DRAFT
Regional Transportation Data Clearinghouse User Guide

May 29, 2009

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Transportation Data Clearinghouse Table of Contents

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Transportation Data Clearinghouse: Introduction

The June 2009 release of the COG Regional Transportation Data Clearinghouse provides member jurisdictions and transportation planners with a GIS-based tool to analyze and project traffic count data in the region. As more data is added, the Clearinghouse will become a comprehensive regional transportation database that contains transit datasets, additional traffic counts, and travel time/level of service (LOS) information.

This edition of the Clearinghouse contains Annualized Traffic Volumes and Hourly Directional Counts. The Annualized Traffic Volumes consist of Annual Average Daily Traffic (AADT) from 2001 to 2007 and Annual Average Weekday Counts (AAWDT) from 2005 to 2007. The Hourly Directional Counts include counts from 2000 to 2007.

In addition to querying data using the ArcGIS application, users may access the data in Microsoft Access. The segments are stored in a logical sequence, where the whole number represents the segment number, and the decimal number represents the sequence within the segment.

The first section of the user guide contains an overview of the functionality of the ArcMap-based application with graphics illustrating query results. The second section provides information on the data layers and the associated attribute tables.

COG staff requests that users of the Regional Transportation Data Clearinghouse review the project, its functionality, and the data within the project, and then submit any comments to COG. After reviewing all comments submitted, COG staff will incorporate appropriate changes and additions into the next version of the Regional Transportation Data Clearinghouse.

Although the data in the Regional Transportation Data Clearinghouse is primarily based on data collected by COG staff, it is intended to include any type of regional data that can be distributed to COG's member jurisdictions. Member jurisdictions are encouraged to submit their own data for inclusion in the next version of the Clearinghouse project. As usual, current datasets in the project—such as traffic volumes and cordon counts—will be updated as new data becomes available.

Transportation Data Clearinghouse: Overview

AADT/AAWDT: Opens a query window for Average Annual Daily Traffic (AADT) and Average Annual Weekday Daily Traffic (AAWDT).

The Transportation Data Clearinghouse application in ArcGIS provides access to regional AADT/AAWDT and Hourly Count data through query windows and an interactive selection function. The application maps queries and allows for the export of attribute tables into .dbf files or .txt files.

Hourly Counts: Opens a query window for hourly traffic counts by month and year.

Select a Link: Allows user to select network links interactively to obtain traffic and count data.

Export Table: Exports attribute tables into .dbf or .txt files.

Help: Provides a brief explanation of buttons.

Reset: Clears all queries and returns user to regional map extent.
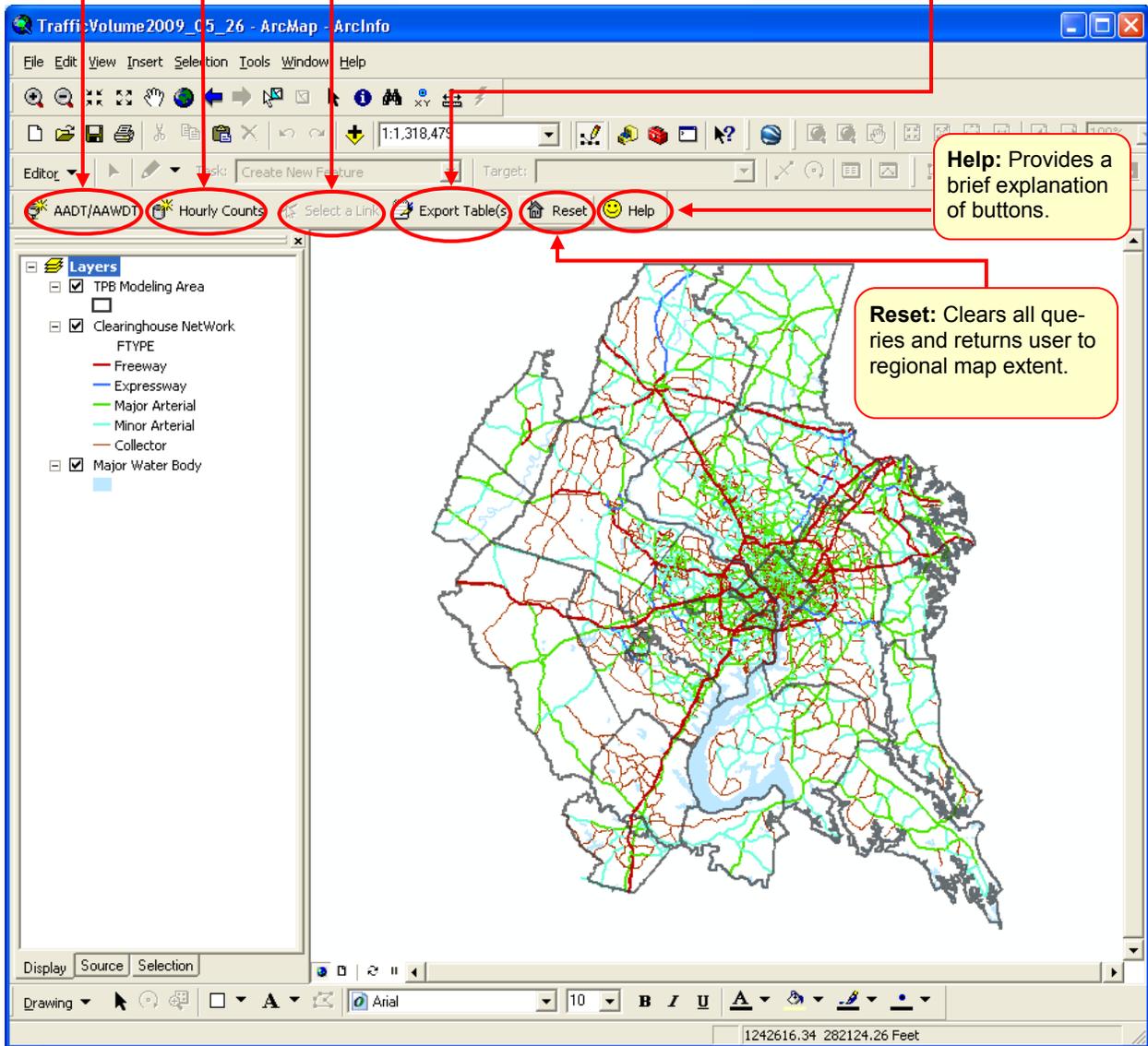
Figure 1.1: Clearinghouse overview

Querying Average Annual Daily Traffic (AADT) and Average Annual Weekday Traffic (AAWDT)

To begin a query for AADT/AAWDT, click on [AADT/AAWDT] button. Clicking this button opens the AADT/ AAWDT TRAFFIC VOLUME QUERY -- MWCOG window (see Figure 1.2 below).

