



NORTH CAROLINA

**Turnpike Authority**

# ***Toll Road Financing***

**House Transportation  
Committee**

**February 28, 2007**

# North Carolina Turnpike Authority

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## Our Mission:

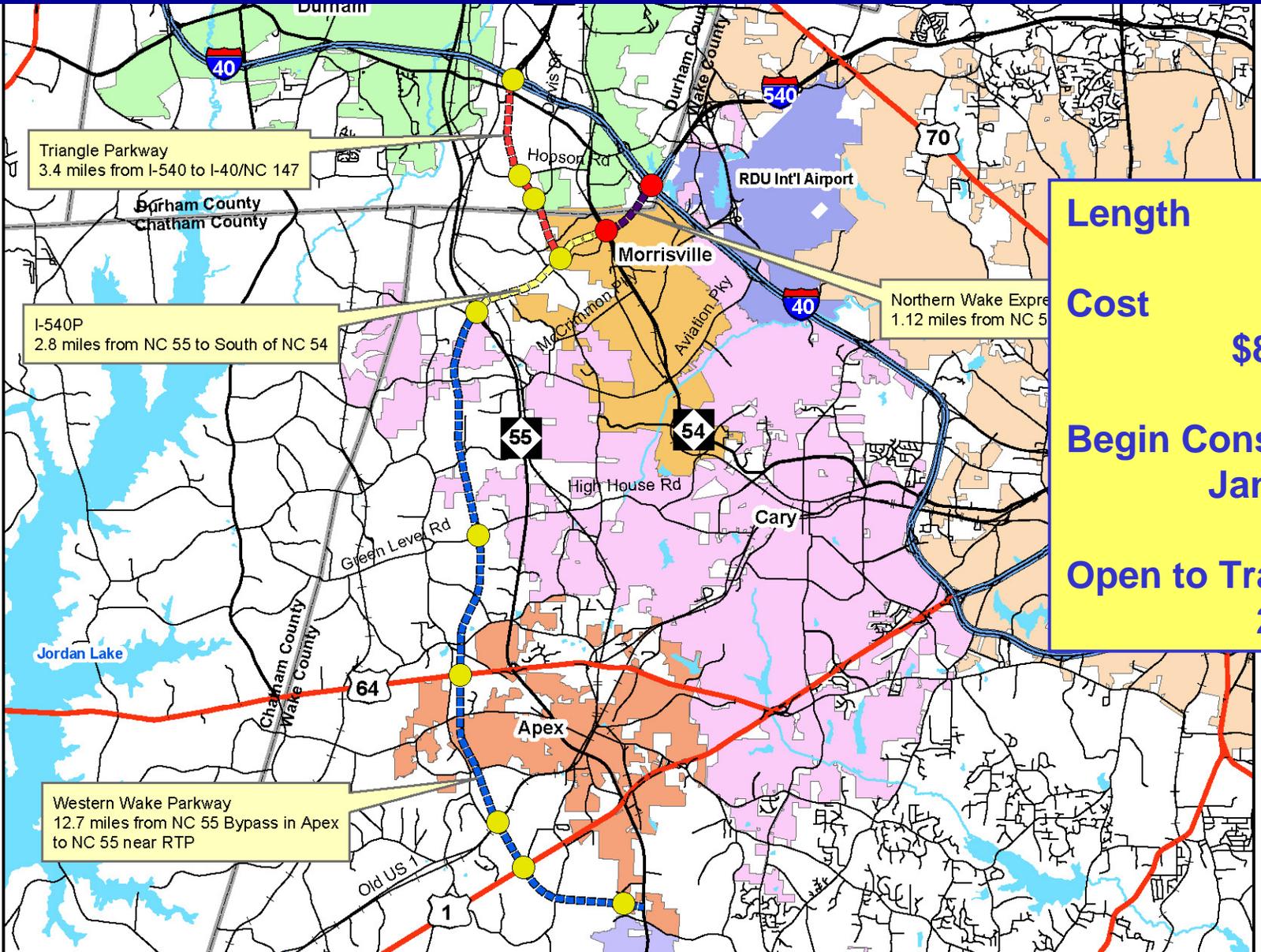
- To develop alternative means of financing critical projects to help relieve congestion or significantly enhance mobility.
- To inject new efficiencies in project delivery without compromising integrity of environmental review process.

