KINGSTON FORWARD

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DRAFT GENERIC ENVIRONMENTAL IMPACT STATEMENT

for the

FORM-BASED CODE REZONING OF THE CITY OF KINGSTON, NY

(*An Analysis of Proposed City Code Chapter 405 – The Kingston Form Based Code*)

Project Location:
City of Kingston, Ulster County, New York

SEQRA Lead Agency:
City of Kingston Common Council
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Kingston, NY 12401

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City Hall, 420 Broadway
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Date of Lead Agency DGEIS Acceptance: March 7, 2023

Date of Public Hearing: March 23, 2023

Date of Close of DGEIS Public Comment Period: **April 10, 2023**

Steve Noble, Mayor

The proposed Form-Based Code Rezoning upon which scoping this DGEIS was based can be found on the project website (https://engagekingston.com/kingston-forward) or a copy is available for viewing at the City of Kingston City Hall in the Office of the City Clerk: 420 Broadway, Kingston, NY 12401.

LIST OF APPENDICES:

1. **Form Based Code**
2. **Final Scoping Document**
3. **Zoning Potential Analysis**
4. **Kingston Forward Charrette Summary - December, 14, 2021**
5. **SEQRA Coastal Assessment Form as per Existing City Code Chapter 398**
6. **Select Documentation & Correspondence**

1.0 EXECUTIVE SUMMARY

The City of Kingston is located in Ulster County, in the Hudson Valley region of New York State. The purpose of this Draft Generic Environmental Impact Statement (DGEIS) is to evaluate the potential for adverse environmental impacts in association with the City of Kingston's proposed adoption of a new City of Kingston Form Based Code (FBC) and Zoning Map (DGEIS Appendix A). The proposed action being evaluated by is the adoption of:

- The City of Kingston Form Based Code (FBC) which updates and replaces the City's existing Chapter 405 Zoning regulations and procedures.
- An updated Zoning Map referred to as the "Regulating Map" that updates and replaces the City's existing zoning map by introducing new transect zoning districts.

Project Description

The City of Kingston plans to replace its existing zoning with a Form Based Code (FBC). The City's '*Kingston Forward: Citywide Rezoning*' project website for this rezoning is at: https://engagekingston.com/kingston-forward

A Form Based Code focuses primarily on the physical form of development (rather than land use) and can be used to implement a desired community vision. Land uses are still regulated, but more flexibility on use is built into the code, and the rules are based on context – the type of place or environment you are trying to create. Form Based Codes make development more predictable, promote better design, and are simpler, so it is easier for people to use the code and understand what it allows.

The existing zoning is outdated and focuses on regulating uses (less so than design and impacts) and it is characterized as auto-oriented and conducive to sprawl. Kingston's existing zoning law dates from the 1960's. It has been amended in pieces and can be confusing and unclear. The existing zoning does not align well with Kingston's historic building tradition, when a large number of existing, highly characteristic and uniquely positioned and grouped buildings were established prior to the advent of zoning. The existing zoning is organized in a way that it often provides for large setbacks between streets and buildings, which has provided an auto-orientation, with associated requirements for substantial parking areas that are emblematic of isolated buildings surrounded by pavement with proportionately large lot and yard areas and not conductive to people walking from one place to another without getting in a car. Moreover, aspects of the existing zoning code are organized in a way that is not aligned to meet current community needs and values.

The proposed zoning standards are oriented to guiding the physical form of development and providing for design-based planning with replication and enhancement of context and traditional patterns of building. The FBC is also oriented to providing for complete streets that link and relate well with a flexible mix of uses, and which aid in advancing multi-modalism, with more ability for people to walk, bicycle, or use transit, as well as automobiles. In addition, the proposed FBC addresses a variety of community needs, including the necessity for greater housing options to service the many different needs that extend across this City.

The FBC focuses on guiding the physical pattern of land use as a means to implement the community vision for growth. This Form Based Code is graphically rich, which aids in its ease of use and interpretation. This FBC is also organized to make development more predictable and provide for better design outcomes.

FBC Overview

In order to guide the physical form of development, the FBC will prescribe details of development by addressing factors such as:

