



PROJECTING AVAILABLE REVENUE FOR PLANNING

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Every MPO prepares a Metropolitan Transportation Plan (MTP)

- Based upon a 25-year planning horizon
- Lists prioritized projects that relate to the needs of the region.
- **MUST BE FINANCIALLY CONSTRAINED**
- The state and MPOs should confer on reasonable expectations of revenue.

The Magnitude Determination

- Needs are determined through TMMP & TUMP.
- MTP is financially constrained by all reasonable funding expectations.
- It is important that we all are consistent in our assumptions for estimating available future funding.
- We all debate the magnitude of the unfunded needs.
- JACK is a tool for estimating future funding.

What is JACK?

- It is an spreadsheet-based tool.
- It relates population and fuel efficiency scenarios to revenue potentials.
- It correlates past trends with future scenarios.
- It allows for rapid examination of potential revenue changes under differing population and fuel efficiency scenarios.

Where does JACK begin?

JACK gives you a quick forecast of reasonable expectations based on current forecasts of revenue and expenditures.

Revenue Forecasts certified from our CFO are hard-coded into JACK

Funding levels from the '09-'19 UTP approved by the commission in April 2008 are also hard-coded in JACK for Category 1 and 5-12.

What are open are the amounts for Categories 2, 3, and 4.

JACK can help identify reasonable expectations based on any number of future scenarios!

The VISION for using JACK

- **MPOs and TxDOT will work together to develop reasonable population, fuel efficiency and revenue enhancement scenarios.**
- **These scenarios will be used to project reasonable expectations of funding.**
- **These reasonable expectations will be consistent across all MPOs and TxDOT.**
- **This improves transparency of funding forecasts and unmet needs reporting.**

JACK Variables

- **Population Growth**
- **Fuel efficiency**
- **Federal Rate of Return**
- **Construction Cost inflation**
- **Federal Gas Tax Increase**
- **State Gas Tax Increase**
- **Index the State Gas Tax**
- **Vehicle Registration Fee Increase**
- **Maintenance Catch up**
- **Prop. 12**
- **Prop. 14**
- **What percentage of redirection of state highway funds can we stop?**

J. A. C. K.

Version 2.1

Joint Analysis using Combined Knowledge

A Product of the TxDOT Financial Management Task Force

19-Dec-07

**** NOTE:** To navigate the instructions please scroll up and down the page. When you are ready to continue please select the "Get Started" button located at the top righthand corner of this page.

Background

The Executive Director of the Texas Department of Transportation (TxDOT) commissioned a task force of experienced and senior Department employees in October 2007. Part of the charge of that task force was to examine the current financial forecasting methods of the Department and to develop an improved and more understandable process. Upon examining the existing process, it was determined that several divisions were involved, using several predictive techniques and that the process was somewhat circular in nature. All the divisions had knowledge about specific areas of forecasting costs and/or revenues. The task force brought together the different divisions and pooled their extensive knowledge to create a new analysis tool. The result is an improved process and methodology allowing for rapid scenario development and analysis. Through a two-month effort involving several divisions and districts, this new methodology allowing for joint analysis using the combined knowledge (J.A.C.K.) of several divisions, was developed.

What is J.A.C.K.?

J.A.C.K. is a spreadsheet using the EXCEL program that provides TxDOT and other decision makers the ability to quickly and easily input different variables that influence the revenues and costs associated with building and maintaining the Texas highway system. J.A.C.K. also allows for a simple and easy construction of a variety of funding scenarios.

