

**MANHATTANVILLE IN WEST HARLEM REZONING AND
ACADEMIC MIXED-USE DEVELOPMENT**

CEQR No. 06DCP032M

**RESPONSE TO ENVIRONMENTAL IMPACT STATEMENT
DRAFT SCOPE OF WORK**

**Community Board 9 - Manhattan
January 5, 2006**

INTRODUCTION

Community Board 9 is pleased to submit comments on the Environmental Impact Statement (EIS) Draft Scope of Work for Columbia University's proposed Manhattanville in West Harlem Rezoning and Academic Mixed-Use Development plan. These comments are founded upon consideration of major issues and needs in Community District 9 and relationship of the proposed 197-c rezoning action and development plan to these needs, as well as the underlying principles, goals and objectives of the Community Board's 197-a Plan, which is undergoing concurrent review. These comments are intended to augment, and incorporate by reference, Community Board 9's November 7, 2005 letter to the Department of City Planning (DCP) and Columbia University (Columbia) and attachments, which set forth recommendations for inclusion of the 197-a plan into the EIS Scope of Work. (See Appendix)

The 197-a Plan was the result of an inclusive community planning process targeting the entire community district, with a particular focus on Manhattanville. The overarching goals of the plan are: to build on the strong social, economic and cultural base of the district through an agenda that would recognize, reinforce and reinvigorate the existing diverse community; to ensure that future development in the district is compatible with the existing neighborhood character and historic urban fabric; to create the conditions to generate jobs for the existing residents; to provide housing and services that are affordable to the community; and to provide for future growth, while preserving the district's physical and demographic character without displacement of existing residents, businesses and jobs.

To achieve these goals the 197-a Plan proposes 33 major recommendations on several topic areas, such as land use and zoning, urban design, open space and historic preservation, transportation and transit, economic development, housing, community facilities and environmental protection and sustainability.

Major issues and needs include the absence of vacant land to promote development that addresses the community's needs; the extended district-wide presence of historic buildings and districts and the need to protect them from out-of-context development; the high amount of vehicular traffic and inadequate bus and subway services; the high unemployment rate, especially among Blacks and Latinos, and the need to encourage economic development that benefits the current population; the presence of environmentally burdensome facilities, which, connected with high vehicular traffic are responsible for pollution and poor air quality; the shortage of affordable housing and high percent of rent-burdened households in the district; and the short supply and absence of needed community facilities in the district.

The following response to the Draft Scope reiterates the Community Board's position on a number of key issues expressed at the Public Scoping Meeting held on November 15, 2005, including the use of Eminent Domain, consideration of the 197-a Plan as an alternative scenario in the EIS, and the EIS/public scoping process. This is followed by detailed comments on the various tasks listed in Section F of the Draft Scope, pertaining to project description, analysis framework, and the kind of information and

methodologies used for analysis in each of the technical areas. Referenced documents are attached in Appendix A.

POSITION STATEMENT: ISSUES OF PRIMARY CONCERN

Eminent Domain

Community Board 9 has clearly stated its position on the use of Eminent Domain in its 197-a Plan. Condemnation of property under the Eminent Domain Procedure Law should be used with great care and only for public purpose, not to convey property from one private owner to another. (See attached CB9-M Resolution). We also believe that the application of Eminent Domain power - even if it addresses the concerns outlined above and meets a high threshold of “public purpose” - should be limited to those properties Columbia University seeks to acquire and develop in the immediate future, i.e. before 2009. It should not be applied to the taking of property that is planned to occur in the future, i.e. post 2009. Columbia University must seek the right of Eminent Domain and demonstrate the existence of public purpose for such properties only at the time they are sought for acquisition and development.

There are substantial omissions in the Draft Scope with respect to Eminent Domain:

- I. The Draft Scope fails to directly address the issue of Eminent Domain, which is central to Columbia’s proposed Academic Mixed-Use Development plan.
- II. The Draft Scope fails to directly address the issue of the phasing and timing for the use of Eminent Domain, which is central to Columbia’s proposed Academic Mixed-Use Development plan.
- III. The Draft Scope does not provide sufficient information, including a detailed outline of proposed program uses, to support the use of Eminent Domain for development of the proposed Academic Mixed-Use Area.
- IV. The Draft Scope has not set forth any methodology to determine the appropriateness of property takings by the Empire State Development Corporation (ESDC).

A proposed methodology must be included for public review and comment in the Scope of Work. It should include a detailed statement describing the rationale for each of the proposed takings, how each taking meets the public purpose requirement under the Eminent Domain Procedure Law, and whether or not there are alternatives to the taking in each circumstance, including avoiding the taking.
- V. The Draft Scope is unclear on how the City will be remunerated for the “disposition” of “underground rights” presently in the public domain.
- VI. Use of Eminent Domain and potential impacts should be assessed for all relevant technical areas in the EIS, in particular Land Use, Zoning and Public Policy (Task 3), Socioeconomic Conditions (Task 4), Historic Resources (Task 8), and Neighborhood Character (Task 10).
- VII. Consideration should be given in the EIS to the necessity for superblock development and contiguous below grade support space to satisfy Columbia University’s expansion efforts.
- VIII. The EIS should include a development scenario *without* the use of Eminent Domain in its alternatives analysis.

Consistency with Community Board 9’s 197-a Plan

In addition to demonstrating consistency with the West Harlem Master Plan, developed by New York City’s Economic Development Corporation (EDC), the EIS should determine the consistency of Columbia University’s proposed 197-c rezoning action and Academic Mixed Use Development with the CEQR No. 06DCP032M

community's plan for Community District 9, developed under Section 197-a of the New York City Charter, and its impact on the 197-a Plan requirements. As in standard planning practice, Community Board 9's comprehensive, community-based 197-a Plan must serve as guidance for rezoning and land use development in the district.

Consideration of the 197-a Plan as an alternative in the DEIS

The EIS should include the 197-a Plan – as it applies to common geographic areas - as a full-blown alternative in its alternatives analysis. This should be based upon the Board's "Framework for Assessing and Comparing Impacts of the Columbia Manhattanville 197-c Proposal and the Community Board's 197-a Plan as an Alternative" submitted to DCP on November 7th and should involve close collaboration with Community Board 9 and its consultants, as noted below.

EIS/Scoping Process – Process for Development of the EIS

In order to adhere to DCP's commitment to concurrently consider the Community Board's 197-a Plan and Columbia's proposed Manhattanville 197-c rezoning action and development plan:

- I. Community Board 9's framework for inclusion of the 197-a Plan that was submitted to DCP on November 7th must be the basis for the analysis of the 197-a Plan as an alternative in the EIS.
- II. DCP must provide a response to all comments submitted at the public scoping meeting and during the public comment period and the opportunity to address any comments rejected by DCP. Community Board 9 and members of its EIS review team/consultants should be allowed to review and comment on the final Scope of Work before it is released in order to determine the degree of consideration of public comments and examine if, and how, they have been incorporated.
- III. Community Board 9 and members of its EIS review team/consultants must be provided an opportunity to review the PDEIS to assess the completeness of the inclusion of the 197-a Plan. Since Community Board 9 is the sponsor of the 197-a Plan, only Community Board 9 can accurately assess whether the 197-a Plan has been properly included and considered in the EIS.
- IV. As the sponsor of the 197-a Plan, Community Board 9 must be able to participate in the development of the EIS with proper respect to the inclusion of 197-a Plan elements. In order to do so, DCP and Columbia must establish a schedule to meet with Community Board 9 and members of its EIS review team/consultants during the development of the EIS.