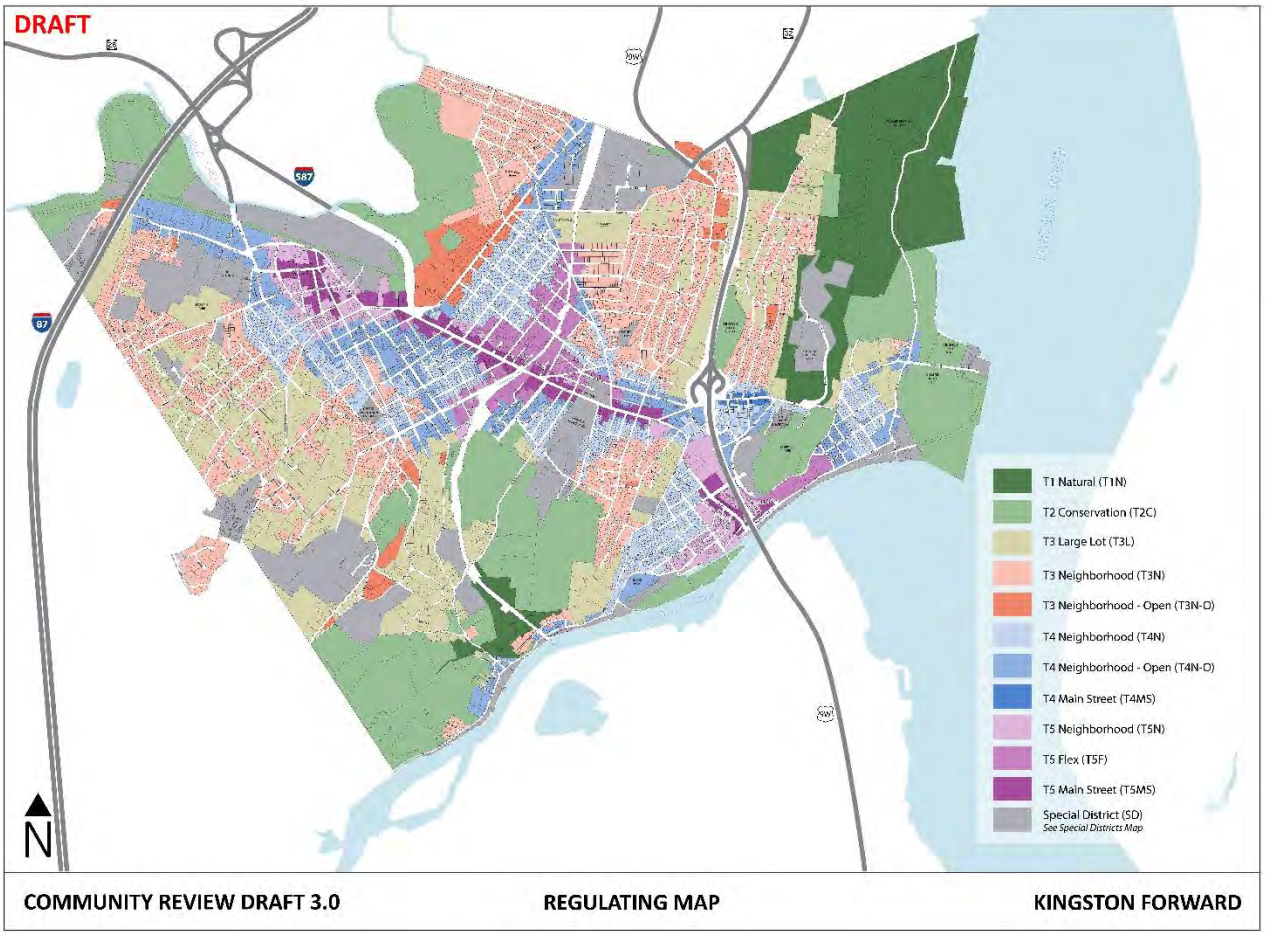
- Relationships of buildings to streets and open space;
- Height, massing and groupings of buildings;
- Architectural design and types of buildings; and
- Layouts of complete multimodal streets with quality designs that fit with land use.

In this way, the FBC regulates the location, design, construction, alteration, occupancy, and the use of structures along with the use of land. The FBC provides a detailed set of development standards, guidelines, and procedures that will result in compact and walkable mixed-use development using regulations and regulating plans that pay particular attention to the intended form and character of different locations in Kingston. Included in the FBC is specific transect regulations and a corresponding spatial Regulating Map that will prescribe the Transect District assignments, and which will be supplemented by a Special Districts & Parks Map and a Special Requirements Map that also compose the spatially assigned framework of regulations.

A Transect approach is a planning strategy that seeks to organize the elements of urbanism - building, lot, land use, street, and all other physical elements of the human habitat - in ways that preserve the integrity of different types of urban and rural environments. In other words, the organizing principle for the FBC is based on a hierarchy of places from the most urban to the most rural.

The designation of each transect zone along this transect hierarchy is determined by the type of place being maintained, evolved, or transformed, and then by the form and intensity of development. The transect zones are used to reinforce existing, or to create new, walkable, mixed-use environments. Secondarily, this FBC will regulate uses that are carefully chosen to maximize compatibility between uses and the envisioned physical form of each transect zone. The intent of this FBC, then, is also to create a well-functioning public realm across Kingston's diverse neighborhoods. The FBC zoning is also intended to aid City-scale growth and advance goals for mixed-uses, affordable housing, walkable streets, preservation and enhancement of community character, economic growth, compatible infrastructure and long-term sustainability.

Figure 1: Draft Regulating Map



The FBC's Transect Zones guide future development in the City using the following principles of each zone:

- **T5 Main Street (T5MS)**: The intent of this transect is to create a walkable, vibrant, urban main street serving multiple neighborhoods and the City with commercial, retail, entertainment and civic uses, public transportation, and small-to-large footprint, medium-to-high density Building Types.
- **T5 Flex (T5F)**: This transect zone provides an urban form that can accommodate a diverse range of uses and Building Types, including some light industrial as well as live/work combinations, to reinforce the pattern of existing walkable neighborhoods and to encourage revitalization and investment.
- **T5 Neighborhood (T5N)**: This transect provides a variety of housing choices, in small-to-large footprint, medium-to-high density Buildings, which reinforce the walkable nature of a neighborhood, support neighborhood-serving retail and service uses adjacent to the zone and supports public transport.
- **T4 Main Street (T4MS)**: The intent of this transect zone is to create a walkable, vibrant urban main street serving multiple neighborhoods with commercial, retail, entertainment and civic uses, public transportation, and small-to-medium footprint, medium-to-high density Building Types.
- **T4 Neighborhood & T4 Neighborhood-Open (T4N & T4N-O)**: This transect zone intends to provide a variety of housing choices, in small-to-medium footprint, medium-to-high density Building Types, which reinforce the walkable nature of the neighborhood, support neighborhood-serving retail and service uses adjacent to this zone, and support public transportation alternatives. An Open Sub-Zone provides the same building form but allows for a more diverse mix of uses.
- **T3 Neighborhood & T3 Neighborhood-Open (T3N & T3N-O)**: The intent of this transect zone is to protect the integrity of existing, small-to-medium lot detached homes and reinforce their role within walkable neighborhoods and to allow new neighborhoods with this component. An Open Sub-Zone provides the same building form but allows for a more diverse mix of uses.
- **T3 Large Lot (T3L)**: The intent of this transect zone is to protect the integrity of existing medium-large lot detached homes and reinforce their role within the City.
- **T2 Conservation (T2C):** This transect protects the integrity of existing natural land and areas of steep slopes and natural vegetation with low density detached homes, and reinforce their role in the City.
- **T1 Natural (T1N)**: This transect zone ensures the preservation of open spaces and natural resources.
- **Special District Waterfront (SD-W/ SD-WMU), Commercial (SD-C), Multifamily (SD-MF), Flex (SD-F), and Institutional (SD-I)**: The intent of this Special District transect zone, with multiple subparts, is to facilitate coastal area development that is compatible with policy standards, plus for the other portions allow for existing drivable commercial, multifamily, institutional, and industrial/flex use areas, thereby enabling their continuing role within the City, and thereby preventing non-conforming lots, buildings and uses.

The minimum open space requirements of the FBC will guide development to generally reinforce the 'Priorities for Protection' as per an Open Space Vision set forth in the City's 2019 Open Space Plan. These priority locations cover: 1.) The Hudson River, Shoreline and Uplands, 2.) The Rondout Creek Corridor, Shoreline and Uplands, and 3.) The Esopus Creek Corridor and Lowlands.

Furthermore, the City's Comprehensive Plan and Local Waterfront Revitalization Program (LWRP) are advanced through the FBC's structing of compatible and resilient waterfront development. It does so within the associated

Transects and Special Districts on the greater Strand and along the Rondout as well as by the Hudson between Kingston Point Park and Sojourner Truth State Park.

Purpose of the DGEIS

The purpose of this DGEIS is to evaluate the potential and cumulative impacts of a possible program of future development in Kingston. It follows the Final Scoping Document adopted by the City's Common Council on June 7, 2022 (see DGEIS Appendix #2). The analysis herein is generic – it involves a hypothetical investigation of ways that the zoning will enable the future buildout of the City of Kingston as a means to evaluate the associated potential impacts compared to existing zoning. To understand these potential impacts, an estimate of the zoning potential for both existing and proposed zoning is presented.

Potential Adverse Impacts

The crux of analysis is an examination of the extent that utilizing the FBC's standards and techniques could result in potential adverse impacts that would be greater than, or potentially more impactful than, what may arise under the existing zoning. As the DGEIS works through specified subject matter that has been identified for analysis in the adopted Scoping Document, there are comparisons of factors like future Building Area, Lot Coverage and new Residential Units, under existing versus proposed zoning criteria.

The DGEIS identifies and evaluates the following potential adverse environmental impacts associated with the proposed adoption of the FBC, and includes a summary of the current status and discussion of potential impacts to and mitigation measures for each of the following: geology, soils and topography; plants and animals; water resources; open space and recreation; land use and zoning; historic and archaeological resources; socioeconomics; multimodal transportation and parking; consistency with community character; energy use, air resources and noise; community services and infrastructure; and consistency with community plans.

Mitigation Measures

There is a full summary of the proposed mitigation measures in part 6.6, the DGEIS's Program Implementation element. That summary covers the mitigation presented across the 12 categories of analysis contained in part 4.0.

The FBC aims to incrementally achieve new building in a form that is compact and compatible with the existing pattern of development. It also focuses on quality design and enhancing community character.

Overall, the Transect Districts criteria and associated regulating standards allow a high mix of uses. They particularly are organized to channel growth into T5 and T4 zones and generate growth in the housing supply. Meanwhile, on a city-scale, the FBC's standards and guidelines reinforce the open and natural character of three landscape-level Priority Conservation Areas. At the same time, the FBC facilitates quality and characteristic onsite buildouts by regulating building placements and providing site arrangements that are well-organized.

The FBC will foster land use that contains usable open space, generates strong building and street relationships, and achieves layouts amenable to multimodal transport. Moreover, the FBC bulk regulations and architectural standards will aid placemaking, and structure growth that is compatible with existing form. The design-based placemaking that will be fostered is a mitigation measure that will prevent negative impacts to arise due to the alteration in the scale of building, or the patterns of building and massing that may accompany FBC adoption.