The AADT/AAWDT query window allows users to select traffic volumes by:
- Station Type (Permanent, Temporary, or both),
- Link identification type (Route ID, Project ID, or all Links with Counts),
- Focus Year (2001—2007),
- County Type for Focus Year (Actual Count Taken, Count Growth Factored from a previous year, or both)
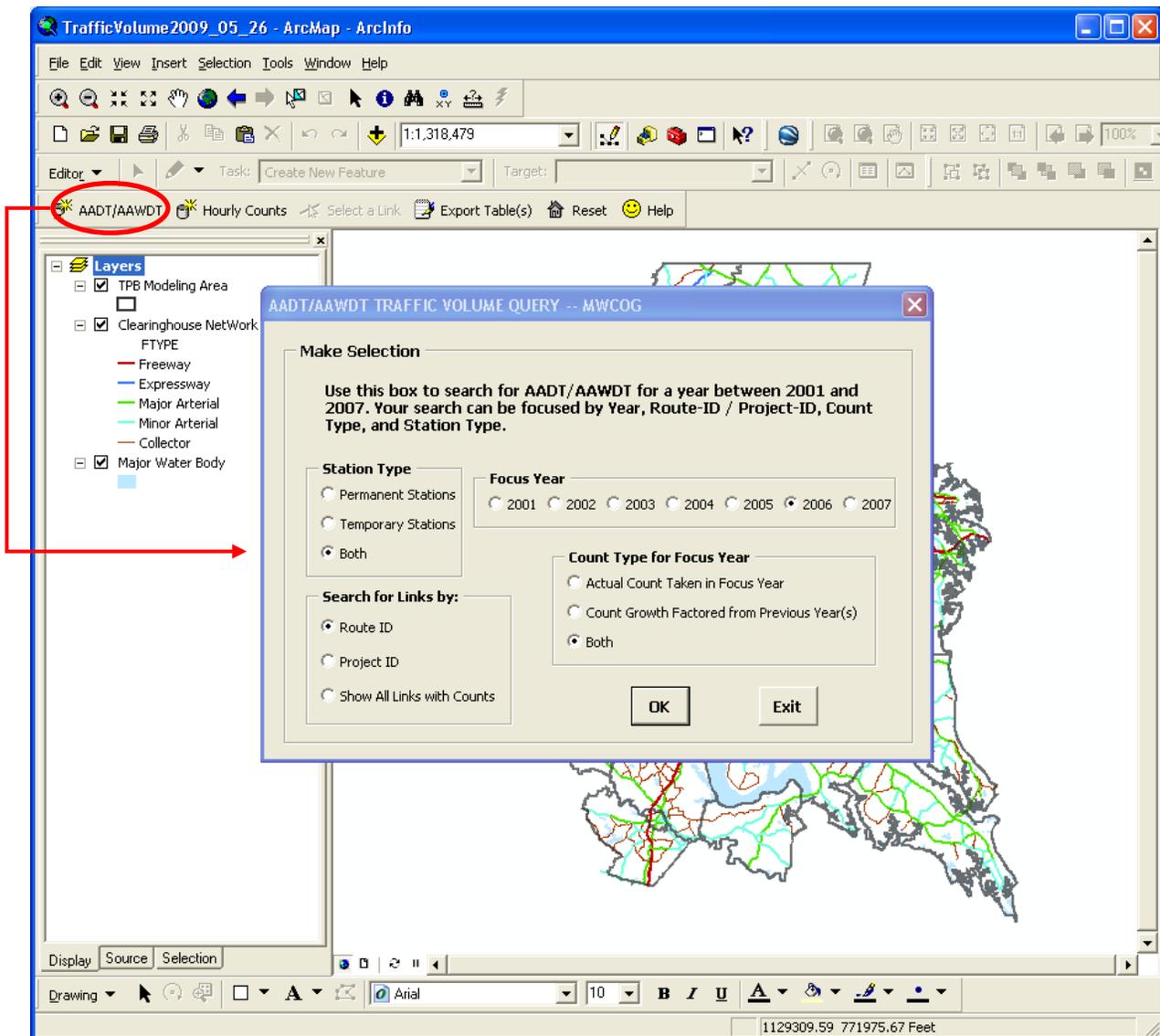
Figure 1.2: Clicking on the AADT/AAWDT button opens a query window.

Querying AADT/AAWDT Counts using Query Window

Begin a query by selecting Station Type, Search for Links, the Focus Year, and Count Type (see Figure 1.3).

In this example, clicking the OK button will start a query for:

- Both permanent and temporary counting stations,
- Links identified by Route ID,
- Counts taken in 2006, and
- All count types, including counts taken in the focus year as well as factored counts.
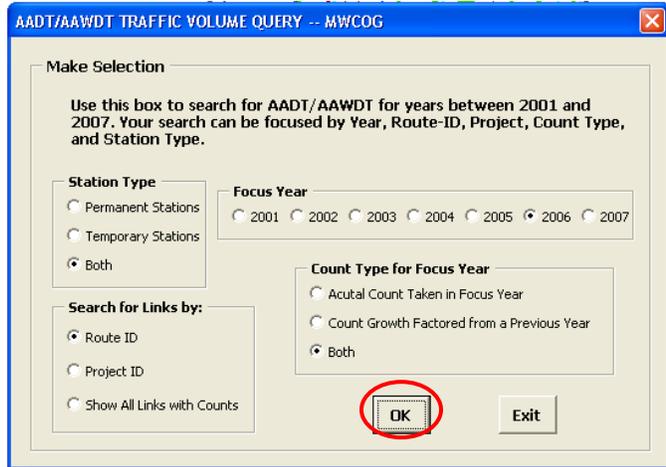
Figure 1.3: AADT/AAWDT Traffic Volume Query window
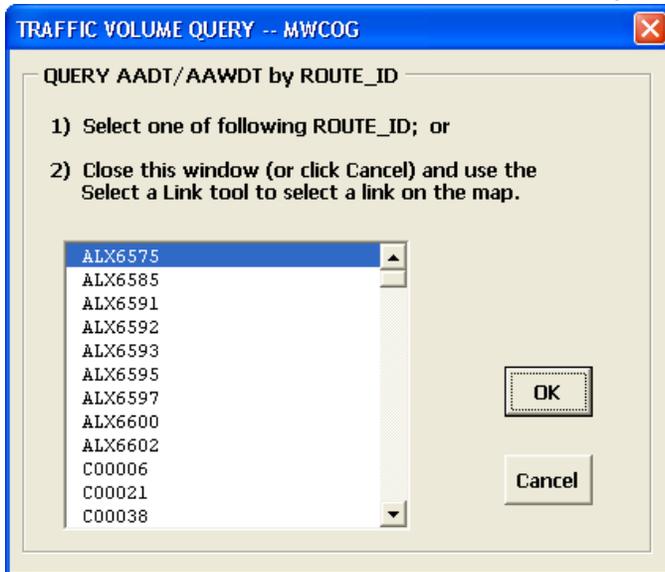
Figure 1.4 :Querying AADT/AAWDT by Route ID

Selecting AADT/AAWDT Counts by Route ID

After clicking OK in the query window above (Figure 1.3), the Clearinghouse opens a new Traffic Volume Query (Figure 1.4) which allows the user to either:

- Select a Route ID, or
- Close the window to select links interactively using the Select Link tool.

Select a Route ID

Select a Route ID by scrolling down the list of routes. Click OK to begin the query.

In this example, US1 from the list of routes and click OK.

To perform an interactive selection, see page 11.
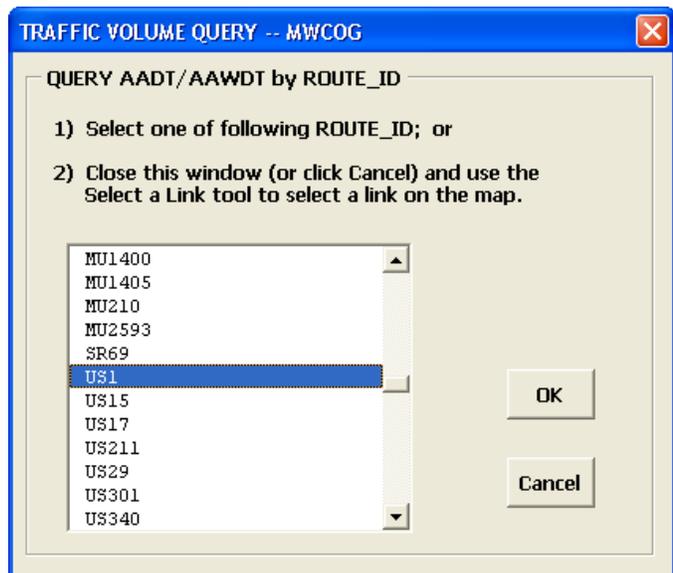
Figure 1.5: Selecting a Route ID

AADT/AAWDT Query by Route ID — Results Table

Clicking OK after selecting a route opens an attribute table for the selected route and zooms into the selected link(s) in the map extent. In this example, the query opens a table with all segments of US 1 with counts in 2006 and highlights the segments in the map window. The Records text at the bottom of the table window shows 67 segments with counts.

Scroll the columns to the right until you see the AADT2006 column.   The AADT2006 shows the traffic counts for the segment and the corresponding CT06 column identifies the types of count (see Table 1.1 below).

Figure 1.6: Attribute table for AADT in 2006 showing results by Route ID

Figure 1.7: AADT fields for US1 in 2006 and corresponding CT codes

AADT/AAWDT Count Codes (CT Codes)

CT code	Description
MDP,VAP,DCP	Volumes from permanent count stations
MD0,VA0,DC0	Program counts taken in the current year
MD0A,VA0A	Program counts taken in the current year if averaged between two or more stations (MD0A or VA0A if averaged between 2 or more stations)
MD1,DC1	Factored counts taken in the 1st previous year (MD1A if averaged between two or more stations)
MD2,DC2	Factored counts taken in the 2nd previous year (MD2A if averaged between 2 or more stations)
MD3	Factored counts taken in the 3rd or more previous year (MD3A if averaged between 2 or more stations)
VA7, DC7	Factored counts taken in a previous year – growth factor was included (VA7A if averaged between 2 or more stations)
VALP (continuous count) VAL0 (current year) VAL7 (previous year growth factored)	Counts summed on parallel facilities
DCE	DC volume estimates

Table 1.1: CT Code descriptions

Understanding AADT/AAWDT Attribute Table Names and Layer Names

The query feature for AADT/AAWDT creates new attribute tables and layers based on the user's selections. The table and figure below explain the naming conventions for these layers.