# Today's Agenda

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- Our Projects
- The Financing Process
- Financing Plans and Gaps
- The Triangle Expressway Example
- 2007 Legislative Priorities

# Triangle Expressway



**Length** 18.9 miles  
**Cost** \$858 million  
**Begin Construction** January 2008  
**Open to Traffic** 2010- 2011

# Mid-Currituck Bridge



<b>Length</b>	<b>7 miles</b>
<b>Cost</b>	<b>\$461 million</b>
<b>Begin Construction</b>	<b>2010</b>
<b>Open to Traffic</b>	<b>2013</b>

# Garden Parkway

## Section A

Length

6.8 miles

Cost

\$410 million

Begin Construction

2011

Open to Traffic

2015



# Monroe Connector/Bypass



Length	21.1 miles
Cost	\$553 million
Begin Construction	June 2010
Open to Traffic	2014

# Cape Fear Skyway

Length

9.5 miles

Cost

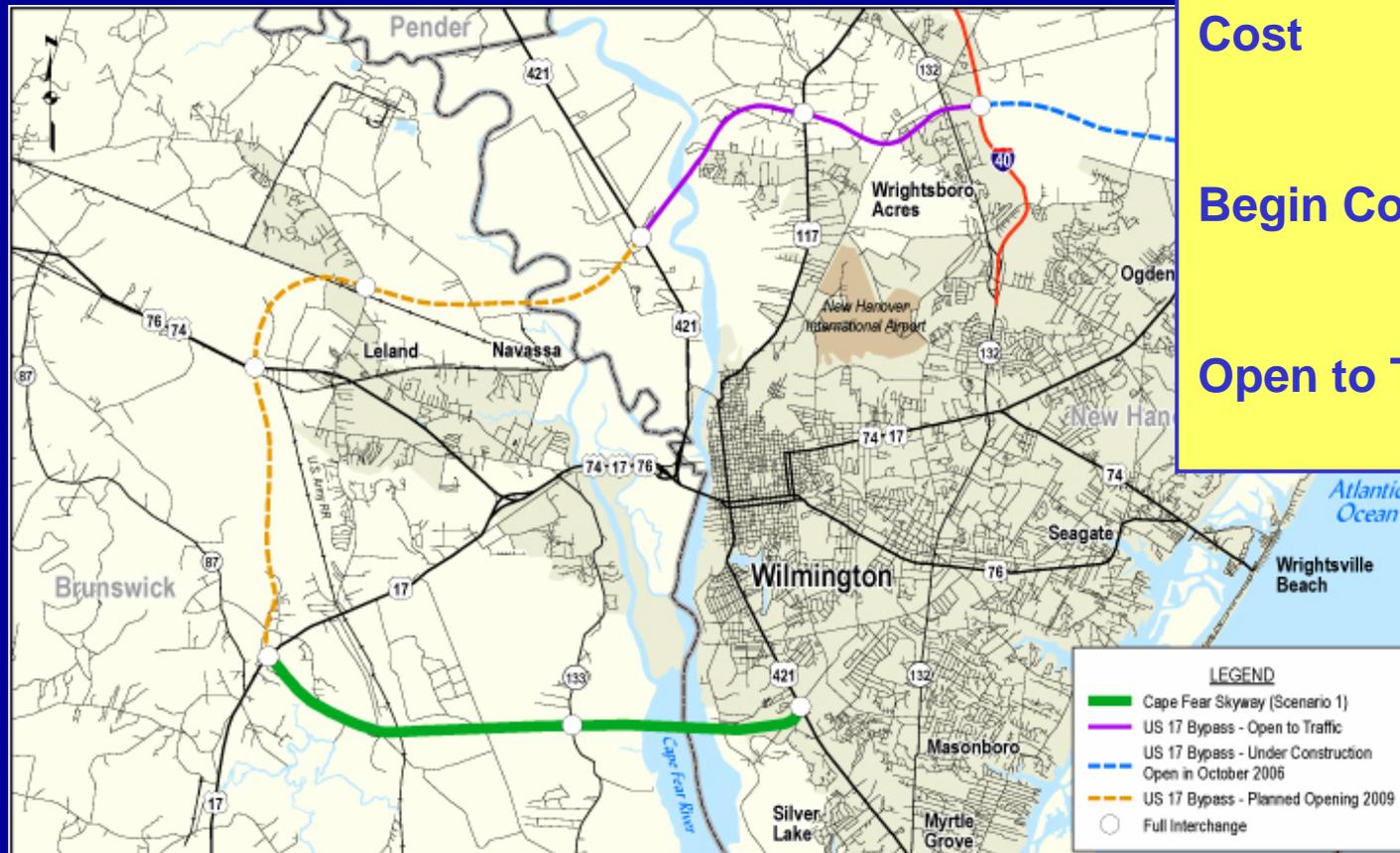
\$744 million

Begin Construction

2010

Open to Traffic

2015



# I-74 Brunswick County



**Length**  
To be determined

**Cost**  
No data available

**Begin Construction**  
No data available

**Open to Traffic**  
No data available

# Yadkin River Bridge

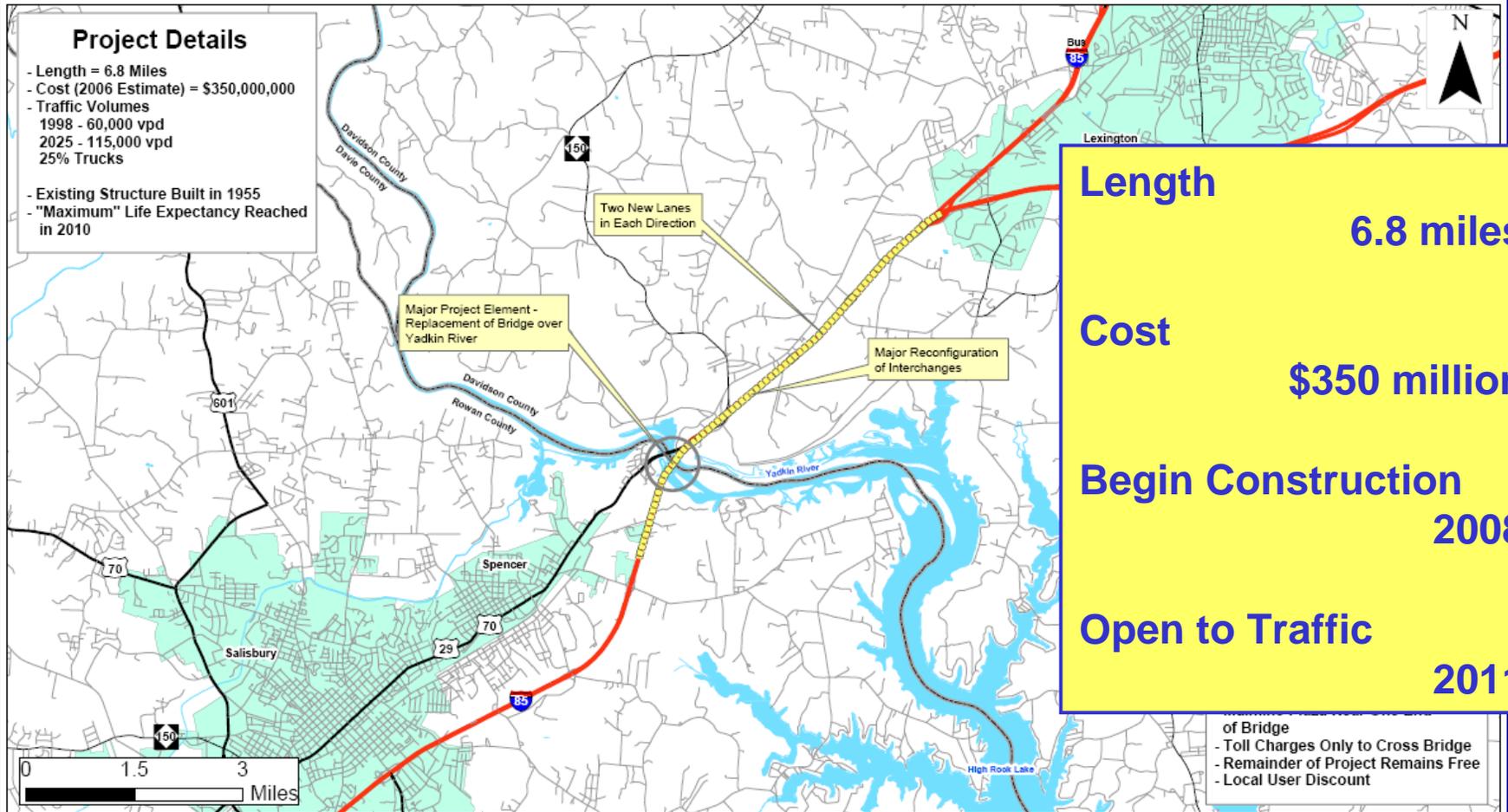


## Proposed I-85 Yadkin River Bridge

NC Turnpike Authority  
December 2006

### Project Details

- Length = 6.8 Miles
- Cost (2006 Estimate) = \$350,000,000
