"TPBMAN"
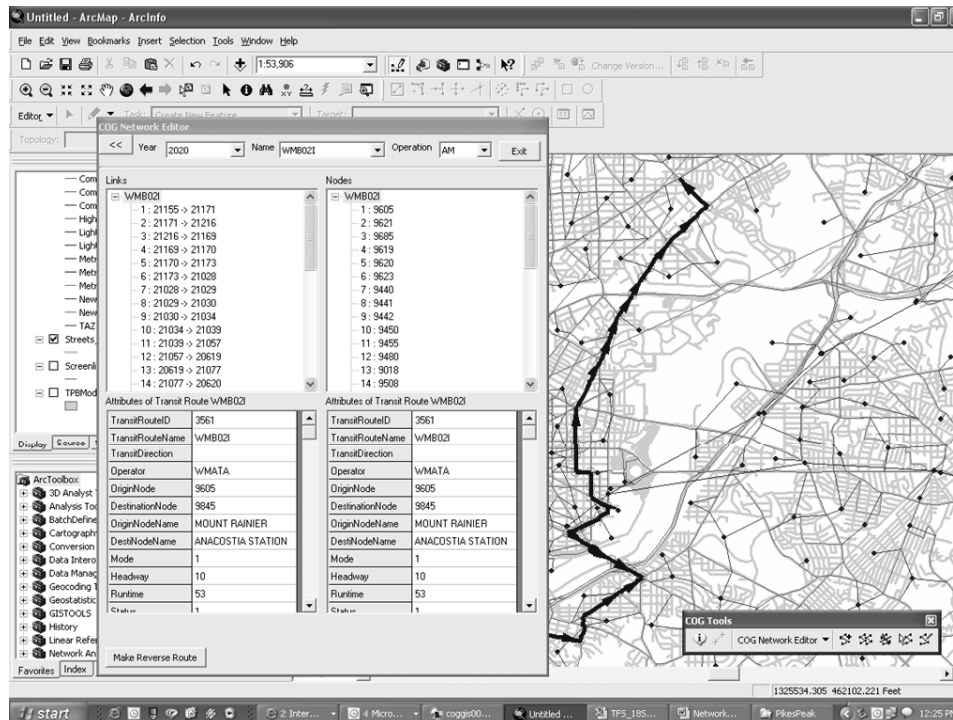## TPB database for network development:

status report

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Presentation to the TPB Travel Forecasting Subcommittee
18 September 2009

Presentation overview

- Brief background information

- Project status

- Ongoing project-related tasks & challenges

- Next steps

A brief background

- Multi-phase project to develop an application able to accomplish the following:
  - Edit and maintain both highway & transit networks
  - Support multiple concurrent users
  - Improve & streamline existing network development procedures

