

TECHNICAL MEMORANDUM

TransCAD v7 Software Testing

Prepared For:	Forecasting, Modeling, & Telemetrics Team – OSP, Iowa DOT
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Date:	10/29/2015

This document is a summary of the items found when testing TransCAD v7.0 Build 12180 64-bit and executing various TransCAD travel demand models (TDM) including a few Iowa MPO TDMs and iTRAM. All of the TDM's tested were built using various builds of TransCAD v6. A few notes on interface and procedural changes have been documented as well.

Summary of Findings

- 1. Standard geographic database files (.dbd) and GISDK scripts (.model) must be updated to be used in TransCAD v7 and are not backward compatible.
- 2. A restore session option is now available if TransCAD errors out and must close. Any file previously opened will be reopened if the session is restored.
- 3. The scenario manager and procedures to run a TDM using the flowchart approach (.model) has changed.
- Of the few TDMs tested, most of them worked. The exception being AAMPO and the iTRAM. Further testing will be done on these TDMS to determine the root cause of the issue. Screenshots of the errors have been logged in this document.

Detailed Log of Findings in Testing TransCAD v7

- 1. Software, Interface, and Procedural changes and updates
 - a. Standard Geographic Layer File (Highway Network) update



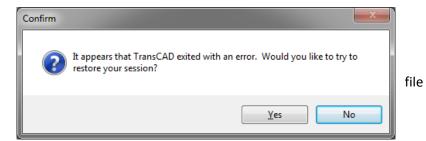
b. GISDK Script (.Model file) update

Update Model IN	RCOG 💌
	Model 'INRCOG' was created with a previous version of TransCAD and needs to be updated to support new features. Once updated this model cannot be accessed in previous versions of TransCAD
 Update th Create a c Browse for 	one of the following options: is model now copy of this model and update the copy or an updated copy of this model don't want to open the model at this time
	OK Cancel

c. Restore Session

d. Scenario

i. A new feature with TCv7. Similar to MS Word or other Microsoft software, if TransCAD has an error and must close, the session can be restored to what was open previously.



management

i. Creating and opening a scenario file are two different buttons. However, the user must click 'new scenario' to open the scenario manager. From there, the user can add, remove, create new, or open a scenario.

ii. TCv7 Updated Model Run Steps

1. Delete all files in the +MODEL directory except for the .model itself.

Name	Date modified	lype	Size
퉬 GISDK	10/28/2015 4:28 PM	File folder	
mpojc_2010.1	10/29/2015 6:27 AM	1 File	3 KB
mpojc_2010.2	10/29/2015 6:27 AM	2 File	1 KB
mpojc_2010.3	10/29/2015 6:27 AM	3 File	2 KB
mpojc_2010.4	10/29/2015 6:27 AM	4 File	319 KB
mpojc_2010.5	10/29/2015 6:27 AM	5 File	6 KB
mpojc_2010.6	10/29/2015 6:27 AM	6 File	2 KB
🗭 mpojc_2010.dbd	10/23/2014 7:06 AM	Caliper Standard	2 KB
MPOJC_2010.layout	10/29/2015 6:27 AM	LAYOUT File	10 KB
MPOJC_2010.model	10/29/2015 6:27 AM	TransCAD Model	197 KB
MPOJC_2010.model.bak	10/29/2015 6:27 AM	BAK File	197 KB

- 2. Open or drag and drop the .model file.
- 3. When you're prompted with the dialog box below, select *Update this model now* and click OK.

	Model 'MPOJC_2010' was created with a previous version of TransCAD and needs to be updated to support new features.
	Once updated this model cannot be accessed in previous versions of TransCAD
Please choos	e one of the following options:
Update	this model now
🔿 Create a	copy of this model and update the copy
Browset	for an updated copy of this model
Cancel,	I don't want to open the model at this time
	OK Cane

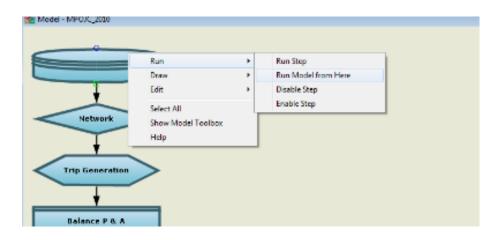
4. Next, go to the drop down menu in the upper left corner of TransCAD, and select New Scenario. This will open the scenario manager.

File Edit Tools	Procedures Route Systems	Plannin	g Trans	it Traffi	c Routing
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	New Scenario				
_	New Scenenow	h			
5 M	odel - MPOJC_2010				

5. In the scenario manager, select the open folder and navigate to the scenario file. Find and open the scenario file, click open and then OK.

Manage Scenarios - MP	DJC_2010
Scenarios	
	9 5 C ×
pen Scenario File	
	OK Apply Close

6. In the upper left corner of TransCAD, go to the drop-down menu and select the desired scenario year. Click the play button or right click on the first model step and select run, and then run model from here.



2. GISDK File (.MODEL) Testing

- a. iTRAM
 - i. Missing icons in the TCv7 directory need to be updated or running the TDM is difficult!
 - 1. C:\Program Files\TransCAD 6.0\bmp\!BMP
 - 2. C:\Program Files\TransCAD 7.0\bmp\!BMP
 - ii. GUI after adding the icons still missing some icons and graphics

What the iTRAM GUI should look like



What the iTRAM GUI currently looks like

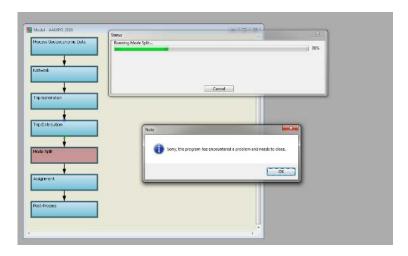


iii. TDM fails during Trip Distribution (Destination Choice) step

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dit Tools Procedures RouteSystems	Planning Turnit Tuffic Routing/Logistics Statistics Window Help ▼ ■ ■ 米 冉 ■ ※ 涤 湯 ■ 毎 ■ ● ■ ● ■ ● ●		
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	Scenario Directory: C/\TRAM_2010\Rese2010 Year: 2010	Scenerio Settings:	
		Initializzbon:	
		Trip Generation:	
	Status		
	Destination Choice (Trip Distribution)	40%	
	Cancel		
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b. AAMPO

i. An error occurs when attempting to execute mode split.



- c. CMPO not tested
- d. DMATS not tested
- e. DMAMPO not tested
- f. INRCOG
 - i. Once the GISDK script (.model) and network (.dbd) were updated, the TDM executed without error.
- g. MAPA not tested
- h. MPOJC
 - i. Once the GISDK script (.model) and network (.dbd) were updated, the TDM executed without error.
- i. SIMPCO
 - i. Once the GISDK script (.model) and network (.dbd) were updated, the TDM executed without error.