Query Window Selection	Layer/Attribute Table Name
AADT200x	AADT in year 200x
Search for Links by:	
Route ID	ROUTE_ID
Project ID	PROJ_ID
Show All Links with Counts	All (note: this query does not open an attribute table)
Station Type	
Permanent Stations	Perm
Temporary Stations	Temp
Both	All
Count Type of Focus Year	
Actual Count Taken in Focus Year	CurYr
Count Growth Factored from a Previous Year	Factored
Both	All

Table 1.2: Attribute Table Names based on query window selections
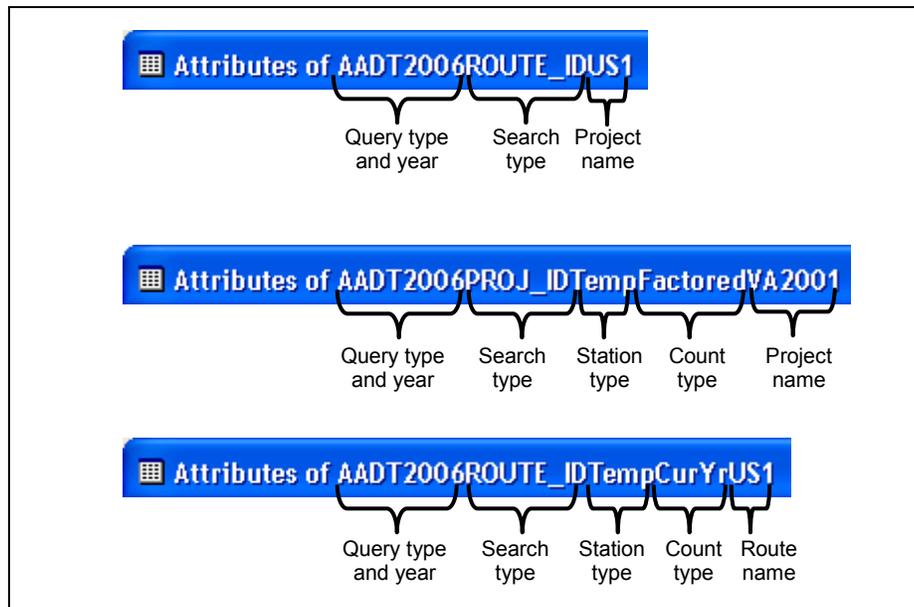
Figure 1.8: Examples of attribute table naming properties

AADT/AAWDT Query by Route ID — Map Results

In addition to creating a new attribute table for each query, the Clearinghouse creates a new layer for the route segments (AADT2006ROUTE_IDUS1) and zooms to the extent of the layer (see Figure 1.9 below). The segments are represented on the map as a thick orange line.

The first layer created from the first query window (in this example AADT2006ROUTE_ID) remains in the Table of Contents, but is no longer the active layer.
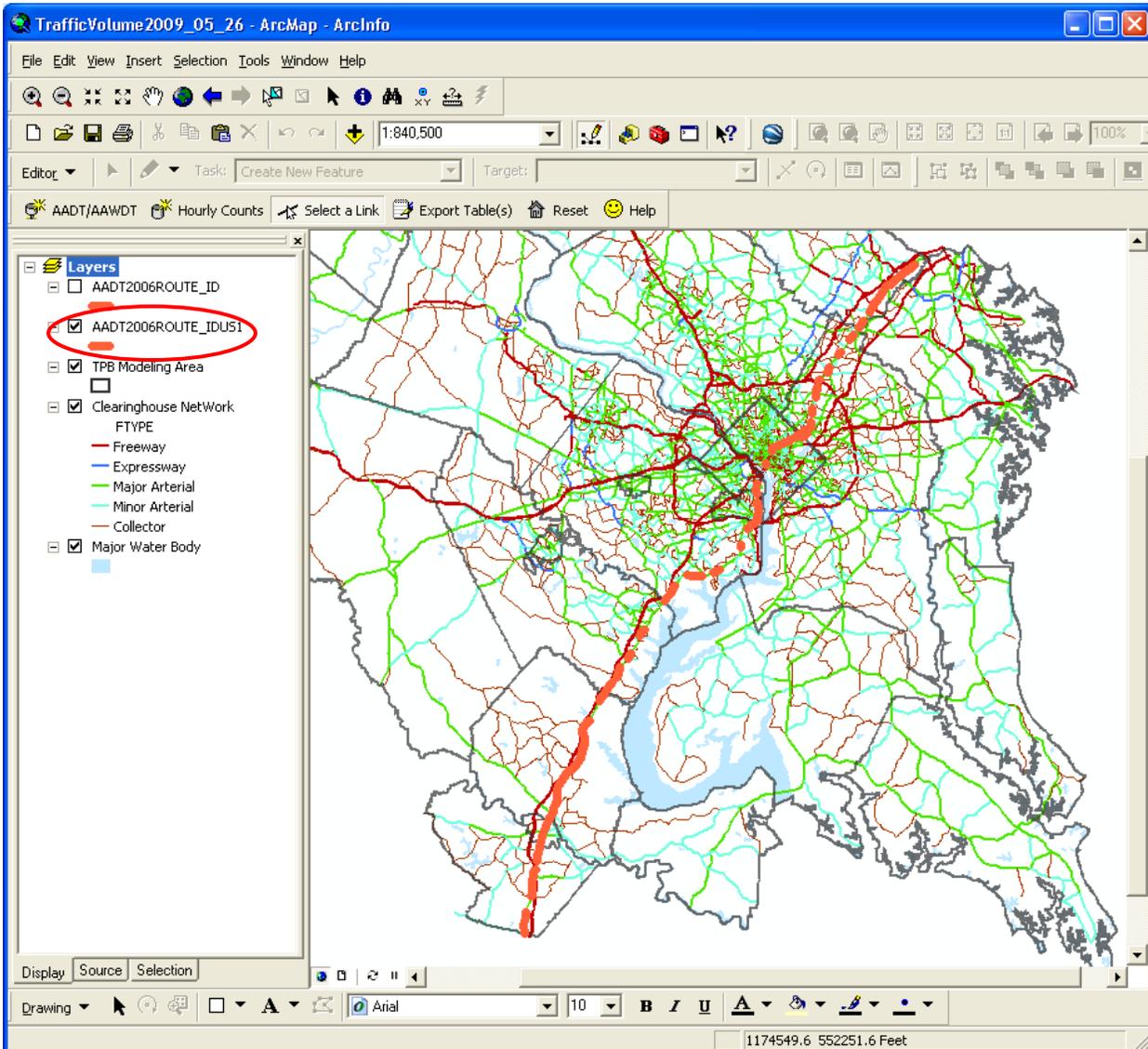
Figure 1.9: Map results for AADT query for 2006 counts on US-1

AADT/AAWDT Query by Route ID

To query AADT/AAWDT by ProjectID, follow the same procedure in describe in the previous example, but choose "Search by Project ID" under "Search for Links by:".