- Implement the ESRI geodatabase model for network datasets

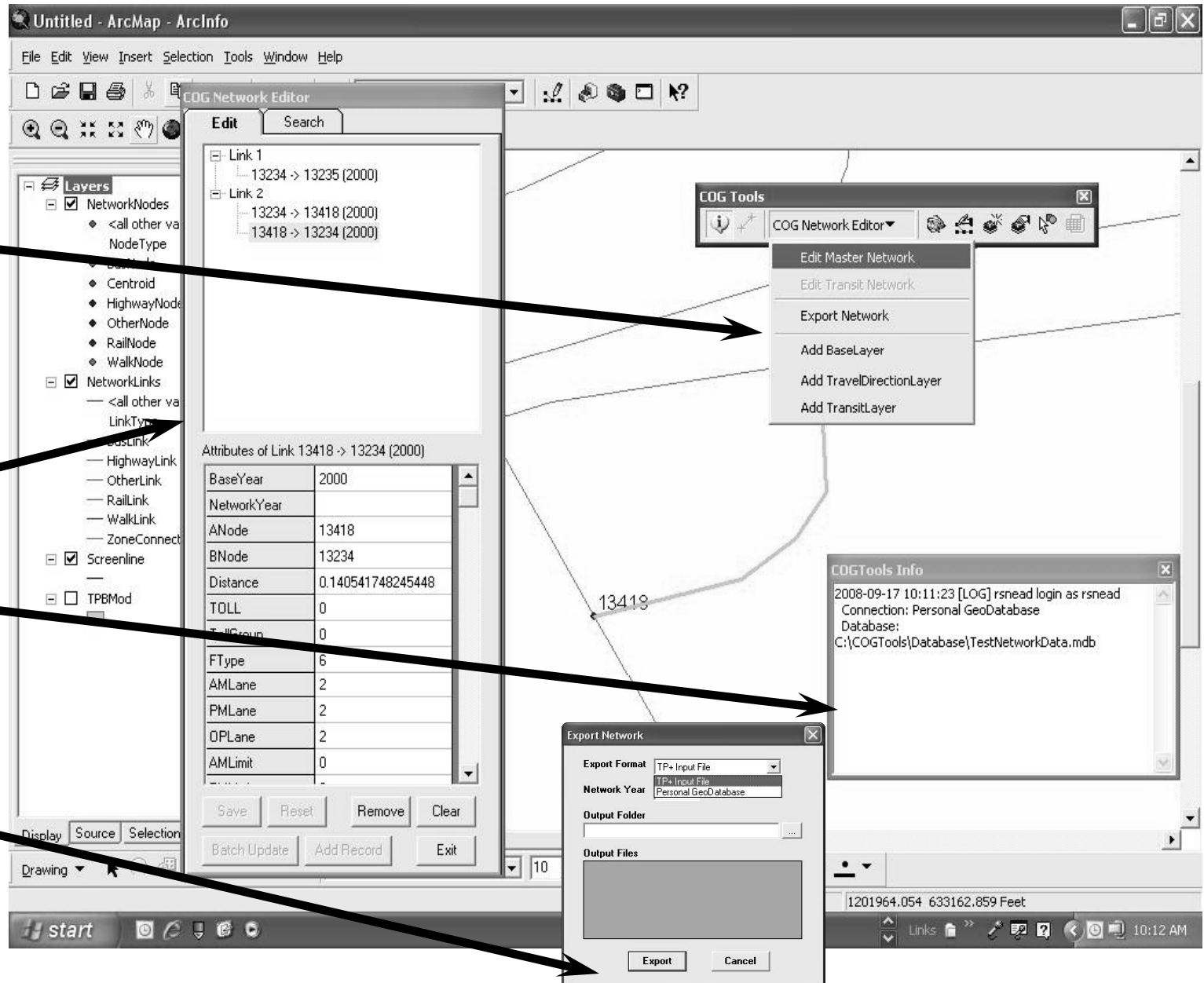- Incorporate the new TPB TAZ3722 zone system

Project status

- Phase Two ended 30th June 2009
  - Geodatabase of TPB master network data
  - "COGTools" toolbar for network editing
  - Documentation- user guides, final report

