

# Tranplan/GIS

## Identification of Problems to be Addressed in the MTMAP Project

### *Stu Turner, DSMMPPO*

TP-Arc.exe does not work correctly. It doesn't allow for the addition of the link text file to Arcview, due to the file headers.

Arc\_load.exe from CTRE web page does not work correctly. The link ID's are not placed where they belong.

The loaded volumes seem to get transposed. A-B volumes sometimes show up as B-A volumes.

Documentation is poor.

### *Jennifer Kragt, INRCOG*

The network is currently not in real-world coordinates, so the TAZs, census data and other data do not overlay the TRANPLAN links.

The number of steps needed to convert the network back and forth is cumbersome.

The documentation is fair. A more comprehensive user manual would be quite beneficial.

It would be beneficial if some of the translation steps could be compressed into fewer commands.

In the Bypass GIS-TPT, it would be helpful if the MapBasic program which updates the network after new links and nodes are added/changed did not automatically overwrite the entire file. Right now, it replaces all the values with a default value for speed, capacity, etc. which can be problematic if you've made changes to some links during calibration. One suggestion would be for the updates to happen only to the new links/nodes (which could be done with an update to the selection only) or if there is a way to avoid overwriting the old data.

### *Steve Williams, Dubuque MPO*

The documentation is close to worthless. In many cases I have found it is just flat wrong.

Some of the functions (like turning movements) are buggy and need to be improved. I would like to see all the Tranplan functions set up so that they can be implemented directly from Mapinfo. In particular I would like to see:

- Some easy method of building a turn or intersection penalty file
- Selected Link (the method in the documentation does not work at all -

I had to redo it for my own purposes)  
--Selected Destinations (perhaps written back onto the TAZ nodes?)  
--Selected Origins (perhaps written back onto the TAZ nodes?)  
--An easier method for selecting particular purposes for the output Links file  
--I would like to be able to use the GIS interface to directly view the skim for user selected zone pairs.  
--Some GIS method for setting a cut line or a screen line and letting Mapinfo tell me the results instead of doing it by hand.  
--Some sort of tool that does a comparison between a link and the surrounding links to identify links that are significantly different. I see a lot of potential for error checking and identification tools.

*Phil Mescher, Iowa DOT*

### **General Ideas:**

Illustration of turn prohibitor locations

Display of Turning Movements

Screenlines/cutlines/cordon lines

Documentation, documentation, documentation

Select link analysis

SIMPACO horizontal network conversion to ArcView. I was able to convert the TP network to a north/south orientation, however after running netcard on the binary network, (during the conversion process) the Nodes file is not in a proper format for the conversion. The Nodes file looks like this:

```
N 1 1065 5910 2 937 5733 3 984 5647 4 966 5570
N 5 906 5521 6 892 5567 7 822 5551 8 908 5660
N 9 841 5651 10 895 5723 11 966 5884 12 915 5842
N 13 849 5816 14 860 5889 15 916 5887 16 748 5886
N 17 796 5828 18 801 5734 19 752 5743 20 721 5816
```

Notice that nodes 2,3, and 4 do not have an “N” and they do not start in column position 1. I think a Fortran or Avenue script can be written to format the text to the proper format. Once the Nodes file is in proper format the remainder of the process can be done.

The ArcView network can be rotated by using the Edit Tools extension.

## **ArcView**

**ModelManager 2000???** Very expensive \$2500 approx. \$15,000 statewide license.

TP-Arc.exe doesn't always work. Bombs when reading (Rank01.pa)?? Exactly which files do I need in the subdirectory to run TP\_Arc?? Do you need to run Tranplan first. Running Tranplan first seemed to fix this problem.

After running TP\_Arc successfully, the Links1.txt file needs to be manually modified. The Header should appear all on one line but doesn't. The "CT" should be on the first line.

Process is very specific or else the interface bombs. Need good documentation for the process and explanation of what each part of the process is doing.

How can we plot two-way volume or total volume or two-way capacity. Can new fields be created automatically to represent the types of information that HNIS presents? Such as in MapInfo interface. Need to identify what the data represent in the various fields.

Once loaded volumes are plotted, how can we determine which direction the numbers pertain? Can fields be created that indicate A-B vs. B-A direction?

## **MapInfo**

### *Registering the Network*

When running TP\_MI and typing in the names of the nodes, links, and PA file you have to use the extension. Nodes.dat not just Nodes or it bombs.

You need to make sure you have exactly the right files or the process will bomb.

### *Performing a Model Run*

When performing a model run and prompted to enter the name of the links file the process bombs if you enter "links.dat" as required in previous processes. We need consistency.

Question: Is the turns table open? Should the turns table be open?

When a model run is performed the program calls a window for Tranplan version 8.0 and we now run 9.0. It should be a DOS window that is opened.

When a mistake is made at any point the whole TP\_MI program crashes and you have to restart the whole thing.

Why do netcard and turns together?? Same for Loaded and Turns-f. They should all be separate.

