BYTES of the BIG APPLE™ Property Address Directory (PAD)

General Introduction to PAD

The Property Address Directory (PAD) contains geographic information about New York City's approximately one million tax lots (parcels of real property) and the buildings on them. PAD was created and is maintained by the Department of City Planning's (DCP's) Geographic Systems Section (GSS). PAD is released under the BYTES of the BIG APPLE product line four times a year, reflecting tax geography changes, new buildings and other property-related changes. **Please note: PAD contains geographic information only. In particular, it does not contain non-geographic information about tax lots, such as ownership, assessed valuation or tax payments and arrears; such information is maintained separately by the Department of Finance (DOF). PAD also does not contain non-geographic information about buildings, such as work permits, certificates of occupancy or building code violations; such information is maintained separately by the Department of Buildings (DOB).**

A key component of the information in PAD is a list of geographic identifiers associated with each tax lot, **in the BYTES of the BIG APPLE version of PAD these geographic identifiers are found in the ADR table**. The list is intended to provide a comprehensive geographic profile of each tax lot by identifying, so far as the information is known, all of the buildings the lot contains; all of the street addresses and non-addressable street frontages of each of those buildings; all of the street frontages of the lot not associated with buildings; and any Non-Addressable Place Names (NAPs) associated with the lot.

The Identification of Geographic Features in PAD

A variety of types of geographic features are identified in PAD, using data items and combinations of data items as follows.

- Boroughs are identified in PAD by a standard one-digit borough code.

    1 = Manhattan
    2 = The Bronx
    3 = Brooklyn
    4 = Queens
    5 = Staten Island

- Tax lots are identified in PAD by a borough code, tax block number and tax lot number, collectively forming a 10-byte item called a 'Borough-Block-Lot' or BBL. Tax block and tax lot numbers are assigned by DOF.

- Buildings are identified in PAD by a Building Identification Number (BIN). BINs are 7-byte items assigned by GSS to every building in New York City. Buildings are also identified by addresses and/or Non-Addressable Placenames (NAPs), if any. A building

that has no addresses and no NAPs is called a Non-Addressable Unnamed Building (NAUB), and can be identified only by its BIN.

- Streets are identified in PAD by a borough code together with a Geosupport System 5-digit Street Code (5SC). 5SC's are defined within borough and must be accompanied by a borough code to be meaningful. The borough code and 5SC are usually concatenated to form a single six-byte item, the Borough-and-5-digit Street Code (B5SC). PAD also contains fields for Local Group Codes (LGCs), which combine with B5SC's to identify a group of names for a street that are valid for a specific portion of the street. The B5SC and LGC are often concatenated to form the Borough-and-7-digit Street Code (B7SC). The street codes are defined in the Street Name Dictionary (SND) which is included with the PAD license.

- Non-Addressable Place Names (NAPs) are geographic place names that cannot be combined with a house number to form an address. There are three types of geographic features that can have NAPs: simplexes, complexes and constituent entities of a complex. A simplex is a "stand-alone" geographic feature, i.e., one that is not part of a complex, such as EMPIRE STATE BUILDING, PLAZA HOTEL, and GRAMERCY PARK. A complex is a related group of geographic features at one site, such as LINCOLN CENTER, STUYVESANT TOWN, COLUMBIA UNIVERSITY, and NYU HOSPITAL. A constituent entity of a complex is a building or other geographic feature that is part of a complex, such as AVERY FISHER HALL and METROPOLITAN OPERA (two of Lincoln Center's constituent entities). NAPs of simplexes and complexes are identified in PAD by their B5SC. NAPs of constituent entities of complexes are identified in PAD by their B5SC and DCP-Preferred LGC.

- House numbers (a term used herein as a synonym for "address numbers") are expressed in House Number in Display (HND) format and House Number in Sort (HNS) format.

- Addresses are expressed in PAD in the form of address ranges, specified by the borough code, the 5SC and the low and high house numbers of the range. A single address is represented in PAD as an address range in which the low and high house numbers are equal. The oddness or evenness of a house number is called its parity. An address range in PAD always comprises house numbers of a single parity. That is, the low and high house numbers of an address range in PAD always have the same parity, and the address range consists of all house numbers of the given parity between (and including) the low and high house numbers. If an address range of a building includes both odd and even house numbers, as sometimes occurs on certain "continuous parity" streets such as Central Park West in Manhattan, that range is indicated by the Continuous Parity Indicator.

