

North Carolina Turnpike Authority

- **Created by General Assembly in 2002**
- **Authorized to finance, build, and operate 9 toll projects**
- **Governed by 9-member board of directors**
- **Chaired by Secretary Tippet**

North Carolina Turnpike Authority

Key Restrictions

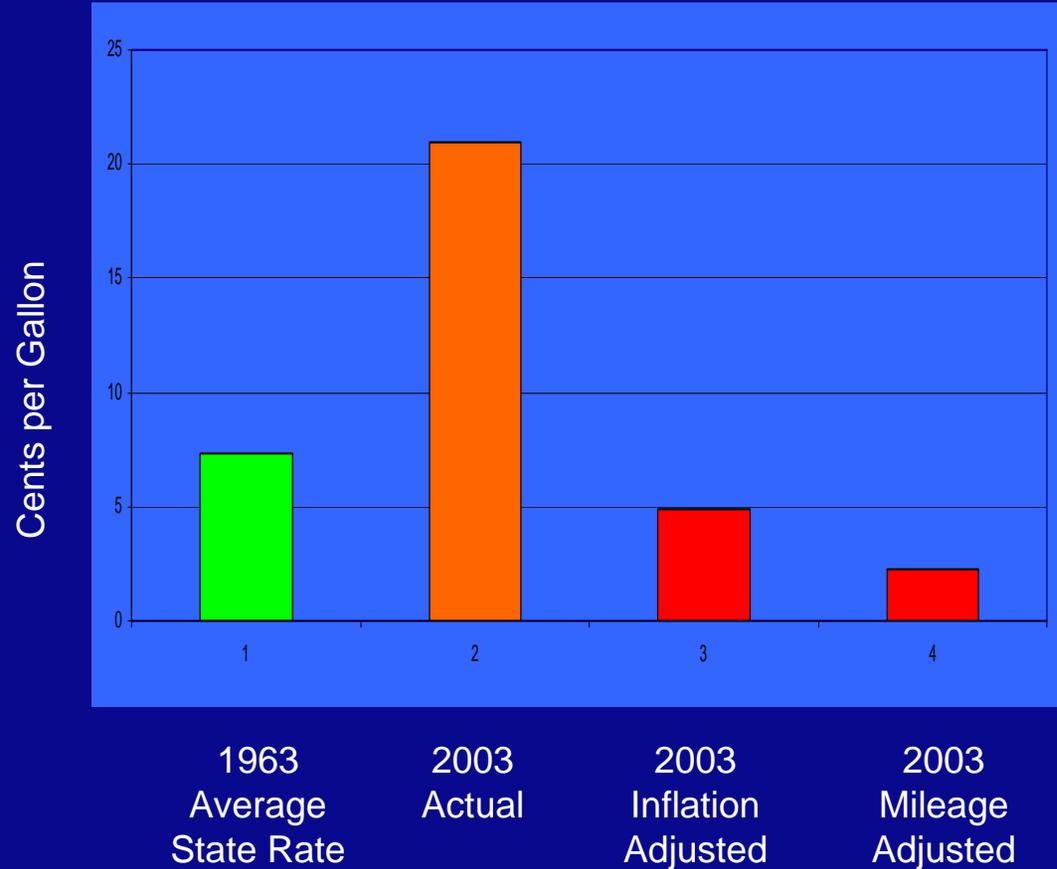
- No tolls on existing roads
- Each toll road has free alternate route
- Must remove tolls once debt is paid

Why Tolls?

