City of New York Department of City Planning
Information Technology Division
Geographic Systems Section

GEOSUPPORT SYSTEM TECHNICAL BULLETIN 07-02

SUBJECT: Version 10.3 Enhancements

Date: 27 November 2007

<u>Target audience</u>: All Geosupport users

- -

Introduction

The principal enhancements to Geosupport for Version 10.3 include:

I. Political Geography Returned with Function 2 Call
II. Browse Function Enhanced to Permit User to Request Only Primary or Principal Street Names
III. For Function 1/1E Eliminate Duplicate Street Names in Cross Street Lists
IV. "Fuzzy" Intersection Processing
V. Instructional Region is no longer in use

In addition, various minor reported bugs have been fixed.

Please note that most of the enhancements apply only to the Character-Only Workareas (COW).

User Programming Considerations

I. Political Geography Returned with Function 2 Call (COW Only)

With Version 10.3, political geography and CD Eligibility are returned in Work Area 2 for Function 2 calls. Since it is possible that multiple political geographies may exist at an intersection, Geosupport returns the political geography associated with the <u>most frequently</u> occurring ED/AD. If there is no one political geography that occurs more frequently than any other, then the political geography associated with the ED/AD that is one of the most frequently occurring ED/ADs and that has the lowest numeric value is selected. This insures that the same data will be returned from one data cycle to the next data cycle. The only exception should be the changes in the political geography associated with the decennial census conducted by the federal government.

Political geography and CD Eligibility for Function 2 calls are available only with the Character-Only Work Areas. The following table supplies the name of the fields for the

political geography in the various supported languages as they appear in the Geosupport COPYLIBs.

	C	COBOL[1]	PL/1[2]	BAL	NATURAL[3]
Assembly District	ad	ASSEMDIST	ASSEM_DIST	P2F2AD	ASSEM-DIST
Congressional District	congress_dist	CONGDIST	CONG_DIST	P2F2CON	CONG-DIST
State Senatorial District	state_sen_dist	SENATEDIST	SENATE_DIST	P2F2SEN	SENATE-DIST
Civil Court District	civil_court	COURTDIST	COURT_DIST	P2F2CIV	COURT-DIST
City Council District	city_council	COUNCILDIST	COUNCIL_DIST	P2F2COU	COUNCIL-DIST
CD Eligibility	cd_eligible	CDELIG	CD_ELIGIBLE	P2F2RES1	CD-ELIGIBLE

II. Browse Function Enhanced to Permit User to Request Only Primary or Principal Street Names[4] (COW Only)

Sometimes only primary or principal street names are desired when browsing through the street names. To enable users to request either all street names, only primary street names or only principal street names, a new flag, called the Browse flag, has been introduced. If this flag is set to **P**, then only primary street names are displayed. If this flag is set to **F**, then only principal street names are displayed. Any other value causes all street names to be displayed.

When you request the principal street names, the primary street name will be displayed since all primary street names are also principal street names.

Please note that this functionality is available only with the Character-Only Work Areas. The following table shows the name of the field for the Browse flag as a function of the language.

Language	Field Name in COPYLIB
C	browse_flag
COBOL	PIWA1-IN-BROWSE-FLAG
PL/1	PIWA1_IN_BROWSE_FLAG
BAL	P1IBRFLG
NATURAL	PIWA1-IN-BROWSE-FLAG

GOAT users may set this flag on the GOAT Browse screen in both CICS and Desktop Edition.

[1]The COBOL names given are preceded by “GEO-WA2-FN2-“.
[2]The PL/1 names given are preceded by “PIWA2_FN2_”.
[3] The NATURAL names given are preceded by “PIWA2-FN1E-“.
[4]Primary and Principal street names are explained in the Geosupport User Programming Guide.

III. For Function 1/1E Eliminate Underlying Street Names from Cross Street Lists (COW and MSW)

Certain Non-Addressable Placenames (NAPs) erroneously return the underlying street name in both the high end and low end cross streets in Function 1 and/or Function 1E. An example would be the Empire State Building in Manhattan; Fifth Avenue appears in both the high end and low end cross streets. This is not appropriate because Fifth Avenue is not a cross street, but the actual underlying street name, since the underlying address of the Empire State Building is 350 Fifth Avenue. The underlying street name or street address is returned as part of the warning message, which is displayed if you are using GOAT. Consequently, Fifth Avenue has been eliminated from both lists of cross streets.

This also applies to Addressable Placenames (APs) as well. For example, if the input to a Function 1 or 1E is 26 Federal Plaza in Manhattan, Broadway will no longer appear in both lists of cross streets, but will appear in the warning message.

For users who need to know the underlying street for the NAP or AP, the borough and seven digit street code may be found in a field in Work Area 2, which is returned for a Function 1 or 1E call. The following table shows the name of this field in the various supported languages.

Language	Field Name (COW)	Field Name (MSW)
C	true_b7sc	true_b7sc
COBOL	GEO-WA2-FN1-TRUE-B7SC	GEO-WA2-1EL-TRUE-B7SC
PL/1	PIWA2_FN1_REAL_B7SC	GEO_WA2_1L_REAL_B7SC
BAL	P2F1B7SC	W21LB7SC
NATURAL	PIWA2-FN1-REAL-B7SC	GEO-WA2-1L-REAL-B7SC

Please note that for MSW, the Long Work Area (2) Flag must be set to **L** to obtain this information.

IV. "Fuzzy" Intersection Processing

If a user supplies a front truncated name as one of the names that define an intersection, Geosupport will attempt to find the intersection using the appropriate street names. If, for example, a user issues a Function 2 call with 24 Street and Third Avenue in Manhattan as the input, Geosupport knows that 24 Street is a front truncated street name. However since 24 Street in Manhattan is a front truncated street name, Geosupport knows that there exists an East 24 Street and a West 24 Street in Manhattan. Geosupport attempts to find the intersection of East 24 Street and Third Avenue and the intersection of West 24 Street and Third Avenue in Manhattan. Since the intersection of East 24 Street and Third Avenue does exist in Manhattan and the intersection of West 24 Street and Third Avenue does not exist, data for the intersection of East 24 Street and Third Avenue in Manhattan is returned to the user together with a warning message indicating that East 24 Street is assumed.

If the user supplies the front truncated street name 34 Street and Fifth Avenue in Manhattan as input to a Function 2 call, Geosupport will discover that both the intersection of East 34 Street and Fifth Avenue and the intersection of West 34 Street and Fifth Avenue exist. In this case, the Node IDs will be compared. Since, in this case, the Node IDs are the same, data for the intersection will be returned to the user. The street with the lower numeric value for its street code will be returned, which in this example is East 34 Street. The user will also receive a warning message indicating that East 34 Street is assumed.

If the user supplies the front truncated street name 177 Street and Jerome Avenue in the Bronx as input to a Function 2 call, Geosupport will find that both the intersection of East 177 Street and Jerome Avenue and the intersection of West 177 Street and Jerome Avenue exist. However in this case the Node IDs will be different because a dogleg exists at the intersection. The Function 2 call would be rejected with an error message indicating that the intersection is not unique. As a result, the user must determine whether East or West 177 Street is the desired street.

V. Instructional Region is no longer in use

The Department of Education has discontinued the use of Instructional Regions; consequently Instructional Regions have been removed from Geosupport. If your programs use Instructional Regions, you will have to remove all reference to them in your programs and recompile those programs.