Pseudo-Addresses

In addition to 'real' addresses of buildings, for some tax lots PAD contains pseudo-addresses. GSS assigns a pseudo-address range to each street frontage of a tax lot that does not have any 'real' building addresses. (Pseudo-addresses have no 'official' status and in particular are not likely to serve successfully as mailing addresses.) Some typical situations in which GSS may

assign pseudo-addresses are street frontages of tax lots that consist of driveways and/or vacant land. The assignment of pseudo-addresses fills in addressing gaps along streets, making it possible in concept to use PAD to automate 'strolling' down a street, that is, to list the BBLs of the tax lots that front along one side of a street in geographic sequence.

From time to time, a new building may be assigned an address that had previously been assigned in PAD as a pseudo-address. (The offices of the Borough Presidents assign 'real' addresses to new buildings.) However, the new building may not necessarily lie within the same tax lot as the one to which GSS had assigned the same address as a pseudo-address. When a pseudo-address in PAD is assigned as a 'real' address of a building, GSS updates PAD by deleting the address as a pseudo-address and adding it to the proper tax lot as a real address.

Specifics about the BYTES of the BIG APPLE Version of PAD

The BYTES of the APPLE PAD database contains two tables in ASCII, comma-delimited format, with the first row of each file containing the field names of the table. The BBL table includes the tax lot level information and the ADR table includes the addresses associated with the tax lots in the BBL table. If a field exists in the mainframe version of the PAD file and is included in the PLUTO or MapPLUTO files, then it is omitted from the BYTES of the APPLE version of PAD.

The BBL table is designed to handle both Condo and Non-Condo lots. For Non-Condo lots the BBL is represented by the boro, block, and lot fields. Together these fields act as the foreign key to the ADR table. For Non-Condo lots the loboro, loblock, and lolot as well as the hiboro, hiblock, and hilot fields will be the same as the boro, block, and lot fields respectively. Condo lots are handled a little differently. Their lots are represented as a range of contiguous BBLs contained in a single building of a Condo complex. The loboro, loblock, and lolot fields represent the Low BBL of this contiguous range of BBLs and the hiboro, hiblock, and hilot fields represent the High BBL of this contiguous range of BBLs. The addresses for this range of condo BBLs can be accessed by the foreign key consisting of the boro, block, and lot fields (The lowest BBL in each condo building is chosen for this purpose). The billboro, billblock, and billlot fields represent the DOF Condo Billing BBL for this range.

Examples of Possible Condo Range Variations				
Description of Condo Complex	Building	Low BBL	High BBL	BBL
1 bldg with 12 units	bldg 1	1-99999-1001	1-99999-1012	1-99999-1001
2 bldgs with 6 units each	bldg 1	1-99999-1001	1-99999-1006	1-99999-1001
	bldg 2	1-99999-1007	1-99999-1012	1-99999-1007
2 bldgs with 6 units each, but lot numbers aren't completely contiguous within each bldg	bldg 1	1-99999-1001	1-99999-1003	1-99999-1001
		1-99999-1007	1-99999-1009	1-99999-1001
	bldg 2	1-99999-1004	1-99999-1006	1-99999-1004
		1-99999-1010	1-99999-1012	1-99999-1004

BBL Table Description

Field Name	Data Type	Description
loboro	char 1	Boro of Low BBL of Condo Range
loblock	char 5	Block of Low BBL of Condo Range
lolot	char 4	Lot of Low BBL of Condo Range
lobblscc	char 1	Self Check Code of Low BBL of Condo Range
hiboro	char 1	Boro of High BBL of Condo Range
hiblock	char 5	Block of High BBL of Condo Range
hilot	char 4	Lot of High BBL of Condo Range
hibblscc	char 1	Self Check Code of High BBL of Condo Range
boro	char 1	Boro of BBL (foreign key to ADRX table)
block	char 5	Block of BBL (foreign key to ADRX table)
lot	char 4	Lot of BBL (foreign key to ADRX table)
bblscc	char 1	Self Check Code of BBL
billboro	char 1	Boro of Condo Billing BBL
billblock	char 5	Block of Condo Billing BBL
billlot	char 4	Lot of Condo Billing BBL
billbblscc	char 1	Self Check Code of Condo Billing BBL
condoflag	char 1	'C' indicates Condo
condonum	char 4	DOF Condo Number
coopnum	char 4	DOF Coop Number
numbf	char 2	Number of Blockfaces for Lot
numaddr	char 4	Number of Addresses for Lot
vacant	char 1	'V' indicates Lot is vacant
interior	char 1	'I' indicates Lot is interior to physical block