- Traffic Volumes
  - 1998 - 60,000 vpd
  - 2025 - 115,000 vpd
  - 25% Trucks
- Existing Structure Built in 1955
- "Maximum" Life Expectancy Reached in 2010



Length	6.8 miles
Cost	\$350 million
Begin Construction	2008
Open to Traffic	2011

- of Bridge
- Toll Charges Only to Cross Bridge
- Remainder of Project Remains Free
- Local User Discount

# Our Top Priority

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Project #1:

**HOME RUN!**

# 4 Major Components of NCTA Projects

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1. Environmental review and permitting
2. Design and construction
3. Toll collections, facility operations, maintenance and marketing

AND...

# 4 Major Components of NCTA Projects

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## 4. Project Financing

*Our Focus Today*

# Project Financing

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- Step 1: Estimate revenue
- Step 2: Estimate capital and operating costs
- Step 3: Develop financing plan

AND

# Step 4: Identify the Gap

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+ Project Costs

– Bondable Amount

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= Gap

# Research Triangle Expressway Gap is Estimate at this Point

- Traffic and Revenue study is preliminary
  - Bond-grade T&R study due in August
- Cost estimates based on preliminary design
  - Consulting Engineers' Report due in July
- Financing plan based on variables that could change
  - Bonds to be rated this fall when all pieces in place

# Revenue Variables

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- Bond-grade Traffic and Revenue study may change revenue forecast
- Rating agencies may feel that tolls are set too close to the top of the sensitivity curve

# Cost Variables

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- Right-of-way costs in the corridor are major unknown
- O&M and R&R may be underestimated for 2016 and beyond
- Consulting Engineers' Report is not due until July

# Financing Variables

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- Rating agencies may require larger reserves for debt service
- TIFIA loan requirements could increase
- Interest rates may change

# A Closer Look at the Traffic and Revenue Study

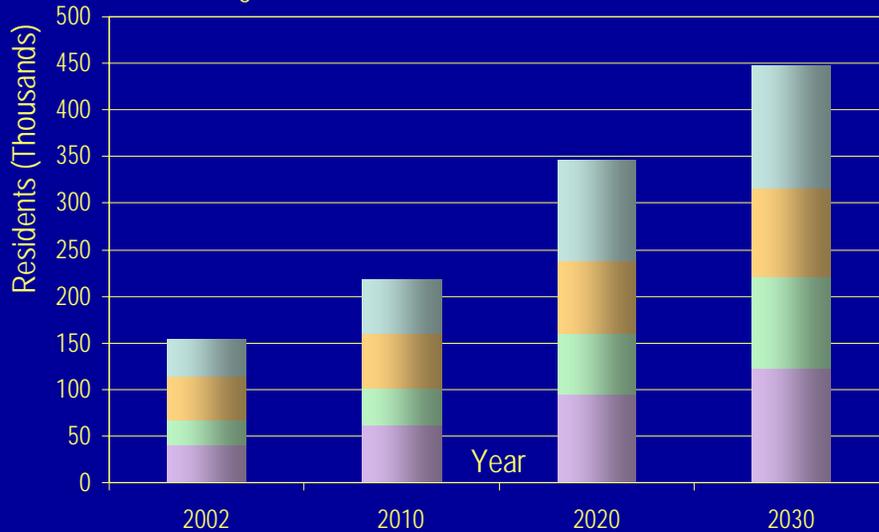
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- Measures area population growth
- Measures regional financial demographics
- Measures employment and job growth
- Measures traffic origin and destination
- Estimates optimal toll rate sensitivities
- Produces annual revenue forecast