Querying AADT/AAWDT Counts using the Interactive Selection (Select Link tool)

The Select Link tool allows the user to select links interactively in the map view. There are two ways to use the Select Link tool:

1) In the AADT/AAWDT Traffic Volume Query window (Figure 1.10), make selections for Station Type, Count Type, and Focus Year. In the "Search for Links by:" section, choose "Show All Links with Counts". Click OK. The program will create a new layer with the links highlighted on the map in bold orange lines. *Use the Select a Link tool to select a segment. The application will zoom to the extent of the selected link(s) and open an attribute table.*
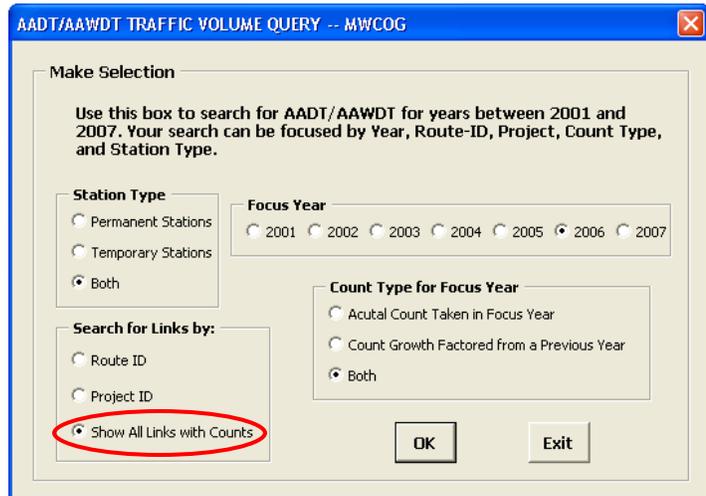
Figure 1.10: Select "Show All Links with Counts" to start an interactive selection.

or

2) Make selections for Station Type, Count Type, and Focus Year in the AADT/ AAWDT Traffic Volume Query window. Clicking OK opens The Traffic Volume Query window (Figure 1.11). Click Cancel or close the window. The application highlights the links meeting the selection criteria and zooms to the extent of the selected links. Use the *Select a Link* tool to select a segment. The application will zoom to the extent of the links with same Route ID or Project ID as the link clicked and will open an attribute table for the links.
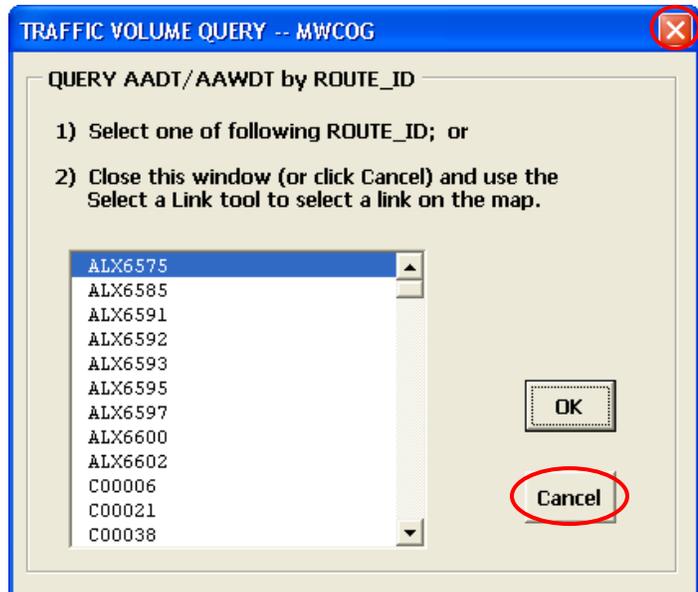
Figure 1.11: Close the query window or click Cancel to begin an interactive selection of segments specified in the query window.

Querying AADT/AAWDT Counts using Interactive Selection (Select Link(s) tool)

Selecting a single segment (Show all Links with Counts selection)
The "Select all Links" option (Option 1 on page 11), opens a map view of all the links with counts. Clicking on a segment creates a new layer for the segment, zooms the map extent to the new layer, and opens the attribute table for the new layer.

The new layer and table are identified by the ANODE—BNODE of the selected link.

Selecting a link creates a new layer for the selected link, zooms to the layer, and opens the attribute table.
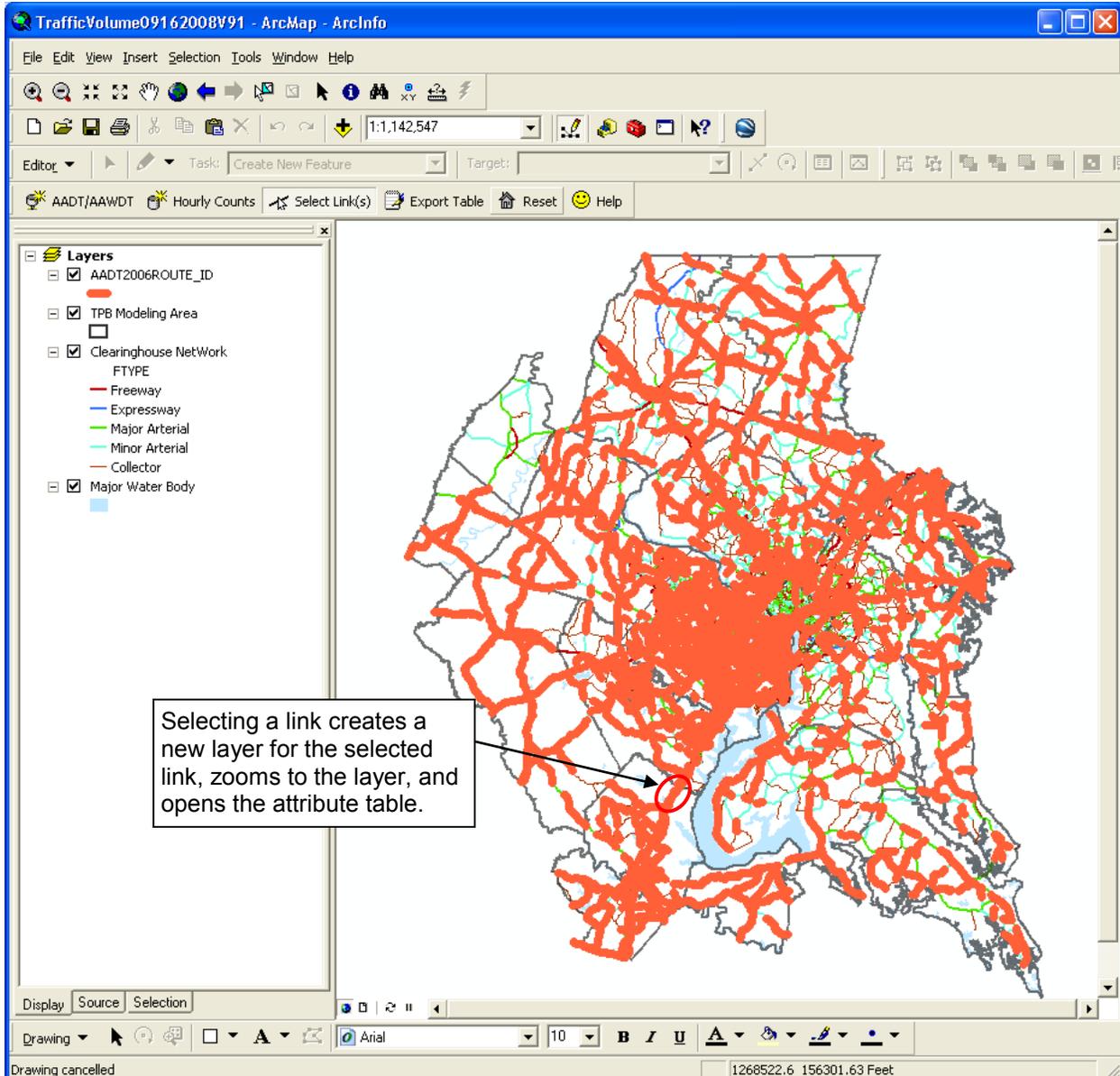
Figure 1.12: Map display after choosing "Select all Links" in the query window and selecting a link.

Querying AADT/AAWDT Counts using Interactive Selection (Select Link(s) tool)

Selecting an entire route (Cancelling / Closing Traffic Volume Query Window)
Closing the query window or clicking Cancel in the Traffic Volume Query window (Option 2 on page 11), opens a map view highlighting the segments that meet the selection criteria. Clicking on a segment with the Select a Link(tool creates a new layer for all the segments with the same Project ID or Route ID, zooms the map extent to the new layer, and opens an attribute table.