ADR Table Description		
Field Name	**Data Type**	**Description**
boro	char 1	boro of BBL
block	char 5	block of BBL
lot	char 4	lot of BBL
bin	char 7	Building Identification Number
lhnd	char 12	Low Housenumber Display Format of Address Range
lhns	char 11	Low Housenumber Sort Format of Address Range
lcontpar	char 1	Continuous Parity Indicator of Low Housenumber
lsos	char 1	Side of Street Indicator of Low Housenumber
hhnd	char 12	High Housenumber Display Format of Address Range
hhns	char 11	High Housenumber Sort Format of Address Range
hcontpar	char 1	Continuous Parity Indicator of High Housenumber
hsos	char 1	Side of Street Indicator of High Housenumber
scboro	char 1	Boro of B7SC of Address
sc5	char 5	5 byte Street Code of B7SC of Address
sclgc	char 2	Local Group Code of B7SC of Address
stname	char 32	Street Name
addrtype	char 1	Indicates type of Address
realb7sc	char 8	B7SC of real address for Vanity Addresses
validlgcs	char 8	Upto 4 2-byte LGC's valid for this Address
parity	char 1	'0' = NAP, '1' = Odd, '2' = Even Housenumber
b10sc	char 11	B10SC for Streetname
segid	char 7	Segment ID
zipcode	char 5	Zip Code for Address

<div align="center">**FIELD DESCRIPTIONS**</div>

BBL

The BBL ("borough-block-and-lot") identifies a parcel of real property in New York City, called a tax lot. The BBL is composed of the concatenation of the Borough Code, Tax Block and Tax Lot.

BILLING BBL OF CONDO

In a condominium, each condominium unit is a separate tax lot and has its own BBL. In a residential condominium, the condominium units are generally the individual apartments; in a commercial condominium, the units might be floors in an office building, individual retail shops, blocks of office space etc. There are also mixed-use condominiums that have both commercial and residential units.

Some municipal operations, such as collecting sanitation fines, involve condominiums as a whole rather than specific condo units. To support these types of applications, the Department of Finance assigns a special 'billing BBL' to each condominium in the city, in addition to the BBLs assigned to the individual condo units. The billing BBL does not represent an actual tax lot, and it is not lien-able, but it provides a mechanism to associate an address of a condominium with a BBL that can be related to a mailing address more appropriate than that of a specific unit owner. The mailing address associated in DOF files with a condominium billing BBL is often the address of an officer of the condominium, the managing agent or the condominium's attorney.

In cases where a condominium occupies portions of more than one tax block, DOF assigns a separate billing BBL to the portion of the condominium on each such block.

BOROUGH CODE

1	Manhattan
2	Bronx
3	Brooklyn
4	Queens
5	Staten Island

BOROUGH/BLOCK/LOT - See BBL

BUILDING IDENTIFICATION NUMBER (BIN)

A seven-digit numerical identifier unique to each building in the City of New York. The first digit is the borough code. In a permanent BIN, the second digit is a number between 0 and 7, inclusive. There are also temporary BINs, which GSS assigns to tax lots that contain more than one building prior to researching those lots and assigning a permanent BIN to each of the buildings. DCP-assigned temporary BINs have a '9' as the second digit. DCP is currently in the process of phasing out all of its temporary BINs and replacing them with permanent BINs.

Note: in general, when a field in a PAD record is 'empty', i.e., devoid of significant information, it contains all spaces. However, BIN fields that are 'empty' contain the borough code followed by all zeros.

CONDOMINIUM FLAG

C	Property is a condominium
blank	Property is not a condominium

CONDOMINIUM ID NUMBER

This is an identification number assigned by the Department of Finance to each condominium in the city. Condominium ID Numbers are unique within a borough, and are meaningful only when accompanied by a borough identifier. A Condominium ID Number identifies the condominium as a whole rather than a specific condominium unit.

CONTINUOUS PARITY INDICATOR

This indicates that an address range of a building lies on the side of street that includes both odd and even house numbers. The side of street is specified with respect to the 'directedness' of the corresponding LION segment. More information on the LION file can be found on City Planning's website.

L	Odd and Even Housenumbers lie on left side of street
R	Odd and Even Housenumbers lie on right side of street
blank	Only Odd or Even Housenumbers lie on sides of street

COOP ID NUMBER

This is an identification number assigned by the Department of Finance to each real property in the city organized as a cooperative. This field is blank for non-coops.

DCP-PREFERRED LGC

The Local Group Code (LGC) value that is designated as 'preferred' by GSS from among the set of LGCs associated with the B5SC of this address that are valid for the location.

GEOGRAPHIC IDENTIFIER TYPE CODE

This indicates the type of geographic identifier that an entry in the List of Geographic Identifiers (LGI) represents. The type of geographic identifier determines which fields in the list entry are non-empty (see chart following the table).

