Information Technology Division / Geographic Systems Section

GEOSUPPORT SYSTEM TECHNICAL BULLETIN 12-02

SUBJECT: Version 11.3 Enhancements

April 20, 2012

Target audience: All Geosupport users

Introduction

The principal enhancements to Geosupport for **Geosupport Version 11.3** include:

I. Neighborhood Tabulation Area (NTA) Code is returned with Functions 1/1E, 1/1E Extended, 1B, 3, 3 Extended, 3C, and 3C Extended (COW Only)

II. Neighborhood Tabulation Area (NTA) Name is returned with Functions 1/1E Extended, 1B, 3 Extended, and 3C Extended (COW Only)

III. DSNY (Department of Sanitation) Snow Priority Code (to indicate Primary, Secondary, Tertiary and non-Department of Sanitation priority) is returned with Functions 1/1E, 1/1E Extended, 1B, 3, 3 Extended, 3C, and 3C Extended (COW Only)

IV. Geosupport Warning Message and TPAD Conflict Flag have been redesigned to return both a regular Geosupport warning and a TPAD warning to the user with only one Function 1A, BL, or BN call. **This may require a modification to user application programs that set the TPAD Option On** (via the TPAD Switch). (COW Only)

V. GOAT Enhancements
   i. Return the Neighborhood Tabulation Area (NTA) code with Functions 1, 1E, 3, 3C
   ii. Return the DSNY Sanitation Snow Priority code with Functions 1, 1E, 3, 3C.

VI. E ROAD in Manhattan (Wards Island) is now recognized as valid street name input. (COW and MSW).

VII. Miscellaneous reported bugs were fixed.

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Background and Overview

- Neighborhood Tabulation Areas (NTAs) are aggregations of census tracts that reflect the 2010 census tracts. (Prior to the 2010 update, the NTAs were called Neighborhood Projection Areas.) The NTAs are used by the Population Division of the Department of City Planning (DCP). See Appendix B for a description and significance of the NTAs.

- DSNY (Department of Sanitation) Snow Priority code is needed during snow emergencies. It helps DSNY to determine the snow removal schedule, routes and resources needed. The priority code would also be of interest to NYC residents to easily check their priority.

- Geosupport Warning Message and Conflict Flag have been enhanced and redesigned.

  Users with applications that make Geosupport Functions 1A, BL, BN, or 1B calls (PAD calls) with the TPAD Option 'on' (via the TPAD Switch) must read the full description of this enhancement (*Geosupport Warnings, TPAD Conflict Flag and Reason Code Qualifier)* in the User Programming Considerations section of this document. Changes were made to the Geosupport reason code returned to the user's application that may require modification to the user application code.

  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.) The TPAD Option is available for Function 1A, BL, BN, and 1B calls (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. We have changed the way in which the Geosupport Reason Code is used with these calls. This information was sent out in advance to allow users time to modify their applications (if needed). It is now also included in this Technical Bulletin.

  - **If you added the TPAD Option to your applications and you examine the Geosupport Reason Code field in conjunction with Geosupport Warnings, then you will need to modify your application code.**

- If you added the TPAD Option to your applications but you do not examine the Geosupport Reason Code field in conjunction with Geosupport Warnings, then you may not have to modify your application code, but you should read the ***Geosupport Warnings and TPAD Conflict Flag*** section in this document anyway.

- If you did not add the TPAD Option to your PAD calls, then you do not have to make any changes to your application code, but you should read the document anyway if you feel that you may implement the TPAD Option in the future.

- E ROAD in Manhattan (which is on Wards Island) will be processed as a valid street name. It will no longer be expanded to EAST ROAD (which is on Roosevelt Island). Both EAST ROAD and E ROAD will be accepted by Geosupport. If you want Geosupport to return information about EAST ROAD (on Roosevelt Island) be sure to spell it out.