- Dwindling resources
 - \$65 billion shortfall over next 30 years
 - No increase in Federal gas tax since 1993
 - NC gas tax capped this year
- Rapid growth
 - 42% increase in NC population expected by 2030
 - NC 7th largest state by 2030
 - Triangle experienced nation's 2nd largest increase in commuter time over past decade
- Rising costs
 - 45% increase in construction costs 2002-2005
 - Foreign demand squeezing price of asphalt, concrete and steel

National Crisis

Gas Tax



- National Average
- Source: Wilbur Smith Associates

Benefits of Tolling

- **Reduces Congestion**
- **Saves Commuter Time**
- **Produces Ripple Effects – Redistribution of Funds**
- **Accelerates Project Delivery**
- **Generates long-term equity/asset building**

Project Delivery Example

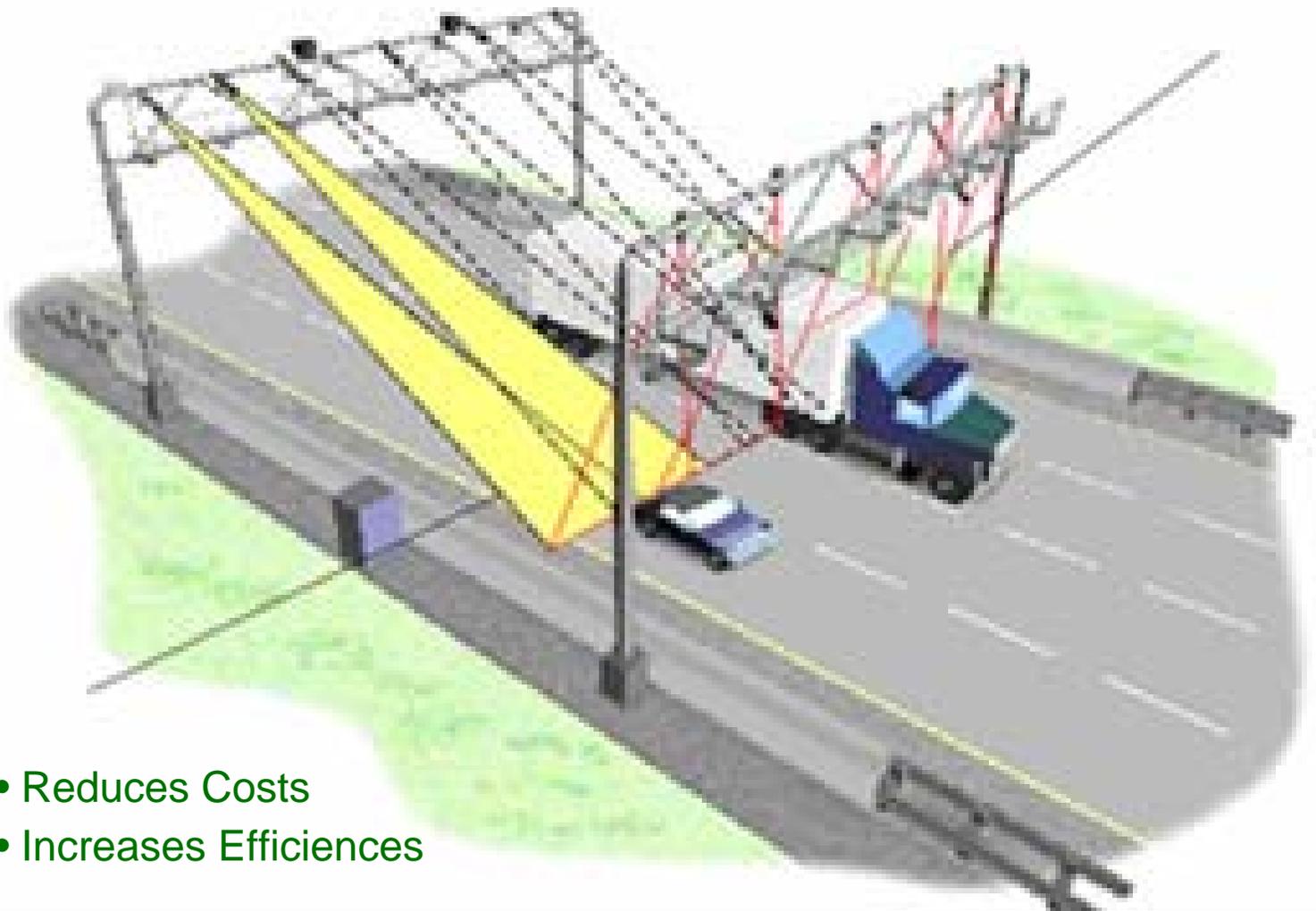
Triangle Expressway

Period	Project Cost	Inflation Loss	Net Gain	Balance Needed
Year 1	\$800	\$0	\$50	\$750
Year 2	\$834	\$34	\$16	\$734
Year 4	\$907	\$37	\$13	\$707
Year 8	\$1,071	\$44	\$6	\$667
Year 12	\$1,266	\$52	-\$2	\$666

