**ELToD 4.0 C++ 🡪 DTA (7.1.5) – 11/15/17**

Control Key Changes

EXPRESS\_NODE\_TYPES 🡪 EXPRESS\_ENTRY\_TYPES, EXPRESS\_EXIT\_TYPES, and GENERAL\_JOIN\_TYPES

SELECT\_ITERATIONS added to permit path leg outputs for multiple iterations.

NEW\_CONVERGENCE\_FILE added to output the iteration gap data to a CSV file.

New Report – CONVERGENCE\_REPORT to output the iteration gap data to the print file.

Processing Changes

Different node codes (entry, exit, join) are now used to identify express – general purpose interactions and additional choice locations for exiting the express system. The toll link selection logic was corrected to identify the first express toll location on the path rather than the last toll location. Logic was added to identify the first exit decision point and related toll collection link after the first toll location.

Gap calculations were added and reported.

A choice model was added with a default data structure (but a user interface for the choice data has not as yet been created). For efficiency in the choice model, the path array was modified to include cumulative time, distance, and cost values at the choice location. This was necessary for the difference calculations and gathering free flow time skims.

A minimum speed of 0.1 mph was added to minimum huge travel time impacts.