Setup Tru – Traffic Network with Google Earth

This Setup allows you to set up your initial layout for both Tru – Traffic versions 8, 9, and later, and Synchro versions 6, 7, or 8 through the use of the UTDF data formats.

Initial instructions:

Type or press means type a letter or press a button on the keyboard.

CTRL means the Control Key. ALT means the Alternate Key. DEL means the Delete Key.

Click or Left Click means click the **Left** mouse button and are the same thing. Right Click means click the **Right** mouse button. *(Note: The mouse is not your foot pedal and/or you do not place it on the computer screen, or display, and try to move it around and click on different items or icons. You place it on your desk and move it around while you watch an arrow move around on the computer screen. You place the arrow over the item or icon and then click the mouse buttons. You guys think I'm kidding don't you. You have never been on the other end of a visionless technical support call, then.)*

TRU – TRAFFIC

1. Start or Open **Tru – Traffic.** In the upper left hand corner, Left Click on File then click on New
2. At the Prompt for the number of intersections, enter the number of intersections in your network. *Note: This step is critical. If you don't do this, nothing else will work properly.*
3. In same window enter the direction of the way you are entering the intersections, starting with intersection number 1; Northbound, Southbound, Eastbound or Westbound
4. Click OK button.
5. Time Space Diagram shows up on screen with equadistant intersections spaced 500 feet apart. The Arterial Outline may show up showing a list of all the intersections from 1 to X where X is the number of intersections you just entered.
6. Either way, Double Click on Arterial Diagram #1 and go to the Artery Tab. Enter the name of the Arterial or Corridor in the Name of Diagram or Artery Box and Click OK.
7. Double Click on Intersection #1. In the little box near right center of screen, enter a 1 in the ID Number Box and Click OK. *Note: You may, but do not have to, enter an intersection name at this point. All names will be taken care of automatically after completing the Google Earth portion below.*

8. At the prompt, you will be queried if you want to continue to number going forward. Click Yes or OK Button. All Intersections will now have increasing I.D. numbers in the forward direction. Verify by looking in the same window at succesive intersections to see if they have intersection I.D. numbers other than 0. *Note: Step 2 is critical. If you don't do it, nothing else will work properly. Steps 7 and 8, while not critical, will save you the bother of manually assigning geographic positions from Google Earth to the correct intersections.*
9. In the upper left hand corner, Click on File Save As and enter a distinctive Name and save as a .DGM aka Tru Traffic file.
10. Minimize Tru Traffic for the interim.

GOOGLE EARTH

1. Open **Google Earth** and create a folder under My Places with the name of your artery or network (e.g., "Moulton Pkwy"). Double click the folder to select it and open it, so pins that you later drop on the map will collect in that folder.
2. Navigate to the first intersection in the network.
3. Click the yellow push pin from the top tool bar. A yellow flashing box with the push pin inside of it will appear on the screen. Left Click and hold the button on the push pin and drag it and drop it on the upper N/W corner of the intersection you called #1 in Tru – Traffic. In the Name: box, Label it exactly in this format:
    a. # <I.D. number from Tru Traffic> <intersection name> then Click the OK Button. *For instance, if we were doing Moulton Parkway and the first intersection was Glenwood Drive, it would look like this without quotes:* "**#1 Glenwood Dr.**" Click OK The push pin will now be visible and labeled.
    b. In the navigation pane to the left you should see the push pin listed. Click on it to highlight it. Or, you can click on the push pin itself on the screen. Either way, press CTRL C then CTRL V on the keyboard. You should now see two sets of identical labels next to the yellow push pin
    c. Right click the yellow push pin to explode it into the two identical push pins.[i]
    d. Right Click on one of push pins and Left Click Properties. The push pin should be back in its original place surrounded by a flashing box.
    e. Left Click and hold the pin inside the flashing box and drag it to the opposing S/E Corner of the intersection and Click OK.
    f. You should now see two identical push pins with exactly the same name in opposing corners of the intersection. The centerline intersection should be somewhat halfway between the two pushpins. If it is not, Right Click on one of the push pins and Left Click Properties and drag it to where it should be and Click OK.

4. Repeat the above instructions for each succesive intersection. Begin with # and the unique intersection I.D. number from Tru Traffic follwed by <intersection name> then Click the OK Button. Repeat instructions 2b through 2e for each intersection you have in your network.
5. Once you have finished all the intersections, review the settings in the navigation pane to the left making sure each intersection has two identical labels and that they are led by a unique #$ setting where $ = the intersection ID number from Tru Traffic.
6. If all is OK, Right Click on the parent folder of all of the yellow push pin labels (the folder you created in Step 1). If you didn't create a folder, then it might be Temporary Places or something like that. Left Click Copy.

TRU – TRAFFIC

1. Re open or Maximize **Tru – Traffic** and open the Arterial Outline Window, the Network View, or the time-space diagram.
2. Inside the opened window, Right Click then Left Click Paste
3. You should now see all of the intersections from Google Earth listed with their location and assignments. If it says unassigned, then do one of the following:
    a. Left Click on the "unassigned" location to select it. (If you hold down the Shift or Ctrl key, you can select more than one "unassigned" location). Using the Arterial Timings Diagram and Intersection boxes below the list of locations, choose the artery and intersection where the selected locations should be assigned. *Or,*
    b. Go back to the first intersection in Tru Traffic and make sure that you have an intersection number assigned to it. If you do, go back to Google Earth and make sure that each intersection push pin label is led by #1 or #2, etc. Any that are not must be renamed to that format. The file must then be once again copied and then pasted back into Tru Traffic per the above.
4. If all is good, Left Click OK and also OK any prompts following it regarding recalculating distances, etc.
5. The time space diagram and network views should now show the arterial as it is in real life. You can now Save it and then Transfer the Layout Data into Synchro through the UTDF methodology that you prefer.
6. In Synchro, you should now do Due Diligence and place the set up the lane geometry, volumes, timing, phasing, and simulation settings for each and every intersection. Then set up link geometry including bend nodes for land add/drops and the like followed by the Roadway Curvature. Make sure everything is

correct. Save it as a Synchro file. Then Save As a Combined Data File or CSV file.

7. You can now open a new Tru Traffic file as a CSV Format and all should open up correctly This should now be saved as a Before or Existing Network. Any Before Travel Time runs can be pasted into this file for use later.

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[i] Bonus tip from Greg Bullock: Save yourself a click and this awkwardness of separating the two collocated push pins by reversing the order of the paste (CTRL V) and the editing (Left Click Properties) operations. That is, instead of the sequence Copy-Paste-Edit, use the sequence Copy-Edit-Paste. Steps 3.b - 3.e reduce to the following

a. In the navigation pane to the left you should see the push pin listed. Click on it to highlight it. Or, you can click on the push pin itself on the screen. Either way, press CTRL C on the keyboard (but don't press CTRL V yet!).
b. Right Click on the push pin and Left Click Properties. The push pin should be surrounded by a flashing box.
c. Left Click and hold the pin inside the flashing box and drag it to the opposing S/E Corner of the intersection and Click OK.
d. Press CTRL V on the keyboard (restoring the copied push pin to the N/W corner)..