- Although this phase has officially concluded, some on-going outstanding issues remain
  - Application testing/debugging
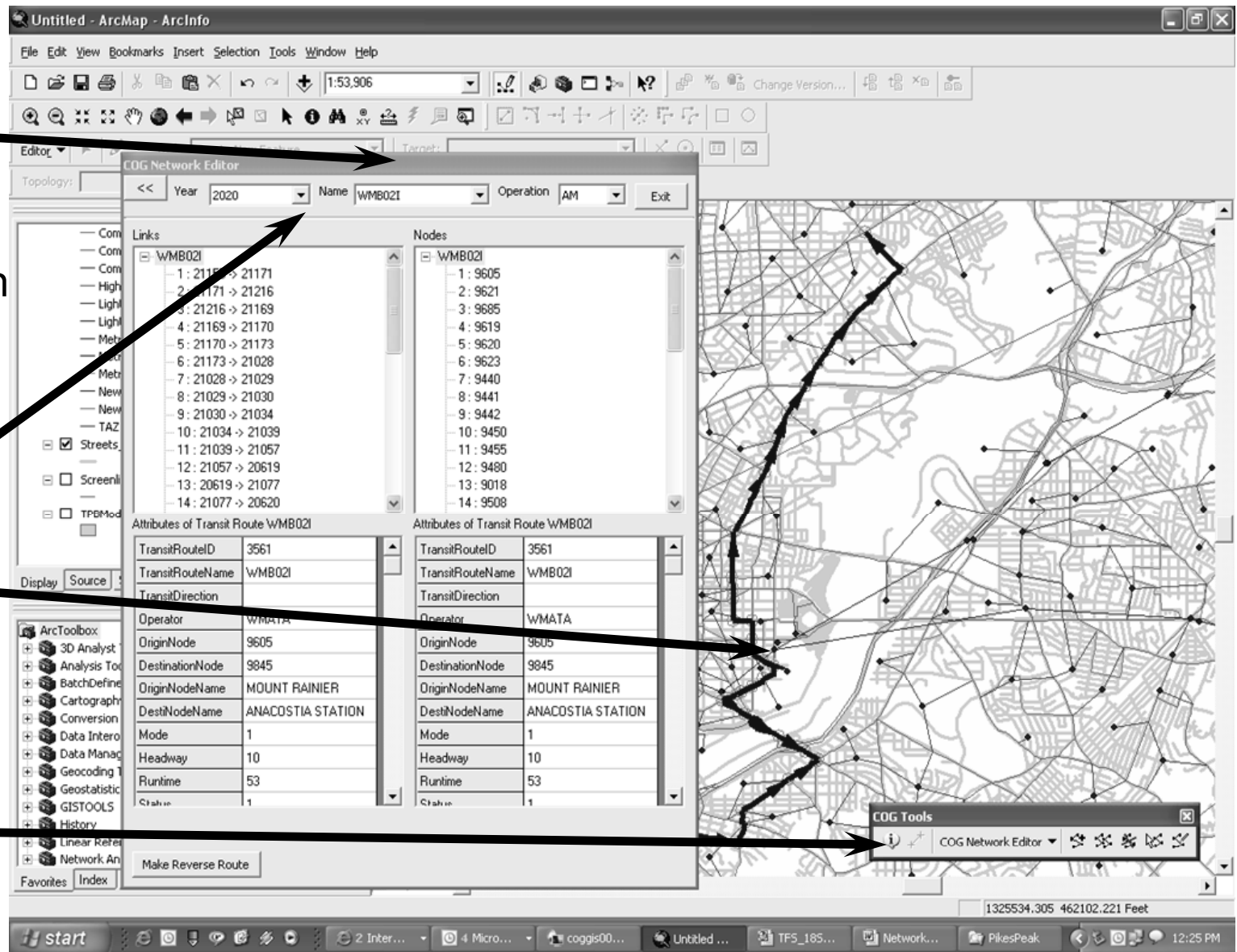 - New tools and tables delivered to TPB as necessary

COG Tools toolbar & ArcGIS

- Used in ArcMap

- COG Tools toolbar

- COG Network Editor

- Info window

- Export options

COG Tools toolbar & ArcGIS, continued

- Transit editing window

- Drop-down list of available transit years

- Active transit route

- COGTools toolbar

Ongoing project-related tasks & challenges

- TPB Master Network conflation
  - NAVTEQ data used to adjust master network links and nodes
  - Conflated links and nodes attributes merged with TPBMAN geodatabase to preserve the database relationships
  - Add additional transit links for each network year in geodatabase

- Update geodatabase with projects contained in the 2009 CLRP and FY2010-2015 TIP

