



Transportation Economic & Land Use System

What is TELUS?

- TELUS is an MIS system that allows users to organize and track information about transportation projects, identify interrelationships between different projects, evaluate their economic and land use effects, while providing a user-friendly interface.
- It is designed to help MPOs and State DOTs meet their transportation planning requirements under TEA-21 and, more recently, SAFETEA-LU

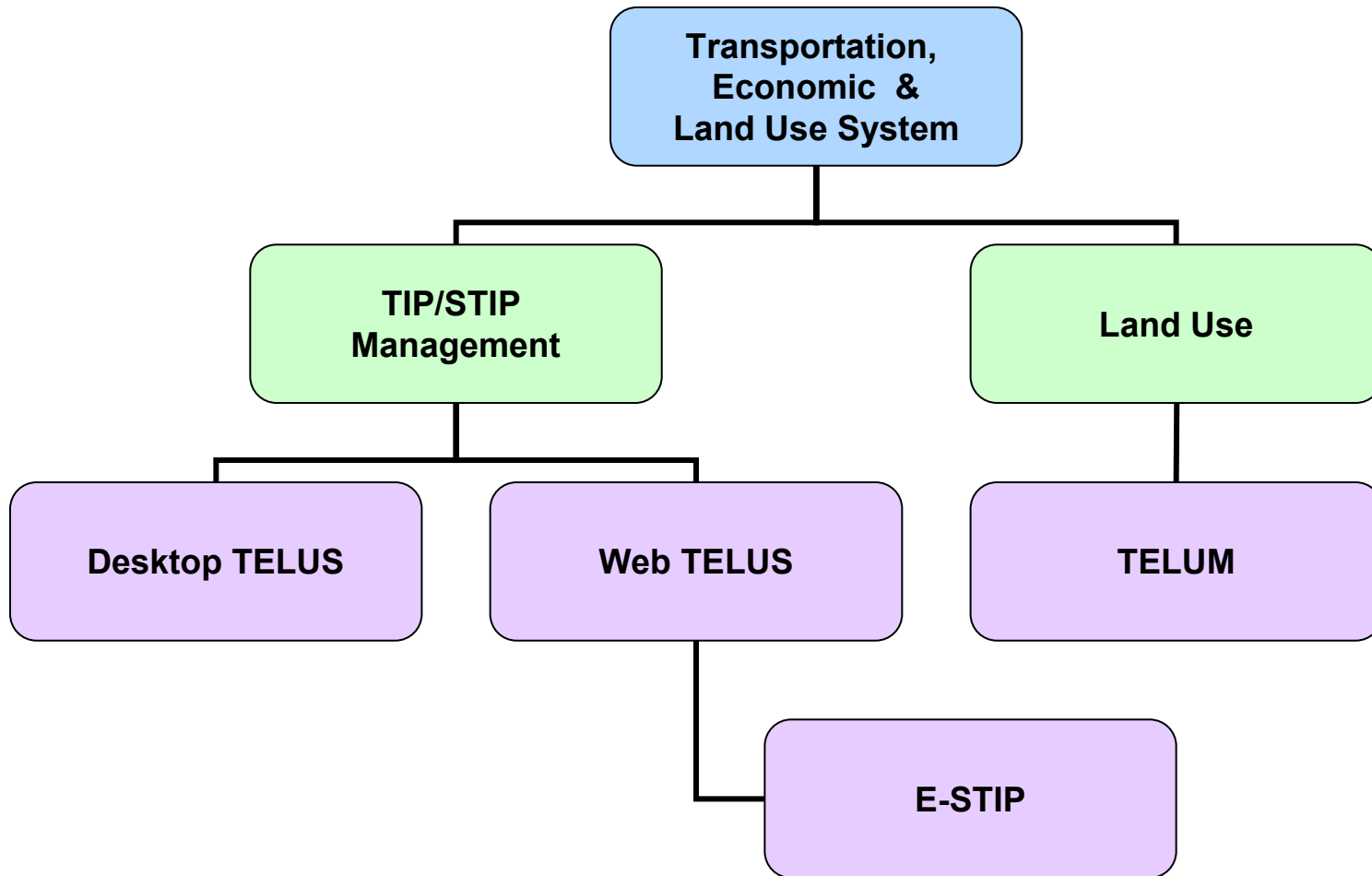


TELUS Objectives

- **Improve productivity** in the preparation of the TIPs and STIPs by providing a seamless, integrated project database.
- **Ensure timely, efficient dissemination of information** to decision makers and stakeholders, as well as enabling public access and participation in developing TIPs and STIPs.
- **Provide an easily accessible and user-friendly system**