Additional mitigation objectives aligned with these purposes are:

- Streamlined reviews for Minor and Major developments which fit Code objectives and do not require waivers or variances. For one, the FBC introduces a new Minor Site Plan review board / approval process for incremental infill that fits the community vision, which applies to SEQRA Type II applications and development involving less than 2 acres and consisting of one to two lots.
- Development on slopes greater than 25% is not allowed.
- Flexible siting of buildings/ structures is allowed under certain circumstances and procedures in order to avoid disruption to identified natural character/ resources.
- The Waterfront Overlay guides natural resource protection, including in- and on- the water.
- Parking standards require tree planting in large parking lots (heat island mitigation; habitat creation).
- The Waterfront Overlay Standards require public access to the shoreline.
- Within three years it is recommended to advance City Open Space and Recreation Plans updates to assist with continued enhancement of existing parks, trails, and open spaces, plus establish additional assets, facilities, and open space and recreation services that can help serve expected residential growth.
- Site-specific environmental review will be used to regulate bonus height allocations in order to manage the potential for impacts from additional scale.
- Compliance with Waterfront Revitalization Area policies and development guidelines will be required for site-specific development proposals using the applicable process of environmental review.
- Development of a City-wide Historic Preservation Plan is recommended as a mechanism to catalog historic resources, gaps in protection, identify any added resources to protect, plus identify any other techniques to consider applying to assist preservation and the enhancement of unique historic character.

Housing availability and affordability has been a primary concern for City leaders and community participants in the rezoning process. The Form Based Code is organized to add diversity and growth in the housing supply. At the same time, it presents specific uniform requirements for achieving more affordable housing, for all developments of 7 or more units, with increased requirements for developments with more than 20 or 50 units, plus it provides incentives to create affordable and workforce housing such as potential bonus height, expediated review, and discount of required fees. Other housing related mitigation includes:

- Allowing diverse “Missing Middle” (https://missingmiddlehousing.com/) building types throughout Kingston by-right;
- Removing minimum parking requirements;
- Setting no upper limit on the number of units on a lot for certain building types (the limit is instead defined by building massing/height);
- Allowing accessory dwelling units (ADUs) citywide;

Meanwhile, the FBC will promote lower Vehicle Miles Traveled (VMT) in the community through its extensive complete street prescriptions and by generating proximity in the places people, live, work and play. For instance, based on the FBC transect arrangement, there would be ability to establish corner stores within ¼ mile of almost all future residences. Also, minimum on-site parking requirements were identified as being a primary factor limiting potential for existing building reuse and infill development. The new code removes minimum parking requirements in most districts, allowing individual property owners to determine how much off-street parking is needed based on their proposed use of the land, rather than the City having a one-size fits all requirement that is often found to be excessive in practice. The code also introduces parking maximums, to ensure parking areas are not so large that they negatively impact walkability and environmental conditions. Finally, the FBC includes a requirement for a Parking Demand Reduction Strategy for developments of a certain size, to ensure not only that there is a strategy to meet demand for parking, but that strategies to promote walking, cycling, ridesharing and transit are used.

Alternatives Considered

Alternative actions were considered in preparing the DGEIS. This included a "No Action" approach to addressing the impacts of potential growth. In this alternative, land use laws and development policies remain unchanged from current existing arrangements, as does the resulting land use pattern in the City.

Deliberations about the purpose of the FBC also included a further alternative approach of constructing buildings with higher densities in T4 and T5 transect zones. This alternative assesses the impacts if there are higher building construction allowances with one additional story more in T4 and T5 transects than is provided for in the FBC.

General Findings

The City of Kingston, NY - Zoning Potential Analysis, or ZPA, (DGEIS Appendix #3) was used in evaluating the generic potential impacts of the existing versus proposed zoning on future development in Kingston. As noted, this comparison of potential for growth under existing zoning and the FBC presents calculations for built area, building footprint, and dwelling units generated using a subset of parcels that could readily be compared and analyzed for the expected building characteristics under existing versus proposed zoning.

Table 1 Current Zoning Analysis

CURRENT ZONING CAPACITY BUILT AREA	74,061,946	Sqft
CURRENT ZONING CAPACITY FOOTPRINT AREA	33,493,751	Sqft
CURRENT ZONING CAPACITY DWELLING UNITS	12,074	du

Source: Kingston Zoning Potential Analysis by Gridics.

Table 2 Potential Zoning Analysis

PROPOSED ZONING CAPACITY BUILT AREA	85,077,538	Sqft
PROPOSED ZONING CAPACITY FOOTPRINT AREA	31,973,147	Sqft
PROPOSED ZONING CAPACITY DWELLING UNITS	16,531	du

Source: Kingston Zoning Potential Analysis by Gridics.

One main finding from the Zoning Potential Analysis (ZPA) is that proposed zoning regulations only slightly increase the overall intensity of the development potential in comparison to the current zoning regulations. Using figures from the ZPA, while existing zoning has a generic potential for 74,061,946 square feet of new building, the new proposed code could yield 85,077,538 square feet. This difference of 11,015,592 square feet greater growth is an increase in intensity of 14.9%.

Another finding is there will be a slight decrease in the footprint of the development allowed and yielded in the future under the proposed zoning, in comparison to the existing regulations. The decrease under the FBC is 4.32%.