- Master network node renumbering
  - Increase number of nodes in each jurisdiction to accommodate TAZ3722 area system
  - Adjust node ranges in all datasets in geodatabase
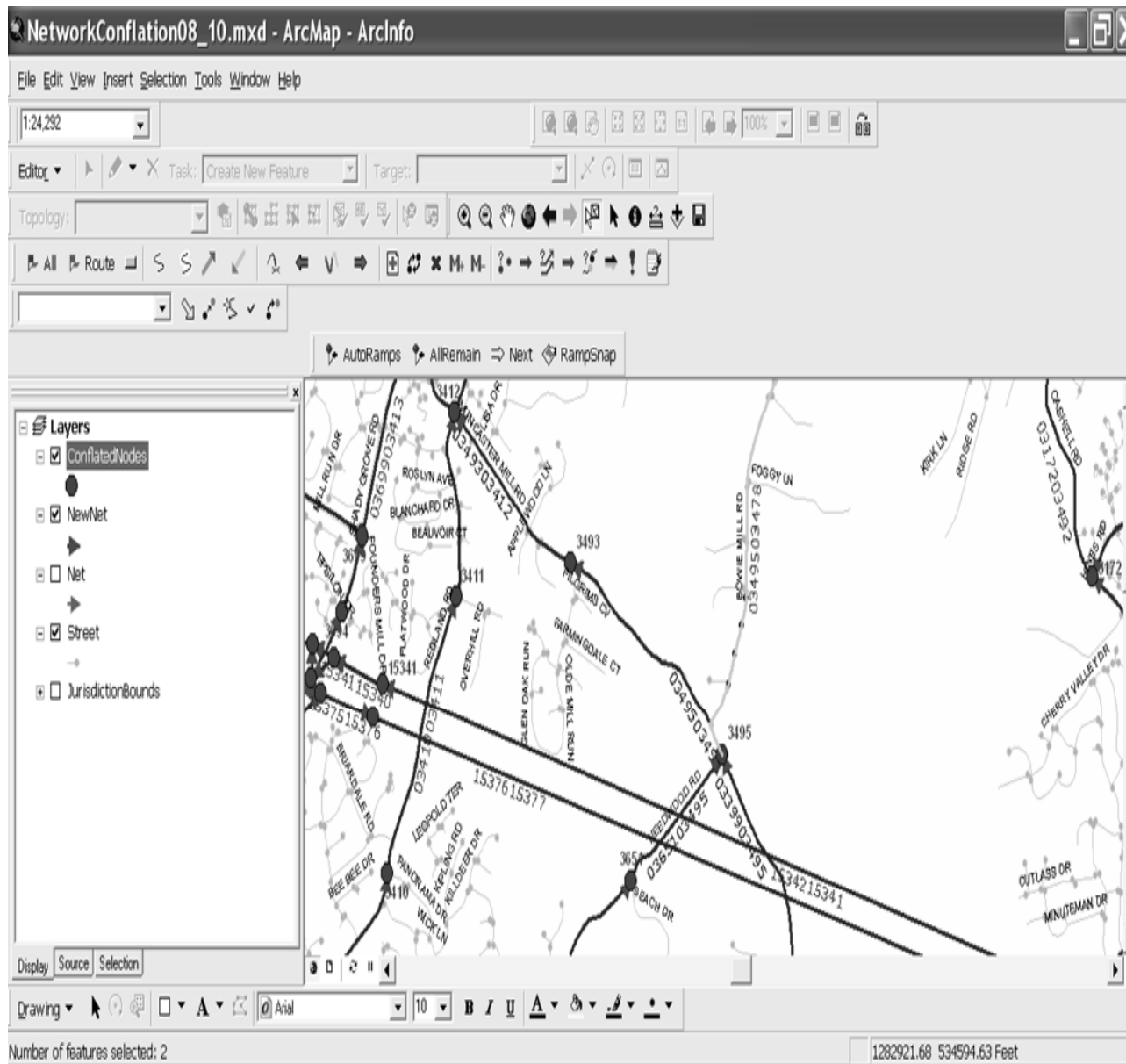 - Create new node range look-up table

Ongoing project-related tasks & challenges,
continued

- Migrate conflated, renumbered data to ArcSDE
  - Geodatabase resides on COG's SQL Server
  - Multi-user environment
  - Ability to create personal geodatabase from parent SDE geodatabase

- Enhancement of the TPB Master Network
  - Adding, modifying and removing zone centroid connectors
  - Enhancing the network by adding additional facilities & correcting 'short cuts' of the past

Ongoing project-related tasks & challenges,
continued

Enhancement of the TPB Master Network-conflation issues

– Previously software limitation prevented accurate coding of some facilities, and caused difficulties during conflation

– Result: overlapping links in some locations

– Links were flagged during conflation process so that those areas can be corrected at a later time

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Next steps

- Continue to move forward with project-related tasks as defined

- Develop procedures to enhance Master Network data
  - Adding additional transit network years
  - Advanced network editing tasks

- Identify opportunities for improving & extending the current COGTools functionality