

C. CURRENT CONDITIONS

This section describes the overall condition of the study area, evaluating such physical characteristics as building and sidewalk conditions, and well as other factors, such as property ownership, condition of transportation infrastructure, and geographical context. Land use characteristics, such as site utilization and property ownership, are also evaluated, as they provide a picture of the study area's existing condition relative to its development potential.

Based on several of these indicators, the overall state of the study area is mainly characterized by aging, poorly maintained, underutilized, and functionally obsolete industrial buildings, with little indication of recent reinvestment to reverse their generally deteriorated conditions, particularly in industrial properties. Though some properties are well maintained and fully utilized, a majority of the properties in the study area are structurally deficient and deteriorated, a threat to the health and safety of its occupants or passing pedestrians, or in other ways substandard due to vacancy, underutilization, or an excessive number of open building code violations. Overall, 34 of the 67 properties in the study area (or 51 percent) were determined to be in poor or critical physical condition, unsafe or unsanitary, or otherwise substandard. Several factors reviewed in this section point to a lack of new investment or re-investment in properties, including the longstanding failure to maintain buildings as indicated by numerous outstanding building code violations, water infiltration that has created serious structural problems, unsanitary conditions resulting from vermin infestation, continued flooding, standing water and chemical spills, and sidewalk conditions that are unsafe for pedestrians. In addition, several other factors discussed in this section are very likely hindering redevelopment efforts, including the study area's physical and visual isolation, diverse property ownership, and persistent graffiti problem.

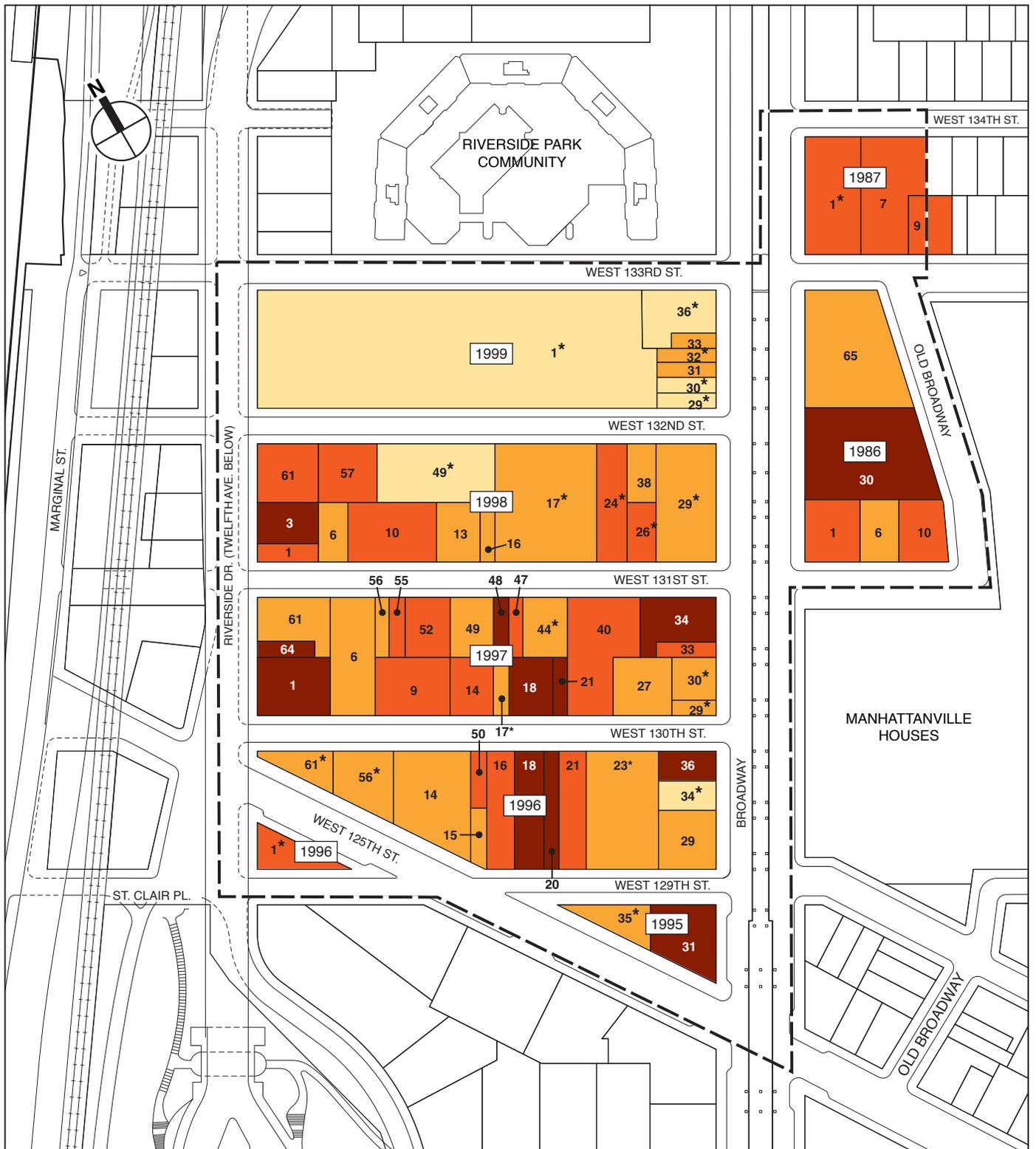
OVERALL LOT AND INFRASTRUCTURE CONDITIONS