User Programming Considerations

I. Neighborhood Tabulation Area (NTA) Code (COW Only)

The Population Division of DCP has requested that Geosupport return the four-byte Neighborhood Tabulation Area (NTA) code. The NTA codes are based on Census Tract and reflect the 2010 Census. See Appendix B for a description of the NTA's history and significance.

The first two bytes of the NTA code are an alphabetic borough code as follows:

Code	Borough
MN	Manhattan
BX	Bronx
BK	Brooklyn
QN	Queens
SI	Staten Island

Four-byte NTA codes are returned with COW Functions 1/1E, 1/1E Extended, 1B, 3, 3 Extended, 3C, and 3C Extended.

The following table indicates where the four-byte NTA code may be found.

NTA Code (4 bytes) Positions		
Function	**COW**	**MSW**
1/1E, 1/1E Extended, 1B	246-249	n/a
3, 3 Extended (Left)	289-292	n/a
3, 3 Extended (Right)	439-432	n/a
3C, 3C Extended	289-292	n/a

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

Please note that there are no separate layouts for Function 1E in the Character Only Work Areas (COWs). For Function 1E, you use the same layout as you would use for Function 1.

NTA Code – Field Names in COPY Libraries			
Language	**COPY Library (COW Only)**	**Function(s) (COW Only)**	**Field Name**
BAL	P2BAL	1/1E	P2F1NTA
	P2BAL1A	1/1E Extended	P2EXNTA
	P2BAL1A	1B	P21BNTA
	P2BAL	3 (Left)	P2F3NTAL
	P2BAL	3 (Right)	P2F3NTAR
	P2BAL	3 Extended (Left)	P23XNTAL
	P2BAL	3 Extended (Right)	P23XNTAR
	P2BAL	3C	P23CNTA
	P2BAL	3C Extended	P2CXNTA
C	PAC	1/1E	nta
	PAC	1/1E Extended	nta
	PAC	1B	nta
	PAC	3 (Left)	nta
	PAC	3 (Right)	nta
	PAC	3 Extended (Left)	nta
	PAC	3 Extended (Right)	nta
	PAC	3C	nta
	PAC	3C Extended	nta
COBOL	P2COB	1/1E	GEO-WA2-FN1-NTA
	P2COB1AL	1/1E Extended	PIWA2-FN1EX-NTA
	P2COB1AL	1B	PIWA2-1B-1-NTA
	P2COB	3 (Left)	PIWA2-FN3-L-NTA
	P2COB	3 (Right)	PIWA2-FN3-R-NTA
	P2COB	3 Extended (Left)	PIWA2-3X-L-NTA
	P2COB	3 Extended (Right)	PIWA2-3X-R-NTA
	P2COB	3C	PIWA2-FN3C-NTA
	P2COB	3C Extended	PIWA2-3CX-NTA
PL/1	P2PL1	1/1E	PIWA2_FN1_NTA
	P2PL11AL	1/1E Extended	PIWA2_1EX_NTA
	P2PL11AL	1B	PIWA2_1B_1_NTA
	P2PL1	3 (Left)	PIWA2_FN3_L_NTA
	P2PL1	3 (Right)	PIWA2_FN3_R_NTA
	P2PL1	3 Extended (Left)	PIWA2_3X_L_NTA
	P2PL1	3 Extended (Right)	PIWA2_3X_R_NTA
	P2PL1	3C	PIWA2_FN3C_NTA
	P2PL1	3C Extended	PIWA2_3CX_NTA

NTA Code – Field Names in COPY Libraries			
Language	**COPY Library (COW Only)**	**Function(s) (COW Only)**	**Field Name**
NATURAL	GEOLP2	1/1E	PIWA2-FN1-NTA
	GEOLP2AL	1/1E Extended	PIWA2-1EX-NTA
	GEOLP2AL	1B	PIWA2-1B-1-NTA
	GEOLP2	3 (Left)	PIWA2-FN3-L-NTA
	GEOLP2	3 (Right)	PIWA2-FN3-R-NTA
	GEOLP2	3 Extended (Left)	PIWA2-3X-L-NTA
	GEOLP2	3 Extended (Right)	PIWA2-3X-R-NTA
	GEOLP2	3C	PIWA2-FN3C-NTA
	GEOLP2	3C Extended	PIWA2-3CX-NTA

In GOAT, the NTA Code is displayed for Functions 1, 1E, 3, 3C. On the mainframe, the NTA Code is not displayed for Function 1B.