# Research Triangle Expressway: Growth Forecast

2002 - 2030

- 294,000 More Residents
- 3.9% Average Growth Per Year

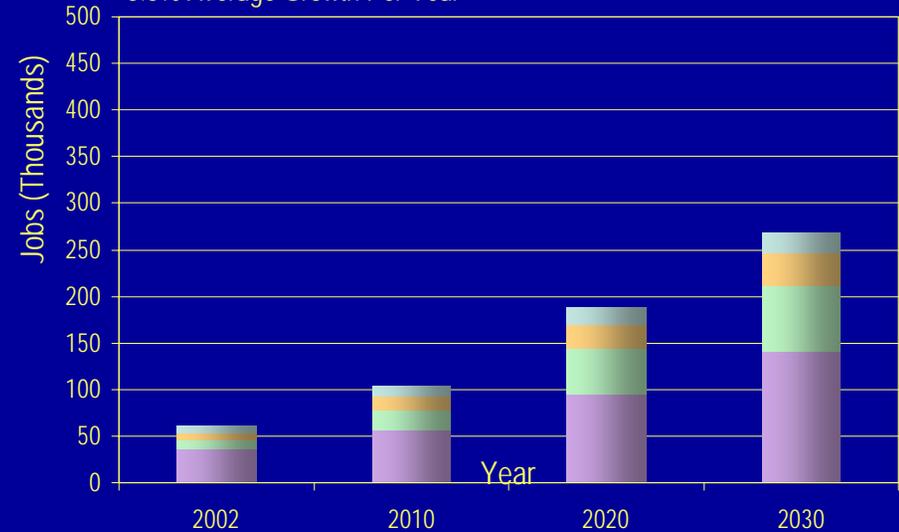


Population



2002 - 2030

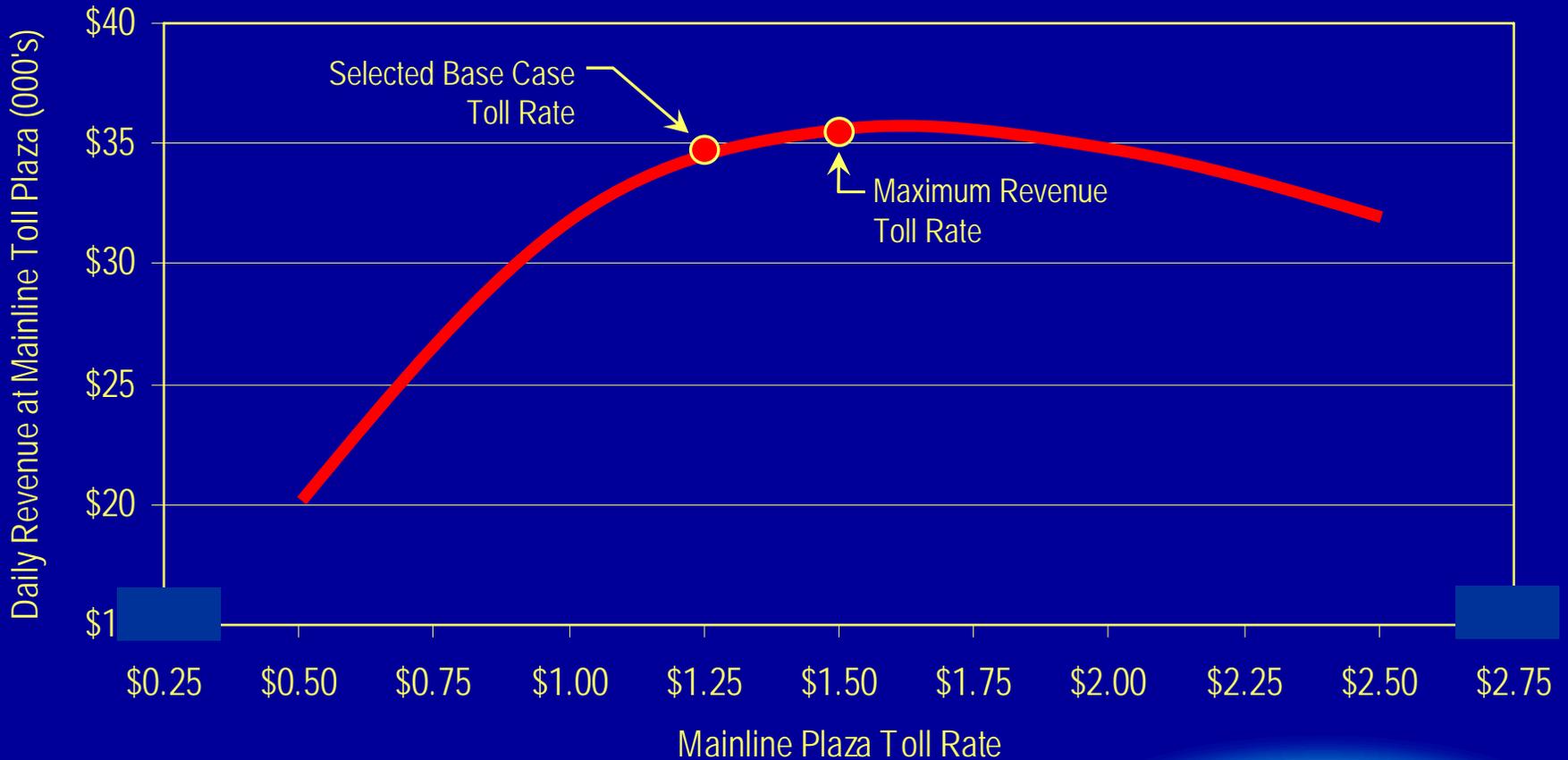
- 208,000 More Jobs
- 5.5% Average Growth Per Year