Dollars in millions

New Technology

No Stopping to Pay Tolls



- Reduces Costs
- Increases Efficiencies

NCTA Project Approval Process

1. Local leaders request consideration of project
2. NCTA conducts preliminary traffic and revenue studies and financial analysis
3. Report measures revenue, project's cost, and bondability
4. Request to proceed with investment-grade studies and environmental reviews made by local leaders and NCTA Board
5. Project approved by General Assembly
6. Rating agencies and capital markets approve financing plan, bonds issued, ROW purchased, construction begins

Projects Under Consideration



NORTH CAROLINA
Turnpike Authority

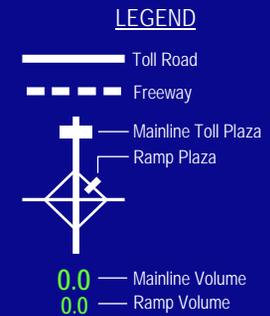
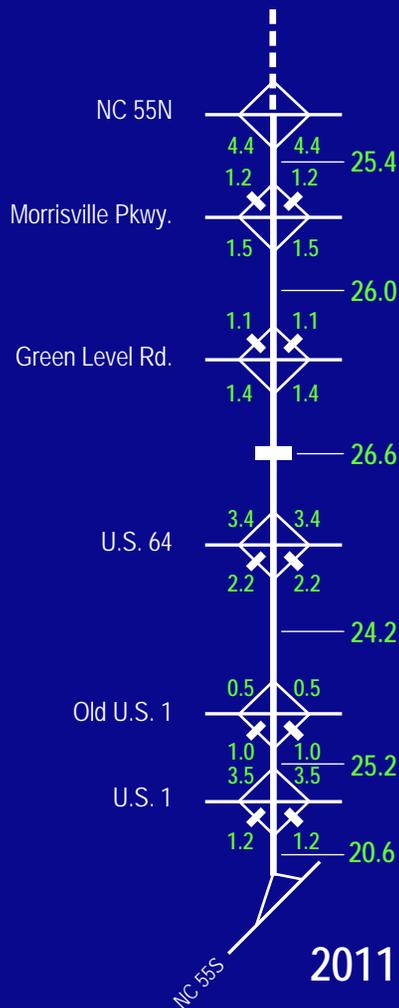


NCTA Project Schedules

<u>Project</u>	<u>Length</u>	<u>Cost</u>	<u>Award</u>
Triangle Parkway	5.2 miles	\$102-273M	Fall '07
Western Wake	12.7 miles	\$395-710M	Late '07
Cape Fear Skyway	9.5 miles	\$415-889M	Fall '09
Mid Currituck	11 miles	\$120-200M	Fall '09
Monroe Connector	11.5 miles	\$205-439M	Late '09
Gaston Connector	21.5 miles	\$720 M-\$1.5B	Spring '10



Triangle Expressway Traffic Estimates



Note: All traffic volumes shown represent thousands of vehicles.

Preliminary Financing Plan

Triangle Expressway

	Single Gap Payment*	Annual Revenue Supplement*
Current Interest Bonds	\$169.6	\$ 393.1
Capital App. Bonds	139.4	138.6
TIFIA Bonds	285.6	288.4
GAP Funding	\$214.9	
Annual Revenue		\$12 million per year
Total	\$ 809.5	\$ 820.1
Effective Interest Rate	7.05%	5.94%

* \$ millions

Gap Funds

- Local funds not available
- NCDOT funds not available
- *General Assembly must act*

If they don't...

