



Technical Memorandum

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From	Billy Park, TE	Tel	+1 916 245 4206
Subject	Brief User Guide for Nevada County Travel Demand Model	Project no.	11230706; 12560295; 12559906

1. Introduction

GHD has revised the Nevada County Travel Demand Model (TDM) as part of the update to the Nevada County Fee Study. The starting point was the July 7, 2021 version of the model that was updated by TJKM using TransCAD 8 Build 22415. The purpose of this guide is to provide information that new users of the Nevada County TDM may find useful. The guide discusses the contents of the files that comprise the model and describes how to perform basic modelling tasks.

2. Description of the Model

2.1 TransCAD version

Users will need to use TransCAD 8 or later as the model network will not open if any earlier version of TransCAD is used. The revised model script was compiled with TransCAD 8 Build 22425. It is also confirmed to be compatible with Build 22415.

2.2 Folder Structure

The model zip file includes the folders shown on the right. The contents of each folder are described below:

##Copy to Program Files_TransCAD: This folder contains BMP folder/files that are used in the model GUI

##Copy to ProgramData_Caliper: This folder contains the **Add-ins.txt** text file, which contains the Nevada County TDM Add-ins information such as the path to the compiled script, model name, etc. as shown below:

D, C:\1\Nevada_Model\Run_Script\nevada_ui.dbd, Nevada Model, Nevada Model (All Years)

- ##Copy to Program Files_TransCAD
- ##Copy to ProgramData_Caliper
- _script
- 2018_BASE
 - Inputs
 - Network
 - Outputs
- 2040_FUTURE
 - Inputs
 - Network
 - Outputs

script: This folder contains the essential files needed for the model GUI. Those include raw model script, compiled script, and model table (Nevada_mod.bin).

2018 Base: This folder contains all files related to 2018 scenario. It includes subfolders as follow:

- **Network** folder contains input network file (**Roads_2018v2.dbd**). Loaded volumes are automatically copied to this file at the end of every model run. Since this file is overwritten with each run, it is important to save the results of earlier runs you wish to keep under a different folder.
- **Inputs** folder contains the remaining input files, including land use (**Land_Use_2018_v3.bin**).
- **Outputs** folder contains the output files.

2040 Future: The structure of this folder is the same as the 2018_Base, but contains all files related to 2040 scenario.

3. Running the Model

3.1 Preparing to Run

Unzip the model zip file to where you want to run the Nevada TDM. The Nevada County TDM can be run on virtually any folder on a hard drive once users define the folder path in two files:

script: This folder contains **Model Table (Nevada_mod.bin)**, which defines the path to each scenario directory. Users need to update the path. The current Nevada_mod.bin assumes models to be run from the following folders:

C:\1\Nevada_Model\Run\2018_BASE\

C:\1\Nevada_Model\Run\ 2040_FUTURE\

##Copy to ProgramData Caliper: The path to the compiled script is defined in **Add-ins.txt** file under this folder. The current Add-ins.txt file assumes the compiled script is in the following folder:

C:\1\Nevada_Model\Run_script\nevada_ui.dbd

The **Add-ins.txt** file in this folder contains the add-ins info for the Nevada County TDM as shown below:

D, C:\1\Nevada_Model\Run_script\nevada_ui.dbd, Nevada Model, Nevada Model (All Years)

TransCAD 8 stores Add-ins.txt file in the C:\ProgramData\Caliper folder. Users can append add-ins using TransCAD menu (**Tools → GIS Developer's Kit → Setup Add-ins**) based on the add-ins info in the Add-ins.txt.

##Copy to Program Files TransCAD: Copy the **BMP** folder in this folder to the TransCAD program folder (i.e., C:\Program Files\TransCAD 8.0).

3.2 Compile the Model Script If Necessary

The model zip file contains a standalone compiled script for the Nevada County TDM under the _script folder. The compiled script is consisted of seven files (nevada_ui.dbd and nevada_ui.1 ~ nevada_ui.6).

The Nevada County TDM should run fine with the compiled script under the _script folder. If users have a different Build of TransCAD 8 and find that the compiled script does not work properly, then they may need to compile the raw model script again using their TransCAD Build.

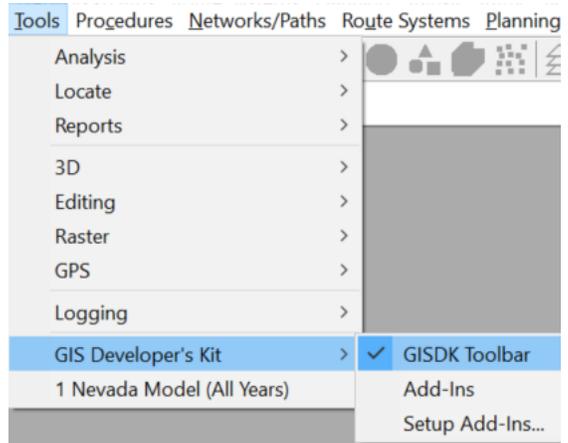
In TransCAD menu, click **Tools** → **GIS Developer's Kit** → **GISDK Toolbar** as shown below.

Then, the following GISDK Toolbar will be opened.



Then, click the **Compile to UI** button in the center, which generates a standalone compiled script.

You can then select the raw script (**Nevada_County_TDM_2018_v2b.rsc**) and click **Open**, and type "nevada_ui.dbd" (all lower cases), and then click **Save**.



3.3 Running Nevada County TDM GUI

Perform the following steps to run the Nevada County TDM after GUI related files are edited and copied to the right place:

- 1) In TransCAD menu, click **Tools** → **GIS Developer's Kit** → **Nevada Model (All Years)**.
- 2) TransCAD will then ask for Model Table. Select **Nevada_mod.bin** from the **_script** folder such as:
C:\1\Nevada_Model\Run_script\
- 3) Clicking Open button will display the Nevada County TDM GUI as shown on the right.
- 4) Select a scenario you want to run from Scenario box.
- 5) Click **Setup** button.
- 6) Confirm the scenario folder location.
- 7) Click **OK** to return to the model GUI.
- 8) Click **Trip Generation** button to run the entire model.

