Information Technology Division / Geographic Systems Section

GEOSUPPORT SYSTEM TECHNICAL BULLETIN 12-03

SUBJECT: Version 11.4 Enhancements

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Target audience: All Geosupport users

Introduction

The principal enhancements to Geosupport for **Geosupport Version 11.4** include:

I. The Health Area and Health Center District information has been restored. (COW and MSW)
II. Vanity Addresses with House Number Suffixes are now supported as input to Functions 1/1E. (COW and MSW)
III. Cross-street processing has been enhanced to return more appropriate information to the user. [Revised example.] (COW and MSW))
IV. TPAD Status fields now support New BIN requests by HPD. (COW Only)
V. X-Y Coordinates of the 'From' Node and the 'To' Node have been added to the output from Function 3 Extended and Function 3C Extended. (COW only)
VI. Miscellaneous reported bugs were fixed.

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User Programming Considerations

I. Health Area and Health Center District fields are restored. (COW and MSW)

With the release of the 2010 Census Tract geography, the Department of Health and Mental Hygiene (DOHMH) and the Department of City Planning (DCP) decided that the 2000 Census Tract based Health Area and Health Center District fields should be dropped from Geosupport Version 11.2. DOHMH has since provided DCP with updated Health Areas and Health Center Districts based on the new 2010 Census Tract geography, thus allowing for the restoration of these fields to the Geosupport System. The fields are being restored to the same locations in Work Area 2 and with the same COPY file field names that they had prior to being retired in Geosupport Version 11.2.

The functions to which these health-related fields are being restored are:

COW Functions	MSW Functions
1/1E	1/1E
1/1E Extended	2
1B	3
2	3C
3	
3 Extended	
3C	
3C Extended	

In GOAT:

Health Area will be displayed by Functions 1, 2, 3, and 3C.
Health Center District will be displayed by Function 1.

In GBAT, the Health Area and Health Center District are returned for all the supported functions.

II. Vanity Addresses with House Number Suffixes are supported. (COW and MSW)

Geosupport will now accept all known vanity addresses with a house number suffix as valid input to Functions 1/1E. An example is: 39A Washington Square South in Manhattan.

III. Cross Street Processing has been enhanced. (COW and MSW)

Initial implementation of enhancements to cross street processing has been made to enable Geosupport to return more appropriate information. Special handling has been given to Railroads, Shorelines, Coincident Streets and streets where two street names having different B5SCs are both valid (a.k.a. Special Address ‘Type B’ situation).

Note: As a result of this special processing, the first one or two street codes in the lists of intersecting streets may not always be the lowest two street codes. For example a railroad or shoreline would now be put last in the list, even if they have lower street codes than the other intersecting streets.

Some examples of the enhanced cross street processing follow:

- Consider the situation of coincident street features, e.g. 3rd Avenue and Gowanus Expressway in Brooklyn. The Gowanus Expressway is above 3rd Avenue between approximately 18th Street and 65th Street.
    - Previously, if a user made a Function 3 call requesting information about the segment of 3rd Avenue between 19th and 20th Streets, Geosupport returned Gowanus Expressway as an intersecting street at each of the intersections. Now, Geosupport will recognize that 3rd Avenue and the Gowanus Expressway are coincident streets and will no longer return Gowanus Expressway as an intersecting street. Please note that Geosupport will also accept as input Gowanus Expressway between 19th and 20th Streets. With this input, 3rd Avenue will no longer be listed as a cross street at either end.
    - Previously, if a user made a Function 3S call, requesting the stretch on 3rd Avenue between 40th Street and 50th Street, Geosupport returned Gowanus Expressway as an intersecting street at each of the intersections. Now, Geosupport will recognize that 3rd Avenue and Gowanus Expressway are coincident streets and will no longer list them as intersecting.
- Consider the situation where a railroad is determined to be one of the cross streets. [Revised example] An example exists in Queens at Kneeland Street between Queens Boulevard and Dead End
    - In Version 11.4, a Function 3 call will return QUEENS BOULEVARD and LONG ISLAND RAILROAD as cross streets at the low end. Even though the Long Island Railroad has a numerically smaller street code than Queens Boulevard, it is listed after Queens Boulevard.
- Consider the situation where two street names, with different street codes, are valid for the same block face. An example exists in Queens where 207th Street and Clearview Expressway are both valid between 39th Avenue and Boyce Avenue.
    - Previously, a Function 3 call was accepted if Clearview Expressway was submitted as the on-street; but the call was rejected if 207th Street was submitted as the on-street. Now, the Function 3 call will be accepted with either street name as the on-street.