We must explore public-private partnership.

Public-Private Partnership

We may lose control of:

- **Construction**
- **Operations**
- **Maintenance**

Synergies Between Toll and Transit

- **Value Pricing**
 - Used to maintain free-flow of traffic
 - Variable toll rates maximize revenue and reduce congestion
- **HOT lanes and Managed lanes**
- **BRT discounts**
- **Vanpool discounts**
- **Rail in corridor**

HOT and Managed Lanes Facilities

- Tolls Charged on Only a Portion of the Lanes
- Fully Electronic Tolling
- Highly Variable Tolls by Time of Day and Direction of Travel
- HOV Traffic Discounted or Free in HOT Lanes
- High Level of Synergy With Transit Initiatives
 - HOT and BRT – A “win-win” proposition



A Look at Triangle Expressway

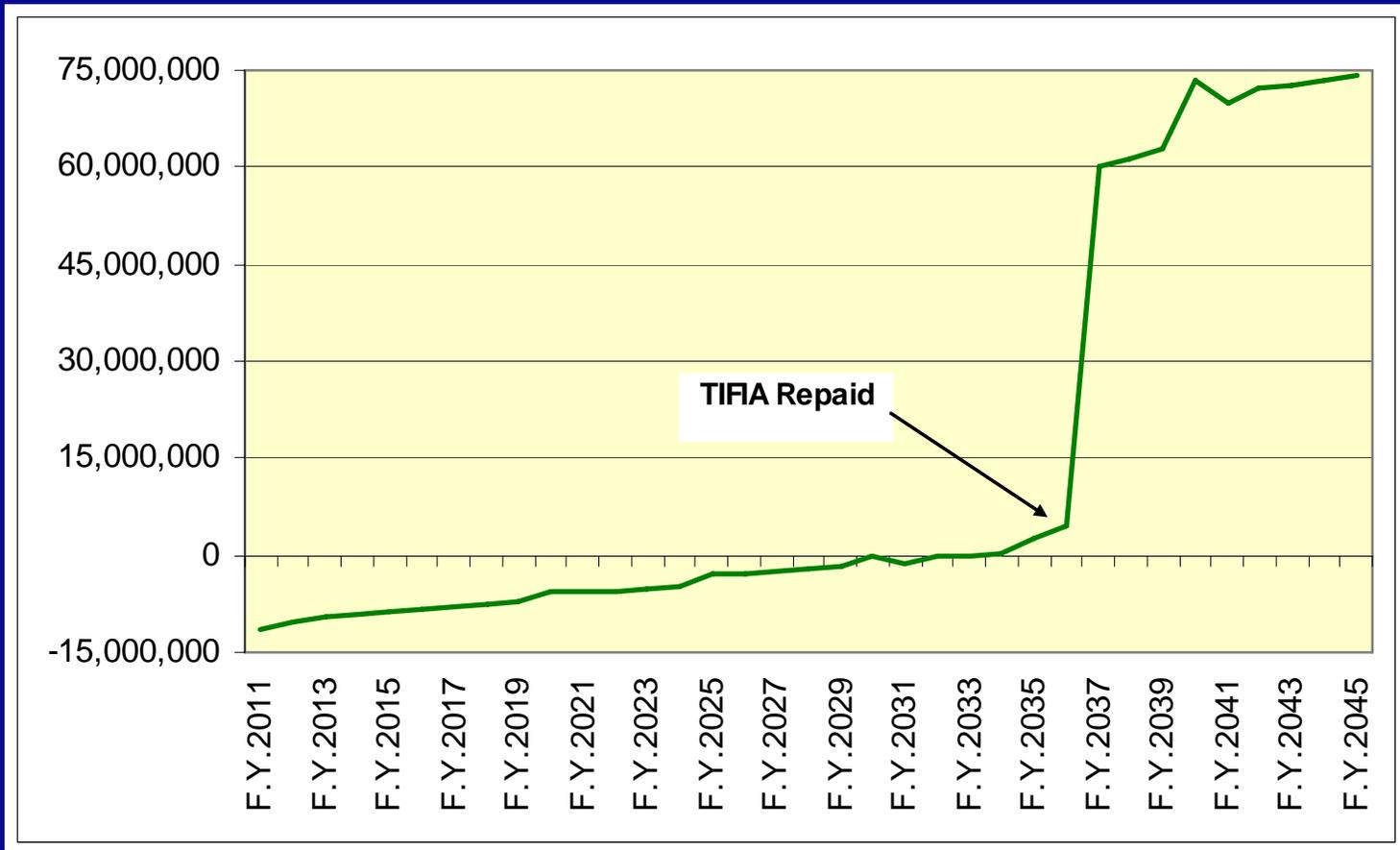
Subsidizing Transit with Toll Revenue is Sensitive Subject