In GBAT, the NTA code is returned for all the supported functions.

II. Neighborhood Tabulation Area (NTA) Name (COW Only)

In addition to the NTA code, Geosupport returns the NTA's corresponding 75-byte Neighborhood Tabulation Area (NTA) Name.

The NTA Names (75 bytes) are returned with COW Functions 1/1E Extended, 1B, 3 Extended, and 3C Extended.

The following table indicates where in Work Area 2 the 75-byte NTA Name be found.

NTA Name (75 bytes) Positions		
Function	**COW**	**MSW**
1/1E Extended, 1B	554-628	n/a
3 Extended (Left)	537-611	n/a
3 Extended (Right)	612-686	n/a
3C Extended	387-461	n/a

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

Please note that there are no separate layouts for Function 1E in the Character Only Work Areas (COWs). For Function 1E, you use the same layout as you would use for Function 1**.**

NTA Name – Field Name in COPY Libraries			
Language	**COPY Library (COW Only)**	**Function(s) (COW Only)**	**Field Name**
BAL	P2BAL1A P2BAL1A P2BAL P2BAL P2BAL	1/1E Extended 1B 3 Extended (Left) 3 Extended (Right) 3C Extended	P2EXNTAN P21BNTAN P23XLNTA P23XRNTA P2CXNTAN
C	PAC PAC PAC PAC PAC	1/1E Extended 1B 3 Extended (Left) 3 Extended (Right) 3C Extended	nta_name nta_name nta_name_left nta_name_right nta_name
COBOL	P2COB1AL P2COB1AL P2COB P2COB P2COB	1/1E Extended 1B 3 Extended (Left) 3 Extended (Right) 3C Extended	PIWA2-FN1EX-NTA-NAME PIWA2-1B-1-NTA-NAME PIWA2-3X-L-NTA-NAME PIWA2-3X-R-NTA-NAME PIWA2-3CX-NTA-NAME
PL/1	P2PL11AL P2PL11AL P2PL1 P2PL1 P2PL1	1/1E Extended 1B 3 Extended (Left) 3 Extended (Right) 3C Extended	PIWA2_1EX_NTA_NAME PIWA2_1B_1_NTA_NAME PIWA2_3X_L_NTA_NAME PIWA2_3X_R_NTA_NAME PIWA2_3CX_NTA_NAME
NATURAL	GEOLP2AL GEOLP2AL GEOLP2 GEOLP2 GEOLP2	1/1E Extended 1B 3 Extended (Left) 3 Extended (Right) 3C Extended	PIWA2-1EX-NTA-NAME PIWA2-1B-1-NTA-NAME PIWA2-3X-L-NTA-NAME PIWA2-3X-R-NTA-NAME PIWA2-3CX-NTA-NAME

In GOAT, the NTA Name is not displayed

In GBAT, the NTA Name is returned for all the supported functions.

III. DSNY (Department of Sanitation) Snow Priority Code (COW Only)

The DSNY (Department of Sanitation) Snow Priority indicates the priority of the street with respect to snow removal.

The snow priority codes are as follows:

Code	Snow Priority
P	Primary
S	Secondary
T	Tertiary
V	Non-DSNY Street

The one-byte Sanitation Snow Priority code is returned with Functions 1/1E, 1/1E Extended, 1B, 3, 3 Extended, 3C, and 3C Extended.

The following table indicates where in Work Area 2 the one-byte Sanitation Snow Removal Priority code may be found.