INSTRUCTIONS

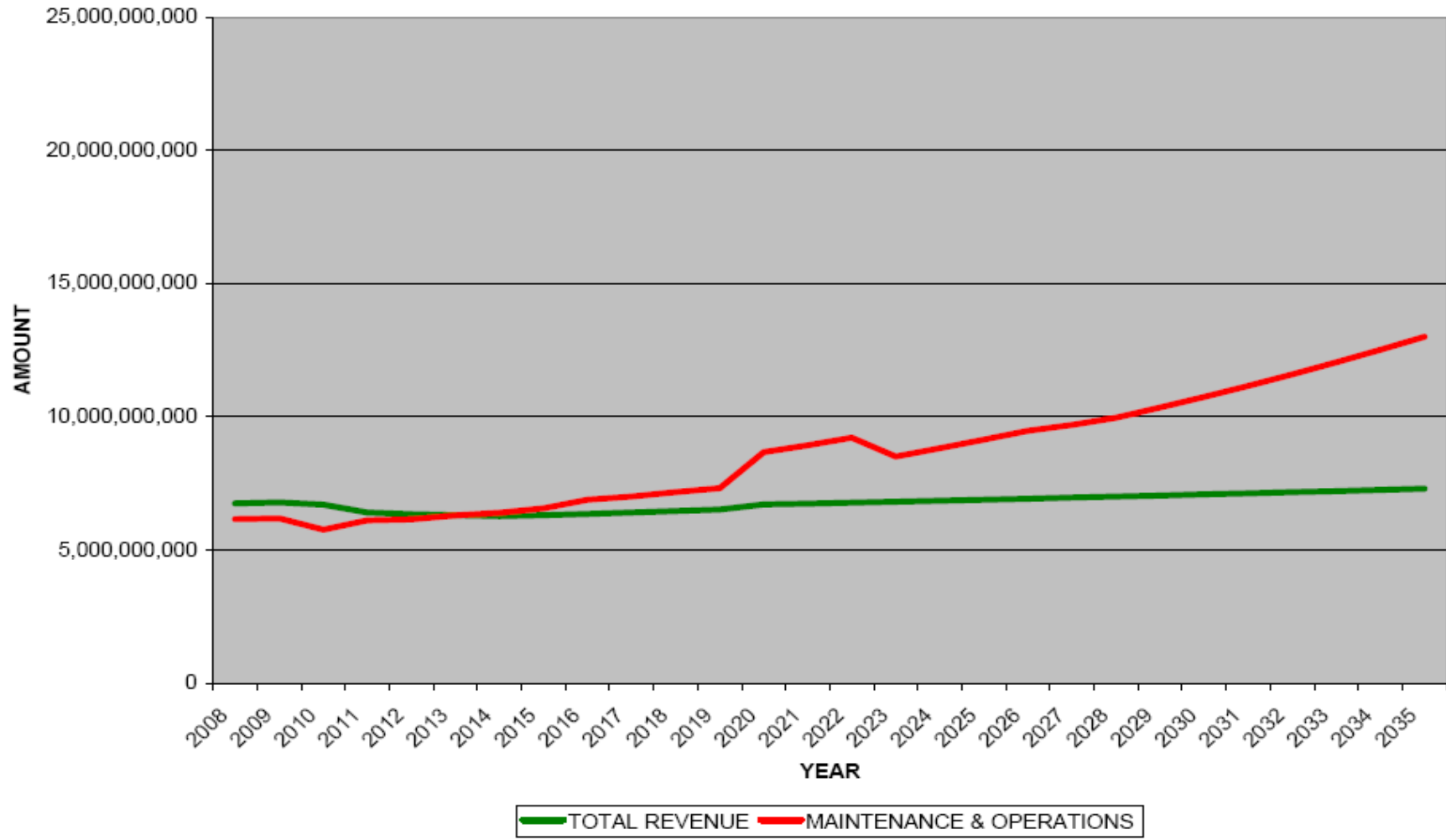
J.A.C.K. ver. 2.1

STATE DATA CENTER MIGRATION FACTOR	<input type="text" value="0.5"/>	NON-LETTING EXPENSES RATE OF INCREASE FY 2020 - FY 2035	<input type="text" value="5"/>
ENTER IN MPG IN YEAR 2035	<input type="text" value="30"/>	PROP 12 AMOUNT	<input type="text" value="\$0"/>
WHAT IS CURRENT MPG IN YEAR 2008	<input type="text" value="17.9"/>	HOW MANY YEARS TO RECEIVE PROCEEDS	<input type="text" value="3"/>
NET FEDERAL RATE OF RETURN AVAILABLE FOR HIGHWAY PROJECTS	<input type="text" value="0.7"/>	FIRST YEAR TO RECEIVE PROP. 12	<input type="text" value="2009"/>
CONSTRUCTION COST INFLATION RATE	<input type="text" value="4"/>	DISCOUNT RATE FOR NET PRESENT VALUE	<input type="text" value="5"/>
FEDERAL GAS TAX INCREASE	<input type="text" value="0"/>	PROP 14 AMOUNT	<input type="text" value="\$0"/>
YEAR FEDERAL GAS TAX INCREASE IMPLEMENTED	<input type="text" value="2010"/>	HOW MANY YEARS TO RECEIVE PROP 14	<input type="text" value="3"/>
STATE GAS TAX INDEXED TO INFLATION	<input type="text" value="0"/>	FIRST YEAR TO RECEIVE PROP. 14	<input type="text" value="2008"/>
YEAR STATE GAS TAX INDEXED	<input type="text" value="2010"/>	YEAR TO START PROP 14 PAYBACK	<input type="text" value="2009"/>
FLAT STATE GAS TAX INCREASE	<input type="text" value="0"/>	HOW LONG IS PAYBACK	<input type="text" value="20"/>
YEAR FLAT STATE GAS TAX IMPLEMENTED	<input type="text" value="2012"/>	WHAT PERCENTAGE OF DIVERSIONS COULD WE STOP	<input type="text" value="0"/>
STATE VEHICLE REGISTRATION FEE INCREASE	<input type="text" value="\$0.00"/>	WHAT YEAR COULD WE STOP DIVERSIONS	<input type="text" value="2010"/>
YEAR VEHICLE REGISTRATION FEE INCREASED	<input type="text" value="2010"/>	TEXAS' MOBILITY NEEDS IN '04 DOLLARS	<input type="text" value="86"/>
MAINTENANCE CATCH UP AMOUNT (FY '20-'22) ENTER AMOUNT IN BILLIONS	<input type="text" value="3"/>		