- Done in many states
- But debt for construction is usually retired
- Financial subsidy not done by any start-ups
- Triangle Expressway not expected to reflect excess revenue over debt until TIFIA loan repaid

A Look at Triangle Expressway

- **NCTA now beginning investment-grade study**
- **Project now at delicate financial balance**
 - Start-ups fragile in early years
 - Nine toll projects are under-performing
 - Mature projects better able to absorb negative revenue impacts
- **Allowing free travel for portion of potential users**
 - Viewed negatively by financial markets
 - Must be addressed in bond documents

Triangle Turnpike Cash Flow 2011-2045



Financial Forecast

- **2030 - Break even**
- **2037 - \$72 million profit**
- **2046 - \$130 million profit**
 - Turn project over to NC DOT

A Look at Triangle Expressway

- **NCTA enabling legislation includes mandate to consider transit in decision-making**
- **WSA will analyze financial impact of:**
 - **BRT operations**
 - **Park-and-ride lots**
 - **Discounts for organized vanpools**
 - **Discounts for HOV traffic**
 - **Rail**
 - **Other options as requested by TTA**

Keeping the Balance

- **Project is NOT self-supporting for 20 years**
- **Some transit strategies may have negative impacts on toll revenue**
 - HOV discounts
 - Carpools
- **Managed pricing**
 - Likely to enhance revenue
 - And keep roadway free flowing

Working Together We Can Find Solutions

- **Park and ride lots at interchanges are possible**
 - Serve buses and carpoolers
 - Acceptable way to share toll costs
 - Equates to per-person discount for carpoolers
- **Bus discounts**
 - Bus tolls may be discounted or free
 - Negotiable with the NCTA

Thinking Outside the Box:

