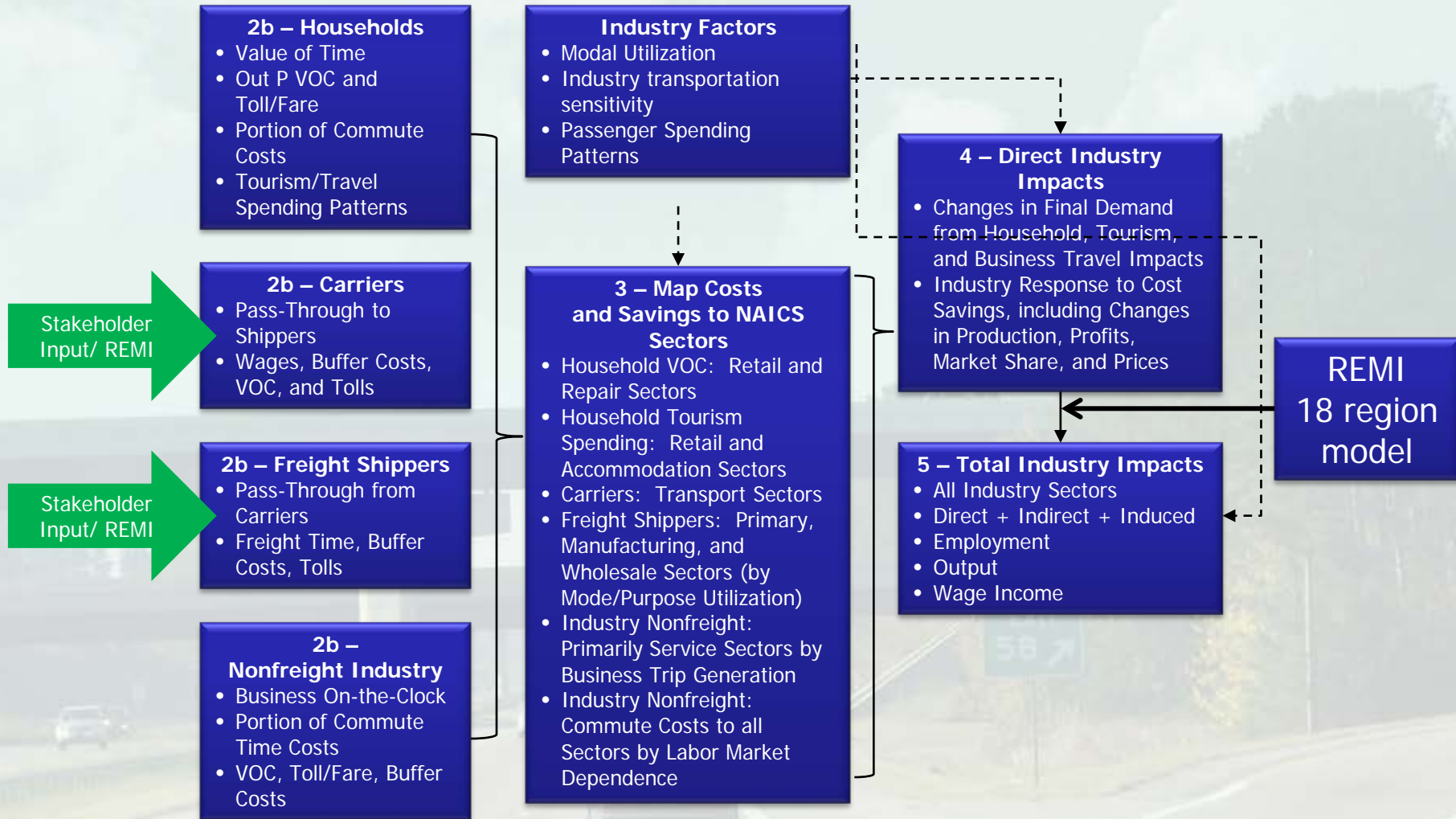
- Shippers
- Trucking Industry
- Economic developers
- Tourism stakeholders
- General public
- Agriculture businesses
- Roadway contractors

# General Framework



DRAFT

# Modeling Changes in Transportation Costs



# Impact Categories for Assessing Alternatives



- Travel time
- Vehicle operating costs
- Safety cost
- Reliability
- Traffic volumes

- Productivity
- Market access
- Business revenue and spending
- Profits

- GDP
- Employment
- Income



# Findings



# Scenarios



- Business as Usual (BAU)
- Build - No Specified Funding
- Build - Fund via Tolls
- Build - Fund via Tolls with Mitigation
- Build - Fund via Alternative Funding
  - 10-Year Statewide Sales Tax - 1/3 of revenue goes to fund I-95
  - Revenue package – Sales Tax (10 year), Highway Use Tax (HUT) and Vehicle Registration Fees