Department of Sanitation Snow Priority Code (1 byte) Position		
Function	**COW**	**MSW**
1/1E, 1/1E Extended, 1B	250	n/a
3, 3 Extended, 3C, 3C Extended	129	n/a

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

Please note that there are no separate layouts for Function 1E in the Character Only Work Areas (COWs). For Function 1E, you use the same layout as you would use for Function 1.

DSNY (Department of Sanitation) Snow Priority Code – Field Names in COPY Libraries			
Language	**COPY Library (COW Only)**	**Function(s) (COW Only)**	**Field Name**
BAL	P2BAL	1/1E	P2F1SP
	P2BAL1A	1/1E Extended	P2EXNTA
	P2BAL1A	1B	P21BNTA
	P2BAL	3	P2F3SP
	P2BAL	3 Extended	P23XSP
	P2BAL	3C	P23CSP
	P2BAL	3C Extended	P2CXSP

DSNY (Department of Sanitation) Snow Priority Code – Field Names in COPY Libraries			
Language	**COPY Library (COW Only)**	**Function(s) (COW Only)**	**Field Name**
C	PAC PAC PAC PAC PAC PAC PAC	1/1E 1/1E Extended 1B 3 3 Extended 3C 3C Extended	sanit_snow_priority sanit_snow_priority sanit_snow_priority sanit_snow_priority sanit_snow_priority sanit_snow_priority sanit_snow_priority
COBOL	P2COB P2COB1AL P2COB1AL P2COB P2COB P2COB P2COB	1/1E 1/1E Extended 1B 3 3 Extended 3C 3C Extended	GEO-WA2-FN1-SANIT-SNOW-PRRTY PIWA2-FN1EX-SANIT-SNOW-PRRTY PIWA2-1B-1-SANIT-SNOW-PRRTY GEO-WA2-FN3-SANIT-SNOW-PRRTY PIWA2-3X-SANIT-SNOW-PRRTY GEO-WA2-FN3C-SANIT-SNOW-PRRTY PIWA2-3CX-SANIT-SNOW-PRRTY
PL/1	P2PL1 P2PL11AL P2PL11AL P2PL1 P2PL1 P2PL1 P2PL1	1/1E 1/1E Extended 1B 3 3 Extended 3C 3C Extended	PIWA2_FN1_SANIT_SNOW_PRIORITY PIWA2_1EX_SANIT_SNOW_PRIORITY PIWA2_1B_1_SANIT_SNOW_PRIORITY PIWA2_FN3_ SANIT_SNOW_PRIORITY PIWA2_3X_ SANIT_SNOW_PRIORITY PIWA2_FN3C_ SANIT_SNOW_PRIORITY PIWA2_3CX_ SANIT_SNOW_PRIORITY
NATURAL	GEOLP2 GEOLP2AL GEOLP2AL GEOLP2 GEOLP2 GEOLP2 GEOLP2	1/1E 1/1E Extended 1B 3 3 Extended 3C 3C Extended	PIWA2-FN1-SANIT-SNOW-PRIORITY PIWA2-1EX-SANIT-SNOW-PRIORITY PIWA2-1B-1-SANIT-SNOW-PRIORITY PIWA2-FN3- SANIT-SNOW-PRIORITY PIWA2-3X- SANIT-SNOW-PRIORITY PIWA2-FN3C- SANIT-SNOW-PRIORITY PIWA2-3CX- SANIT-SNOW-PRIORITY

In GOAT, the DSNY Snow Priority Code is displayed for Functions 1, 1E, 3, 3C. It is not displayed for Function 1B.

In GBAT, the DSNY Snow Priority Code is returned for all the supported functions.

IV. Geosupport Warnings, TPAD Conflict Flag and Reason Code Qualifier (COW Only)

If your applications make function 1A, BL, BN or 1B calls with the TPAD Option 'on', then you must read this description. If you check Geosupport Return Code for '01' (a warning) you may have to modify your code.