Avoidance of impacts

"CEQR requires that any significant adverse impacts identified in the EIS be minimized *or avoided to the fullest extent practicable...*" (CEQR Technical Manual, Chapter 1, §241.5) Priority should be given to the *avoidance* of impacts rather than mitigation of impacts in the analysis of the Reasonable Worst-Case Development Scenario and other alternatives in the EIS. The Final Scope must require that each technical area in the EIS include an analysis of methods to avoid significant impacts for each of the alternatives identified in the alternatives section below. (See Task 24)

Additional technical areas/analyses

Cumulative Impacts and Environmental Justice Impacts

In addition to the range of technical analyses that may be undertaken under CEQR, as listed in the Technical Manual, the EIS should analyze cumulative impacts and environmental justice impacts, per Community Board 9's letter to DCP/Columbia, dated November 7, 2005. Both DCP and Columbia agreed to include these as topics in the EIS after release of the Draft Scope. The methodologies for conducting CEQR No. 06DCP032M

cumulative impact and environmental justice analyses must be included in the revised Scope with opportunity for public comment - failure to do so would be to violate the requirements of City Environmental Quality Review.

In assessing cumulative impacts the EIS should consider impacts of multiple concurrent actions or developments in different technical areas for the build years 2015 and 2030, and not just the incremental development of the proposed project. (See CEQR Technical Manual Chapter 2C, §530). The revised Draft Scope should include methodologies for conducting cumulative impact analyses and should identify all projects for a particular build year, including the proposed project and development by other entities within the relevant study areas.

Public Safety Impacts

Public safety must be analyzed as a separate technical area in the EIS. Analysis of public safety impacts associated with biochemical research and related activities must consider:

- I. Accidental releases - the reasonable worst-case scenario must be based on multiple simultaneous accidental releases.
- II. Anti- terrorism – susceptibility of biochemical research facilities to terrorist attacks.
- III. Handling of hazardous materials - including transport of materials between campuses.

This analysis must include impacts on properties adjacent to biochemical research facilities, and adequacy of emergency response resources and procedures.

Impacts on 197-a Plan Requirements

In addition, Community Board 9's November 7, 2005 submission to DCP/Columbia specified that the EIS impacts analyses must include whether Columbia's proposed rezoning and development plan will achieve, or preclude the achievement of, the requirements in the 197-a Plan regarding:

- I. Economic Development
- II. Land Use and Zoning
- III. Open Space
- IV. Historic Resources – as identified in the 197-a Plan
- V. Urban Design – e.g. recommended height limitations along the waterfront
- VI. Transportation and Transit
- VII. Community Facilities
- VIII. Housing

Note: Withdrawal of 3333 Broadway from the New York State Mitchell-Lama Program and conversion of its subsidized apartments to market rate must be considered as a loss of affordable housing driven by real estate speculation due to the proposed action.

- IX. Environmental Protection and Sustainability

Amendments to the Draft Scope

There were substantial amendments to the Draft Scope subsequent to its release, i.e. inclusion of the 197-a Plan as an alternative, inclusion of a specialized high school in the proposed development, and consideration of additional technical areas, e.g. environmental justice. The public has not been provided with methodologies for the analysis of new components or technical areas, nor has it been given the opportunity to review and comment. As requested in Community Board 9's November 7, 2005 letter, a

supplement to the Draft Scope or a revised Draft Scope must be provided for public review and comment. Failure to seek review and comment on a Revised Draft Scope or Supplement would violate the requirements of CEQR and SEQRA as well as DCP's commitment to fully include the Community Board in the EIS process. Substantial comments and suggestions received in response to the Draft Scope may generate additional amendments. DCP/Columbia should distribute a revised Draft Scope or Supplement and permit adequate time for public feedback before issuing the Final Scope.

SCOPE OF WORK

TASK 1: PROJECT DESCRIPTION

Inadequate information

There is insufficient information and an insufficient level of detail in the Project Description (Section D of the Draft Scope) for public comment and response, and for meaningful and effective dialogue and negotiation.

Competing goals

Columbia University's two primary goals in its proposed Manhattanville rezoning and development plan are: (a) to facilitate the revitalization and improvement of Manhattanville "...to generate significant economic development opportunities for a community that has not shared in the economic renaissance occurring in central and east Harlem" – following the guidance of EDC's 2002 West Harlem Master Plan (WHMP); and (b) to allow Columbia to build academic facilities over a 25 year period "...to support New York City's role as a leading center of higher education." (pp. 1, 3)

While Columbia goes to great lengths to describe how it will achieve its campus expansion goal in the draft scope and general project plan, it is not at all clear on how it will achieve its neighborhood revitalization goal, how and when this will be undertaken, and how it will be measured. The EIS should also consider potential adverse socioeconomic impacts from Columbia's proposed rezoning and campus expansion plan in light of its stated neighborhood revitalization goal.

The Draft Scope states that "...the third component of the WHMP builds on the waterfront improvements . . . and encourages economic development of the upland. It identifies the need to change the restrictive manufacturing zoning to allow a greater variety of uses and greater building bulk in the area near Broadway." (See Draft Scope, p.8.) The EIS must set forth whether Columbia's Manhattanville proposal conforms to this requirement, by comparing "the variety of uses and greater building bulk in the area near Broadway" of the Columbia proposal with the community's 197-a Plan, which is more specific with respect to proposed uses and development than the WHMP. The EIS must specifically set forth how the siting of research facilities in Manhattanville conforms to the goals of both the WHMP and the 197-a Plan.

A third, unstated goal is clear from the concentration of scientific research facilities and uses in the proposed Academic Mixed-Use Area (Subdistrict A), that is, to enable Columbia to develop and benefit from a substantial biotech presence in Manhattan. Twice as much square footage is devoted to research in the proposed Academic Mixed Use Area than to academic uses. (Draft Scope, Table 5, p. 21) Columbia must set forth the basis for proposing the siting of such extensive research uses in Manhattanville. The nexus between proposed research facilities in Manhattanville and other research facilities in proximity, including those on Columbia's existing campuses and other holdings in the area, must be included in the EIS. Each of the EIS topics must analyze the impacts due to any cited nexus between the proposed research facilities for all pertinent technical areas, including safety (accidental release, emergency response) and public health. The kind of biotech research that will be undertaken in these facilities must

be fully and completely disclosed in the Final Scope and the level of risk for each activity must be clearly outlined.

TASK 2: FRAMEWORK FOR ANALYSIS

Development Uncertainty

There is insufficient information and an insufficient level of detail in the Framework for Environmental Review (Section E of the Draft Scope) for public comment and dialogue, and the amount of flexibility built into the proposed Academic Mixed-Use Development. Uncertainty with respect to future conditions and future uses makes it difficult to respond in a meaningful way.

Analysis Years

Build Years

The Draft Scope fails to demonstrate that the selected build years – 2015 and 2030 – represent the years for maximum impact from projected development arising from Columbia’s proposed rezoning action and development plan. The EIS must base its analysis on years in which maximum impacts would occur from full build out *and* operation of the proposed facilities.