TELUS



Transportation Economic and Land Use System (TELUS)



TELUS Functional Components

- Information Management
 - Project Information Management
 - TIP Project Tracking
 - GIS Interface
- Decision Support
 - Project Scoring (RE: SAFETEA-LU Objectives)
 - Input/Output Model
 - Land Use Model



Data Entry: Quick and Accurate

Data Entry

Go to: County Project ID1 Rev.

Only show latest project revisions Project ID1 Revision TIP Year -

Project ID2 Project ID3 Project Name

Lead Agency Contact Phone

TIP Status Mode User Cat.

Description Air Quality Status

EIS Status

Classification (REQUIRED): 1. System 2. Project Type 3. Functional Class

4. Category 5. Subcategory

Remarks:

Location | Tracking: Schedule | Tracking: Narrative | Custom Fields | County % Info

Limits

Route 1 Route 2

Project Termini (From) (To)

Length Corridor

State County

Municipality

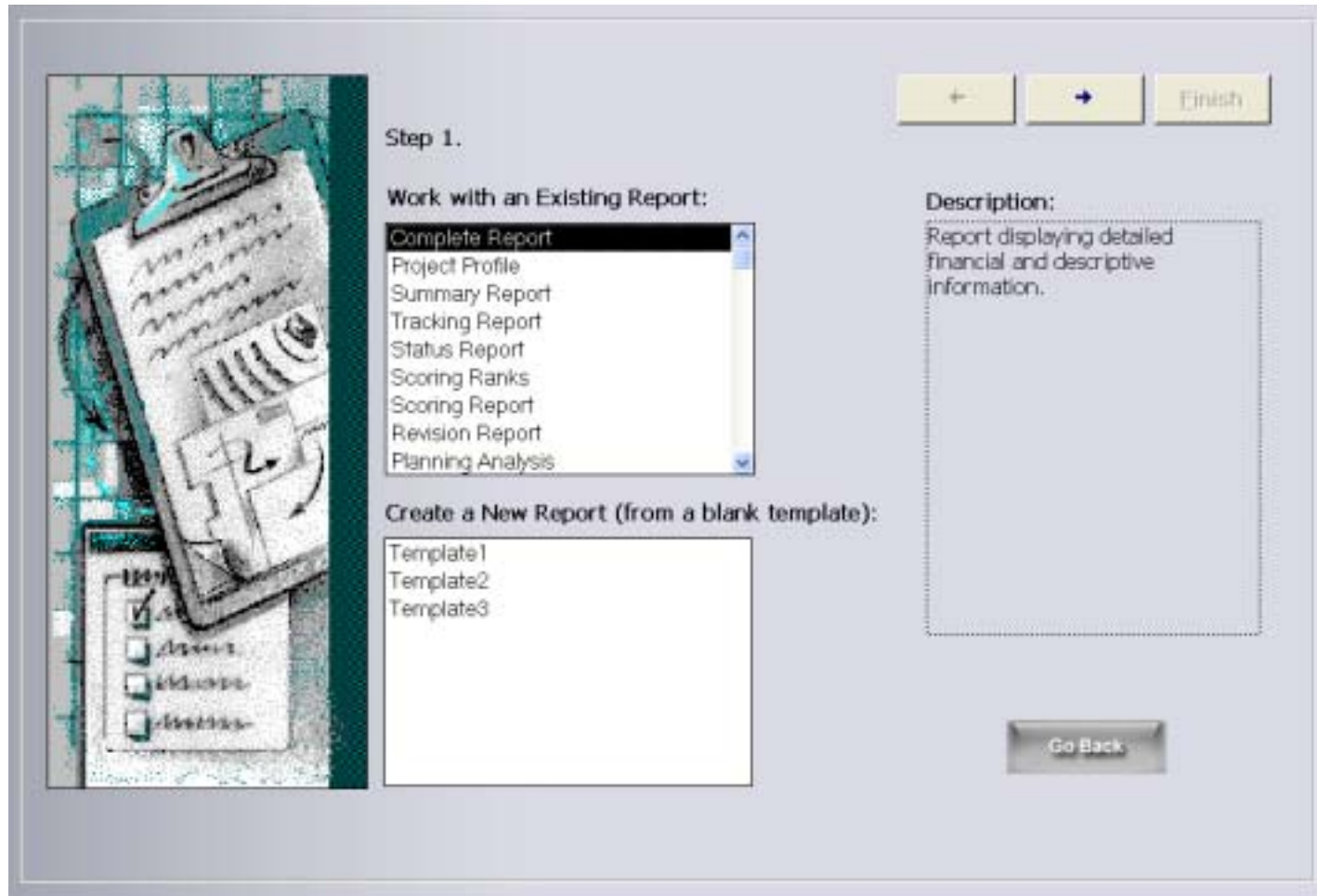
District 1 District 2 District 3 District 4