Modifications to Geosupport Warning Messages and Reason Codes for Geosupport Function 1A, BL, BN, and 1B Calls with the TPAD Option 'On'

Due to user feedback, DCP has redesigned Geosupport Warning Messages for Geosupport Function 1A, BL, BN calls (PAD calls) with the TPAD Option' on'. The TPAD property information and the contents of the TPAD Conflict Flag have not changed. The description of those fields in Technical Bulletin 10-01 Version 10.9 is still in effect. Only the return code processing has been changed and a new field called Reason Code Qualifier has been implemented.

Previous Design (as of Geosupport Version 10.9 / Release 10C)
The initial design of the messages returned to a user making a Geosupport call with the TPAD Option 'on' always returned a Geosupport Return Code (GRC) of '01' (indicating a warning) and a Geosupport Reason Code of '*' whenever data was found (just PAD or just TPAD or both PAD and TPAD). The user then examined the TPAD Conflict Flag in Work Area 2 (WA2) to find out if there was any TPAD data returned and whether there was any conflict between the TPAD data and the PAD data. This design meant that the Reason Code for a regular (non-TPAD) Geosupport Warning from the initial 1A, BL, or BN call was suppressed (e.g. … RANGE ASSUMED…) and users who needed this information had to make a second Geosupport call with the TPAD option 'off'.

New Design (as of Geosupport Version 11.3 / Release 12A)

The new design restores the Reason Code to the values that a user would expect with a Geosupport function call completed with warnings. The TPAD Conflict Flag will continue to be in WA2 for all PAD calls with the TPAD Option on. The '*' Reason Code will appear in only one exceptional case. In the situation where there was no regular Warning Message for the regular PAD call and there was TPAD data found that *conflicts* with the PAD data, then the GRC will contain '01' (indicating a warning) and the Reason Code will contain '*' (indicating that there is only a TPAD Conflict Flag warning).

In addition, if TPAD data is found and there is a conflict with the PAD data, the value in the WA2 Conflict Flag field also will be placed into a new field called the Geosupport Reason Code Qualifier field which immediately follows the Geosupport Reason Code field in Work Area 1 (WA1). When this new field is populated with the TPAD Conflict Flag, the TPAD Conflict Message will be put in the Geosupport Error Message field instead of the Geosupport Warning Message that would normally appear. Note: If there was a Geosupport Warning involving the regular PAD portion of this call, the Reason Code field will indicate the nature of the warning as with all other Geosupport calls (but the Error Message field for this warning will be overridden by the TPAD Conflict message if a conflict exists). TPAD Conflict Flag (in WA2) values of '0' or '1' are considered 'normal results'. '0' signifies TPAD data was found and does not conflict with PAD data; '1' signifies that no TPAD data was found. When there

are ‘normal results’, the WA2 TPAD Conflict Flag will *not* be placed in the new Geosupport Reason Qualifier field in WA1.

	Regular Geosupport Warning for PAD Call			
	Yes		***No***	
	TPAD Data Found		**TPAD Data Found**	
Work Area 1 Fields	***Yes***	***No***	***Yes***	***No***
Geosupport Return Code (GRC)	01	01	01	00
Reason Code	Warning Reason Code	Warning Reason Code	*	blank
Reason Code Qualifier	TPAD Conflict Flag†	blank	TPAD Conflict Flag†	blank
Error Message	TPAD Conflict Message	Warning Message	TPAD Conflict Message	blank
WA2 Conflict Flag	TPAD Conflict Flag	TPAD Conflict Flag	TPAD Conflict Flag	TPAD Conflict Flag

† Note: *The TPAD Conflict Flag ‘1’ (no TPAD data was found) and the TPAD Conflict Flag ‘0’ (TPAD data found and it does not conflict with PAD data) will not appear in the Reason Code Qualifier field in WA1. The Error Message field will have a TPAD Conflict Message only when TPAD data was found and it conflicts with the PAD data in some way (and as a result, the Reason Code Qualifier will be non-blank). Note that if there is no Regular Geosupport Warning, and there is TPAD data which does not conflict with the PAD data (Conflict Flag ‘0’), the GRC will be ‘00’ the Reason Code, Reason Code Qualifier, and Error Message will all be blank.*

See examples on the following pages.