Code	Type of Geographic ID	Description of List Entry
Blank	Address range	Entry contains a real address range of a building on the tax lot. (This is by far the most common type of entry.) There are non-empty values in the Low House Number, High House Number, B5SC, DCP-Preferred LGC, Side of Street Indicator and BIN fields. A single address is represented as an address range in which the low and high house numbers are identical.
B	NAUB	Entry represents a Non-Addressable Un-named Building (NAUB), that is, a building (to which a BIN is assigned) that has no addresses and no name. Typical NAUBs are work-sheds at the rear of industrial properties and comfort stations in parks. In an entry for a NAUB, the Low and High House Number fields are empty. If the NAUB fronts on or is closely accessible to a street, the Street Code field in this entry contains the street code of that street; otherwise, the Street Code field is empty. (If the NAUB has frontages on more than one street, there are multiple type 'B' entries to represent all of the NAUB's street frontages.) The DCP-Preferred LGC and Side of Street Indicator fields contain values if and only if the B5SC field does. The BIN field is non-empty.

F	Vacant Street Frontage	Entry represents a street frontage of the tax lot at which there are no buildings (including NAUBs) and to which no pseudo-addresses have been assigned. The Low and High House Number and BIN fields are empty. There are values in the B5SC, DCP-Preferred LGC and Side of Street Indicator fields.
G	NAP of a complex	Entry contains a Non-Addressable Place name (NAP) of a complex of buildings and/or other geographic features on a large site or superblock, such as a college or hospital campus, a housing project, a zoo or an airport. Examples of NAPs of complexes are COLUMBIA UNIVERSITY, METHODIST HOSPITAL, BRONX ZOO, LINCOLN CENTER, STUYVESANT TOWN and LA GUARDIA AIRPORT. In a list entry of type G, the house number and Side of Street fields are empty, the B5SC and DCP-Preferred LGC fields contain the street code assigned to the name of the complex, and the BIN field may or may not be empty. (A non-empty BIN field identifies a designated 'principal' building of the complex.) In addition to this list entry, there are separate list entries for the address ranges, NAPs and NAUBs of each of the individual constituent entities of the complex.
N	NAP of a Simplex	Entry contains a NAP of a building or other geographic feature (such as an island, a body of water, a small park etc.) that is not part of a complex. Examples of NAPs of simplexes are EMPIRE STATE BUILDING, PLAZA HOTEL, GRAMERCY PARK and SHEA STADIUM. In a list entry of type N, the Low and High House Number and Side of Street fields are empty, the 5SC and DCP-Preferred LGC fields contain the Street Code assigned to the NAP, and the BIN field is non-empty if and only if the NAP represents a building.
Q	Pseudo-Address Range	Entry contains a pseudo-address range assigned to a vacant street frontage of the tax lot. There are values in the Low House Number, High House Number, B5SC, DCP-Preferred LGC and Side of Street Indicator fields. The BIN field is empty.
R	Real Street of a Vanity Address	Entry indicates the street and side of that street on which a building entrance having a vanity address is really located. For more information on vanity addresses, see the Geographic Identifier 'V'

below. In a type R entry, the Low and High House Number fields are empty, and there are non-empty values in the B5SC, DCP-Preferred LGC, Side of Street Indicator and BIN fields. Whenever the LGI contains a type R entry, it also contains a corresponding type V entry.

V	Vanity Address	Entry contains a vanity address or address range. Vanity addresses pertain to addresses in which the street name refers to a different street than the one on which the referenced building entrance is actually located (such as 1049 Fifth Ave in Manhattan, where the actual building entrance is on E. 86th St). There are non-empty values in the Low House Number, High House Number, B5SC, DCP-Preferred LGC, Side of Street Indicator and BIN fields. A single address is represented as an address range in which the low and high house numbers are identical.
W	Blank-Wall Bldg Frontage	Entry represents a frontage of a building along a street that is not associated with any addresses (such as some building facades with no entrances). The Low and High House Number fields are empty. There are non-empty values in the B5SC, DCP-Preferred LGC, Side of Street Indicator and BIN fields. Note: Type 'W' entries exist only for buildings that also have at least one real address range entry. If a building has no real address ranges, the building is a NAUB, and its street frontages, if any, are represented by type 'B' entries rather than type 'W' entries.
X	NAP of a Constituent Entity of a Complex	Entry represents a NAP of a constituent entity of a complex. (The NAP of the complex is represented by a separate list entry of type G.) For example, AVERY FISHER HALL is a NAP of a constituent entity (in this case a building) of the complex LINCOLN CENTER. In a list entry of type X, the house number and Side of Street Indicator fields are empty. The B5SC and DCP-Preferred LGC fields contain the street code of the NAP. The BIN field is non-empty if and only if the entity is a building.