An analysis of the physical conditions of each of the properties in the study area was undertaken by Thornton Tomasetti, Inc., a nationally recognized structural engineering firm, which assigned an initial rating to each lot.¹ AKRF, Inc. further analyzed the physical conditions on each property by assessing the number and extent of open ECB and DOB building code violations as well as the number and severity of health and safety concerns present at the site. These combined criteria were used to formulate an overall rating for each lot, using the categories of good, fair, poor, and critical.

As illustrated in Figure 6, a widespread lack of proper building maintenance and attention to employee or public health and safety was revealed, with a majority of lots (34 lots or 51 percent) receiving a poor or critical rating. Twelve of these lots received a critical rating, due to a significant level of structural distress, ongoing maintenance problems, and hazardous health or safety conditions. Described in more detail below, the range of problems at the properties include deteriorated structural systems, sometimes critical in nature; prolonged poor roof maintenance; heavily worn interior finishes; and cracks in walls and floors. Examples of such conditions include:

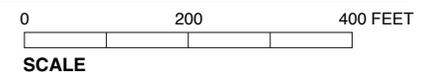
- *Damage to building exteriors*—Numerous structural concerns were identified throughout study area properties, including large cracks, missing or loose bricks, missing mortar, deteriorated lintels and

¹ Thornton Tomasetti, Inc. did not evaluate the physical conditions on Block 1999 Lot 1, the Manhattanville Bus Depot.



- Study Area Boundary
- 1996 Block Number
- 14 Lot Number
- * Exterior evaluation only

- Lot Conditions**
- Good
 - Fair
 - Poor
 - Critical



Based on evaluations by Thornton Tomasetti, Inc. and AKRF, Inc.

Figure 6
Lot Conditions

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window sills, and crumbling façade material (see Photographs 1, 2, and 3). Photographs begin on page C-10.