Examples: PAD Data Found with Regular Warnings

PAD Data (with regular Geosupport warning) and No TPAD Data Found	
Input: 10-20 Sample Street	
WA1 Fields	**Value**
GRC	*01*
Reason Code	*3 [indicates input address number altered – hyphen deleted]*
Reason Qualifier	*blank*
Error Message	*ADDR NUMBER ALTERED: HYPHEN DELETED*
WA2 Conflict Flag	*1*

PAD Data (with regular Geosupport warning) and TPAD Data (with no conflicts)	
Input: 10-20 Sample Street	
WA1 Fields	**Value**
GRC	*01*
Reason Code	*3 [indicates input address number altered – hyphen deleted]*
Reason Qualifier	*blank*
Error Message	*ADDR NUMBER ALTERED: HYPHEN DELETED*
WA2 Conflict Flag	*0*

PAD Data (with regular Geosupport warning) and TPAD Data (with conflicts)	
Input: 10-20 Sample Street	
WA1 Fields	**Value**
GRC	*01*
Reason Code	*3 [indicates input address number altered – hyphen deleted]*
Reason Qualifier	*D [indicates address in TPAD but not PAD (PAD data from BL call)]*
Error Message	*ADDRESS FOUND IN TPAD, NOT FOUND IN PAD……..*
WA2 Conflict Flag	*D*

Examples: PAD Data Found with No Regular Geosupport Warning

PAD Data (with no regular Geosupport warning) and No TPAD Data Found	
Input: 1020 Sample Street	
WA1 Fields	**Value**
GRC	*00*
Reason Code	*Blank*
Reason Qualifier	*blank*
Error Message	*blank*
WA2 Conflict Flag	*1*

PAD Data (with no regular Geosupport warning) and TPAD Data (with no conflicts)	
Input: 1020 Sample Street	
WA1 Fields	**Value**
GRC	*00*
Reason Code	*Blank*
Reason Qualifier	*blank*
Error Message	*blank*
WA2 Conflict Flag	*0*

PAD Data (with no regular Geosupport warning) and TPAD Data (with conflicts)	
Input: 1020 Sample Street	
WA1 Fields	**Value**
GRC	*01*
Reason Code	*
Reason Qualifier	*D [indicates address in TPAD but not PAD (PAD data from BL call)]*
Error Message	*ADDRESS FOUND IN TPAD, NOT FOUND IN PAD……..*
WA2 Conflict Flag	*D*

The Reason Code Qualifier is used to define a specific TPAD warning. When there is a true conflict between TPAD data and PAD data, the reason code qualifier contains the same information as the TPAD Conflict Flag.

The following table indicates where in Work Area 1 the one-byte Reason Code Qualifier field(s) may be found.

		(1 byte) Position	
Field Name	**Function(s)**	**COW**	**MSW**
Reason Code Qualifier	1A, BL, BN	714	n/a
Reason Code Qualifier 2	1B	575	n/a

For Functions 1A, BL, and BN the Reason Code Qualifier is a one-byte field, in column 714 of COW Work Area 1.
For Function 1B, the Reason Code Qualifier 2 is a one-byte field, in column 575 of COW Work Area 1.

The following table contains the field name in the COPY libraries for the Reason Code Qualifiers.