In this example, the selection tool selects both I-95 and US-1 routes for display because of the geographic proximity of the routes. In order to select a route or project more precisely, zoom to the area and select the link.
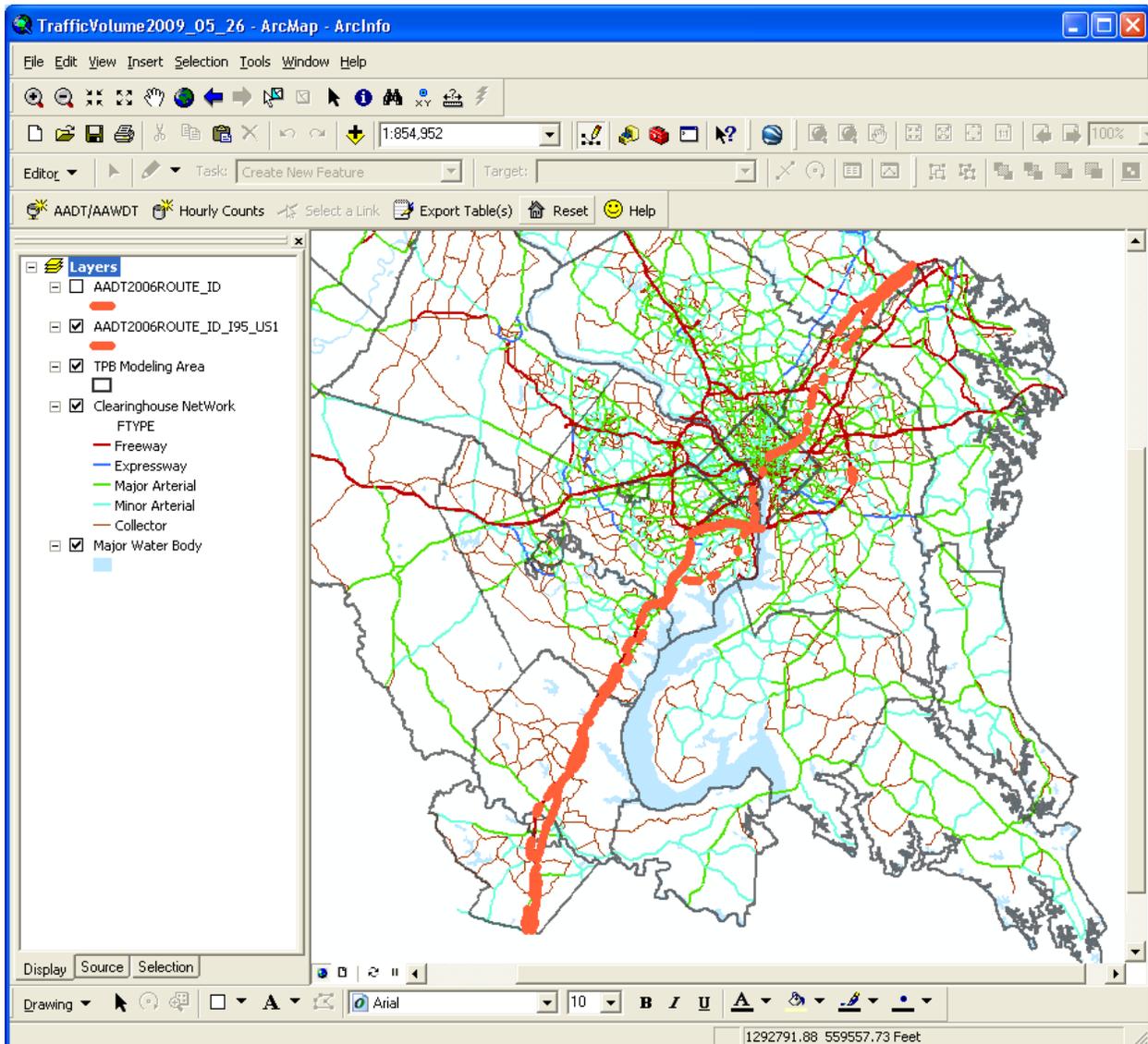
Figure 1.13: Map display after cancelling or closing the query window and selecting a link. The entire route is highlighted.

Querying Hourly Traffic Volume (Hourly Counts)

Clicking the Hourly Count button opens the Hourly Traffic Volume Query window. Select a year and a month and click OK to begin a query.

The Hourly Traffic Volume Query function creates a new layer with segments containing hourly traffic counts for the time period selected. In this example, the query opens a new layer containing all segments with hourly traffic counts taken in January 2002. The line segments are delineated by Short Term Counts (blue), Medium Term Counts (green), and Continuous Counts (red). See definitions below.

To view Hourly Count Data for a specific segment, use the Select a Link tool to click on a line segment. Clicking on a link opens two attribute tables (one for each direction) for the selected segment (see page 16 for more details).
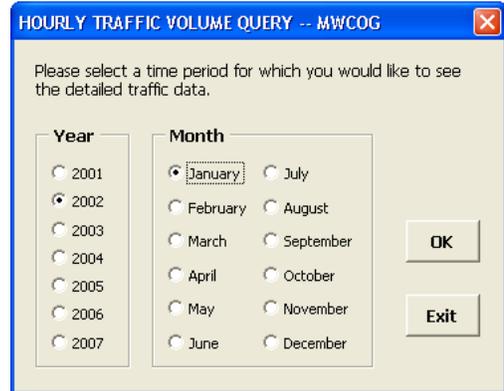
Figure 1.14: Hourly Traffic Query Window

Hourly Count Types:

Short Term Count: Less than one week.

Medium Term Count: More than one week, but not continuous. mostly permanent count stations that are not always working

Continuous Count: Taken from a permanent counting station.
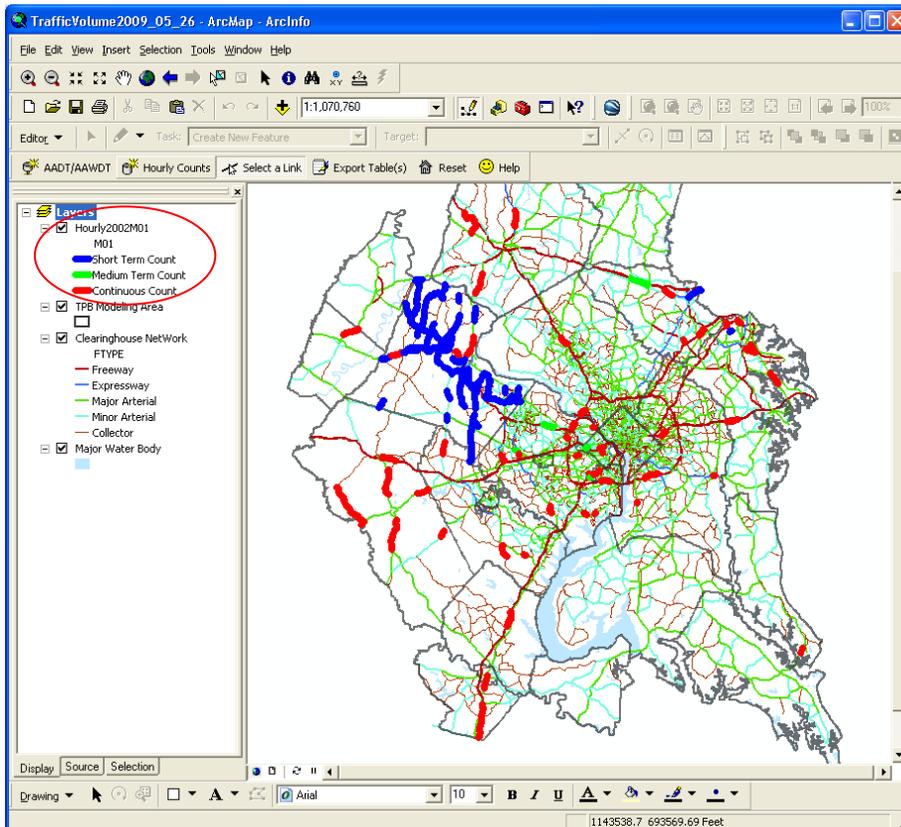
Figure 1.15: Hourly Traffic Query Map Window showing segments with counts

Attribute Tables for Hourly Counts

The Attribute Tables for Hourly Counts are identified by the NDPR number (ANODE—BNODE pair) for the links and the directional flow. The nodes are based on the 2007 TPB network. In this example, the Attributes of HourlyCounts_148121481SouthBound represents the segment between nodes 14812 and 14811 for southbound traffic. The attribute table for the northbound flow automatically opens behind the southbound table.