- *Deteriorated, rusty, or collapsing columns and beams*—Water intrusion, haphazard layouts, ad hoc repairs, and damage to encasements have deteriorated supports and columns, leading to severe rusting, corrosion, and other serious structural problems (see Photographs 4, 5, and 6).
- *Water damage to roof beams*—Long-term water infiltration in many properties has resulted in rotting, deteriorated, and collapsing roof framing that undermines the buildings’ structural integrity (see Photograph 7).
- *Prolonged, poor roof maintenance*—Torn and deteriorated roof membranes; crumbling or leaning parapets; damaged coping, flashing, or waterproofing; poorly sloped roofs; blocked drains; and scattered rooftop debris were among the adverse conditions identified as causing interior water infiltration and related structural damage (see Photographs 8, 9, and 10).
- *Significant deterioration of interior walls and floor slabs*—Substandard conditions, including cracks, spalling, efflorescence, and mold, on the inside walls and floor slabs have been commonly caused by water damage on buildings’ exteriors, structural deficiencies, and wear and tear related to the nature of building occupancies (see Photographs 11 and 12).
- *Large holes or missing patches of ceiling*—Water infiltration from poorly maintained roofing components have affected the structural elements and finishes of floors below, including ceilings which were observed in many properties as partially collapsed or otherwise seriously damaged (see Photographs 13 and 14).
- *Missing or broken windows and skylights*—Deteriorated window and skylight frames and glass panes, as well as improperly sealed or boarded-up windows, are a source of water infiltration in many buildings, leading to further damage inside the observed properties (see Photograph 15).
- *Structurally unsound stairs*—Rust, corrosion, spalling, missing handrails, and related deterioration of emergency steel and wooden stairs pose a threat to building occupants in many properties (see Photographs 16 and 17).
- *Severely damaged or cracked interior flooring*—Evidence of water infiltration, including flooding in the study area, was observed in many properties, causing interior floor finishes to delaminate and otherwise deteriorate, and often presenting dangerous conditions to building occupants (see Photographs 18, 19, and 20).
- *Inoperable elevator or operation of elevator with a hazardous building code violation*—Deteriorated conditions, including corrosion, cracks, and other damage, were also observed in building elevators or elevator shafts (see Photograph 21), which can result in dangers to tenants and others in the properties.
- *Inaccessible or blocked fire exits*—Fire safety and access to clear, unobstructed emergency exits are concerns at several properties, where exit doors are locked, blocked, or broken; wooden fire stairs are worn and metal fire stairs are corroded; handrails are missing; and fire escapes are severely rusted (see Photographs 22 and 23).
- *Exposed electrical wiring*—Badly maintained wiring was observed next to active water leaks and other areas prone to flooding and infiltration, which is a hazardous condition (see Photograph 24).

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- *Open spraying of automotive paint*—Properties used by automotive businesses do not have proper ventilation systems for spray-painting operations, which poses a health hazard to workers, customers, and passersby (see Photograph 25). These businesses’ operations also include the washing of vehicles inside buildings without proper drainage, which exacerbates water infiltration problems in the structures.
- *Poor sidewalk conditions*—Discussed in more detail later in this section, many sidewalks have wide cracks and missing or spalling concrete, posing tripping hazards to pedestrians, and several business owners regularly park numerous vehicles on the sidewalk, forcing pedestrians into the street.
- *Unsanitary conditions*—Several buildings have severe mold (see Photograph 26), poor pest control (see Photograph 27), standing water or leaking chemicals (see Photograph 28), and excessive accumulation of garbage and debris inside buildings (see Photograph 29); and
- *Other related poor exterior conditions*—Chipping paint, rusted apparatuses, and persistent graffiti are common on many building façades (see Photograph 30).

Building Code Violations

In addition to the physical deterioration discussed above, this study found that 75 percent of structures in the study area had open building code violations with the DOB and ECB as of July 2006, indicating that a large majority of structures are not being adequately maintained or are being used for purposes other than what is permitted at the site (see Figure 7). Boiler-related violations (typically citing the property’s failure to maintain the boiler) were the most prevalent (131). Violations related to elevators (119) were the second most common offense, most commonly reporting problems with “elevator safety test” or failure to maintain the elevator. Business operations not permitted by the certificate of occupancy and building alterations without a permit were also frequently cited. For example, Block 1987 Lot 1 has open violations from 1990 and 1995 for “occupancy contrary to that allowed by Certificate of Occupancy; operating a commercial business variety store without a valid C of O,” apparently referring to the current retail occupant, El Mundo Department Store.

In addition, twenty-three violations at 8 individual properties were cited as “hazardous,” according to the DOB or ECB as a result of a condition dangerous to an inspector, a mechanic, or to the general public. For example, a hazardous violation for “failure to maintain an exterior wall” is due to “variations from plans that significantly diminish structural stability, fire rating, fire suppression, or means of egress, and general construction safety and unsafe site conditions that cannot be immediately corrected,” or for boiler violations “any part of the boiler is considered an ‘unsafe condition’ by the issuing officer.”¹ Open hazardous violations within the study area included the failure to maintain an exterior wall, an elevator, plumbing, or boiler, as well as construction without a permit. While further details regarding the nature of these violations are generally not available from the DOB, examples of hazardous violations cited by the ECB are listed below:

- *Block 1997 Lot 27*: “Concrete ceiling is broken and defective with concrete spalling, exposing reinforcing rods and steel beams throughout cellar. Also missing concrete at various areas.”

