

National Capital Region Transportation Planning Board

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MEMORANDUM

TO: Regional Bus Subcommittee

FROM: Robert L. Snead,
Principal Transportation Engineer

SUBJECT: Transfer of Bus Schedule Data between Transit Providers and TPB Staff

Date: July 22, 2008

To date, staff received transit electronic schedules from the City of Alexandria, Arlington, Fairfax, Loudoun, Prince George's counties, PRTC, and a commitment for electronic schedules from Frederick County. We have also received GIS shape files from Alexandria and Prince George's County, and commitments from Fairfax and Frederick County.

During the spring and summer, network development activities were refocused to develop networks for use in the air quality conformity assessment of the 2008 CLRP and FY 2009-2014 TIP. That work continues but staff has resumed contacting the remaining transit providers as to the availability of computer-readable transit data.

All transit schedules received to date are in an Excel spreadsheet format. We have investigated using SAS to process the schedule data but have had little success, in part because we lacked the proper software component in SAS, so we asked Daniel Consultants, Inc. (DCI) to evaluate our problem.

TPB has contracted with DCI to develop an ArcGIS-based database application that supports the management and maintenance of multimodal and multiyear transportation network data. The first phase of the multiyear project was completed in June. The second phase is focused on transit network development applications and will include multiyear transit networks and associated databases.

DCI reviewed your transit schedules and noted, as we did, that there were different formats for each provider and sometimes different formats for blocks of transit service, even for the same provider. The abundance of formats would require a large number of SAS programs, or possibly Visual Basic programming, to process dissimilar schedules. Bob Griffiths has also advised us that we may be unable to process Excel files using SAS and suggested that we request schedule data in an easier-to-read, electronic format, such as text or dBase (DBF).

We envision including the import, processing, and interface of schedule data with rail and bus route files that are required for TPB's modeling software, as a module in the new transit application being developed by DCI. To accomplish these tasks, we are hoping to find a common format for a majority of the electronic schedule data.

My initial presentation on November 27, 2007 included two questions: What software is used to manage bus routes and schedule information (e.g. Trapeze)? And, are there or could we develop

standards for transmitting schedule data and spatial data about transit routes? My hope is to discuss these issues at today's meetings. Our understanding is that there is a "Trapeze Export Tool for Google Transit Trip Planner." Perhaps such a tool would be useful.