OBJECTID *	NDPR	STATION	DIR	MONTH_	DATE_	YEAR_	HOUR_	DOW	VOLUMEQUAL	TOTAL	FULLDATE
1	1481214811	70274	3	1	1	2002	0	3	4	79	Tuesday, 1/1/2002
2	1481214811	70274	3	1	1	2002	1	3	4	66	Tuesday, 1/1/2002
3	1481214811	70274	3	1	1	2002	2	3	4	48	Tuesday, 1/1/2002
4	1481214811	70274	3	1	1	2002	3	3	4	15	Tuesday, 1/1/2002
5	1481214811	70274	3	1	1	2002	4	3	4	20	Tuesday, 1/1/2002
6	1481214811	70274	3	1	1	2002	5	3	4	46	Tuesday, 1/1/2002
7	1481214811	70274	3	1	1	2002	6	3	4	48	Tuesday, 1/1/2002
8	1481214811	70274	3	1	1	2002	7	3	4	68	Tuesday, 1/1/2002
9	1481214811	70274	3	1	1	2002	8	3	4	77	Tuesday, 1/1/2002
10	1481214811	70274	3	1	1	2002	9	3	4	135	Tuesday, 1/1/2002
11	1481214811	70274	3	1	1	2002	10	3	4	153	Tuesday, 1/1/2002
12	1481214811	70274	3	1	1	2002	11	3	4	213	Tuesday, 1/1/2002
13	1481214811	70274	3	1	1	2002	12	3	4	215	Tuesday, 1/1/2002
14	1481214811	70274	3	1	1	2002	13	3	4	224	Tuesday, 1/1/2002
15	1481214811	70274	3	1	1	2002	14	3	4	234	Tuesday, 1/1/2002
16	1481214811	70274	3	1	1	2002	15	3	4	241	Tuesday, 1/1/2002
17	1481214811	70274	3	1	1	2002	16	3	4	219	Tuesday, 1/1/2002
18	1481214811	70274	3	1	1	2002	17	3	4	205	Tuesday, 1/1/2002
19	1481214811	70274	3	1	1	2002	18	3	4	202	Tuesday, 1/1/2002
20	1481214811	70274	3	1	1	2002	19	3	4	162	Tuesday, 1/1/2002
21	1481214811	70274	3	1	1	2002	20	3	4	84	Tuesday, 1/1/2002
22	1481214811	70274	3	1	1	2002	21	3	4	71	Tuesday, 1/1/2002
23	1481214811	70274	3	1	1	2002	22	3	4	39	Tuesday, 1/1/2002

Figure 1.16: Attribute table showing southbound counts

Attribute Tables for Hourly Counts

NDPR	Anode-Bnode pair, link identifier
STATION	Count Station ID
DIR	Direction; 0 = unknown, 1 = northbound, 2 = eastbound, 3 = southbound, 4 = westbound, 5 = northbound-southbound combined, 6 = eastbound-westbound combined, 7 = north-south reversible, 8 = east-west reversible
MONTH	Month 1-12
DATE	Day of the month 1-31
YEAR	Year
HOUR	Hour; 0-23
DOW	Day of Week; 1 = Sunday, 2 = Monday, 3 = Tuesday, 4 = Wednesday, 5 = Thursday, 6 = Friday, 7 = Saturday
VOLUMEQUAL	Volume quality code; 0 = not reviewed, 1 = acceptable for nothing, 2 = acceptable for qualified raw data distribution, 3 = acceptable for raw data distribution, 4 = acceptable for use in AADT calculation, 5 = acceptable in all TMS uses, 9 = Maryland link, no volume quality information available at this time.
TOTAL	Hourly volume
FULLDATE	Complete date; in DAY, MM/DD/YYYY format
DIRECTION	Direction of traffic: Northbound, Eastbound, Southbound, Westbound

Table 1.3: Attribute fields for Hourly Counts Query results

Additional Transportation Clearinghouse Functions

Exporting an opened table into a .dbf file.

Click on the Export Table button to export an open table into a .dbf file (default) or a .txt file. Only tables that are open can be exported.

Resetting the Clearinghouse data and layers

Click on the Reset button to delete layers created by queries and to reset the map view to the original extent.

Help

Click on the Help button for hyperlinked help menus explaining the basic operation and functionality of the Clearinghouse.

Database Descriptions

Layer Properties
TPB Modeling Area

Topology: Polygon
Scale: 1:100,000
Coordinate System: Maryland State Plane
Zone: 4126 NAD83
Units: Feet
Extent: The 2191 Modeled area including: COG Member Jurisdictions; Anne Arundel, Charles, Stafford, Fauquier, Howard, Jefferson, Clarke, King George, St. Mary's, Calvert, Carroll, and (part of) Spotsylvania Counties, and the City of Fredericksburg.
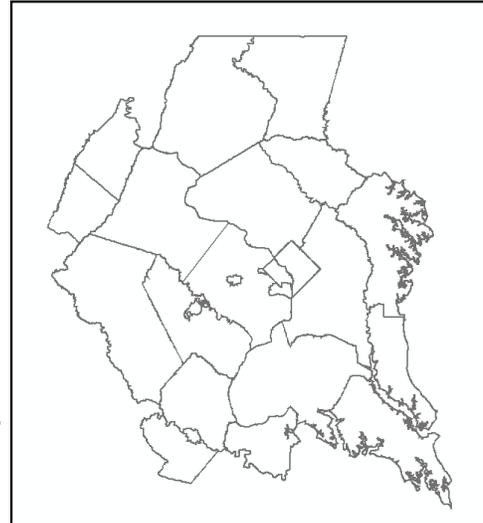
Description—Spatial Data

The TPB Modeling Area contains all the COG/TPB 2191-zone modeled area including: COG Member Jurisdictions plus Jefferson, Clarke, Fauquier, Stafford, part of Spotsylvania, Anne Arundel, Charles, Saint Mary's, Calvert, King George, Howard, and Carroll Counties, and the City of Fredericksburg.

Attribute Items for TPB Modeling Area

Item Name	Type	Description
SHAPE	Geometry	Shape type
NAME	Text	Name of jurisdiction
STATE_NAME	Text	Name of state
STATE_FIPS	Text	State Federal Information Processing Standard (FIPS) Code VA = 52; MD = 21; DC = 11
CNTY_FIPS	Text	County Federal Information Processing Standard (FIPS) Code See Additional Resources section for more information.
JUR	Short	TPB Jurisdiction code. See Additional Resources section for more information.
FIPSSTCO	Text	Combination of State and County FIPS codes.
REGION	Text	TPB Modeled Region or TPB Planning Region
COG_REGION	Short	Identifier of COG Region.
SHAPE_LENG	Double	Length of perimeter
SHAPE_AREA	Double	Area of polygon

Layer Properties

Clearinghouse Network

Topology: Polygon
Scale: 1:100,000
Coordinate System: Maryland State Plane
Zone: 4126 NAD83
Units: Feet
Extent:
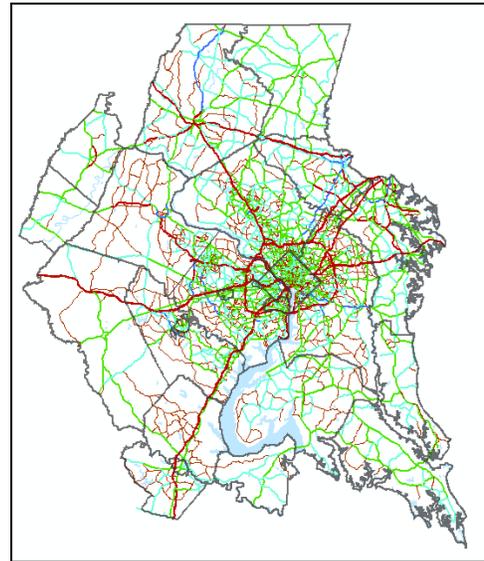
Description—Spatial Data

The Regional Transportation Data Clearinghouse Network is now entirely based upon the 2191-zone COG Master Highway Network. The 2007 year network is the Clearinghouse network for this release.