The other finding is the proposed zoning regulations increase the allowance for and yield of new residential units. Using comparisons in the Zoning Potential Analysis shows that the generic impact of the rezoning will within the 7,334 parcels analyzed, result in 16,531 new dwelling units over an undefined time frame. This is a net change of 4,457 greater future dwelling units than the 12,074 units expected under existing zoning. The substantial potential new housing that could generically arise under proposed zoning is an increase of 36.9%, which would mean that more housing would be allowed within the FBC framework that still would maintain and reinforce Kingston's traditional development patterns.

This DGEIS within Section 4.0 provides detailed analysis of the potential effects of the FBC across 12 subject-oriented categories of analysis that are laid out in the adopted scope of work. These delve further into the dimensions of possible impacts and the characteristics. DGEIS, Section 6.6 summarize the potential mitigation specified based on the reviews provided for each of these associated 12 topic areas.

Overall, the FBC reduces the total number of districts, simplifies processes, and it clarifies regulations while modestly increasing the potential total building, elevating the FBC's Zoning Capacity Built Area by 14.9%, or 11,015,092 square feet, greater than that calculated for existing zoning within the 7,334 parcels analyzed in the ZPA. It also allows for a substantial increase in the potential for more housing while generating a compact footprint of growth. The proposed zoning regulations will allow a larger supply of housing, thereby helping make housing more affordable. The FBC will foster walkable neighborhoods, preserve historic building patterns, and support the conservation of natural resources and the development and enhancement of open spaces.

Generally, the FBC is meant to provide compatible form and environmental design. It will direct and generate growth which will beneficially blend with existing building and patterns. This can aid in sense of place while providing for more compact, less sprawling layouts which can aid ecological quality and cost-effective infrastructure and services. Importantly, a lot of expected potential growth will arise in T5 and T4 transects which are locations with established connected and often higher order street grids and which are well organized to receive new growth. For instance, per the ZPA, almost half (48.3%) of Proposed FBC Density will arise in the T5s. With 26,923,678 of 85,077,538, or 31.7% of all future land use arising in T5 (ZPA), but with the combined T5 acreage only occupying 6.7% of the city, this means that the density and scale of building will be focused in T5 under the FBC as the new code facilitates a diverse housing supply and supports efficient land use, which is conducive to people walking, bicycling, and taking transit.

2.0 PURPOSE & PROCEDURAL HISTORY

Purpose

Pursuant to Article 8 of the Environmental Conservation Law of the State of New York, and consequently the provisions of SEQRA, all agencies are required to "determine whether the actions they directly undertake, fund or approve may have a significant impact on the environment, and, if it is determined that the action may have a significant adverse impact, prepare or request an environmental impact statement."

The purpose of this Draft Generic Environmental Impact Statement (DGEIS) is to comprehensively analyze the potential for adverse environmental impacts that may arise based upon the adoption of the new City of Kingston Form Based Code (FBC) zoning law. This new FBC, which represents a complete re-write of zoning, will regulate land use throughout the City. The DGEIS will include an analysis of those impacts which may result as future building and infrastructure development proceed in accordance with implementation of this altogether new City zoning law.

The Lead Agency for this action is the City of Kingston Common Council. The Common Council prepared and adopted the Final Scoping Document on which this DGEIS is based. The Final Scoping Document (DGEIS Appendix B) lays out all the necessary information that must be assembled and analyzed in this DGEIS in order to evaluate potential adverse impacts, alternatives, and mitigation measures.

The Final Scoping Document is a detailed content guide, or organizational outline, for the environmental analysis and issues that will be specifically addressed in this DGEIS, and provides:

- The requisite content in accordance with the provisions of SEQRA NYCRR 617.8 through 617.10 to guide formulation of a DGEIS. This DGEIS assembles identified relevant and material facts and is intended to be analytic but not encyclopedic.
- For this DGEIS to contain a concise description of the Action; its purpose, public need and benefits, and the location/ setting. It also provides that the DGEIS will examine areas that may be affected and it presents alternatives to analyze with sufficient detail to enable generic comparative assessments.
- For the DGEIS to analyze the potential for significant adverse impacts. In conjunction with this, proposed mitigation will be introduced and described in terms of possible effects within the subject-level narratives. The DGEIS will also document public input used in forming and evaluating the DGEIS. Sources of information will be clearly identified.

Procedural History

The City Council conducted the following steps per SEQR Regulations 6 NYCRR Part 617 regulations:

- On April 5, 2022, the City Common Council:
    - Declared their intent as Lead Agency for the action and a coordinated review was carried out with identified involved and interested agencies.
    - Completed Parts 1, 2, and 3 of a Full Environmental Assessment Form (FEAF), and determined the Action is a legislative action and, thus, declared the City Common Council as Lead Agency.
    - Classified this Project as a Type 1 Action in accordance with SEQRA regulation NYCRR 617.4(b)(2), since the adoption of the Form Based Code (FBC), is a type of zoning, with prescribed land use components and/or recommend zoning changes covering 25 or more acres.
    - The City Council reviewed the FEAF as part of making a SEQRA Determination of Significance and issued a Positive Declaration specifically determining that a Generic Environmental Impact Statement (GEIS) is required for the analysis of the proposed FBC.
    - Public involvement was ensured during the process through timely publications in the Environmental Notice Bulletin (ENB) and local newspaper of a notice for the: Positive Declaration; the release of a Draft Scoping Document; and for identification of the intent to hold a scoping session and receive comments on the Draft Scoping Document.
    - A Draft Scoping Document was issued and a date was set for the Public Scoping Session.
    - Distribution of a notice of the Public Scoping Session went to potentially involved and interested agencies and adjacent jurisdictions, and such determinations were published in the Environmental Notice Bulletin (ENB) and local newspaper.
- On April 21, 2022, the Common Council:
    - Conducted a Public Scoping Session in Kingston City Hall over publicly accessible teleconferencing software. There were four (4) commentors at that meeting and multiple written communications received after the meeting.
    - Public comments, both written and in-person at the scoping meeting were received on the Draft Scoping Document up through May 2, 2022.
- On June 7, 2022, the Common Council:
    - Adopted by resolution the Final Scoping Document. This Final Scope was subsequently distributed to all involved and interested entities and posted to the Environmental Notice Bulletin (ENB) and the City's website. See DGEIS Appendix B for the Final Scoping Document.

In addition to the SEQR procedures, the City provided the following project related public input opportunities:

- September 20 and 21, 2022 – Walking Tours

  - The Project consultant conducted walking tours and initial stakeholder meetings to assess community conditions. Prior to visiting, they reviewed existing community policies, including the 2025 Comprehensive Plan (2018), Chapter 405 'Zoning', the full City Code, plus subject-specific plans like the City's 2020 Open Space Plan. While onsite, the consultants toured the City and documented existing conditions. Factors reviewed included: land use; community appearance; street conditions, infrastructure; natural environment, and others. Also, this team held meetings with city staff, elected leaders, community activists, and regional officials to examine issues and opportunities and setup for a multi-day information gathering Charrette.

- November 4 to 10, 2021 – Kingston Forward Charrette

  - The Kingston Forward Charrette was a major source of community participation. There were 386 total participants. There was extensive input regarding topics of interest and potential environmental significance in relation to the rezoning. The Charrette was organized so the consultants were available during a sizable span of time for one-on-one consultation with any interested parties. The Charrette was also comprised of multiple location visits/ tours, and general public and subject-specific interested party meetings that explored and delved into community needs, land use, and development-related issues and subject dimensions, and assessed how these and other factors may influence and relate to the form-based code rezoning.

- December 14, 2021 – Charrette Summary

  - A Draft 'Charrette Summary' was provided to the City introducing the project. It presented major subjects ("big ideas"), plus case studies and analysis covering five areas of the City. All Charrette proceedings are documented, including online engagement. Also, interested party consultations included an opinion survey administered to gather feedback on rezoning. The queries captured respondents' interests and their relative agreement with test statements on relevant topics such as housing, mix of uses, and building types.

- February 23 and 24, 2022 – Public Meetings

  - The first public meeting sought additional input related to Hurley and Albany Avenues areas and approaches in the FBC.

  - The second public meeting examined the waterfront and how the FBC may be used to advance development in and around it. There were two online opinion surveys used to gather public input on the potential rezoning of these locations.

- May/June 2022 – Preliminary FBC Draft 1.0

  - Preliminary FBC Drafts were presented to the community and tested. These documents were available for review and comment and the input was used to adjust the Code based on consideration of this feedback, with significant calibrations and adjustments made based on this public involvement:

  - FBC Draft 1.0 was publicly shared and a Public Hearing on the same matter occurred on June 22, 2022.

  - A community presentation was held on June 8th. This hybrid online/in-person meeting was conducted in English and Spanish and provided an opportunity for questions and comments on the rezoning effort.
  - There were four open house events and a walking tour of the Waterfront Area held on June 10 and 11, 2022 to solicit further community feedback on Draft 1.0.

- August/ September 2022 – Preliminary FBC Draft 2.0
  - FBC Draft 2.0 was publicly shared and a Review Meeting occurred on September 15, 2022 with the public.

- Proposed Chapter 405 - The Kingston Form Based Code was released in November 2022. This was published on the EngageKingston website, with annotation showing the responses to community comments on the previous version 2.0 draft. The Common Council accepted that code proposal as complete and referred it to involved entities to advance the compliance and approvals process.

The next steps in the SEQRA process will be:

- The City Council's determination that the DGEIS is adequate with respect to its scope and intent for the purpose of commencing public review.
- Scheduling a Public Comment Period and Public Hearing on the DGEIS
- Preparation of a Final GEIS.
- Preparation of Findings Statement.

It is the responsibility of the City of Kingston Common Council as Lead Agency to oversee GEIS completion. While no agency other than City Council can approve or directly undertake this Action, through coordinated review process, multiple involved agencies and the public will have an opportunity to comment on the Action. Simultaneous with the public comment period and hearing, there will be notification provided to any involved and interested parties that this document is available for their review and comment. Inclusive of this also, there will be formal referrals of the new proposed zoning code to the City Planning Board, City Landmarks Preservation Commission, the local entity that provides for consistency determinations of actions that may affect the City's Local Waterfront Revitalization Program (LWRP), plus it will be referred to the Ulster County Planning Board.