Existing Conditions Baseline

The EIS should use an earlier start date for the existing conditions baseline - e.g. 2000, prior to Columbia’s widespread acquisition of property in Manhattanville and announcement of its Manhattanville Campus development plans - rather than a 2005 start date supplemented by a recent trends analysis. Columbia aggressively started purchasing property in this area around the year 2000, which could have been a direct cause for residential and business displacement. It is likely that land speculation has been a major cause for business and residential displacement as a result of Columbia’s acquisition activities and announcement of its development plans.

In addition to describing existing conditions in the year 2000, the EIS must document:

- I. All acquisitions by Columbia University in the period *prior* to 2000, including properties in and adjacent to Manhattanville and its Morningside Heights and Washington Heights campuses.
- II. Conditions at and adjacent to each property before and after it was acquired by Columbia. Among the items that must be disclosed, include:
 - Changes in tenant occupancy
 - Changes in tenant lease terms, including length
 - Changes in use
 - Records of maintenance
- III. In order to assess the consequences of Columbia’s acquisitions and announcement of its Manhattanville campus expansion plan, the EIS should document each property transaction by Columbia University in Manhattanville, and conditions at or adjacent to such property *since* the year 2000 with respect to:
 - Changes in tenant occupancy
 - Changes in tenant lease terms, including length
 - Changes in use
 - Changes in observed maintenance/state of repair

Future Without the Proposed Action (No Action Condition): Baseline for Impact Analysis

- I. Columbia must identify for public comment all developments it projects to be built by each of the build years in the following categories:
 - Under construction
 - Planned
 - Proposed
 - “Soft Sites” - projects not proposed or planned but can reasonably expected to occur by the build year
- II. The baseline must incorporate the projected economic development stimulus arising from improvements on the waterfront.
- III. The baseline must include the reasonable development of all properties currently owned by Columbia University without the proposed action.
- IV. The baseline must include projected economic and business development arising from the maximum use of all available economic development resources in the Empowerment and Empire Zones, as well as initiatives by newly elected Manhattan Borough President Scott Stringer and EDC.

Future with the 197-a Plan

The future baseline without the proposed action must be adjusted for developments projected to occur with the full implementation of the 197-a Plan for the geographic area that is common to Columbia’s proposed Special Manhattanville Mixed-Use Zoning District.

Future with the Proposed Actions (Build Condition): Probable Impacts Analysis

The impacts of Columbia’s Manhattanville rezoning and development proposal must be measured against the Future Without the Proposed Action, adjusted to reflect potential development under the 197-a Plan.

Study Area

The study area for certain technical areas, e.g. land use, socioeconomic conditions, traffic, transit, neighborhood character, and historic resources, must be expanded to include all neighborhoods encompassed and impacted by Columbia’s Morningside Heights, Washington Heights and proposed Manhattanville campuses, as well as City College, which has a close scientific relationship with Columbia. (Per CB9 letter to DCP/Columbia, dated November 7, 2005)

Reasonable worst-case development scenario

There is inadequate demonstration to support the “...reasonable worst-case development scenario” for the Academic Mixed-Use Area (Subdistrict A) in Table 5 of the Draft Scope (Table 7, EAS). The reasonable worst-case development scenario must be supported by a demonstration that the maximum allowable development for the proposed zoning actions (see Table 9, EAS) is limited by factors set forth in the CEQR Technical Manual, including technical, legal or construction restrictions, and the need for additional future approvals. The EIS analysis of impacts in the Academic Mixed-Use Area (Subdistrict A) must be based upon a reasonable worst-case development scenario that is clearly derived from specifically documented restrictions to the maximum allowable development permitted in the proposed zones.

There is insufficient information regarding development of the sub-grade “factory” in terms of phasing or full build-out, access, and plans to acquire the right to develop. This is a major component of the project and a major rationale behind the use of Eminent Domain. Full and complete disclosure regarding street closures, utility relocation, and construction techniques with respect to development below grade is crucial for decision-makers to consider environmental effects, evaluate alternatives, and identify adverse impacts, including construction, open space, and economic impacts.

TASK 3: LAND USE, ZONING, AND PUBLIC POLICY

Primary Issues

- I. The secondary land use study area should be expanded to include Columbia’s Morningside Heights, Washington Heights, and proposed Manhattanville campuses, as well as City College. [CEQR Technical Manual, Chapter 3A, §310]
- II. Analysis of potential displacement of properties by Columbia’s proposed development plan should include avoidance of impacts as well as mitigation.
- III. Alternatives analyses should consider development without the use of Eminent Domain, with an infill approach focused on preserving existing residential buildings, businesses that want to stay, and buildings that are proposed for historic preservation. Columbia should demonstrate why this alternative does not allow it to achieve its objectives and demonstrate what the qualitative and quantitative differences are with respect to such issues as displacement, job generation, classroom space, etc.

Additional Issues

- I. Alternatives analyses should include Inclusionary Zoning as a means of ensuring the provision of affordable housing in all districts rezoned from manufacturing to residential and commercial uses: Subdistrict A (from M1-2, M2-3 and M3-1 to C6-2); Subdistrict C (from M1-2 to C6-2) and Other Area: East of Broadway (from M1-2 to R8-A).
- II. The EIS should include a detailed description of land use in the Project Area in 2000, when Columbia started acquiring property. (Draft Scope, Task 3A)
- III. The EIS should include a detailed and accurate description of current land uses and current ownership in the Project Area. Manhattanville is characterized in the Draft Scope and the EAS as having a number of vacant or partially vacant buildings and lots. Only one small building, at the northeast corner of 12th Avenue and West 131st Street, is currently vacant, and it is owned by Columbia University. (See EAS, Figure 5.) The lot mapped as vacant on the northwest corner of 12th Avenue and 131st Street contains the Hudson River Café. The land use analysis should also include a detailed and accurate assessment of current underbuilt sites in the Project Area.
- IV. The EIS should include a determination of consistency with New York City Landmarks Law. [CEQR Manual, Chapter 3A, §122] (Draft Scope, Task 3G)
- V. The EIS should include a determination of consistency with the West Harlem Master Plan (WHMP). The Draft Scope seems to overstate the compatibility of Columbia’s plan with the WHMP. While some uses are common to the two plans, the scale of development and approach to manufacturing and job retention are very different. For example, the WHMP advocates for:
 - Low to mid-rise development, in keeping with the existing character of Manhattanville;
 - Maintenance of the existing pedestrian scale of 12th Avenue;

- Infill development and the preservation of the existing historic character;
- A stepping down of scale from Broadway to the waterfront;
- Manufacturing uses at a density higher than what is currently allowed;
- Retention of existing jobs.

The EIS should analyze consistency of Columbia's rezoning proposal and development plan with each of the above goals.