Attribute Items for Clearinghouse Network

Item Name	Type	Description
OBJECTID	ObjectID	Internal Feature Number
Shape	Geometry	ArcGIS shape type
NDPR2	Text	Anode—Bnode pair
ROUTE_ID	Text	Type of route and route number: I = Interstate; US = US Highway; MD = Maryland State Highway; VA = Virginia State Highway
PROJ_ID	Text	Project ID for Improvement Project
NAME	Text	Facility name
FROM_	Text	From facility name (at ANODE)
TO_	Text	To facility name (at BNODE)
COUNTY	Text	Jurisdiction name. Either county or independent city.
STATE	Text	Link state. DC = District of Columbia; MD = Maryland; VA = Virginia; WV = West Virginia
AADT200x	Long	Average Annual Daily Traffic
CT0x	Text	CT Code = Type of Traffic Count (see Additional Resources for details)
AAWDT200x	Long	Average Annual Weekday Traffic
Shape_Length	Double	Length
FNODE_	Double	Internal From Node Number
TNODE_	Double	Internal To Node Number
LPOLY_	Double	ArcGIS polygon type
LENGTH	Double	Segment length

Layer Properties

Attribute Items for Clearinghouse Network (continued)

Item Name	Type	Description
NET2006_	Double	Network identifier
NET2006_ID	Double	2006 Network identifier
BASE2000_	Double	Link ID
BASE2000_I	Double	Link ID
ANODE	Long	Anode
BNODE	Long	Bnode
YEAR	Double	Year of last change of network link
SPDC	Double	Speed Class
CAPC	Double	Capacity Class = FTYPE + ATYPE. See Additional Resources for more information.
LANE	Double	Number of directional lanes
AMLANE	Double	Number of directional lanes in morning
PMLANE	Double	Number of directional lanes in afternoon
OPLANE	Double	Number of directional off peak lanes
REV	Double	Reverse Code
LIMIT	Double	Link Prohibition Code. See Additional Resources for details
AMLIMIT	Double	Link Prohibition Code in morning
PMLIMIT	Double	Link Prohibition Code in afternoon
OPLIMIT	Double	Link Prohibition—off peak
TOLL	Double	Toll code—number in field is the current year monetary amount of toll, in cents
TOLLGRP	Double	Four digit facility type index that is associated with a per mile rate
ZONE_	Double	TAZ number
CNT	Double	Ground count
JUR	Double	Jurisdiction code. See Appendix A for details.
LTYPE	Text	Link Type: H = Highway; T = Transit
HOVFLAG	Double	Special highway link operation code
SPDFLG	Double	Trip generation variable representing initial restrained speed
SCREEN	Double	Screen Code; screen line number
REVID	Text	Reverse ID
ALT	Short	Alternative Flag; for use for projects such as ICC; used in projects from 2001 on

Layer Properties

Attribute Items for Clearinghouse Network (continued)

Item Name	Type	Description
BASE_ID	Text	Link ID before change
DUAL	Short	Direction code: 1 = two-way; 1 = one-way
REVBASEID	Text	Reverse Base ID
STATUS	Text	Type of link change
BASE2000	Text	2000 Link ID
STATUS2000	Text	Type of Link Change; used in network editing process
CNT00	Long	2000 Ground Count
FLAG	Short	Flag for internal use
RAMPFLAG	Text	Flag used in network attribute update process; currently not regularly updated
LINK2003	Text	2003 Anode-Bnode pair
NHS	Text	National Highway System flag; Y = yes; N = no
AADT2007	Long	2007 Average Annual Daily Traffic
AAWDT2007	Long	2007 Average Annual Weekday Traffic
CT07	Text	2007 Count type (see Appendix A for details)
SEQUENCE	Double	Sequence Number within Route Segment
URB_AREA	Text	Flag indicating link within an Urbanized Area: Y = within urbanized area; N = outside urbanized area
LOG_SEQ	Double	Logical Sequence Number for Entire Route. The whole number represents the Segment Number, and the decimal number represents the sequence within the segment.
COMMENTS	Text	Comments
COUNTLOC	Text	Count Location

Layer Properties

Major Water Bodies

Topology: Polygon
Scale: 1:100,000
Coordinate System: Maryland State Plane
Zone: 4126 NAD83
Units: Feet
Extent: The 2191 Modeled area including: COG Member Jurisdictions; Anne Arundel, Charles, Stafford, Fauquier, Howard, Jefferson, Clarke, King George, St. Mary's, Calvert, Carroll, and (part of) Spotsylvania Counties, and the City of Fredericksburg.
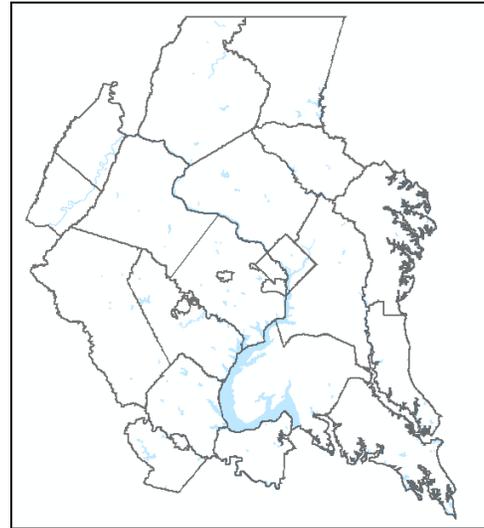
Description—Spatial Data

The theme was created by selecting all of the water blocks from the 1992 Census TIGER files. The county FIPS code is included so that water can be displayed for only the jurisdictions needed.

Attribute Items for Major Water Bodies

Item Name	Type	Description
FIPS	Text	Federal Information Processing Standard (FIPS) Code
CMSA	Short	National Highway System flag; Y = yes; N = no
COG	Short	Identifier if within COG Jurisdictions: 0 = no; 1 = yes
MODREG	Long	Identifier if within TPB Modeled region: 0 = no; 1 = yes
MPO	Short	Identifier of MPO region
MSANUM	Long	Identifier of metropolitan region
Shape_Length	Double	Length
Shape_Area	Double	Area

Layer Properties
AADT(*year*)(*id type*)(*station type*)(*count type*)(*id*)

Topology: Polygon
Scale: 1:100,000
Coordinate System: Maryland State Plane
Zone: 4126 NAD83
Units: Feet
Extent: same as Clearinghouse Network layer

Description—Spatial Data
The theme is generated from the Clearinghouse Network layer through the user-defined search criteria and contains attributes drawn from the Clearinghouse Network.

Attribute Items for AADT(*year*)(*id type*)(*station type*)(*count type*)(*id*)

Item Name	Type	Description
OBJECTID	ObjectID	Internal Feature Number
Shape	Geometry	ArcGIS shape type
NDPR2	Text	Anode—Bnode pair
PROJ_ID	Text	Project ID for Improvement Project
NHS	Text	National Highway System Flag. Y = yes; N = no
ROUTE_ID	Text	Type of route and route number: I = Interstate; US = US Highway; MD = Maryland State Highway; VA = Virginia State Highway
NAME	Text	Facility name
FROM_	Text	From facility name (at ANODE)
TO_	Text	To facility name (at BNODE)
COUNTY	Text	Jurisdiction name
AADT2001	Double	Average Annual Daily Traffic
CT01	Text	Count type
AADT2002	Double	Average Annual Daily Traffic
CT02	Text	Count type
AADT2003	Double	Average Annual Daily Traffic
CT03	Text	Count type
AADT2004	Long	Average Annual Daily Traffic
CT04	Text	Count type
AADT2005	Long	Average Annual Daily Traffic
AAWDT2005	Long	Average Annual Weekday Traffic
CT05	Text	Count type
AADT2006	Long	Average Annual Daily Traffic
AAWDT2006	Long	Average Annual Weekday Traffic

Layer Properties

Attribute Items for AADT(*year*)(*id type*)(*station type*)(*count type*)(*id*) - continued

Item Name	Type	Description
CT06	Text	Count type
AADT2007	Long	Average Annual Daily Traffic
AAWDT2007	Long	Average Annual Weekday Traffic
CT07	Text	Count type
STATE	Text	Link state: DC = District of Columbia; MD = Maryland; VA = Virginia; WV = West Virginia
LOG_SEQ	Double	Logical Sequence Number for Entire Route. The whole number represents the Segment Number, and the decimal number represents the sequence within the segment.
COMMENTS	Text	Comments
Shape_Length	Double	Area

Layer Properties

Hourly Counts

Topology: Polygon
Scale: 1:100,000
Coordinate System: Maryland State Plane
Zone: 4126 NAD83
Units: Feet
Extent: same as Clearinghouse Network

Description—Spatial Data
The theme is generated from the Clearinghouse Network layer through the user-defined search criteria and contains attributes drawn from the Clearinghouse Network. The layer is labeled with three different line segment types: Short term counts (blue), Medium term counts (green), and Continuous counts (red).

The Clearinghouse contains two different attribute tables: one for the layer in the table of contents generated by the query (Hourly(*year*)(*month*)) and a table (HourlyCounts_(*anode*)(*bnode*)(*direction*)) generated from by selecting a link using the Select a Link tool.