The City will post all mandatory submittals and documents required to support the SEQRA process online at the ***Engage Kingston Website https://engagekingston.com/kingston-forward***.

3.0 DESCRIPTION OF PROPOSED ACTION

The proposed action being undertaken is a complete replacement of the City Zoning Code, Chapter 405, with the introduction and approval of a new Form Based Code for the City of Kingston. The location of this action covers the whole of the City of Kingston, Ulster County, NY.

The new FBC will replace the existing zoning ordinance which dates from the 1960's, has been amended in pieces, and has proven to be confusing and unclear. The existing zoning does not align well with Kingston's historic building tradition and development patterns; this has led to the approval of auto-oriented buildings conducive to sprawl. Moreover, other aspects of the existing zoning code do not meet current community needs and values.

A new Chapter 405 Form Based Code will replace the existing zoning standards of the City of Kingston to guide the physical form of development by providing a design-based approach. The FBC prescribes details of development by addressing:

- The relationships of buildings to streets and open space;
- The height, massing and grouping of buildings;
- The architectural design of building elements; and
- The layouts of complete, multimodal streets of quality design.

In this way, the Form Based Code regulates the location, design, construction, alteration, occupancy, and use of structures along with the use of land. This Chapter is legally enforceable as local law pursuant to Municipal Home Rule §10(1)(ii)(a) and Statute of Local Governments §10(6). This Chapter is also adopted under provisions of New York General City Law §28-a, §20(22-25), §32-34, §27-a, §27.b and §81-b.

The FBC provides a detailed set of development standards and procedures that are tied to existing context and provide prescriptions that pay attention to the intended form and character of Kingston, thus resulting in a compact and walkable development pattern. Included in the FBC are specific regulations and a corresponding spatial Regulating Map that defines the introduced Transect/Special District assignments to replace the City's existing zoning district standards.

Figure 2: Transects Demonstrating Density Transition

The rural-to-urban transect approach is a planning technique and strategy that organizes the elements of urbanism – building, lot, land use, street, and all other physical elements of the human habitat – in ways that preserve the integrity of different types of urban and rural environments. In other words, the organizing principle for the Chapter is based on a hierarchy of places from the most urban to most rural. The designation of each transect zone along this transect hierarchy is determined by the type of place being maintained, evolved, or transformed and then by the form and intensity of development, all within the context of city-scale growth according to the comprehensive plan.

The transect zones are used to reinforce existing, or to create new, walkable, mixed-use environments. Secondarily, the FBC will regulate uses that are carefully chosen to maximize compatibility between uses and the envisioned physical form of each transect zone. The FBC is intended to create a well-functioning public realm across Kingston's diverse neighborhoods.

The proposed FBC Transect Zones are intended to replace the City's existing zoning ordinance and guide future development as follows:

- T5 Main Street (T5MS)
- T5 Flex (T5F)
- T5 Neighborhood (T5N)
- T4 Main Street (T4MS)
- T4 Neighborhood & T4 Neighborhood-Open (T4N & T4N-O)
- T3 Neighborhood & T3 Neighborhood-Open (T3N & T3N-O)
- T3 Large Lot (T3 Large Lot (T3L)
- T2 Conservation (T2C)
- T1 Natural (T1N)
- Special Districts: Waterfront (SD-W/ SD-WMU), Commercial (SD-C), Multi-family (SD-MF), Flex (SD-F), and Institutional (SD-I).

Alternative actions are also discussed, which include a "No Action" approach to addressing the impacts of potential growth. In this alternative, land use laws and development policies remain unchanged from current existing arrangements, as does the resulting land use pattern in the City.

Aside from a No Action alternative, deliberations about the purpose of the FBC also included a further alternative approach of constructing buildings with higher densities in T4 and T5 transect zones. Using a buildout analysis, this methodology was able to assess impacts that could arise if there are higher building construction allowances with one additional story more in T4 and T5 than is in the baseline FBC.

The FBC is intended to aid City-scale growth. It has goals to advance mixed-uses, affordable housing, walkable streets, preservation of community character, economic growth, compatible infrastructure and long-term sustainability. The density allocated using the Code centers on the cores in Uptown, Midtown, the Rondout, plus along the Broadway corridor. Generally, there are lower densities in their surroundings.

4.0 EXISTING CONDITIONS, POTENTIAL IMPACTS & MITIGATION

4.1 Geology, Soils & Topography

4.1.1 Existing Conditions

Bedrock Geology

As discussed in the Natural Resource Inventory, the generalized bedrock characteristic of Kingston is uniquely and predominantly limestone. It represents materials of the Onondaga and Glenerie formations (see NRI Appendix C, Map Fig. 16. 'Bedrock Geology of Kingston, NY'[1]). This historically valuable limestone bedrock natural resource, which extends from High Falls to Kingston, was a source for the Nation's early concrete industry and started in the Kingston area beginning in the 1820's and extended until the advent of Portland Cement a century later.

Ecologically, the calcium rich bedrock is prone to dissolution by acidic surface water infiltration, and it gave rise to abundant caves and kept karst topological features across the region. Caves, regionally and in Kingston, still serve as important hibernaculum (nesting/roosting sites) for bats, though utilization of the features have ranged from mushroom farming to planned below-ground cooling systems for computing arrays. In addition, the carbonate layers contributed significantly as parent bedrock material to rich and productive soil systems in the area.