Upload Project Picture: Please click on the text box to add/change picture for this project.

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Reporting: Customized TIP Reports



The screenshot displays a software interface for generating reports. On the left, there is a vertical illustration of a clipboard with a checklist and a printer. The main content area is titled "Step 1." and is divided into two sections: "Work with an Existing Report:" and "Create a New Report (from a blank template):".

Step 1.

Work with an Existing Report:

- Complete Report
- Project Profile
- Summary Report
- Tracking Report
- Status Report
- Scoring Ranks
- Scoring Report
- Revision Report
- Planning Analysis

Create a New Report (from a blank template):

- Template1
- Template2
- Template3

Description:

Report displaying detailed financial and descriptive information.

Navigation buttons are located at the top right: a left arrow, a right arrow, and an "Finish" button. A "Go Back" button is positioned at the bottom right of the interface.

Report Example: TELUS TIP List Report

TABLE 4.1 TRANSPORTATION SFY2002-SFY2005 TRANSPORTATION IMPROVEMENT PROGRAM (HIGHWAY, BIKEWAY AND OTEHR PROJECTS) (GREENE COUNTY PROJECTS)														
PROJECT I.D. #	AIR QUALITY STATUS	COUNTY, ROUTE, SECTION, LOCATION AND TERMINI	LENGTH IN ENGLISH	TOTAL COST (000)	FUND TYPE	PHASE	STATE FISCAL YEAR USE BY FUND TYPE						COMMENTS	RESPON. AGENCY
							Prior	\$ FY2004	\$ FY2005	\$ FY2006	\$ FY2007	\$ FY2008		
00 15 PID 3 DA1500 10	# LANES Saylorville	Iowa 141 to the Mile Long Bridge		\$5,250	DA	CON	\$5,250						Grade and Pave	POLK COUNTY
01 10 PID 3 STP1001	# LANES 44	South Trail Ridge Road to Iowa 141	0.6	\$700	STP	CON		\$700					Widening, ACC Overlay	GRIMES
01 20 PID 3 STP2001	# LANES \$ 22nd St	Army Post Road to Pine Avenue		\$1,145	STP STP MPO	MAINT CON CON MAINT			\$495	\$250	\$100	\$300	Grade and Pave	WEST DES MOINES
01 20 PID 3 STP2001	# LANES SW 9th St	SW 9th Street at County Line Road		\$835	STP STATE MPO	CON CON MAINT		\$285	\$350	\$200			Widening, Traffic Signals	DES MOINES
00 2 PID 3 STP2002	# LANES Corporate	New interchange with I-35	1.06	\$4,548	STP STATE	CON MAINT		\$4,298	\$250				Grade and Pave	ANKENY
02 20 PID 3 STP2002	# LANES SW Conne	Army Post Road to First Street	1.8	\$1,000	STP	CON			\$1,000				Grade and Pave	WEST DES MOINES
00 2 PID 3 STP2002	# LANES IA 160	At Delaware Avenue		\$270	STP	CON	\$270						Pavement Widening, Signals	ANKENY