1 New York City Department of Buildings, *ECB Violation Reference Guide Part II- Certification Requirements for the Top 25 Violations*. (Available at <http://www.nyc.gov/html/dob/html/violations/ecbviorefguide.shtml>). [Accessed on June 25, 2007].



- Study Area Boundary
- Yellow Box 1-5 Open Violations
- Orange Box 6-10 Open Violations
- Dark Red Box 11+ Open Violations
- 1996 Block Number
- 14 Lot Number

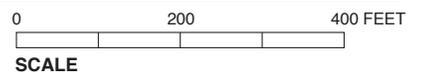


Figure 7
Open Building Code Violations

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- *Block 1998 Lot 29*: “Failure to maintain exterior building wall. The brick exterior wall at the south corner of the west elevation has a crack from the 2nd floor extending vertically to the fourth floor.” (See Photograph 31)
- *Block 1986 Lot 65*: “At 5th floor on west side, a piece of concrete broke off and fell to sidewalk. There are cracks in various locations that may also fall.”
- *Block 1987 Lot 1*: “Metal window frames are corroded, loose, and defective. Molding around frame is loose, hanging and does not support at 3rd story. At northeast corner windows are missing and broken.” (See Photograph 32) “West side has horizontal displacement over 3rd floor windows; weather worn mortar joints and loose bricks at extended elevation (center of wall).” “Southwest corner column top displaced 2-inches to the west and 1-inch to the south; south side at 3rd floor, there is 10 foot area of brick over window building 4-inches.” “Northwest corner column displaced 2 inches over street at 2nd floor northeast corner column has 4 feet vertical crack that is open 1/2 inch at ground level.”
- *Block 1996 Lot 56*: “Failure to maintain elevator.”
- *Block 1997 Lot 34*: “Failure to maintain elevator.” (See Photographs 21 and 33 showing that the elevator floor is out of alignment)

In addition, though not listed as “hazardous” in the DOB Building Information System, other ECB violations citing instances of unsafe conditions included:

- *Block 1997 Lot 48*: “Exit passageway or corridor: Total obstruction. Rear exit passageway is totally obstructed by a locked gate with no panic device or thumb latch (gate has keyed deadbolt lock).” (See Photograph 34)
- *Block 1997 Lot 34*: “Altered building occupied without a valid certificate of occupancy. An auto repair shop has created a spray booth with exposed partition wall 10’ x 2’ approx. made of wood studs and plywood at 2nd floor.”
- *Block 1987 Lot 1*: “Occupancy contrary to that allowed by Certificate of Occupancy; operating a commercial business variety store without a valid C of O.”
- *Block 1996 Lot 18*: “Exit lighting defective/fails to meet building code standards. Fire exit sign and defective no illuminated fire exit sign on the 2nd and 3rd floors.”
- *Block 1996 Lot 20*: “Work without a permit. Having erected and altered 3rd premises into studios, offices, and rehearsal rooms throughout 3rd floor.”
- *Block 1998 Lot 17*: “Plumbing work does not conform to approved plans. Failure to maintain boiler.”

Three properties in particular were in non-compliance with ECB and DOB regulations, each with 20 or more open building code violations. Block 1996 Lot 14, a four-story structure that, until recently, housed a job training, substance abuse, and HIV treatment center, had 47 open building code violations, the majority of which were related to the elevator or boiler (29 and 11 violations, respectively). Block 1997 Lot 34, a five-story loft building occupied by several auto repair businesses, had 25 open building code violations, nearly half of which are related to the building’s elevator, which is currently operating without a valid certificate. Finally, a narrow three-story brick structure occupied by a dry

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cleaning plant and artists studios on Block 1996 Lot 20 had 20 open building code violations, with most related to either the boiler or the elevator. ECB also cited the illegal conversion of studios and offices on the third floor—a potentially dangerous situation for these illegal tenants, as dry cleaning facilities emit toxic chemicals that are harmful for building tenants if proper ventilation is not constructed or maintained (see Photograph 35).

See Appendix A, Table A-1 for a complete list of building code violations for each lot.