Attribute Items for Hourly(*year*)(*month*)

Item Name	Type	Description
Hourly.OBJECTID	Long	Object ID
Shape	Geometry	ArcGIS shape type
Hourly.NDPR2	Text	Anode-Bnode pair, link identifier
Hourly.ROUTE_ID	Text	Type of route and route number: I = Interstate; US = US Highway; MD = Maryland State Highway; VA = Virginia State Highway
Hourly.NAME	Text	Facility name
FROM_	Text	From facility name (at ANODE)
TO_	Text	To facility name (at BNODE)

Layer Properties

Attribute Items for Hourly(*year*)(*month*) - continued

Item Name	Type	Description
COUNTY	Text	Jurisdiction name. Either county or independent city.
STATE	Text	Link state. DC = District of Columbia; MD = Maryland; VA = Virginia; WV = West Virginia
HOURFLAG	Long	0 = no traffic volumes exist for that link 9 = detailed (hourly) traffic volumes exist for that link
PROJ_ID	Text	Project ID for Improvement Project
JUR	Short	TPB Jurisdiction code. See Additional Resources for details.
LOG_SEQ	Float	Logical Sequence Number for Entire Route. The whole number represents the Segment Number, and the decimal number represents the sequence within the segment
Shape_Length	Double	Area
det2002.OBJECT_ID	Long	Internal Object ID of Detailed Count look-up table
det2002.NDPR2	Text	Nodepair that matches the network node pair
det2002.ROUTE_ID	Text	Network Link Route ID
det2002.NAME	Text	Network Link Street Name
M01 to M12	Double	Count Flag for Months 1 to 12 Count type: 0 = no count, 1 = Short Term Count, 2 = Medium Term Count, 3 = Continuous Count
HCL2002	Double	Count Flag for Entire Year Count type: 0 = no count, 1 = Short Term Count, 2 = Medium Term Count, 3 = Continuous Count

Layer Properties

Selecting a link in the hourly counts map window opens a new attribute table named: Hourly-Counts_(*anode*)(*bnode*)(*direction*). The table below provides a description of the attribute data:

Item Name	Type	Description
OBJECTID	Long	Object ID
NDPR	Text	Anode-Bnode pair, link identifier
STATION	Text	Traffic Counting Station Number that is most often associated with that link
DIR	Double	Direction; 0 = unknown, 1 = northbound, 2 = eastbound, 3 = southbound, 4 = westbound, 5 = northbound-southbound combined, 6 = eastbound-westbound combined, 7 = north-south reversible, 8 = east-west reversible
MONTH_	Double	Month 1-12
DATE_	Double	Day of the month 1-31
YEAR_	Double	Year
DOW	Double	Day of Week count taken: 1 = Sunday, 2 = Monday, 3 = Tuesday, 4 = Wednesday, 5 = Thursday, 6 = Friday, 7 = Saturday
VOLUME-EQUAL	Double	Volume quality code; 0 = not reviewed, 1 = acceptable for nothing, 2 = acceptable for qualified raw data distribution, 3 = acceptable for raw data distribution, 4 = acceptable for use in AADT calculation, 5 = acceptable in all TMS uses 9 = Maryland link, no volume quality information available at this time.
TOTAL	Long	Hourly volume
FULLDATE	Text	Complete date; in DAY, MM/DD/YYYY format

Additional Resources

This section contains look up tables for various network attributes. Many of the tables relate to several different datasets.

State and County FIPS Codes

FIPS Code	Jurisdiction
11001	District of Columbia
24031	Montgomery County
24033	Prince George's County
51013	Arlington County
51510	Alexandria
51059	Fairfax County
51610	Falls Church
51600	City of Fairfax
51107	Loudoun County
51153	Prince William County
51683	Manassas
51685	Manassas Park
24021	Frederick County
24027	Howard County
24003	Anne Arundel County
24017	Charles County
24013	Carroll County
24009	Calvert County
51099	King George County

FIPS Code	Jurisdiction
51630	Fredericksburg
51179	Stafford County
51177	Spotsylvania County
51061	Fauquier County
51043	Clarke County
54037	Jefferson County
24025	Harford County
24005	Baltimore County
51047	Culpepper County
54003	Berkeley County
24510	Baltimore
51171	Shenandoah County
51165	Rockingham County
51139	Page County
51157	Rappahannock County
51660	Harrisonburg
51033	Caroline County
51069	Frederick County, VA
51840	Winchester

County FIPS Codes

FIPS Code	Jurisdiction
001	District of Columbia
031	Montgomery County
033	Prince George's County
013	Arlington County
059	Fairfax County
107	Loudoun County
113	Prince William County
021	Frederick County
027	Howard County
003	Anne Arundel County
017	Charles County
013	Carroll County
009	Calvert County
099	King George County
179	Stafford County
177	Spotsylvania County
043	Clarke County
037	Jefferson County

AADT/AAWDT Count Codes (CT Codes)

CT code	Description
MDP,VAP,DCP	Volumes from permanent count stations
MD0,VA0,DC0	Program counts taken in the current year
MD0A,VA0A	Program counts taken in the current year if averaged between two or more stations (MD0A or VA0A if averaged between 2 or more stations)
MD1,DC1	Factored counts taken in the 1st previous year (MD1A if averaged between two or more stations)
MD2,DC2	Factored counts taken in the 2nd previous year (MD2A if averaged between 2 or more stations)
MD3	Factored counts taken in the 3rd or more previous year (MD3A if averaged between 2 or more stations)
VA7, DC7	Factored counts taken in a previous year – growth factor was included (VA7A if averaged between 2 or more stations)
VALP (continuous count) VAL0 (current year) VAL7 (previous year growth factored)	Counts summed on parallel facilities
DCE	DC volume estimates

TPB Jurisdiction Codes

Jurisdiction Code	Description
0	District of Columbia
1	Montgomery County
2	Prince George's County
3	Arlington County
4	Alexandria
5	Fairfax County, Falls Church and Fairfax Cities
6	Loudoun County
7	Prince William County, Manassas and Manassas Park
8	*not assigned*
9	Frederick County
10	Howard County
11	Anne Arundel County
12	Charles County
14	Carroll County
15	Calvert County
16	Saint Mary's County
17	King George County
18	Fredericksburg
19	Stafford County
20	Spotsylvania County
21	Fauquier County
22	Clarke County
23	Jefferson County

CAPC—Capacity Class descriptions

The network attribute CAPC is a two-digit model attribute represented as FTYPE + ATYPE. The following table provides the equivalents of the CAPC value for network links.

		ATYPE						
		1	2	3	4	5	6	7
FTYPE	0-centroid	3150	3150	3150	3150	3150	3150	3150
	1- freeway	1500	1600	1800	2000	2000	2000	2100
	2- major arterial	800	800	960	960	1260	1260	1260
	3-minor arterial	500	600	700	840	1000	1000	1000
	4-collector	300	400	500	700	700	700	800
	5- expressway	900	1000	1000	1200	1500	1500	1500
	6-ramp	1500	1600	1800	1800	2000	2000	2100
	7-I-270 & ICC capacity	1600	1600	1800				
	9-I-495 capacity	2400	2100					

The ATYPE represents the relationship between population and employment density. The following table provides the equivalents of the ATYPE value for network links.

One-mile 'floating' Population density (pop/sq. mi.)	One mile 'floating' Employment density (emp/sq. mi)						
	0-100	101-500	500-1500	1501-5000	5001-15000	15001-35000	35000+
0-100	7	7	5	5	2	2	2
101-350	7	5	5	5	2	2	2
351-1500	6	6	5	5	2	2	2
1501-3500	6	6	4	3	2	2	2
3501-6500	4	4	3	3	2	2	1
6501-10000	4	3	3	3	2	2	1
10000+	3	3	3	2	2	2	1

LIMIT descriptions

The network attribute LIMIT describes link prohibitions, as in what type of vehicles are allowed to travel along that link. The following table provides the equivalents of the SPDC value for network links.

Limit Code	Vehicles Allowed	Vehicles Prohibited
0	All vehicles	No vehicles
2	HOV2+ vehicles	SOV, trucks
3	HOV3+ vehicles	1 & 2 occupancy vehicles, trucks
4	All vehicles	Trucks
5	Airport passenger auto driver trips	All other vehicles
9	Transit only	All other vehicles