PREPARED BY MIAMI PLANNING REGIONAL COMMISSION: June 2001 Final TIP



TELUS Project Info - Scoring

Project Information

TIP Year: 2006 - 2010 Goto: STP1103106 1 of 12 Go Back

Project ID1: STP1103106 Revision: 0 Project Name: Euclid Avenue

Project Scoring

Scoring System: TELUS Default

Scoring Category	Score
1 - Economic Vitality	37.1
2 - Security	52.0
3 - Accessibility and Mobility	48.3
4 - Environmental/Energy/QOL	41.7
5 - Integration and Connectivity	41.7
6 - Efficient System Management	27.9
7 - System Preservation	35.0
8 - Safety	32.5
9 - Local/Regional Factors	41.7

Total Score: 357.9

Project Score Chart

- Economic Vitality
- Security
- Accessibility and Mobility
- Environmental/Energy/QOL
- Integration and Connectivity
- Efficient System Management
- System Preservation
- Safety
- Local/Regional factors

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TELUS Economic Model

- Economic Input/Output Model - provides a measure of the economic impact on the region from undertaking transportation project(s).
- Free-standing or TELUS embedded application.
- The model estimates jobs, earnings, gross product, taxes, Indirect business taxes, business revenue and profit/other.
- Provides the option to view the impacts broken down by the 10 SIC (Standard Industrial Code)



TELUS Economic Model

Input Output Model - Summary of Results

ProjectID: Revision:

TIP Length: Year:

Goto:

Hosts: % (millions)

Choose Impacts Type:
 Individual Grouped

Display Impacts for Reporting Area:

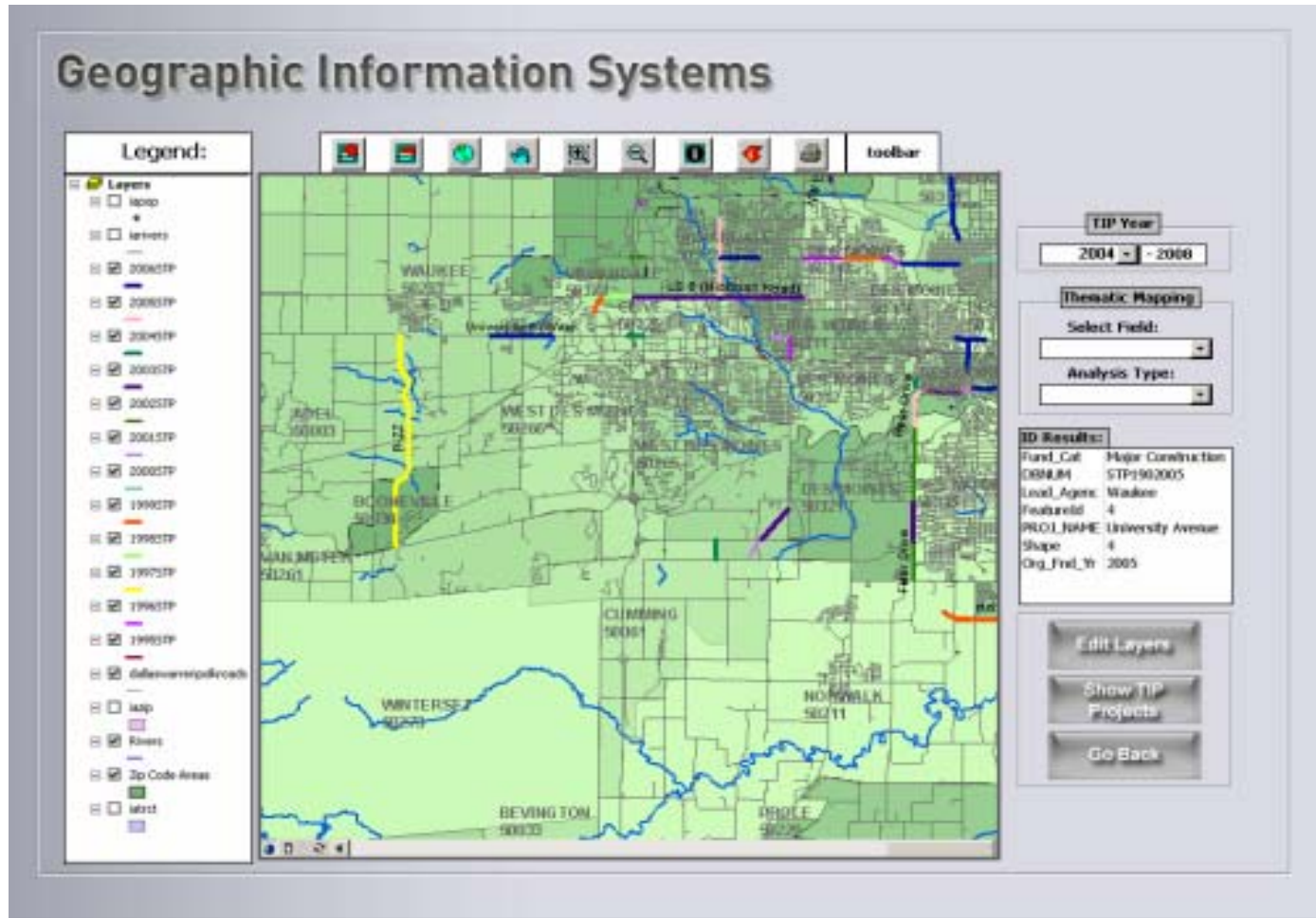
Project Classification:
Mode: SubCategory:
Project Type:

Impacts To Entire MPO

	Totals	3 Year Annual Average
Jobs	15,625	3,125
Earnings (\$000)	\$265,757	\$53,151
Gross Product (\$000)	\$470,548	\$94,110
Tax (\$000)	\$163,042	\$32,608
Indirect Business Taxes (\$000)	\$22,316.63	\$4,463
Business Revenue (\$000)	\$1,030,777.10	\$206,158
Profit / Other (\$000)	\$182,474.23	\$36,495



TELUS GIS

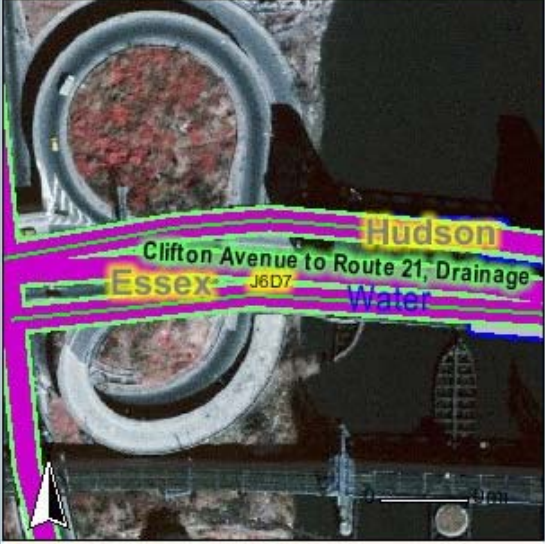


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TELUS Project Information


TELUS Project Classification			
System	Bridge	Project Type	Non Federal-Aid Highway
Functional	Urban Local	Sub Category	Major Bridge Rehab
Project Type	Major Bridge Rehab		
Location			
State	New Jersey	County	Essex
Corridor		Legislative District	29 10
Routes	280 /	Municipality	Newark City
Limits	14.42 - 14.60	Project Termini	From: 14.42 To: 14.6
		Length	



Map Legend
Selected Features

-  TIP Projects
-  NJ Rail Stations
-  US and State Highways
-  County Routes
-  NJTPA Local Streets(East)
-  NJTPA Local Streets(West)
-  NJTPA Local Streets(South)
-  DVRPC Local Streets
-  SJTPO Local Streets
-  NJ Active Rail Lines
-  Image Grid

J7B1.sid
J7B2.sid
J7B3.sid
J7B4.sid



Project Information Reports		
Profile Report	Format <input type="text" value="HTML"/>	<input type="button" value="Go"/>
Financial Report	Format <input type="text" value="HTML"/>	<input type="button" value="Go"/>

Web-enabled TELUS

- Web TELUS is an enhanced version of TELUS
- Deployment Scenarios
 - State as Host, MPOs as Clients
 - MPO as Host, Localities as Clients
 - Combination of the above scenarios
- Uses Existing Agency Databases (w/firewalls)
- Customizable by Each Agency
- Partition of system data by agencies
- Active Public Participation
- TIP/STIP approval process via E-STIP

