

**Estimates of
Florida's Transportation Needs
2003-2020**

DRAFT

Presented to the

Florida Transportation Commission

March 4, 2003

Overview

- **Commission Request to Assess Long Range Needs**
- **Proposed Approach at December Meeting**
- **“Macro Level” Assessment**
 - **Basis: 1995 CUTR Study**
 - **Not “Bottoms Up” or Inventory-Based**

Today's Presentation

- **Summary**
- **Background**
- **System Components**
- **Conclusions**
- **Next Steps**

Summary

Needs Scenarios

- **“Maintain Conditions”**: maintain today’s physical conditions and service levels
- **“Improve Conditions”**: reduce current deficiencies in physical conditions and service levels

Summary of Needs

(Estimates in Billions of 2002 Dollars)

	Needs Scenario	
	Maintain Conditions	Improve Conditions
State-owned Roads and Bridges	\$81.8	\$101.8
Locally-owned Roads and Bridges	44.6	53.8
Transit/Urban, Regional Passenger Rail	21.5	30.2
Paratransit	5.6	9.4
High Speed Rail (State Share)	-	2.4
Other Rail (State Share)	1.0	1.0
Aviation (State Share)	2.5	2.5
Seaports (State Share)	<u>0.6</u>	<u>0.6</u>
Total	\$157.4	\$201.6

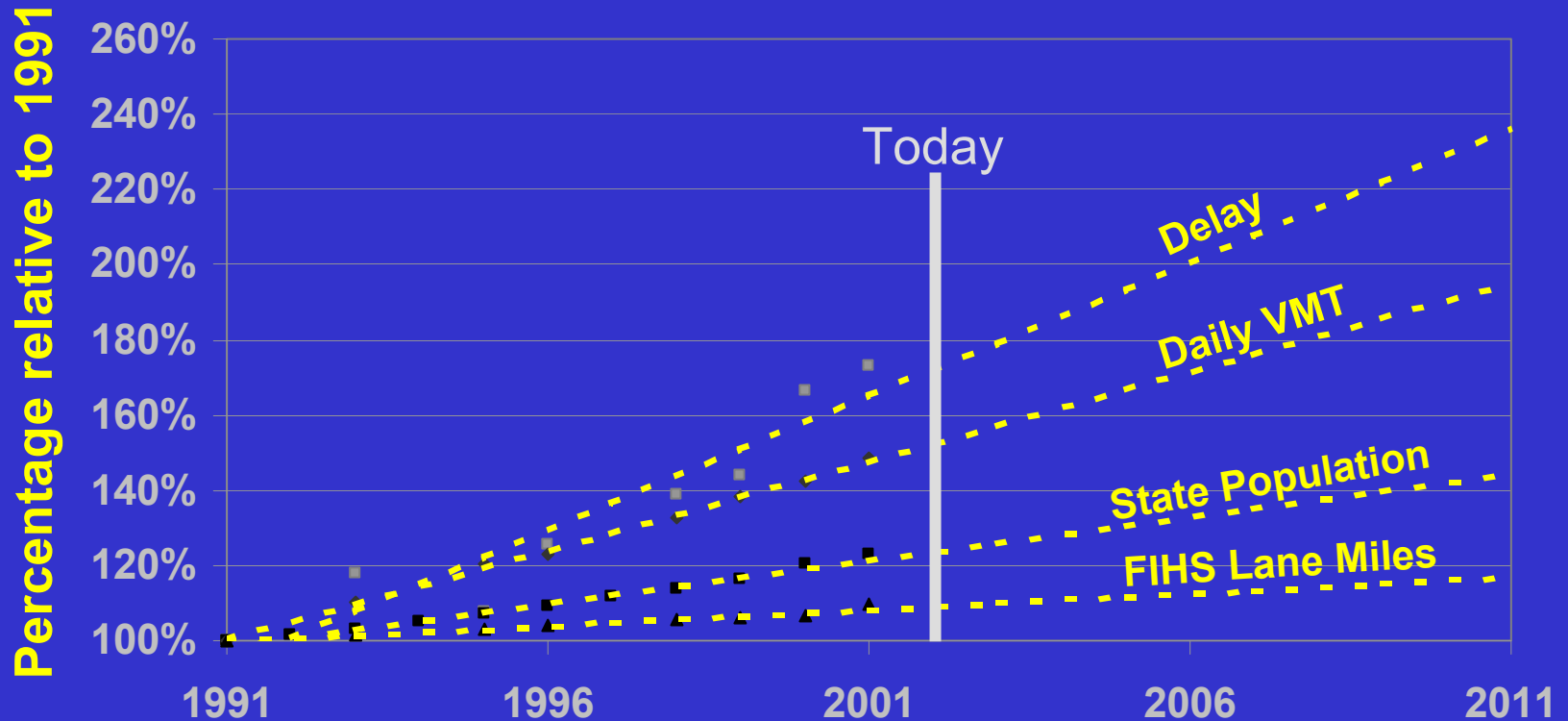
Summary of Needs, Revenues and Shortfalls