- VI. The EIS should include a determination of consistency with New York City's new Industrial Policy released in January 2005, and efforts to retain industrial businesses and jobs. Specifically, the EIS should address the impacts of rezoning one of the few remaining manufacturing zones in upper Manhattan and identify potential relocation sites for existing industrial uses.
- VII. The Final Scope of Work should distinguish between the amount of land that is actually vacant in the Project Area and the amount that is used as surface parking.
- VIII. The Final Scope of Work should clarify the height limitations for Subdistrict B, with respect to properties underneath the Riverside Drive viaduct, and indicate whether there would be excess development rights on these properties. If so, who would control them and how would they be distributed?
- IX. Analysis of zoning and land use trends in an expanded secondary study area – i.e. incorporating the Morningside Heights, Washington Heights and proposed Manhattanville campuses as well as City College, should include all current or projected rezoning, development, rehabilitation or expansion plans by Columbia University as well as City College and other major institutions, in order to determine cumulative impacts. (Draft Scope, Task 3F)
- X. Additional, more detailed information needs to be provided in the Final Scope of Work with regard to the Transfer of Floor Area, by Certification of the Chairperson of the City Planning Commission, and potential for a modification of the bulk regulations and mandated street wall requirements by special permit from CPC stated in the Proposed Special Manhattanville Mixed-Use District Zoning Text Amendments (Appendix A, p.4 and p.5).
- XI. The Draft Scope is unclear on how streets in the Academic Mixed-Use Area will be treated by Columbia University and the City, and whether they will remain completely open and accessible as publicly owned and publicly controlled thoroughfares.
- XII. For all streets and properties where Columbia University may restrict public access, the specific restrictions, including periods of restricted access, must be identified and the potential impacts associated with such restrictions, e.g. limited accessibility to remaining businesses and increased emergency response times must be analyzed in the EIS.
- XIII. Land use patterns in proximity to Columbia University's existing campuses over the last 15 years must be documented, and impacts, including socioeconomic impacts, analyzed. Such analyses should be used to inform the analysis of land use impacts resulting from the proposed action.
- XIV. Land use impacts of student and faculty housing adjacent to Columbia University's existing campuses must be analyzed and used to inform the analysis of land use impacts, particularly residential displacement and increased residential costs, in the expanded study area as a result of the proposed action.

Proposed Uses

- I. “Active Ground Floor Use” - under Use Regulations in Appendix A (Proposed Special Manhattanville Mixed-Use District Zoning Text Amendments), p.2 - does not specify the size of development or enlargement that would trigger the requirement of active ground floor uses.
- II. Appendix A should include a list of “Active Ground Floor Uses” that would be permitted.
- III. Performance standards for “selected” manufacturing uses in Subdistricts A, B, and C (Appendix A, p.2) must address compatibility of uses. The EIS should specify "research" use and “other selected" manufacturing uses. Biotech is not listed under any use group in the Zoning Resolution. Whether biotech or other types of manufacturing-related uses inherent to scientific research are proposed, performance standards must address compatibility of uses.

TASK 4: SOCIOECONOMIC CONDITIONS

The 197-a Plan should provide guidance for the EIS socioeconomic analysis in the absence of any such analysis in the Columbia University planning process. Development of Columbia University’s rezoning proposal and general project plan was not based upon a detailed and comprehensive evaluation of socioeconomic conditions in Community District 9 but on strictly physical land use characteristics of the site. This was very clear from the public information sessions and handouts on the project, which starkly omitted any reference to the existing West Harlem community and its needs and interests. The 197-a Plan, on the other hand, was developed through an extensive participatory planning process that involved a broad number of community stakeholders and is based upon a detailed and thorough investigation of existing socioeconomic conditions in West Harlem.

The secondary socioeconomic study area should be expanded to include all areas encompassed by Columbia’s Morningside Heights, Washington Heights, and proposed Manhattanville campuses, as well as City College, as noted above.

As stated in the Draft Scope, the reasonable worst-case development scenario for the socioeconomic conditions assessments will “minimize... private commercial research space,” generating the greatest potential off-site demand for such uses and maximizing potential indirect residential and business displacement. (Draft Scope, p.27) Since most of Upper Manhattan is zoned for residential or small-scale retail operations, it is not clear where off-site demand for commercial research space will be met. Such analysis must be included in the EIS.

The Draft Scope must be amended, as follows:

- I. With respect to the Economic and Fiscal Benefit Analysis (See Draft Scope, p.29):
 - Separate analyses must be conducted for Subdistrict A and the other Subdistricts in the Project Area and compared against the 197-a Plan.
 - Separate analyses must be conducted for the two selected build years.
 - The *costs* of the proposed action must be included in the analysis (e.g., loss of property tax, corporate tax, and sales tax revenues as a result of business displacement). As a tax exempt institution Columbia University will not generate any additional tax revenues from its proposed Manhattanville development. The EIS should evaluate loss of business income and sales tax revenues as a result of street closures or detours, service and utility disruptions, and restricted access during construction. It should also assess costs to the city resulting from development below streets, street closures, and service or utility disruptions, etc.

- The projected use and value of Brownfield Tax Credits from the New York State Brownfields Law must be included in the analysis.
 - The economic benefit of construction arising from the implementation of the 197-a Plan and all projected development in the baseline build years (i.e. without the proposed action) must be documented.
- II. Analysis of employment and economic growth data must not be limited to the 20-year period between the 1980 and 2000 Censuses, but must separately consider growth patterns for the last 5 years, i.e. between 2000 and 2005, and for 2005 versus the previous 25 years. Furthermore, employment must be separated by industry categories.
- III. Jobs created under the 197-a Plan must be compared against those created as a result of the proposed action, with regard to:
- Temporary versus permanent jobs.
 - Relative income level of jobs, e.g. as a percent of median income.
 - New jobs generated *per year* over the build out period, including types of jobs, background necessary, pay scale and whether they are temporary or permanent.
- Note:* Jobs relocated from other Columbia University facilities must be documented separately and not included in the analysis of economic benefits from new jobs.
- Impact on local unemployment, i.e. percentage of hiring from the local resident pool.
 - Relationship to local occupational skills and needs.
 - Job training and job placement efforts. (Specifically, would there be job training and placement of local residents within the proposed project area? Would local residents have access to the academic facilities proposed?)
 - Number of jobs lost *per year* and an analysis of the types of jobs and whether or not they were local jobs.
- IV. The EIS should assess net job loss and revenue loss from business displacement.
- V. The EIS should compare government income/expenditures, with respect to:
- Tax revenues arising from each alternative, for all federal, state and New York City tax categories.
 - Tax abatements, government grants or loans, government-backed bonds, and all public subsidies.
- VI. With respect to Eminent Domain, the EIS should:
- Analyze government costs associated with the use of Eminent Domain.
 - Establish the fair market value of public lands, including streets and related underground rights that are associated with the proposed extensive sub-grade development.
 - Analyze impacts on socioeconomic characteristics of the study areas – e.g., consolidation of property under single ownership and within one industry (education) versus multiple owners with various businesses; consequences to the neighborhood from residential and business displacement and gentrification.
- VII. Since the proposed development of Subdistrict A will be phased, the revised Scope should:

- Identify whether the Eminent Domain actions will be phased to follow the projected development by Columbia University in Subdistrict A.
- Identify the projected time periods and phase for Eminent Domain actions.

VIII. Data on real estate market conditions in the primary and secondary study areas must include:

- An inventory of Columbia owned property – disclosure of all property transactions in or adjacent to Manhattanville and its other campuses, indicating date of purchase, occupancy, use and development status, including proposed start date for new developments.
- Conditions prior to and after acquisition of property by Columbia. The time frame for residential and business displacement should include the period before 2000, the year 2000, and today. Columbia aggressively started purchasing property in this area around the year 2000, and that could have been a direct cause for displacement.
- Forecast of the market without Columbia’s proposed action.
- Co-op conversion activity in the expanded secondary study area
- Business sectors serving Columbia that are located in the study areas versus business sectors serving Columbia that are not located in the study areas due to current zoning.