IV. TPAD Status fields now support New BIN requests by HPD. (COW Only)

This enhancement applies only to users who make Function 1A, BL, BN or 1B calls with the TPAD Option 'on' (via the TPAD Switch). Beginning with Geosupport Version 10.9 / Release 10C, DCP implemented the TPAD Option. (The TPAD Option was announced and described in Geosupport Technical Bulletin 10-01 Version 10.9, and Technical Bulletin 12-02 Version 11.3.) The TPAD Option is available for Function 1A, BL, BN, and 1B calls (Property Address Directory (PAD) calls). When users turn the TPAD Option 'on' in their applications, Geosupport reads the Transitional PAD file (TPAD) for intra-cycle PAD data and if any is found, Geosupport returns the TPAD data to the calling application.

New Value for TPAD BIN of Input Address Status and TPAD New BIN Status fields

When users make Geosupport Function 1A, BL, BN, or 1B calls with the TPAD Option Flag on, then the 'TPAD BIN of Input Address Status' and 'TPAD New BIN Status' fields will contain values indicating the status of the BIN for the corresponding BIN field. A new value of '3' has been added that indicates a request for a new BIN made by the Department of Housing Preservation and Development (HPD). The updated list of values follows:

Value	Associated Job Type	Description
Blank		No activity for this address
0	NB	New BIN issued (for DOB); application not yet filed
1	NB	NB Job application filed and paid for
2	NB	NB Job signed off [temporary or final Certificate of Occupancy (T/CO or C/O) issued]
3	NB	New BIN issued (for HPD); application not yet filed
5	DM	DM Job application filed and paid for
6	DM	DM Job signed off (building demolished)

V. X-Y Coordinates of the 'From' Node and 'To' Node are returned to user. (COW Only)

The X-Y coordinates of the 'From' Node and 'To' Node have been added to the output for Functions 3 Extended (3X), 3 Extended with Auxiliary Segments (3XA), 3C Extended (3CX), and 3C Extended with Auxiliary Segments (3CXA).

Each X-Y coordinate is seven bytes long. The following table indicates where the coordinates can be found in COW Work Area 2.

X-Y Coordinates of 'From' Node and 'To' Node			
	Size	**Positions**	
Functions		**COW**	**MSW**
3 Extended and 3 Extended with Auxiliary Segments			
X coordinate of 'From' Node	7	687-693	n/a
Y coordinate of 'From' Node	7	694-700	n/a
X coordinate of 'To' Node	7	701-707	n/a
Y coordinate of 'To' Node	7	708-714	n/a
3C Extended and 3C Extended with Auxiliary Segments			
X coordinate of 'From' Node	7	462-468	n/a
Y coordinate of 'From' Node	7	469-475	n/a
X coordinate of 'To' Node	7	476-482	n/a
Y coordinate of 'To' Node	7	483-489	n/a

The following table indicates the field names used in the COPY Libraries for the various languages supported by Geosupport.

Please note that Functions 3 Extended and 3C Extended with Auxiliary Segments use the same COPY Libraries as Functions 3 and 3C (without the Auxiliary Segments). Therefore, there are no separate entries for the Auxiliary Segment feature in this table. The X-Y coordinates are fully supported with the Auxiliary Segment feature.

X-Y Coordinates of 'From' Node and 'To' Node Field Names in COPY Libraries			
Language	**COPY Library (COW Only)**	**Function(s) (COW Only) See note below**	**Field Name**
Note: Functions 3 and 3C are supported with Auxiliary Segments as well			
BAL	P2BAL	3 Extended	P23XFXC
	P2BAL	3 Extended	P23XFYC
	P2BAL	3 Extended	P23XTXC
	P2BAL	3 Extended	P23XTYC
	P2BAL	3C Extended	P2CXFXC
	P2BAL	3C Extended	P2CXFYC
	P2BAL	3C Extended	P2CXTXC
	P2BAL	3C Extended	P2CXTYC
C	PAC	3 Extended	from_coord
	PAC	3 Extended	to_coord
	PAC	3C Extended	from_coord
	PAC	3C Extended	to_coord
COBOL	P2COB	3 Extended	PIWA2-3X-FROM-XCOORD
	P2COB	3 Extended	PIWA2-3X-FROM-YCOORD
	P2COB	3 Extended	PIWA2-3X-TO-XCOORD
	P2COB	3 Extended	PIWA2-3X-TO-YCOORD
	P2COB	3C Extended	PIWA2-3CX-FROM-XCOORD
	P2COB	3C Extended	PIWA2-3CX-FROM-YCOORD
	P2COB	3C Extended	PIWA2-3CX-TO-XCOORD
	P2COB	3C Extended	PIWA2-3CX-TO-YCOORD
PL/1	P2PL1	3 Extended	PIWA2_3X_FROM_XCOORD
	P2PL1	3 Extended	PIWA2_3X_FROM_YCOORD
	P2PL1	3 Extended	PIWA2_3X_TO_XCOORD
	P2PL1	3 Extended	PIWA2_3X_TO_YCOORD
	P2PL1	3C Extended	PIWA2_3CX_FROM_XCOORD
	P2PL1	3C Extended	PIWA2_3CX_FROM_YCOORD
	P2PL1	3C Extended	PIWA2_3CX_TO_XCOORD
	P2PL1	3C Extended	PIWA2_3CX_TO_YCOORD