Trans Texas Corridor

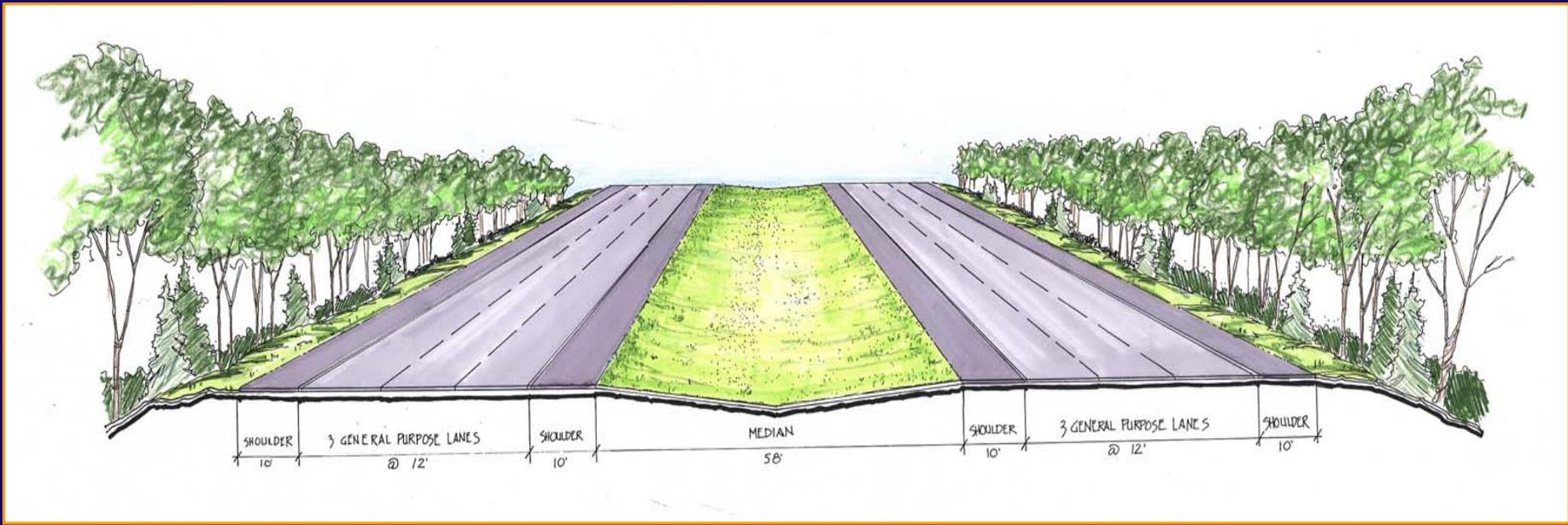
- **Oklahoma to Mexico and Louisiana to New Mexico**
- **Estimated cost = \$145-184 billion**
- **1200-foot corridor**
- **Car lanes, truck lanes, rail, utilities**
- **Opens in stages over 50-year period**
- **Public-private partnership with Cintra-Zachry**
- **Cintra-Zachry paid Texas \$1.2 billion for right to build, maintain and operate Phase 1 of project**