IX. Indirect displacement analyses must include the following vulnerable populations:

- Rent-burdened households, paying more than 30% of gross income towards rent
- Residents in subsidized/rent-controlled buildings that may potentially be subject to displacement due to loss of subsidy/rent-controlled status by the build years of the Columbia action.

Note: Withdrawal of 3333 Broadway, a 1190-unit apartment complex, from the New York State Mitchell-Lama Program in early 2005, and transition from subsidized to market rents must be considered as an indirect displacement arising from real estate speculation due to the proposed action. This may be indicative of other comparable actions in and around Columbia’s holdings in northern Manhattan and the cumulative impact of these on the residential market must be assessed.
- Businesses that may potentially be subject to displacement due to rent increases as a result the proposed action.
- Businesses whose livelihoods are linked to a particular building type, e.g. storage companies and small manufacturers in loft buildings that may be converted to residential or other uses.

X. The EIS should analyze conditions at and adjacent to each property before and after acquisition by Columbia, including: changes in tenant occupancy; changes in use; disclosure of all housing court actions/tenant-landlord disputes; and records of maintenance violations, etc.

XI. The EIS should consider the “important economic value” of local businesses to the community as well as the city, when analyzing business displacement impacts.

XII. The EIS should include measures to *avoid* both direct and indirect displacement of businesses, residents and jobs. (See “Avoidance of Impacts,” p.3)

- XIII. The EIS should evaluate potential increased economic segregation in northern Manhattan as a result of Columbia's proposed rezoning action and development plans.
- XIV. The socioeconomic costs and benefits of all alternatives must be analyzed and compared against each other, including the proposed action and development plan, the no-build alternative, the 197-a Plan alternative and alternative development without the use of eminent domain.
- XV. The EIS should evaluate the impact on affordable housing supply in Community District 9, in terms of direct residential displacement as a result of the proposed development as well as lost opportunities for affordable housing development on the site, per the 197-a Plan.
- XVI. Place of residence of prospective employees in developments resulting from the proposed action must be included in the analysis.
- XVII. The EIS should provide documentation on the local artist community, including an inventory of artist's studios and artists in residence (AIR) in the area.
- XVIII. Socioeconomic patterns in proximity to Columbia University's existing campuses must be documented and analyzed for all of the parameters identified above as well as in the Draft Scope. The potential for similar socioeconomic patterns to occur in Manhattanville as a result of the proposed action must be analyzed in the EIS.

TASK 5: COMMUNITY FACILITIES AND SERVICES

Information on the proposed new specialized Public High School for Science and Engineering announced by the City and Columbia University in October 2005 is inadequate. The location of the proposed school must be clearly identified in the revised Draft Scope and the EIS must compare the capacity of the school and population served with the demand for classroom space and educational needs of Community District 9. The new Public High School must be identified as a component of the Columbia Plan or included in the future baseline condition for analysis of impacts of the Proposed Action.

TASK 6: OPEN SPACE

There is insufficient information in the Draft Scope on public access to the proposed "privately owned publicly accessible open space," including times of access, use restrictions, and potential closures. The impacts of the proposed action on the ability to achieve the open space components of the 197-a Plan must also be analyzed. (See Community Board 9's November 7, 2005 letter to DCP/Columbia). (See Task 18)

TASK 7: SHADOWS

- I. The EIS should include an analysis of shadow impacts from proposed tall buildings adjacent to the Broadway and Twelfth Avenue viaducts and potential for significant reductions in daylight penetration at street level near and under the viaducts.
- II. Shadow impacts on existing open space and recreational facilities, including the school yard at 134th Street and Broadway, Manhattanville Houses open space, Riverside Park, and the Hudson River - as well as streets, sidewalks and other publicly accessible areas - should be included in the analysis.

- III. Shadow impact analyses should also be conducted for proposed open spaces, such as the privately owned publicly accessible open space in the Academic Mixed Use Area and the new West Harlem Piers waterfront park.

TASK 8: HISTORIC RESOURCES

The Draft Scope must be modified to specifically incorporate the Community Board's 197-a Plan Recommendations on the treatment of potential historic resources within Community District 9 (Section 9 of the Recommendations Chapter of the 197-a Plan, which begins on page 62 of the document). As DCP and Columbia are well aware, implementation of the Project Plan currently proposed by the University will bring enormous physical change to Manhattanville. This will ultimately include the demolition of a large number of buildings, reconfiguration of streets and streetscapes, and an overall transformation of the scale and appearance of the neighborhood. Therefore it is imperative that the EIS carefully analyze each type of change and fully recognize the impact such change will have on historic, architectural and cultural resources that the community recognizes as significant.

Manhattanville is rich in such resources. After extensive survey of the area, the 197-a Plan concluded that there are many significant scenic resources, potential historic districts, and potential individual landmarks. A detailed list can be found in the 197-a Plan submitted to DCP, and a copy has been attached to this document.

- I. Because the Community Board has already identified the resources that are important to the community, the EIS should accept the 197-a Plan's guidance on this matter. Analysis of the "worst case" impacts on historic property should be based on all of the potentially historic resources discussed in the 197-a Plan – whether they are referred to as "Proposed for Designation" or "Proposed for Study." A request for this action was made in a letter from CB9 to DCP/Columbia, dated November 7, 2005. (See attached) Analysis should be done of primary impacts upon resources within the Project Area, as well as secondary impacts for resources identified by the 197-a Plan that are within the Community District but outside the Project Area.
- II. Modification of the definition and description of "historic resources" recognized by the EIS is in order. The Scope proposes to assess direct impacts and visual/contextual impacts on "architectural and archaeological resources." The language should be changed to acknowledge a broader set of resources as is done in the 197-a Plan. The community identified important structures and sites that contribute to the sense of place of the area, and that have historical and cultural as well as architectural merit. The EIS can and should embrace the same broader definition of "historic resources" that the Community Board used in its analysis. To weigh impacts only upon those structures that are deemed to meet the standard definition of "architectural and archaeological resources" is not appropriate when this very diverse and knowledgeable community has used a much broader standard of the term "historic resource". Therefore, resources should be referred to in all places in the Scope – and in the ensuing EIS – as "historical, cultural, architectural and archeological resources."
- III. Recognition should be given to the unique quality of Manhattanville Houses, which are architecturally and culturally significant, having been designed in 1961 by famed modernist William Lescaze. The distinctive architectural style of the Manhattanville Houses is emblematic of the mid-20th century's tower in the park concept. Lescaze designed the towers to make best use of the site's view corridors and bring the beneficial qualities of air and light to the residents of this public housing complex. These important values – which are threatened by the proposed Project Plan – should be carefully assessed and protected.

In addition, the EIS should assess potential adverse impacts on the Claremont Theater, which was built in 1914 and has been determined by the State Historic Preservation Office to meet National Register criteria, from the increased floor area ratio proposed for development in the “Other Area: East of Broadway.”

- IV. The process of identifying historic resources and weighing impacts upon them must be conducted in the appropriate manner. The Final Scope should make it clear, in clear language, that historic, cultural, architectural and archeological resources within the Project Area will be identified **before** the potential impact of the Proposed Action upon those resources is assessed. The Scope should describe this as a 2-step process whereby resources are identified first, and impacts assessed second.