Manhattan Valley IRT Viaduct

In addition to the substandard building and lot conditions in the study area, the poor appearance of the 13-block-long Manhattan Valley IRT viaduct further contributes to an atmosphere of disinvestment in the study area. Occupying a broad right-of-way in the middle of Broadway, the viaduct carries the No.1 subway line above grade across the valley from West 122nd Street to West 135th Street, where it runs below grade again. This highly visible viaduct, with parking below, acts as the eastern boundary of most of the study area and is a prominent feature for those living or working in the area. It is particularly prevalent for those entering Manhattanville from 125th Street, Harlem's primary commercial corridor, where the viaduct serves as a gateway into the study area. However, the prevalence of rust, peeling paint, graffiti, and dirt on the viaduct casts a negative image on the study area, as shown in Photographs 36, 37, and 38. Despite NYCT's recent \$12 million renovation of the West 125th Street subway station completed in 2004, the viaduct's external appearance remains poor, as a new paint job was not included in the renovation budget. At Broadway and West 134th Street, the northernmost gateway to the study area, the poor condition of the viaduct has the same negative effect on the area. Here, the viaduct is encased in stone and covered in dirt and graffiti that have accumulated over time (see Photographs 39, 40, and 41).

SIDEWALK CONDITIONS

Sidewalk conditions throughout the study area are generally substandard. While conditions vary from lot to lot, instances of spalling and cracked sidewalks that create unsafe conditions for pedestrians are common, as shown in Photographs 42 through 46. Of the 67 lots in the study area, 25 properties (or 37 percent) have sidewalks in poor or critical condition. Poor sidewalk conditions contain widespread cracking (with cracks greater than 1/8 inch) or spalling. Sidewalks on four lots are considered in critical condition due to extreme cases of crumbling, spalling, and cracking.

Sidewalk parking is prevalent throughout the study area, as shown in Photographs 47 through 52, and numerous businesses were observed using the sidewalks to park commercial and customer vehicles. This practice is, in part, due to the functional obsolescence of many of the properties used for automotive repair, i.e., many buildings utilized for auto repair are too small to accommodate the necessary equipment and all of the customers' vehicles at the same time. In these cases, business operators use the adjacent sidewalk to store cars awaiting repair. When vehicles are parked on the sidewalk, passing pedestrians are typically forced to walk into the street to move around the parked cars—a clearly dangerous situation.

In addition, sidewalk parking exacerbates the degeneration of sidewalk surfaces and can damage sidewalk vaults, both of which create further unsafe conditions for pedestrians. For example, Skyline Windows (Block 1997 Lot 14) parks its commercial vans on the sidewalk in front of adjacent Lot 18, which has caused structural damage to the vault below and severe cracking on the sidewalk itself.

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(Columbia University, the owner of the adjacent lot, has since repaired the vault and sidewalk.) Examples of observed illegal parking include: a gas station on the corner of Broadway and West 129th Street that parks a tow truck on the sidewalk; several of the auto-related businesses in the study area, including New 2000 Auto Repair (see Photographs 47 and 48), Papito's Auto Repair, and Pedro y Jose (see Photograph 49); Pearl Green Corporation and Skyline Windows, which load and unload company trucks and vans or park vehicles (see Photographs 50 and 51); and Tuck-It-Away, where customers appear to park cars on the sidewalk to unload storage items (see Photograph 52).

GEOGRAPHIC CONTEXT: PHYSICAL AND VISUAL ISOLATION

The study area is isolated from adjacent neighborhoods in both physical and visual respects. This isolation is largely the result of differences in topography and zoning relative to surrounding neighborhoods, and the presence of large-scale transportation infrastructure. Manhattanville is located in a valley between the more elevated neighborhoods of Hamilton Heights to the north and Morningside Heights to the south. The study area lies generally uphill from the commercial core of Harlem's 125th Street. One block west of the study area is the Hudson River, where the waterfront sees little activity other than parking.