Employment



# Western Wake: 2011 Toll Sensitivity Curve



# Preliminary Plan of Finance: Research Triangle Expressway

Triangle Expressway (Base Case)	(\$ Millions)	% of Project
<b>Total Gross Project Costs</b>	<b>\$857.6</b>	100.0%
<b>Financing &amp; Other Sources</b>		
Current Interest Bonds	\$278.7	
Capital Appreciation Bonds	\$144.9	
TIFIA Loan	\$300.1	33.3%
NC DOT 540-P	\$108.7	
Construction Fund Earnings	\$72.0	
<b>Financing &amp; Other Uses</b>		
540-P Construction Costs	\$108.7	
Triangle/Western Wake Cost	\$748.9	
Capitalized Interest Fund	\$0.3	
Debt Service Reserve Fund	\$42.4	
Cost of Issuance	\$4.0	
<b>Financing Stats</b>		
TIFIA Fully Paid In:	2038	
Average Debt Service Coverage	2.38	
Effective TIC	5.70%	
Additional Annual Revenues	\$12.0	
Upfront Gap without Annual Revenues	(\$203.5)	23.7%

# Preliminary Gap Estimates (\$ in millions)

Project	Total Cost	Total Gap Amount	Gap Amount/year	Year Needed
Triangle Expressway	\$858	\$204	\$12 - \$18	2007
Monroe Connector	\$553	\$151	\$0 - \$15	2010
Gaston Parkway	\$410	\$188	\$12 - \$18	2011
Mid-Currituck	\$461	\$199	\$0- \$18	2010
Total	\$2,282	\$742	\$24 - \$69	

# Benefits of Early Gap Commitment

- **Allows**
  - Issuance of a Bond Anticipation Note
  - Early right-of-way purchase and utility relocation
- **Reduces cost**
  - Project savings of \$30+ million
- **Accelerates delivery**
  - Open up to one year earlier

# North Carolina Turnpike Authority

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## *Legislative Priorities for 2007*

# 2007 NCTA Legislative Priorities

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1. Gap Funds for Research Triangle Expressway (range of \$12 million - \$18 million)
2. Gap Bond Authorization Language
3. Violation Enforcement Legislation
4. Yadkin River Bridge Authorization

# North Carolina Turnpike Authority

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Thank You