TASK 9: URBAN DESIGN/VISUAL RESOURCES

- I. Because Columbia’s plans may change, and may not follow the Illustrative Plan (see Draft Scope, p.16), it would be more helpful to the reader in understanding the full impact potential if the text and the graphics (i.e. Figures 5 and 6 in the Draft Scope) described the reasonable worst-case development scenario instead of the Illustrative Plan.
- II. The EIS should include a complete and accurate visual analysis, including renderings or computer models of the Academic Mixed-Use Development (reasonable worst-case development scenarios for Subdistrict A in future build years), showing full – maximum permitted - building heights as seen from a distance, in addition to close-up street level views, and views from various levels at Manhattanville Houses and 3333 Broadway, to provide a clear indication of the scale and bulk of the proposed project in relation to the surrounding urban fabric, including historic and visual resources, public streets, and public open space. It would also be helpful if figures showing the existing conditions elevations were included for comparison purposes.
- III. Urban design and visual impacts analyses should also consider views of, and from, the Broadway IRT and Riverside Drive viaducts, the IRT subway station, the 125th Street corridor, and the Hudson River waterfront.
- IV. The topographical relationship between Manhattanville’s valley and heights, and the Grant, Manhattanville and 3333 Broadway housing complexes should be considered in the analysis.
- V. The EIS should explore alternative designs for research buildings. Buildings with large floor plates, such as those proposed for the Academic Mixed-Use Area (Draft Scope, p.12) have a tendency to deaden streetscapes rather than enliven them, contradicting an important urban design goal of the Columbia plan.

TASK 10: NEIGHBORHOOD CHARACTER

Columbia’s proposed rezoning and development plan will bring considerable change to Manhattanville, affecting both its physical characteristics and its population. Therefore, the Neighborhood Character chapter of the EIS must carefully consider impacts upon the residents, workers, and businesses in the neighborhood as well as upon the built environment. Specifically:

- I. The EIS should include an assessment of impacts on neighborhood character and community identity from direct and indirect displacement of residents, businesses and workers, and increasing gentrification as a result of the proposed project. (See Task 22)

- II. Demographic changes, including changes in the concentration of ethnic enclaves, must be analyzed with regard to neighborhood character.
- III. Eviction patterns - including the rate of eviction in the expanded study area over the last 10 years and associated demographic changes, and potential for increased evictions and further demographic changes from the proposed action - must be analyzed with regard to neighborhood character.
- IV. The EIS should include an assessment of cultural and arts facilities in the secondary study area - as well as West Harlem's rich cultural heritage - that may be adversely impacted by the proposed rezoning action and campus expansion plan.
- V. The EIS should assess the impact on neighborhood character from periodic restrictions to public access to the campus and presence of a private security force and other security measures. (See Task 18)
- VI. A description of Columbia-owned property and current conditions of such property must be factored into assessment of existing neighborhood character, with conditions prior to acquisition by Columbia, i.e. prior to 2000, used as the baseline.
- VII. The EIS should include an assessment of impacts on neighborhood character and community identity from the demolition of buildings and complexes of buildings that provide historic context and continuity to the neighborhood and the construction of new buildings that will form new block fronts and streetscapes and be occupied by new and substantially different uses. (See Task 22) The relationship between people on the street to their built environment, in terms of street life, sense of identity and security, is an important determinant of neighborhood character.
- VIII. There should be separate reviews in the EIS of potential impacts on neighborhood character from the proposed rezoning action and from the proposed Academic Mixed-Use Development, in order to explore unintended consequences in terms of height and bulk that may result from the rezoning in the event that the development project is changed (Appendix A, p.5 – "Proposed Special Permits"), or in the event that the project is aborted and the properties are developed by other owners for other uses as-of-right.
- IX. The Draft Scope does not state under what conditions and for what purposes the transfer of floor area would be permitted or if any limitations will be placed on the size of developments on receiving sites. Modification of bulk regulations and mandated street wall requirements, as provided in the proposed zoning text amendments (Appendix A, p.5), could radically alter the scale and character of the development and substantially impact neighborhood character as well as urban design and visual resources (Task 9).

Note: In any community, residents and frequent visitors generally understand the "character" of the place they inhabit. In defining the character of Manhattanville for the EIS, DCP should consult the community itself, and allow neighborhood residents and other direct stakeholders to define what they believe to be the significant attributes that create the unique character of the Manhattanville neighborhood.

TASK 11: NATURAL RESOURCES

Migratory bird flight patterns in proximity to the areas of the Proposed Action must be documented and potential impacts arising from the height and bulk of the proposed action must be analyzed.

TASK 12: HAZARDOUS MATERIALS

- I. The EIS must disclose the finding of the presence of hazardous materials, both with respect to hazardous materials within buildings (e.g., asbestos, lead) and in soils; remedial measures to address such conditions; and the proposed air monitoring and dust control program during remedial work.
- II. The transport of biological and hazardous materials from proposed research facilities in the Project Area to other Columbia University facilities must be analyzed. Methods of transportation and routes must be identified and impacts - from an accidental release during transport – must be measured and mitigation measures identified. How these mitigation measures would be enforced over time should also be addressed.
- III. Any building within the proposed Project Area that is expected to remain must be analyzed to determine the existence of contaminated materials in the exterior soils; the presence of soil vapors migrating into the building; and any interior contaminants, e.g., asbestos and lead.

TASK 13: WATERFRONT REVITALIZATION PROGRAM

Need for additional data

- I. Under *Discretionary Actions Subject to CEQR and SEQRA* on page 2, the Draft Scope does not identify that a Local Waterfront Revitalization Plan (LWRP) consistency finding must be made by the City Planning Commission acting as the City Coastal Commission. (See CEQR Technical Manual, Section 721, p.3K-12)
- II. In Relation to the Waterfront Revitalization Program (Task 13) the Draft Scope simply states that “the Project Area is located within the designated boundaries of New York City’s Coastal Zone (see Figure 13). The Proposed Actions will, therefore, be reviewed, as appropriate, for consistency with the LWRP. The study area for the LWRP evaluation will be the designated Coastal Zone boundary.” The language should be changed to: The proposed Actions will, therefore, be reviewed, as specified in the Waterfront Revitalization Program and in the CEQR Technical Manual - Chapter K - for consistency with the LWRP.

Methodologies

- I. The Scope should make it clear that, while the actions under LWRP review are those applicable to the Coastal Zone, the area of analysis of potential inconsistency may be larger than the Coastal Zone and will vary according to each LWRP policy (and issue it addresses), with each of the relevant study area boundaries reflecting those required for analyses in related technical areas in the Environmental Impact Assessment. “*The study area may have to be enlarged for certain proposed actions to include resources that are part of a larger environmental system....*” (CEQR Technical Manual, Section 310, p.3K-4)
- II. The Scope should also make it clear that the LWRP review will fully identify and describe all of the impacts identified in the other technical areas that relate to LWRP policies and, where they represent inconsistencies with LWRP, will specify how those inconsistencies will be mitigated. In addition, relevant other technical analyses should be cross-referenced and analysis of the LWRP should refer to these other sections of the environmental assessment. (CEQR Technical Manual, Assessment Methods - Sections 300 and 322, pp.3K-4 and 3K-5). The CEQR Manual further stipulates: “*Because the LWRP review*

considers the many laws affecting the coastal area, consideration of an action's consistency with the LWRP typically requires a comprehensive assessment, which also includes synthesis of different technical areas described in this Manual. Therefore close coordination with the other technical areas will be needed. The analysis of each of these technical areas such as natural or air resources, and use and zoning, or historic resources is summarized and presented in this chapter as it relates to LWRP policies.” (CEQR Manual Section 300 page 3K-4) and “...Mitigation of a significant adverse impact related to the LWRP may require coordination with other technical analyses. Mitigation measures may include those described in Section 500 of the different chapters of this Manual.” (CEQR Technical Manual, Section 500, p.3K-11)