Isolation due to natural conditions is exacerbated by the four transportation rights-of-way that run north-south on either side of the study area (see Figure 8). The 54-foot-high Manhattan Valley IRT viaduct occupies a broad right-of-way in the middle of Broadway and acts as both a physical and visual barrier between the study area and surrounding central Harlem neighborhoods, including the portion of Manhattanville itself east of Broadway (see Photographs 53, 54, 55, and 56). The study area is cut off from the waterfront as well, due to the Henry Hudson Parkway (25-30 feet above grade) and Amtrak Empire Corridor rail lines that run just 20-25 feet above grade. This low-lying infrastructure prevents easy access between the waterfront and the study area (see Photograph 57) and at the same time restricts views of the river. In addition, the Riverside Drive viaduct at the western border of the study area, which supports a portion of Riverside Drive that runs 80 feet above Twelfth Avenue, provides yet another physical barrier (see Photograph 58). Although its increased height does not generally interrupt views to the east and west of the study area, it does limit access to the study area. For example, the roadway infrastructure connects the residential land uses and open space at the level of the elevated roadway immediately north and south of the study area, leaving the industrial and commercial uses in the valley isolated from the broader activities of neighborhood life.

The cumulative effect of these four major pieces of transportation infrastructure is the significant isolation of the study area and a real and perceived separation from the surrounding neighborhood, as shown in Figures 8 and 9. This physical isolation, when combined with the generally poor condition of the industrial buildings, makes the area an unattractive pedestrian passage to the waterfront and to far west destinations, such as Fairway. The streets in the study area are devoid of urban street life, and monolithic buildings like the Manhattanville Bus Depot discourage pedestrian movement, particularly after dusk.

Despite the large number of residents close to the study area, few have reason to walk into or through the area. The study area is largely devoid of shopping, entertainment, and other commercial activities, except for Mi Floridita Restaurant and Bakery; Cotton Club; and the relatively recent arrival of the Dinosaur Bar-B-Que restaurant and Mi Floridita Tapas. In addition, wholesale trade and auto-related