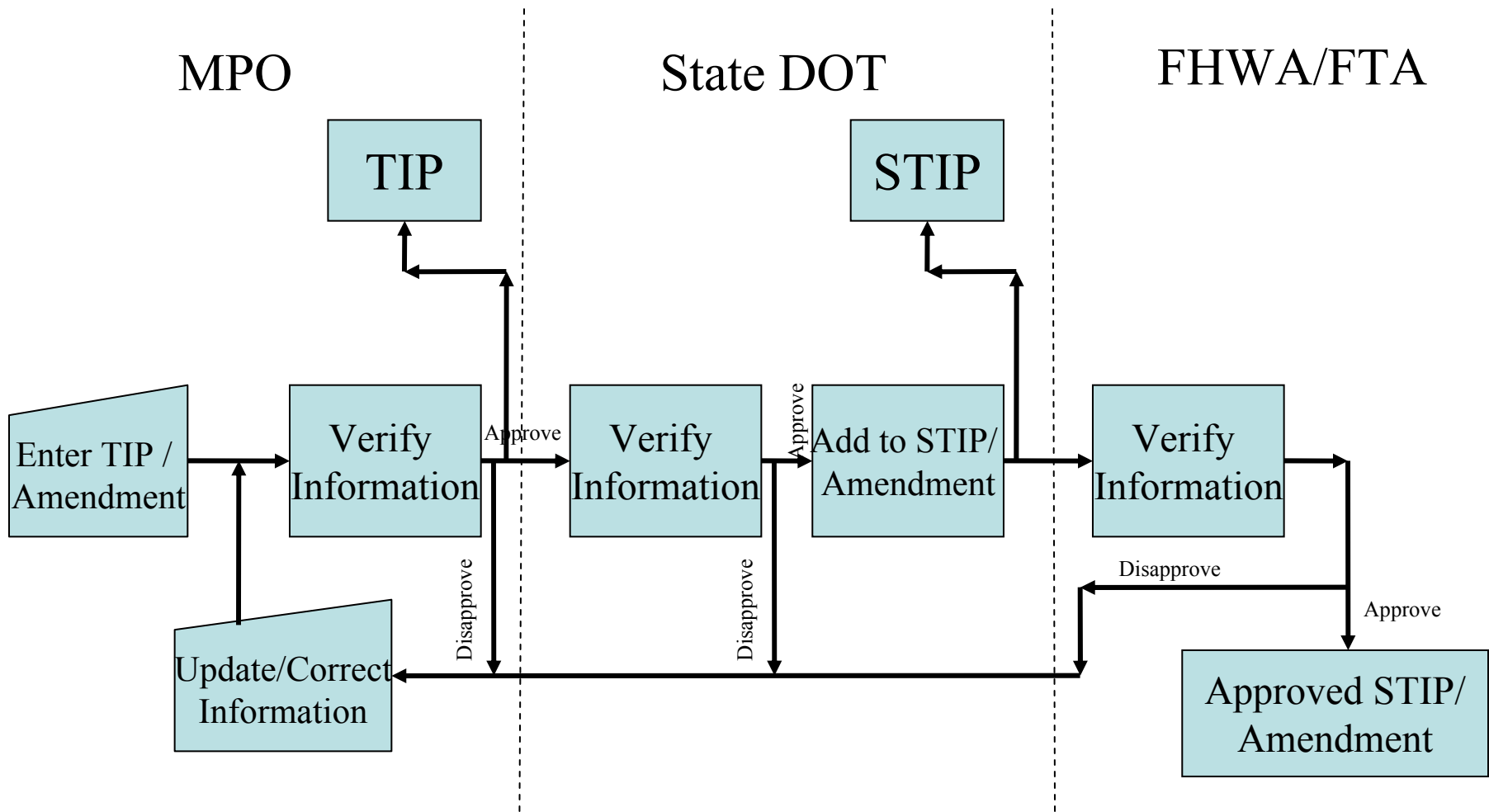


E-STIP Objectives

- **Integrate E-STIP** architecture into the TELUS framework
- **Single Point of Data Entry**
- **Computerize the entire TIP & STIP** creation and amendment process
- **Improve project and information management** by providing an integrated and seamless database