# Business As Usual (BAU)

2014-2050



Metric	I-95 Counties			Eastern NC			Rest of State		
	Constr.	Long-term	Total	Constr.	Long-term	Total	Constr.	Long-term	Total
Business Transportation Costs (\$ billions)			<b>\$51.7</b>			<b>\$6.0</b>			<b>\$9.2</b>
Gross Regional Product (\$ billions)	\$0.23	(\$41.1)	<b>(\$40.8)</b>	\$0.04	(\$7.3)	<b>(\$7.2)</b>	\$0.15	(\$30.5)	<b>(\$30.4)</b>
Personal Income (\$ billions)	\$0.22	(\$44.3)	<b>(\$44.1)</b>	\$0.04	(\$6.9)	<b>(\$6.8)</b>	\$0.11	(\$21.8)	<b>(\$21.7)</b>
Jobs (avg annual full-time)	132	(9,858)	<b>(9,727)</b>	10	(1,620)	<b>(1,610)</b>	34	(5,048)	<b>(5,014)</b>

( ) denotes negative impact

Source: CS analysis using a REMI economic model

# Build, No Funding Specified

2014-2050



Metric	I-95 Counties			Eastern NC			Rest of State		
	Constr.	Long-term	Total	Constr.	Long-term	Total	Constr.	Long-term	Total
Business Transportation Costs (\$ billions)			<b>(\$51.9)</b>			<b>(\$6.1)</b>			<b>(\$9.3)</b>
Gross Regional Product (\$ billions)	\$2.8	\$41.4	<b>\$44.2</b>	\$0.38	\$7.5	<b>\$7.9</b>	\$2.2	\$30.7	<b>\$32.9</b>
Personal Income (\$ billions)	\$2.8	\$44.7	<b>\$47.5</b>	\$0.45	\$7.3	<b>\$7.8</b>	\$1.8	\$22.0	<b>\$23.8</b>
Jobs (avg annual full-time)	1,706	9,927	<b>11,633</b>	120	1,689	<b>1,809</b>	589	5,074	<b>5,663</b>

( ) denotes negative impact

Source: CS analysis using a REMI economic model

# Build with Tolls

2014-2050



Metric	I-95 Counties			Eastern NC			Rest of State		
	Constr.	Long-term	Total	Constr.	Long-term	Total	Constr.	Long-term	Total
Business Transportation Costs (\$ billions)			<b>(\$50.6)</b>			<b>(\$3.2)</b>			<b>(\$8.6)</b>
Toll Cost (\$ billions)			<b>\$7.9</b>			<b>\$0.73</b>			<b>\$0.94</b>
Gross Regional Product (\$ billions)	\$2.8	\$39.4	<b>\$42.2</b>	\$0.38	\$4.7	<b>\$5.1</b>	\$2.2	\$28.3	<b>\$30.5</b>
Personal Income (\$ billions)	\$2.8	\$38.6	<b>\$41.4</b>	\$0.45	\$3.8	<b>\$4.3</b>	\$1.8	\$20.1	<b>\$21.9</b>
Jobs (avg annual full-time)	1,706	9,066	<b>10,772</b>	120	910	<b>1,030</b>	589	4,601	<b>5,190</b>

( ) denotes negative impact

Source: CS analysis using a REMI economic model

# Build with Mitigated Tolls

2014-2050



Metric	I-95 Counties			Eastern NC			Rest of State		
	Constr.	Long-term	Total	Constr.	Long-term	Total	Constr.	Long-term	Total
Business Transportation Costs (\$ billions)			<b>(\$49.3)</b>			<b>(\$4.2)</b>			<b>(\$8.8)</b>
Toll Cost (\$ billions)			<b>\$4.2</b>			<b>\$0.37</b>			<b>\$0.48</b>
Gross Regional Product (\$ billions)	\$2.8	\$42.5	<b>\$45.3</b>	\$0.38	\$5.5	<b>\$5.8</b>	\$2.2	\$29.3	<b>\$31.5</b>
Personal Income (\$ billions)	\$2.8	\$47.2	<b>\$50.0</b>	\$0.45	\$4.6	<b>\$5.0</b>	\$1.8	\$20.8	<b>\$22.6</b>
Jobs (avg annual full-time)	1,706	9,297	<b>11,003</b>	120	1,140	<b>1,234</b>	589	4,782	<b>5,371</b>