LWRP policies of particular concern include, but are not limited to:

- I. Policy 2.2 B: *“Support continuation of industrial uses outside SMIA’s that are well-located relative to customers and delivery networks and adequately buffered from surrounding residences.”* (Related to the Socioeconomic Conditions technical area)
- II. Policy 4.1 E: *“Protect designated Significant Coastal Fish and Wildlife Habitats from land or water uses which would...destroy habitat values associated with the designated habitat through direct physical alteration, disturbance, or pollution or indirect effects of actions that would result in a loss of habitat...”* The Hudson River is a Significant Coastal Fish and Wildlife Habitat. (Related to the Natural Resources technical area)
- III. Policies 5.1 and 5.2: *“Protect and improve water quality in the New York City coastal area.”* (Related to the Natural Resources technical area)
- IV. Policies 7.1, 7.2 and 7.3: *“Minimize environmental degradation from solid waste and hazardous substances”* (Related, but not limited to, the Hazardous Materials, Solid Waste, Air Quality, Infrastructure, Construction Impacts, and Natural Resources technical areas)
- V. Policy 8.2: *“Encourage the development and maintenance of high quality public spaces in appropriate locations, particularly those that would facilitate connection of existing public access spaces....”* Of particular significance is the relationship of the proposed open space to the West Harlem Waterfront Park, specifically those elements endorsed by the Community Board, and the impact on the park of the tall buildings proposed for the east side of 12th Avenue. (Related to the Open Space, Urban Design, and Shadows technical areas)
- VI. Policy 9: *“Protect scenic resources that contribute to the visual quality of the New York coastal area”* (Related to the Neighborhood Character, Urban Design and Visual Resources, Shadows, and Historic Structures technical areas)
- VII. Policy 10.1 A and C: *“Retain and preserve designated historic resources and enhance resources significant to the coastal culture of New York City”* The Riverside Drive Viaduct from Tiemann Place to West 135th Street has been declared eligible for the State/National Registers of Historic Places. (Related to the Historic Structures, Neighborhood Character, Urban Design and Visual Resources, and Shadows technical areas)

Additional consideration

Although not required in the CEQR Technical Manual, determination of the action's consistency with the LWRP should consider the action in comparison, not only to the "No Action" condition but also to the 197a alternative.

TASK 14: INFRASTRUCTURE

- I. The existing capacity of the North River Sewage Treatment Plant must be documented for both dry and wet weather conditions, along with its capacity in both build years - for both the build and no-build/197-a Plan conditions, and available future capacity beyond each of the build years. The future baseline condition must identify influents from the Riverside South and Hudson Yards projects and their impact on treatment and capacity. The impacts to the North River Sewage Treatment Plant from in-sink garbage disposal units must be analyzed for each build year, using the percentage of the use of such units in other municipalities in the United States where such option currently exists as a baseline.
- II. The impacts due to relocation of utilities due to sub-grade construction must be analyzed.
- III. Local electrical distribution networks must be analyzed to assess their capacity to handle the additional electrical load associated with the Proposed Action.

TASK 15: SOLID WASTE AND SANITATION SERVICES

The EIS should analyze the impact of Columbia's proposed Manhattanville development on requirements for a zero waste zone in the CB9 197-a Plan. (See CB9-M 197-a Plan, p.77)

TASK 16: ENERGY

Columbia should use their in-house faculty to refine and exceed the LEEDS platinum standard in all the buildings that they rehabilitate and/or construct. The EIS must analyze energy conservation measures for the construction of Columbia's proposed developments, including the use of green building materials, energy efficient building equipment, and incorporation of the substantive requirements of LEED platinum standards, without regard to formal application in Columbia's structures. Green measures to reduce energy consumption should be assessed against specific targets/ goals/ standards. Columbia should also be required to develop a minimum energy construction strategy that includes: deconstruction of all buildings in lieu of demolition; alternatives to dumping of construction-related materials; reuses for excavated fill; and a plan to minimize waste and reduce truck trips in and out of the construction zone over the entire build out period. (Applicable to Tasks 15 and 21 as well as Task 16)

TASK 17: TRAFFIC AND PARKING

- I. The EIS should assess traffic impacts throughout the district and particularly on West 125th Street and Broadway. Much of the early development will be in this area as well as intersection improvements by the city.
- II. Intersections along West 126th Street and West 141st Street should be included for analysis in the EIS. Because of the superblocks, parks and general topography of the area, these streets are used as alternative means for getting into Manhattanville from the east.
- III. The revised Scope should describe conditions where parking in excess of that permitted by zoning would be allowed.

- IV. The revised Scope should clarify whether on-street parking would be permitted in the Special Manhattanville Mixed-Use District and where it would be located.
- V. The revised Scope should indicate the number of parking spaces that would be provided in the below grade support space – the “factory” - and describe the population served as well as the criteria for allocation of parking spaces.
- VI. Alternative transportation strategies for staff, faculty and students should be considered in the EIS, aimed at minimizing auto dependency and using mass transit alternatives for traveling to and from and servicing the area.
- VII. The revised Scope should indicate where the entrances and exits to the proposed “factory” and to the underground parking, storage, loading docks and energy plant would be located in the Academic Mixed-Use Area and an analysis of potential traffic impacts as a result of these new underground access and egress points should be included in the EIS.
- VIII. The revised Scope should explain and indicate the number of loading docks in the “factory” floor, their general location, and the type of vehicles that would be using them.

TASK 18: TRANSIT AND PEDESTRIANS

- I. Columbia’s proposed expansion is described as being “...without traditional campus walls or gates,” yet very little information is provided in the Draft Scope on campus security measures and restrictions to public pedestrian access—including when disaster mitigation programs are in effect. It is not clear, for instance, if there would be public access to the mid-block passageways and private square.
 - The revised Scope should explain why public ground floor uses, which would create a more attractive, secure environment and encourage pedestrian access, are not being proposed along the perimeters of the mid-block passageways and private square.
 - The EIS should include an analysis of pedestrian movement throughout the proposed campus, including the location and time of peak activity, and impacts of various campus security measures on public access.
- I.
- II. The EIS should consider the impacts of the development of a superblock in Subdistrict A – with potential restricted access – on public access to and use of the new West Harlem Piers Waterfront Park.
- III. A detailed description and analysis of the proposed Metro-North Multi-Modal Station should be included in the EIS.

TASK 19: AIR QUALITY

Critical components of an environmental justice analysis are the performance of existing sources and background levels of pollution. This analysis must include a detailed assessment of any permitted industrial facility in, or adjacent to, the expanded study area (including Columbia’s Morningside Heights and Washington Heights campuses and proposed Manhattanville development).

Cumulative Emissions Inventory

A cumulative emissions inventory of NAAQS, including PM 2.5 and HAPS must be prepared consisting of:

- I. All permitted combustion sources with heat inputs greater than 2.8 million BTU/hr for a primary study area encompassing Columbia's Morningside Heights and Washington Heights Campuses and proposed Manhattanville development.
- II. A secondary study area of 2 kilometers from the boundary of the primary study area consisting of permitted combustion sources greater than 50 millions BTU/hr.
- III. A tertiary study area between 2 kilometers and 10 kilometers of the primary study area boundary of current and proposed "major" combustion-related facilities.