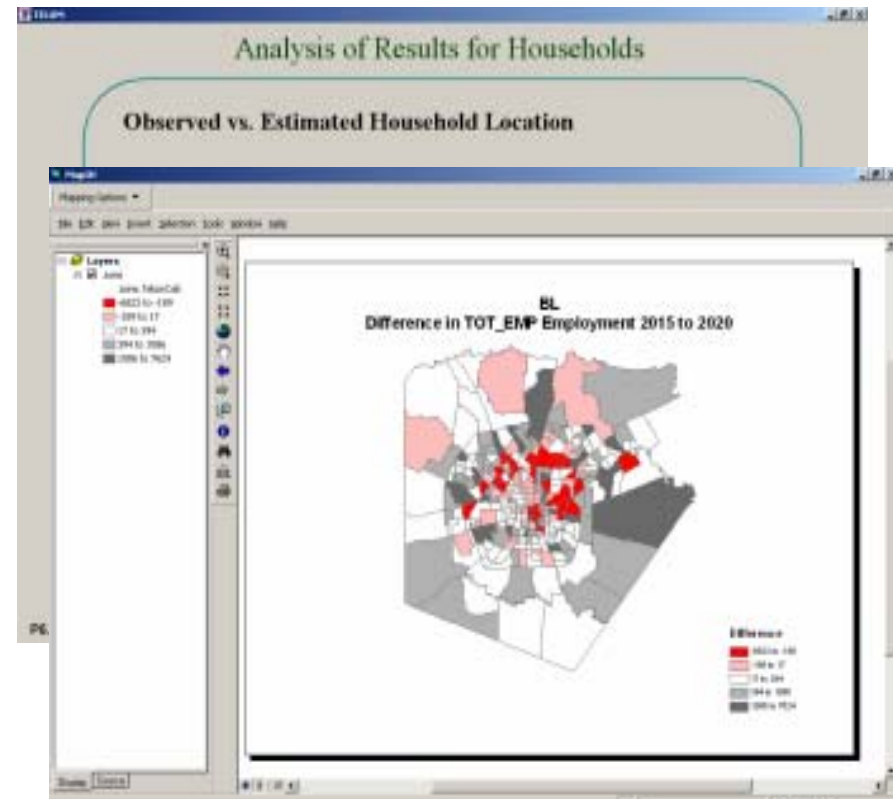


E-STIP Approval Process



Introduction

- TELUM is a software package for evaluation of the land use impacts of regional transportation improvement projects, as well as changes in population and employment.
- Developed as part of the TELUS grant as a standalone modeling software.
- Integrated GIS tool



Motivation

Majority of MPOs do not use Land Use Models for regional forecasting and for providing input to travel models, mainly due to the lack of trained in-house personnel with experience in land use planning.

TELUM is developed as intuitive, interactive software package with many user-friendly features. It is easy to understand, provides tools for easy data entry and analysis, and features Help System that provides instructions and is able to guide and advise users throughout their analysis. It is primarily developed for small and medium-sized MPOs.



Why use TELUM?

- TELUM allows planners to perform regional land use analysis by:
 - Forecasting the employment and population demand for location in specific zones of a region.
 - Calculating the amount of employment and population that will be located.
 - Calculating the amount of land that will be used by the locating activities.



Scenario Comparison

- TELUM provides the ability to compare various different transportation scenarios.
- By allowing the user to make changes in the transportation network between runs, TELUM provides an opportunity for them to compare the resulting changes in land use patterns.
- Helps users make informed choices about their transportation projects based on their land use impact



Technical Support and Cost

- NJIT Staff provide FREE technical support to users on TELUS related issues. This includes
 - Registering
 - Installation
 - Usage
 - Importing existing data
 - Customizing reports
- Desktop TELUS Software is:
 - FREE
 - Provided on CD with User Manual



Status of National Deployment

- Currently there are 214 Website Registrants for Desktop version of TELUS:
 - 168 MPOs (44% of 384 Nationwide)
 - 25 SDOTs (50% of states)
 - 15 Misc. (e.g., consultants, universities)
- Two MPOs and one State DOT have implemented Web TELUS.



Some TELUS Users

MPOs:

- Stark Co., OH
- Knoxville, TN
- Chittenden Co., VT
- COMPASS, ID
- Waco, TX
- KYOVA Interstate Planning Commission, WV
- Corpus Christi, TX

(MPOs continued)

- Des Moines Area, IA
- Albuquerque, NM
- Rochester, NY

Web TELUS:

- Alabama (14 MPOs)
- Miami Valley, OH
- Broward Co., FL



www.telus-national.org

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