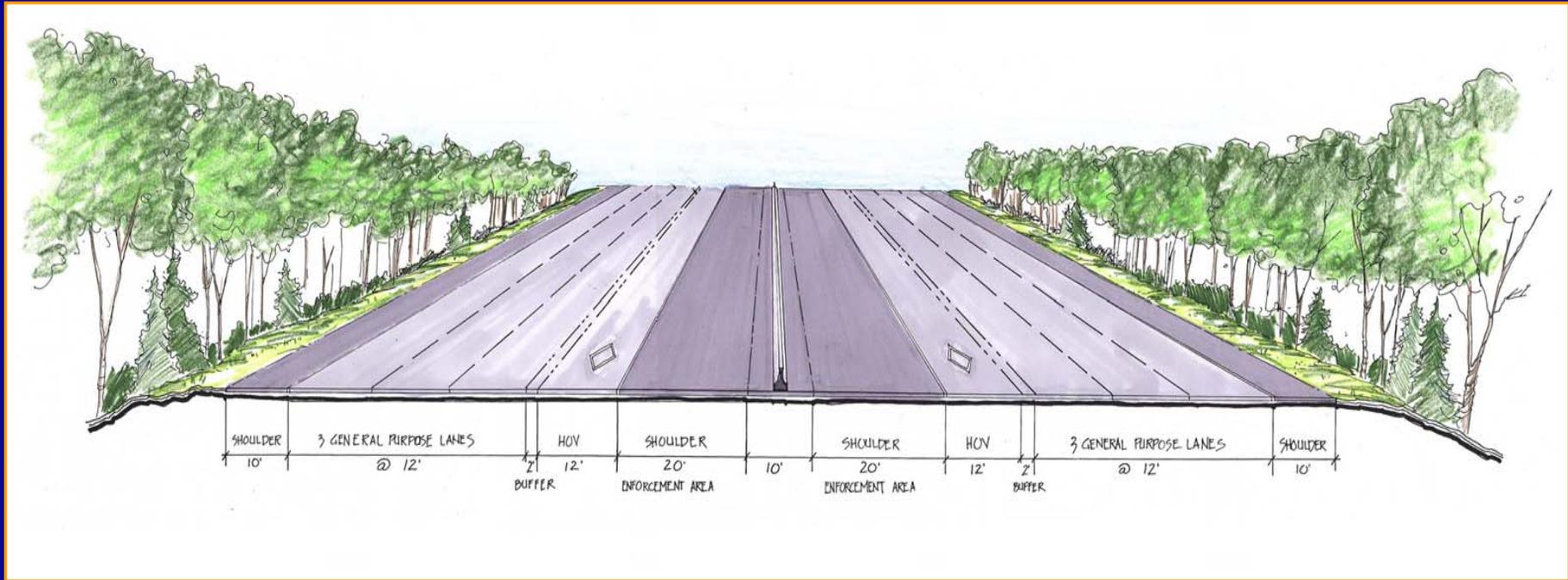
TTA and NCTA Challenges

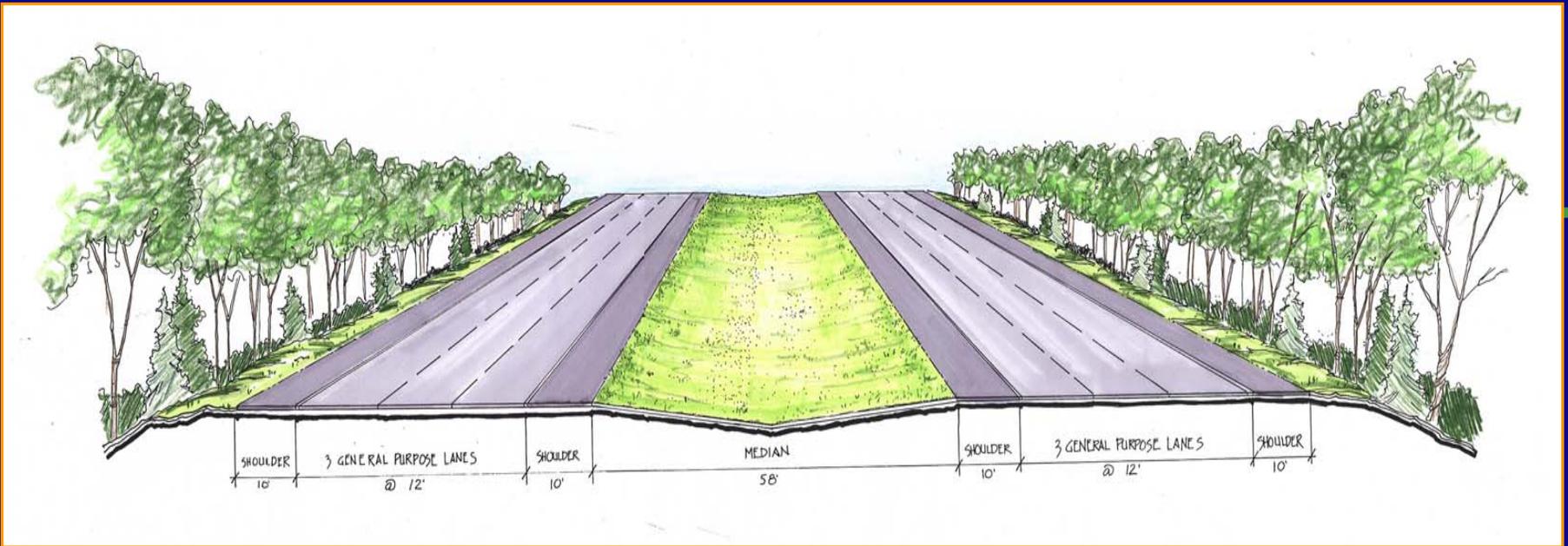
- **Develop integrated mobility solution without jeopardizing ability to finance project**
 - Delay some initiatives until reach certain revenue thresholds
 - Secure increased financial subsidies from other sources to offset negative revenue impacts
- **Build and operate a “smart” road which maximizes mobility**
 - Maximize use of electronic toll collection to minimize delays and pollution
 - Use value pricing to better manage demand
 - Over long term, look for multi-modal strategies to optimize mobility of corridor when financial strength of project permits

Following 2 slides in addendum



Proposed 78' Median with and without HOT lanes





Proposed 78' Median With and Without Additional GP and HOT Lanes