The following chart summarizes, by type of geographic identifier, which fields in an LGI entry are non-empty.

Fields in an LGI Entry Containing Values, by Type of Geographic Identifier

Type Code	Type of Geographic Identifier	Low & High House Numbers	B5SC	DCP-Preferred LGC	Side of Street Indicator	BIN
blank	Real Address Range	T	T	T	T	T
B	NAUB		(*)	(*)		T
F	Vacant Street Frontage		T	T		
G	NAP of Complex		T	T		(**)
N	NAP of Simplex		T	T		(**)
Q	Pseudo-Address Range	T	T	T	T	
R	Real Street of Vanity Address		T	T	T	T
V	Vanity Address	T	T	T	T	T
W	Blank-Wall Building Façade		T	T		T
X	NAP of Constituent Entity of Complex		T	T		(**)

(*) Field may or may not be non-empty. Note: Type B entries contain DCP-Preferred LGC and Side of Street Indicator values if and only if they contain B5SC values.

(**) The BIN field is non-empty only if the NAP represents a building.

HOUSE NUMBER FIELDS

House number fields are in one of two normalized formats. House Number in Display Format (HND) is suitable for applications to use for display on screens, reports and mailing labels. HND fields are 12 characters long. Sorting on HND fields does not produce a numerically correct sort order.

House Number in Sort Format is not suitable for display, because it is not a form normally associated with house numbers. They contain a code representing the house number suffix (if any) rather than the suffix itself and they also contain a code indicating if the house number is hyphenated or not. HNS is useful to applications that need to sort house numbers. HNS fields are 11 characters long.

LIST OF UP TO 4 LGCs VALID FOR ADDRESS RANGE

Local Group Codes (LGCs) group together street names in such a way that two names for a street have the same LGC value if and only if those names are valid for the same portion (possibly all) of the street. If two names are valid for overlapping portions of a street, or one is valid for a subset of the portion where the other is valid, then those names

are in different local groups. An LGC is a two digit number starting in position 6 of the B10SC.

LOW and HIGH BBL OF CONDO

These are the numerically smallest and largest BBL values, respectively, of all the condo units in the specific building of the condominium to which the defining address range of this PAD record belongs).

NUMBER OF ADDRESSES

The number of addresses associated with a given BBL. Maximum value is 2500.

PARITY OF ADDRESS RANGE

0	Record represents a NAP (no address range)
1	Defining address range consists of odd house numbers
2	Defining address range consists of even house numbers

SEGMENT ID

Identifies, uniquely within the entire city, a geographic feature segment represented in the LION file.

SELF-CHECK CODES (SCCs)

For each BBL value, the Department of Finance has computed a Self-Check Code (SCC). This is a one-digit number that DOF uses to assist it in validating the data entry of BBLs by its staff. For more information on SCCs, inquire to the data processing division of the Department of Finance.

SIDE OF STREET INDICATOR

Indicates on which side of the street an address range lies. The side of street is specified with respect to the 'directedness' of the corresponding LION segment. Note that for address ranges not in LION, this field is blank; this constitutes a data discrepancy between PAD and LION which GSS will research and correct in the future. More information on the LION file can be found on City Planning's website.

L	Address range lies on left side of street
R	Address range lies on right side of street
blank	Address range not in LION; side of street unknown

TAX BLOCK

A unit of the tax geography of New York City designated and modified by the New York City Department of Finance (DOF). The tax geography consists of the subdivision of the territory of the city (excluding city-owned land that is mapped for streets) into tax blocks, each of which is further subdivided into one or more tax lots. Each tax block is identified, uniquely within its borough, by a tax block number assigned by DOF. Each tax block can consist of one, more than one, or a portion of one physical city block.

TAX LOT

A unit of the tax geography of New York City designated and modified by the New York City Department of Finance (DOF) that is a subdivision of a tax block. Each tax lot is identified, uniquely within its tax block, by a tax lot number assigned by DOF.

VACANT LOT FLAG

| V | Tax lot is vacant, i.e., it has no buildings |
| blank | Tax lot is not vacant |

INTERIOR LOT FLAG

| I | Tax lot is interior to physical block, i.e. it has no blockfaces |
| blank | Tax lot is not interior to physical block |

ZIPCODE

Zip Code for Address. Please note that some addresses may not have a zip code.