(Estimates in Billions of 2002 Dollars)

	Needs Scenario	
	Maintain Conditions	Improve Conditions
Needs	\$157.4	\$201.6
Available Revenue	<u>109.7</u>	<u>113.0</u>
Shortfall		
State	28.7	54.1
Local	19.1	34.5
Total	\$47.8	\$88.6

Background

Trends in Demand and Mobility on the FIHS



Background

- **1995 CUTR Study**
- **Changes in Methodologies and Assumptions**
- **2020 Revenue Forecast**
- **Revenue Uncertainties**

1995 CUTR Study

- **Federal Model for Highways and Bridges**
- **Numerous Assumptions, all Components**
- **Original 2020 Revenue Forecast (1994)**
- **No Additional Federal Funding for Shortfalls**

Changes in Methodology / Assumptions

Needs

- **Adjust for Travel Demand/Supply, Inflation**
- **Add Interchanges, ITS**
- **Use Federal Model for Transit**
- **Include Initial Assessment of Security Needs**

Changes in Methodology / Assumptions

Revenues

- **Use Current 2020 Revenue Forecast**
- **Examine Impact on Revenues of Changes in Vehicle Technology**
- **Account for 2002 Miami-Dade Referendum**
- **Add Change in Local Option Motor Fuel Taxes**

2020 Revenue Forecast

- **State and Federal Funds Through FDOT Work Program for Most Components**
- **Reflects TEA-21 and Mobility 2000**
- **Reasonable Compared to Recent Estimates**
- **Use Current Forecast Where Possible**

Revenue Uncertainties

- **Issue: Impact of Technological Change on Motor Fuel Tax Revenues**
- **Recent Florida Analyses**
- **Current National Initiatives**
- **Reductions will Impact Capacity Programs**

System Components

- **State-owned Roads and Bridges**
- **Locally-owned Roads and Bridges**
- **Transit including Urban / Regional Passenger Rail**
- **Paratransit**
- **High Speed Rail (State Share)**
- **Other Rail (State Share)**
- **Aviation (State Share)**
- **Seaports (State Share)**

State-owned Roads and Bridges

Needs

- Adjust CUTR for increased demand and supply, for inflation
- Add interchange needs from 2020 FIHS Plan
- Add needs from ITS Plan
- “Maintain”: maintain physical condition and congestion levels
- “Improve”: improve physical condition and reduce congestion

Revenues

- 2020 Revenue Forecast for highway preservation and capacity

State-owned Roads and Bridges

(Estimates in Billions of 2002 Dollars)

	Needs Scenario	
	Maintain Conditions	Improve Conditions
Needs	\$81.8	\$101.8
Available Revenue	<u>55.4</u>	<u>55.4</u>
Shortfall	\$26.4	\$46.4

Locally-owned Roads and Bridges

Needs

- Adjust CUTR for increased demand and supply using adjustment factors for state highways
- Adjust for inflation
- “Maintain”: maintain physical condition and congestion levels
- “Improve”: improve physical condition and reduce congestion

Revenues

- CUTR estimates through 2012; 3.1% annual growth thereafter
- Add proceeds for changes in Local Option Motor Fuel Taxes

Locally-owned Roads and Bridges

(Estimates in Billions of 2002 Dollars)

	Needs Scenario	
	Maintain Conditions	Improve Conditions
Needs	\$44.6	\$53.8
Available Revenue	<u>28.8</u>	<u>28.8</u>
Shortfall	\$15.8	\$25.0

Transit

Including Urban/Regional Passenger Rail

Needs

- Use Federal “TERM” methodology for capital costs
- Estimate operating costs
- “Maintain”: maintain physical condition of assets and capacity utilization levels
- “Improve”: improve physical condition, operating speeds and capacity utilization levels; assume 3 “new starts” or major fixed guideway/commuter rail expansions

Transit

Including Urban/Regional Passenger Rail

Revenues

- Project historic revenues through 2020 (i.e., “continuation”)
- Add estimates of state assistance to Tri-Rail/SFRC
- Add additional farebox revenues from service and passenger growth
- Add revenues from Miami-Dade ½ ¢ Sales Tax

Shortfalls

- Use ratio of historic assistance from state and local governments

Transit

Including Urban/Regional Passenger Rail

(Estimates in Billions of 2002 Dollars)