Reason Code Qualifier(s) Field Names in COPY Libraries			
Language	**COPY Library (COW Only)**	**Function(s) (COW Only)**	**Field Name**
BAL	P1BAL	1A, BL, BN 1B	P1ORCQ P1ORCQ2
C	PAC	1A, BL, BN 1B	reason_code_qual reason_code_qual_2
COBOL	P1COB	1A, BL, BN 1B	GEO-WA1-OUT-REASON-CODE-QUAL GEO-WA1-OUT-REASON-CODE-QUAL2
Natural	GEOLP1	1A, BL, BN 1B	PIWA1-OUT-REASON-CODE-QUAL PIWA1-OUT-REASON-CODE-QUAL-2
PL/1	P1PL1	1A, BL, BN 1B	PIWA1_OUT_REASON_CODE_QUAL PIWA1_OUT_REASON_CODE_QUAL_2

V. GOAT Enhancements

i. Return the Neighborhood Tabulation Area (NTA) code with Functions 1, 1E, 3, 3C
ii. Return the DSNY Sanitation Snow Priority code with Functions 1, 1E, 3, 3C.

VI. E ROAD in Manhattan

There is a street on Ward's Island named E ROAD (nearby D ROAD and F ROAD). Before Version 11.3, a user's street name input of E ROAD was normalized to EAST ROAD, which is the name of a different street on Roosevelt Island. The geocodes of the Roosevelt Island location were returned, which may have been the user's intention by abbreviating EAST ROAD as E ROAD. A return of the geocodes for the E ROAD location on Ward's Island was not possible.

This enhancement to Geosupport normalization software allows a correct return of information for both locations; however, users must now spell out EAST ROAD for the Roosevelt Island location to avoid getting a return of the E ROAD geocodes on Ward's Island. To get a hit to the Ward's Island location, users must enter E ROAD. Users can still abbreviate all other street names in Manhattan that contain the word EAST by using E (for example, E 78 STREET is normalized to EAST 78 STREET).

VII. Miscellaneous bugs were fixed.

Appendix A

TABLE OF GEOSUPPORT FUNCTIONS

Function	User Input	Selected Geosupport Output Items
1	Address	Standardized Street Name and Street Code, Address Range, List of Cross Streets, Zip Code, Community 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	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	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, 1990, 2000 and 2010 Census Tract, Fire Districts, School District, Police Precinct, X-Y Coordinates (based on State Plane Coordinate System)
3	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, 1990, 2000 and 2010 Census Tracts, Fire Districts, School Districts, Police Precincts)
3C	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	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	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

Appendix B

NEIGHBORHOOD TABULATION AREAS (NTAS)

Originally created as Neighborhood Projection Areas for use in population projections, these aggregations of census tracts have been updated using 2010 census tracts and renamed Neighborhood Tabulation Areas (NTAs). The origin of Neighborhood Projection Areas as subsets of 55 Public Use Microdata Areas (PUMAs) is explained below.

The Neighborhood Tabulation Areas (NTAs) have been adopted by the Population Division of DCP as a method of presenting the U.S. Census Bureau's American Community Survey (ACS) release of census tract data for 5-year estimates. To mitigate the small sample size and accompanying large margins of error, ACS data are aggregated to NTA geography and made available in the ACS section of the DCP Population website. Because NTAs are subsets of PUMAs, they are important to anyone requiring ACS data for subareas of Community Districts. Regarding the 2010 census, these geographic areas offer a good compromise between the very detailed data for census tracts (2,168) and the broad strokes provided by community districts (59).

Neighborhood Projection Areas were created to project populations at a small area level, from 2000 to 2030. First and foremost, these aggregations were driven by population size in 2000 – neighborhood projection areas had to have a minimum population of 15,000, because this reduces the error associated with the projected population. This criterion resulted in combinations of neighborhoods that probably would not occur if one were solely designating boundaries of historical neighborhoods. Moreover, the neighborhood names associated with the neighborhood projections areas are not intended to be definitive.

Neighborhood projection areas were created using whole census tracts that were exact subdivisions of New York City's 55 Public Use Microdata Areas (PUMAs). (PUMAs were developed for use with the Census Bureau's Public Use Microdata Samples (PUMS) and are approximations of Community Districts.) Neighborhood projection areas were not permitted to cross PUMA boundaries.

Users need to be cognizant of the reason why these neighborhood projection areas were created, and the demographic and geographic constraints inherent in how they were configured.