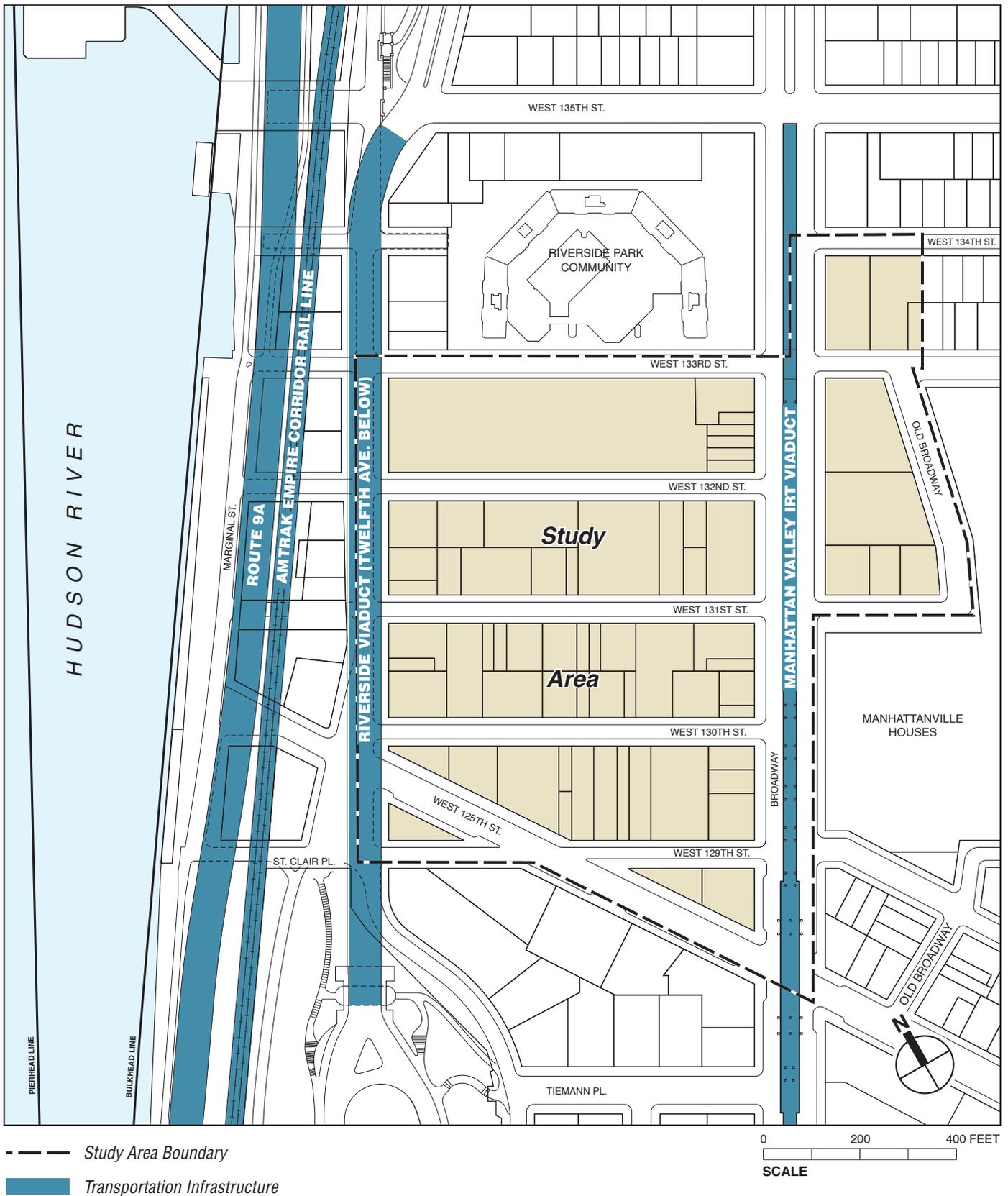


Figure 8

Transportation Infrastructure



— Study Area Boundary

0 170 340 FEET
SCALE

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businesses do not generally attract or cater to the needs of the local residential community. In these ways, low-density manufacturing zoning acts to isolate the neighborhood by restricting opportunities for enhanced pedestrian flow and neighborhood life in general. As noted in the West Harlem Master Plan, “the Study Area’s zoning—primarily for manufacturing uses—reinforces the area’s isolation by excluding the development of higher density uses.” Zoning that would allow for a greater mix of uses and the higher density would help to counteract the existing isolated nature of the study area and create a 24/7 community.

PROPERTY OWNERSHIP

Multiple property ownership has traditionally been a hindrance to implementation of public initiatives and private redevelopment efforts alike. Plans for revitalizing the study area proposed by the City Planning Commission in 1965 and then in 1976 by a combination of public agencies and private institutions were never implemented, likely in part due to the high level of multiple property ownership in the area.

To facilitate the implementation of its plan to develop a new campus and overcome the pitfalls of multiple property ownership in the study area, Columbia University has purchased 31 tax lots from willing sellers since 2000. An additional 16 lots are under contract with Columbia, and the University is expected to purchase these buildings within the next 28 months. In total, the University currently owns or has contracted to buy 48 of the 67 tax lots (72 percent) in the study area.¹ Thus, Columbia currently owns and has contracted to buy over 70 percent of the lots in the study area. (Figure 10 illustrates the location of properties owned by or under contract with Columbia.) The remaining 19 lots are owned by 12 different property owners. Publicly owned properties include two residential buildings owned by the City of New York and operated by HPD, and two lots owned by MTA NYCT, also illustrated in Figure 10.

As discussed in section B, there has been little significant independent private investment in individual properties in the study area for several decades (except for the recent rehabilitation of two residential buildings along Broadway in the northern part of the study area), and public sector initiatives to revitalize the study area have not been fruitful. While Columbia University has made significant strides in acquiring properties to implement its development plans for the study area, the continued ownership of nearly 30 percent of the study area by 12 independent entities or individuals makes revitalization of the area and elimination of deteriorated and substandard conditions problematic for both the public and private sector.

SITE UTILIZATION

The utilization of lots in the study area was also analyzed for this report, since underutilization can be indicative of problems like poor physical conditions that engender disinterest, disinvestment, and stagnating business activity in an area. Lot utilization was calculated for each lot by comparing the actual square feet of built space of the lot to the maximum allowable square feet under applicable zoning. The study area’s existing M1-2, M2-3, and M3-1 manufacturing zones allow for an FAR of 2.0. For this analysis, lots that occupy less than 60 percent of the maximum allowable square feet (or FAR) were considered to be underutilized.

¹ Property ownership information is current as of the date of the last site visit on April 30, 2007.



- Study Area Boundary
- Columbia University Owned Property
- Under Contract by Columbia University
- New York City Transit
- City of New York
- Block Number
- Lot Number