( ) denotes negative impact/loss

Source: CS analysis using a REMI economic model

# Comparison of Scenarios

2014-2050



Metric	BAU	Build, No Funding	Build, Tolls	Build, Mitigated Tolls
Business Transportation Costs (\$ billions)	\$66.9	(\$67.3)	(\$62.4)	(\$62.3)
Toll Cost (\$ billions)			\$9.6	\$5.1
Gross Regional Product (\$ billions)	(\$78.4)	\$85.0	\$77.8	\$82.6
Personal Income (\$ billions)	(\$72.6)	\$79.1	\$67.6	\$77.6
Jobs (avg annual full-time)	(16,352)	19,105	16,872	16,925

( ) – denotes negative impact/loss

Source: CS analysis using a REMI economic model

# Comparison of Alternative Funding Scenarios



2014-2050

Metric	10-Year Dedicated Sales Tax	Revenue Pkg Sales, HUT, VR	Personal Income Tax	Motor Fuels Tax
Gross Regional Product (\$ billions)	\$66.3	\$74.7	\$76.4	\$77.7
Personal Income (\$ billions)	\$46.4	\$58.2	\$61.4	\$64.2
Jobs (avg annual full-time)	12,673	16,072	16,616	16,845

Source: CS analysis using a REMI economic model



# Key Findings



- I-95 needs improvement
  - Improve safety in the short-term, address congestion in the long term
- BAU will cost the state an average of more than 16,000 jobs annually
- All the funding options examined lead to a net increase in statewide economic benefits
  - \$48 - \$85 billion in economic output
  - 12,000 - 19,000 jobs annually between 2014 & 2050

# Key Findings



- Of the scenarios examined, Build with Mitigated Tolls gives rise to the greatest economic benefit, locally and statewide
- I-95 corridor counties bear the greatest burden
  - Increase in transportation cost in the Business as Usual due to worsening conditions
  - Increase in cost due to tolls in the tolling scenarios
- I-95 counties also reap the largest share of benefits from improving I-95

QUESTIONS?

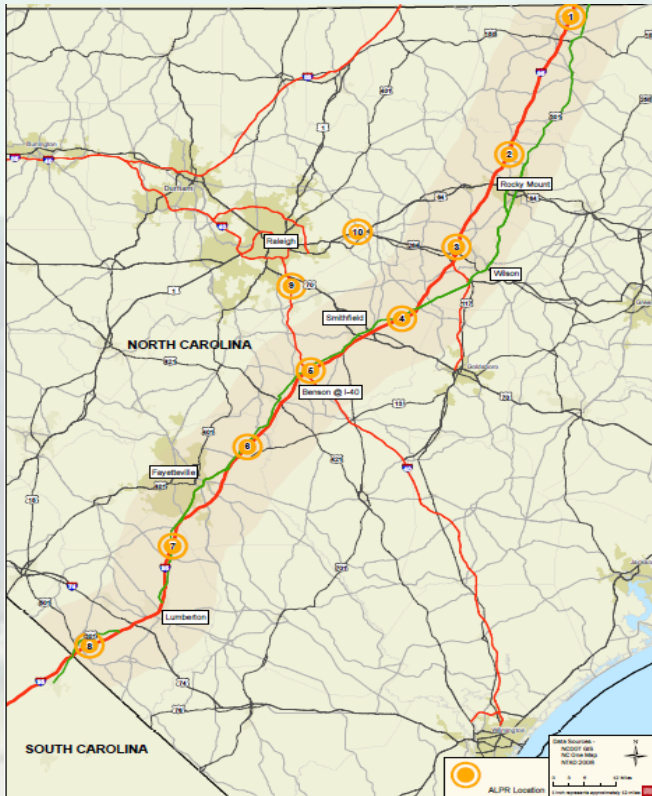


# Refined Model Results



- Future Growth – I-95 Traffic Volumes\*

- » Traffic Growth (2011 - 2020) 12-16%
- » Traffic Growth (2011 - 2040) 50%



Station	Base Year Volume (2011)	2020 Business as Usual (BAU)	2040 BAU	2020 Growth	2040 Growth
Station 1	40,259	45,007	59,879	12%	49%
Station 2	39,156	43,919	58,820	12%	50%
Station 3	39,764	44,695	55,697	12%	40%
Station 4	37,019	42,998	52,883	16%	43%
Station 5	44,098	49,162	61,285	11%	39%
Station 6	48,109	55,408	67,227	15%	40%
Station 7	46,147	51,093	62,017	11%	34%
Station 8	28,645	31,597	38,418	10%	34%

\*All traffic volumes recorded as vehicles per day