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- [Registration](#)
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REVENUE VS. MAINTENANCE & OPERATIONS



REVENUES VS. EXPENDITURES

SUMMARY OF INPUTTED SCENARIO

POPULATION & FUEL EFFICIENCY (FY 2008 - FY 2035)

The state data center migration factor is 0.5
 In 2008, the average fuel efficiency in Texas was 17.3 mpg.
 This is a 67.5% increase in fuel efficiency over a 27 year period.

FEDERAL FUNDING

The net federal rate of return to Texas currently is 0.6%.
 the assumption of a 0.7 rate of return is used for this scenario.

Despite several years of double digit construction cost increases,

STATE AND FEDERAL TAX INCREASES

There was no increase to the federal gas tax.

In FY 2035, the federal gas tax will be \$0.194.

There was no increase to the state gas tax.

The state gas tax was not indexed to inflation.

In FY 2035, the state gas tax will be \$0.194.

The state's vehicle registration fee will increase.

These increases shown above generate

	Federal gas tax
FY 08	\$0
FY 09-19	\$0
FY 20-35	\$0
Total	\$0

TXDOT OPERATING EXPENSES

In order to gain more money to maintain the highway trust funds, the rate is capped at a 5% increase after FY 2010.

POSSIBLE BONDS

Proposition 12

There was no issuance of Prop. 12.

Proposition 14 or other Fund 6 supported debt

There was no issuance of Prop. 14.

Therefore there is no bond repayment

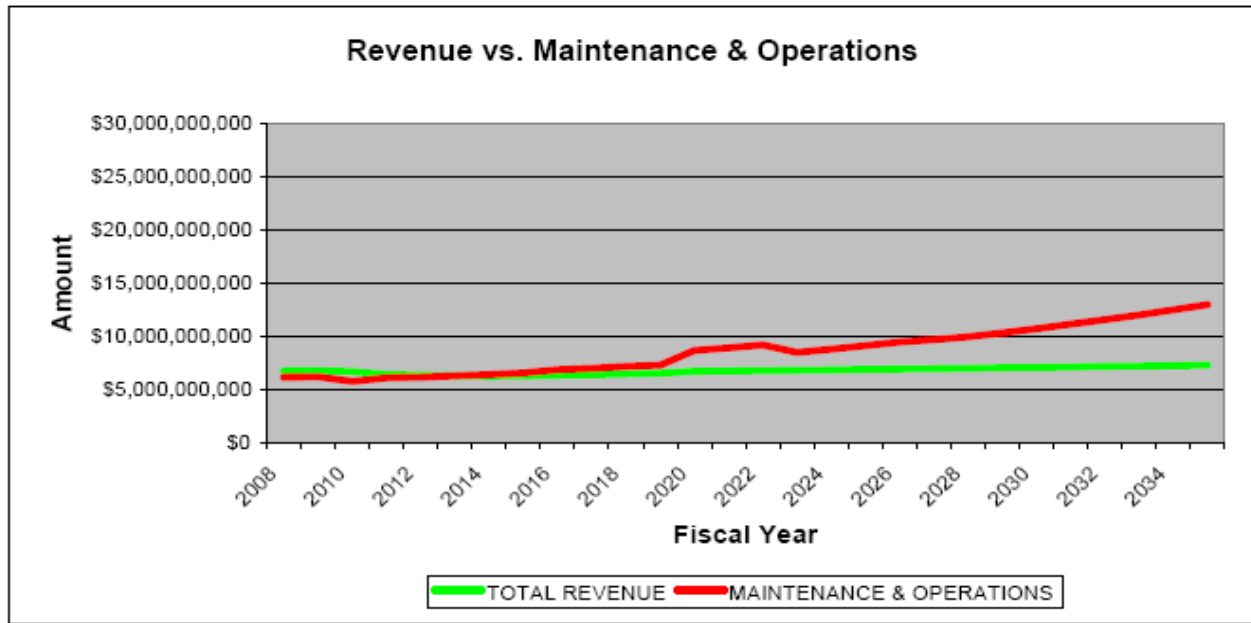
DIVERSIONS

During the last legislative session \$1.57 Billion was diverted from the highway funds to other agencies. For this scenario, it is assumed that no diversions were recovered. Therefore no additional revenue is shown in Table 2.