PM 2.5 Impact Analysis

- I. It is assumed that NYCDEP/NYSDEC criteria for assessing PM 2.5 impacts, as set forth below will be used:
 - 5 ug/m³ 24-period at both ground and elevated receptors;
 - 0.3 ug/m³ annual impacts at discrete ground level or elevated locations; and
 - on an annual average neighborhood average basis
- II. Air dispersion associated with relocation of the Bus Depot, as well as potential options to treat air from the sub-grade bus depot must be analyzed.
- III. The air quality impacts from an accidental release of biological substance from a research facility or during transportation must be analyzed.

TASK 20: NOISE

- I. The EIS should assess potential noise impacts on Manhattanville Houses, Grant Houses and 3333 Broadway from increased traffic and building operations in the Project Area, as well as sound reflected off new tall buildings from the IRT viaduct above Broadway and identify mitigation measures.
- II. The EIS should assess potential noise impacts from the bus depot air circulation vents on West 133rd Street. Construction of tall buildings above the existing bus depot may create a reverberation effect impacting residents at 3333 Broadway. Mitigation measures should be identified.
- III. Assessment of weekend noise levels should be included in the analysis. If the proposal is to introduce a 24/7 environment into an area that is currently quiet on weekends, there may be significant impacts.

TASK 21: CONSTRUCTION

- I. The EIS should consider a separate "build year" baseline for peak construction impacts. Analysis of construction impacts must be based on periods of maximum construction activity, e.g. four buildings constructed simultaneously as well as subgrade activities for estimated completion by 2015.

- II. The EIS should consider construction impacts from the *renovation* of existing buildings in the Academic Mixed Use Area for interim use. (Draft Scope, p.23)
- III. Analysis of transportation related construction impacts should include loss of curbside parking as a result of road and lane closures and competition for parking spaces from construction workers.
- IV. Construction impacts for all pertinent technical areas must be analyzed.
- V. Analysis of socioeconomic related construction impacts should include loss of revenue - and potential displacement of local businesses - arising from reduced access for customers as well as shipping or delivery services; service and utility disruptions; and loss of parking.
- VI. Construction impacts analyses must be based on the period of maximum construction activity and must consider both subgrade and above grade activities.
- VII. Proposed construction techniques for both subgrade and above-grade activities must be documented.
- VIII. Access limitations/restrictions arising from subgrade construction must be documented and impacts on businesses and residents - including reduced economic activity and increased emergency response times - analyzed.
- IX. All utilities proposed to be relocated due to sub-grade construction must be identified, along with the potential impacts due to disruptions of service.
- X. The proposed methods for dust, air pollution and noise control during construction must be presented in the EIS. (Also applies to Tasks 19 and 22)
- XI. All construction equipment must use ultra low sulfur fuel and maximum available control technology for particulates emissions. (Also applies to Tasks 19 and 22)
- XII. The impacts and benefits of alternative techniques for sub-grade excavation, construction, and the removal of buildings/infrastructure (deconstruction and demolition) must be analyzed.
- XIII. All temporary takings of business establishments during the construction period must be analyzed as permanent takings.
- XIV. Impacts on public transportation must be analyzed.
- XV. A schedule of construction activities, that includes all periods of restricted vehicular and pedestrian access as well as excavation, demolition, and relocation of utilities, must be included in the EIS.
- XVI. Strategies for minimizing the impacts of construction vehicles must be analyzed, including:
 -
 - Minimizing the number of construction truck trips through the maximization of truckloads.

- Use of truck fleets that use alternative fuels.
- Siting of an alternative fuel station in proximity to the proposed action.
- Use of non-truck based transport of construction materials.

TASK 22: PUBLIC HEALTH

The EIS should include an analysis of the potential impacts on public health, community identity and social psychology caused by direct and indirect residential and business displacement and complete transformation of the physical and social environment as a result of Columbia’s proposed rezoning action and development plan. *aka “Manhattanville” A White Paper on Columbia University’s West Harlem Project*, attached in Appendix A, discusses the significant and potentially long-term consequences of “massive spatial reorganization” such as widespread urban renewal practiced in the 1950s and 1960s, with reference to Columbia’s Manhattanville expansion plan.

TASK 23: MITIGATION

The EIS should consider the *avoidance of impacts* as well as mitigation in all technical areas. (Per Community Board 9’s letter to DCP/Columbia, dated November 7, 2005)

TASK 24: ALTERNATIVES

197-a Plan Alternative

The comparative impacts of the 197-a Plan must be analyzed **for each technical area** in the EIS, along with existing conditions, Columbia’s proposed development for the future “build years,” the no-build alternative, and any other alternative, as required under both NYC and NYS Environmental Review Laws, not just in the alternatives section.

Alternative without Eminent Domain

The EIS must include analysis of Columbia’s proposed Manhattanville Campus development *without* Eminent Domain as an alternative for each topic area – with infill development focused on preserving existing residential buildings, businesses that want to stay and buildings that are proposed for historic preservation.

Academic Based Alternatives

A critical component of Columbia University’s rationale for its Manhattanville expansion is increased space per student to enable it to compete with other similar institutions. (See Draft Scope, p.3). Yet, Table 5 in the Draft Scope indicates that approximately 1.4 million gross square feet - representing only 19.3% of the total gsf in the proposed Academic Mixed-Use Area (Subdistrict A) and half of the area allocated for research - is for academic purposes. The EIS must analyze how the purely academic based needs set forth in the Manhattanville proposal can be achieved within the framework of the 197-a Plan, and without the use of Eminent Domain.

Academic Based Alternative & Avoidance Based Alternative

The EIS should consider a separate alternative that would achieve the academic needs identified in Columbia's Project Plan while only developing that portion of the research facilities that avoids the use of Eminent Domain and is consistent with the 197-a Plan.

Alternative Locations for Research Facilities

Alternative locations for establishing research facilities, including those identified by Columbia University, must be analyzed in the EIS. For these alternative locations:

- I. Identify each alternative location assessed by Columbia University;
- II. Identify the specific rationale for rejecting each alternative location;
- III. Identify what portions of the research facilities can be established at the alternative locations;
- IV. Identify what portions of the research facilities require a contiguous location;
- V. Identify the specific rationale for a contiguous location;
- VI. Identify the impact of establishing research facilities at non-contiguous locations;
- VII. Identify what portion of the total square footage projected to be developed by 2015 can be accommodated at alternative locations;
- VIII. Identify all properties owned by Columbia University at alternative locations, and;
- IX. Identify population characteristics in proximity to each of the alternative locations.

APPENDIX

1. CB9-M Resolution on Eminent Domain
2. Expanded study area map, including Columbia's Morningside Heights, proposed Manhattanville, and Washington Heights campuses, as well as City College.
3. CB9 letter to DCP/Columbia, dated November 7, 2005
4. List of significant scenic resources, potential historic districts, and potential individual landmarks – CB9-M 197-a Plan.
5. *aka "Manhattanville": A White Paper on Columbia University's West Harlem Project.* The Community Research Group of the New York State Psychiatric Institute at Columbia University and Mailman School of Public Health, Columbia University. Drs. Robert and Mindy Fullilove, Co-Directors.