	Needs Scenario	
	Maintain Conditions	Improve Conditions
Needs	\$21.5	\$30.2
Available Revenue	<u>17.3</u>	<u>20.5</u>
Shortfall		
State	1.1	2.6
Local	3.1	7.1
Total	\$4.2	\$9.7

Paratransit

Needs

- Use CUTR through 2012; same growth rates through 2020
- Adjust for inflation
- “Maintain”: maintain present conditions and level of service
- “Improve”: needs for “maintain” plus eliminate unmet demand

Paratransit

Revenues

- Use CUTR through 2012; same growth rates through 2020
- Adjust for inflation

Shortfalls

- Use ratio of historic assistance from state and local governments
 - 15% from TD Commission and FDOT
 - 26% from other state agencies
 - 59% from local governments

Paratransit

(Estimates in Billions of 2002 Dollars)

	Needs Scenario	
	Maintain Conditions	Improve Conditions
Needs	\$5.6	\$9.4
Available Revenue	<u>5.2</u>	<u>5.3</u>
Shortfall		
State	0.2	1.7
Local	0.2	2.4
Total	\$0.4	\$4.1

High Speed Rail (State Share)

Needs

- Estimated from initial information submitted in proposals to the Florida High Speed Rail Authority, Tampa to Orlando
- Estimates of “state share” of needs for St. Petersburg/Tampa and Orlando/Miami not available
- “Improve” scenario only

Revenues

- 2020 Revenue Forecast has no funding estimated for High Speed Rail

High Speed Rail (State Share)

(Estimates in Billions of 2002 Dollars)

	Needs Scenario	
	Maintain Conditions	Improve Conditions
Needs *	-	\$2.4
Available Revenue	-	<u>0.0</u>
Shortfall	-	\$2.4

* Tampa to Orlando

Other Rail (State Share)

Needs

- Continuation of current programs: rail safety, intercity passenger rail, local rehabilitation assistance
- Additional rail/highway crossing improvements
- Potential Amtrak service on FEC
- “Maintain” and “Improve” scenarios the same

Revenues

- 2020 Revenue Forecast minus Tri-County Commuter Rail/SFRC

Other Rail (State Share)

(Estimates in Billions of 2002 Dollars)

	Needs Scenario	
	Maintain Conditions	Improve Conditions
Needs	\$1.00	\$1.00
Available Revenue	<u>0.95</u>	<u>0.95</u>
Shortfall	\$0.05	\$0.05

Aviation (State Share)

Needs

- Total Needs from Florida Aviation Database, 2003-2008; 50% of annual average (2003-2008) thereafter
- State share of total needs = 15% (recent experience)
- “Maintain”: State share of estimated needs (above)
- “Improve”: “Maintain” plus proposed airport near Panama City

Revenues

- 2020 Revenue Forecast

Aviation (State Share)

(Estimates in Billions of 2002 Dollars)

	Needs Scenario	
	Maintain Conditions	Improve Conditions
Needs	\$2.46	\$2.49
Available Revenue	<u>1.50</u>	<u>1.50</u>
Shortfall	\$0.96	\$0.99

Seaports (State Share)

Needs

- Current state assistance program
- Debt service on outstanding bond issues
- State share of other needs has not been established
- “Maintain” and “Improve” scenarios the same

Revenues

- 2020 Revenue Forecast

Seaports (State Share)

(Estimates in Billions of 2002 Dollars)

	Needs Scenario	
	Maintain Conditions	Improve Conditions
Needs	\$0.6	\$0.6
Available Revenue	<u>0.6</u>	<u>0.6</u>
Shortfall	\$0.0	\$0.0

Conclusions

Growth in Average Annual Needs

(Estimates in Billions of 2002 Dollars)

	Maintain Conditions	Improve Conditions
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<u>Average Annual Needs</u>		
Update (2002 \$)	\$8.7	\$11.2
CUTR Study (2002 \$)	<u>6.5</u>	<u>8.4</u>
Difference	\$2.2	\$2.8
Demand/Supply	\$1.9	\$2.2
Added Needs (Interchanges, ITS, HSR)	\$0.3	\$0.6

Conclusions

Average Annual Shortfall, 2003 Update (2002 Dollars)

	Maintain Conditions	Improve Conditions
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<u>Average Annual Shortfall</u>		
Total	\$2.7 Billion	\$4.9 Billion
Per Capita	\$160	\$295
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Conclusions

- **“Order of magnitude” estimates**
- **Results confirm earlier analyses:
Growth in demand continues to
exceed growth in supply**

Next Steps

- **Commission Questions**
- **Commission Comments on Draft Report**
- **Final Report by mid-March**