Table 2: Diversion Recovery of 0%

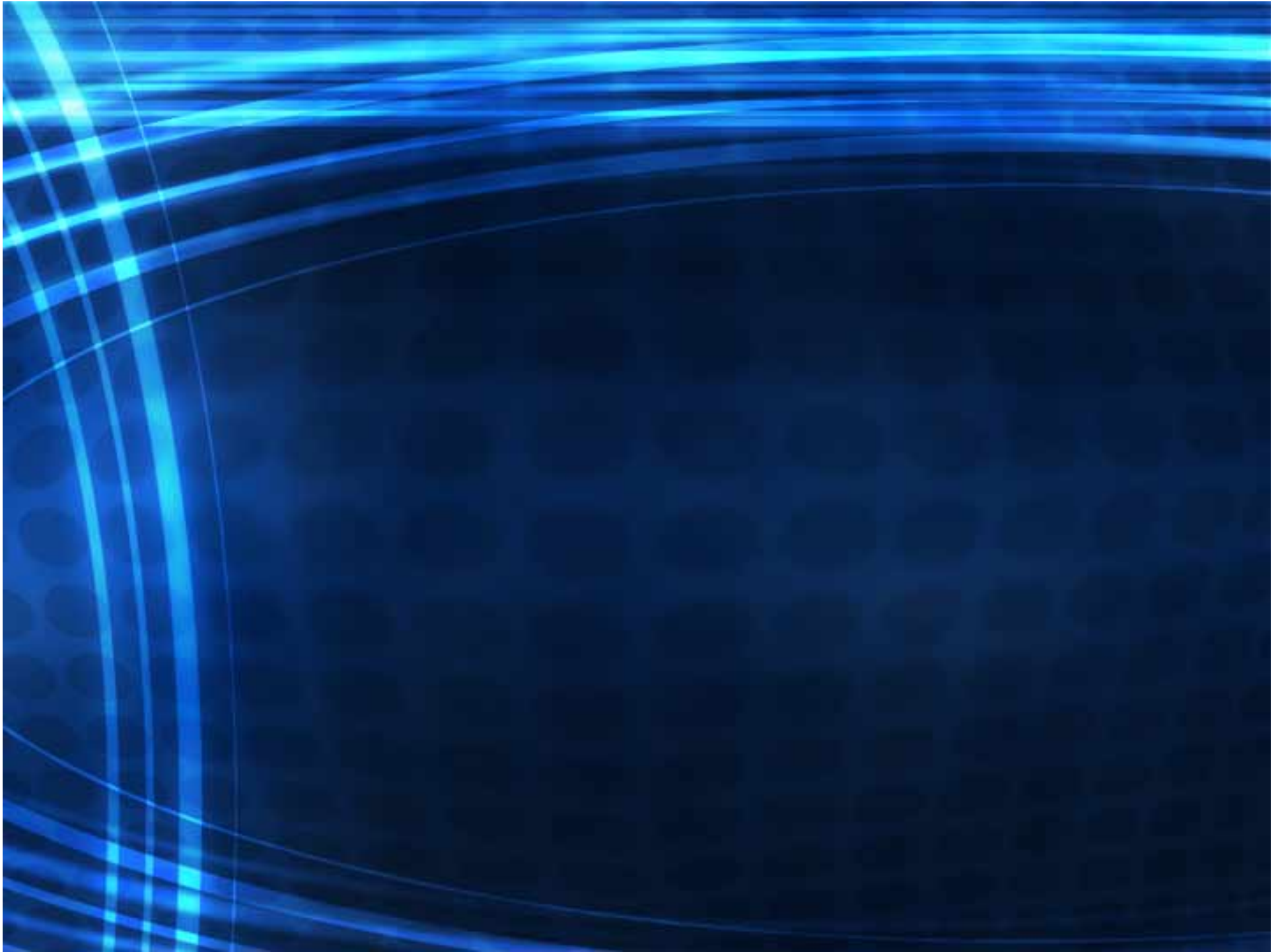
	Amount Recovered
FY 08	\$0
FY 09-19	\$0
FY 20-35	\$0
Total	\$0

A chart of the revenues vs. expenditures is shown below:



The Next Steps

- MPOs and TxDOT jointly need to decide what are reasonable scenarios and what funding we can expect.
- TEMPO is currently establishing a work group of MPO and TxDOT representatives to get some reasonable, jointly acceptable scenarios by September 2008.



The background is a dark blue gradient with several bright, glowing blue light streaks and bands that curve across the frame, creating a sense of motion and depth.

Thank You

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