X-Y Coordinates of 'From' Node and 'To' Node Field Names in COPY Libraries			
Language	**COPY Library (COW Only)**	**Function(s) (COW Only) See note below**	**Field Name**
Note: Functions 3 and 3C are supported with Auxiliary Segments as well			
NATURAL	GEOLP2	3 Extended	PIWA2-3X-FROM-XCOORD
	GEOLP2	3 Extended	PIWA2-3X-FROM-YCOORD
	GEOLP2	3 Extended	PIWA2-3X-TO-XCOORD
	GEOLP2	3 Extended	PIWA2-3X-TO-YCOORD
	GEOLP2	3C Extended	PIWA2-3CX-FROM-XCOORD
	GEOLP2	3C Extended	PIWA2-3CX-FROM-YCOORD
	GEOLP2	3C Extended	PIWA2-3CX-TO-XCOORD
	GEOLP2	3C Extended	PIWA2-3CX-TO-YCOORD

In GBAT, the X-Y coordinates of the 'From' and 'To' Nodes are returned for all the supported functions.

VI. Miscellaneous bugs were fixed.

Appendix A

TABLE OF GEOSUPPORT FUNCTIONS

Function	User Input	Selected Geosupport Output Items
1 & 1 Extended	Address	Standardized Street Name and Street Code, Address Range, List of Cross Streets, Zip Code, Community District, Health Area, Health Center District, 1990 Census Tract, 2000 and 2010 Census Tract and Block, Fire Engine or Ladder Company, School District, Police Precinct, X-Y Coordinates (based on the State Plane Coordinate System)
1E &1E Extended	Address	Same as for Function 1 + Political Geography (Election District, Assembly District, Congressional District, City Council District, Municipal Court District and State Senatorial District)
1A &1A Extended	Address	Standardized Street Name and Street Code, Tax Block and Lot, Alternative Addresses for Lot, Building Identification Number, RPAD Building Class, Interior Lot Flag, Vacant Lot Flag, Irregularly-Shaped Lot Flag, Corner Code, etc.
1B	Address	Same as for Function 1E + Property Level Information from Function 1A + Street Names for Cross Streets and Address Lists
1N	Street Name	Standardized Street Name and Street Code (not available in the Desktop Edition of GOAT)
2	Pair of Intersecting Streets or Named Intersection	Standardized Street Name and Street Codes, List of Additional Cross Streets, Zip Code, Community District, Health Area, Health Center District, 1990, 2000 and 2010 Census Tract, Fire Districts, School District, Police Precinct, X-Y Coordinates (based on State Plane Coordinate System)
3 & 3 Extended	On Street and a Pair of Consecutive Cross Streets	Standardized Street Names and Street Codes, Lists of Cross Streets at both ends, and information about both sides of the street, (including Zip Codes, Community Districts, Health Areas, Health Center Districts, 1990, 2000 and 2010 Census Tracts, Fire Districts, School Districts, Police Precincts)
3C & 3C Extended	On Street and a Pair of Consecutive Cross Streets & a Compass Direction (Side of Street)	Same as Function 3 but for one side of the street only (Blockface information)
3S	On Street and an Optional Pair of any Intersecting Streets along the On Street	Street Stretch information: List of intersecting streets in order along 'on' street, the distance between them and node IDs
BF, BB	Character String	List of street names in alphabetic order - supports street name browsing
BL &BL Extended	Tax Block and Lot	List of Addresses Ranges for Lot, List of Building Identification Numbers (BINs), RPAD Building Class, Interior Lot Flag, Vacant Lot Flag, Corner Code, etc.
BN &BN Extended	Building Identification Number	List of Address Ranges for Building, Tax Block and Lot, RPAD Building Class, Interior Lot Flag, Vacant Lot Flag, Irregularly Shaped Lot Flag, Corner Code etc.
D,DG,DN	Street Code and/or House Number	Street Name and/or House Number in Displayable Format

Note: 'Extended' functions return Street Names (in addition to street codes), and other additional data.