Future development on the existing bedrock of the City should be considerate of the varying nature of the associated slopes. Land along the Hudson River shore within Kingston's corporate boundaries is generally composed of flat and level coastal areas ranging between 0-200 feet in width. Steep slopes rise above inland boundaries of these low floodplains. Peak elevations of these slopes are as high as 250 feet[2].

Kingston Point, at the mouth of the Rondout Creek, is the largest lowland area in the City's coastal area, but it is conserved and will not face development. As the coastal area proceeds westerly along the boundaries of the Rondout, topographic conditions again become undulating and rise upwards, similar to those conditions along the Hudson. The floodplain is generally wider along the Rondout waterfront; however, the adjoining slopes are typically not as high, seldom rising above 200 feet[3].

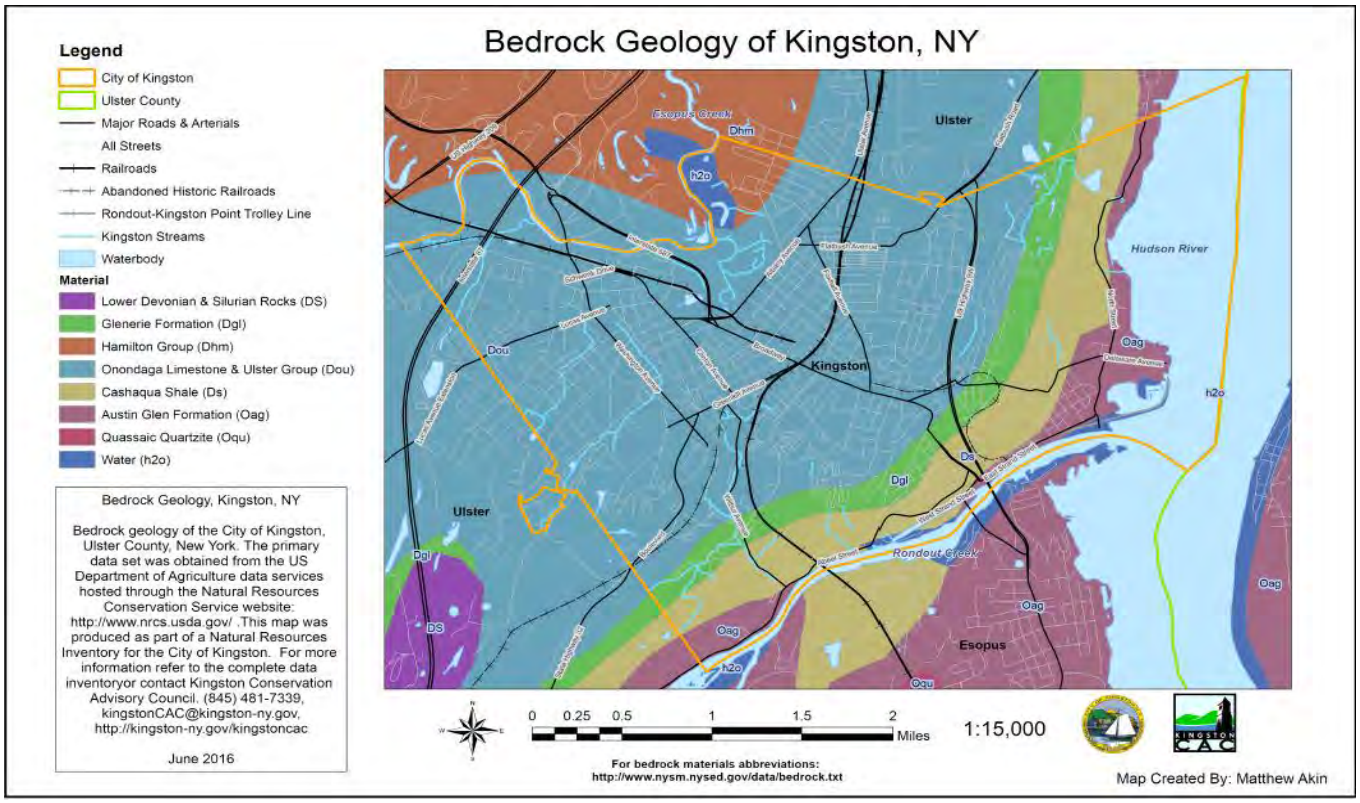
Overlapping with discussion that follows about surficial geology and soils, and as can be viewed on the topography graphic, Figure 4, it is noted that the Hudson River coast has adjacent steeper slopes. Yet, many of the larger steep sloped areas, like within the confines of Sojourner Truth State Park, and at Hasbrouck Park, are conserved. There are generally no significant potential erosion problems associated with the steep slopes closest within the coastal area at this time, although identification of potential for erosion attributable to development, including within proximity of coastline, will continue, through demarcation on site plans, along with attendant prescriptions for utilization of erosion protective structures.

[1] https://kingston-ny.gov/filestorage/8399/8491/8495/10452/Bedrock_Geology.pdf

[2] 2013 NYSDOT Geotechnical Design Manual Geology of New York State, Section 2, Page 4

[3] Ibid, Page 5

Figure 3: Bedrock Geology of Kingston, NY

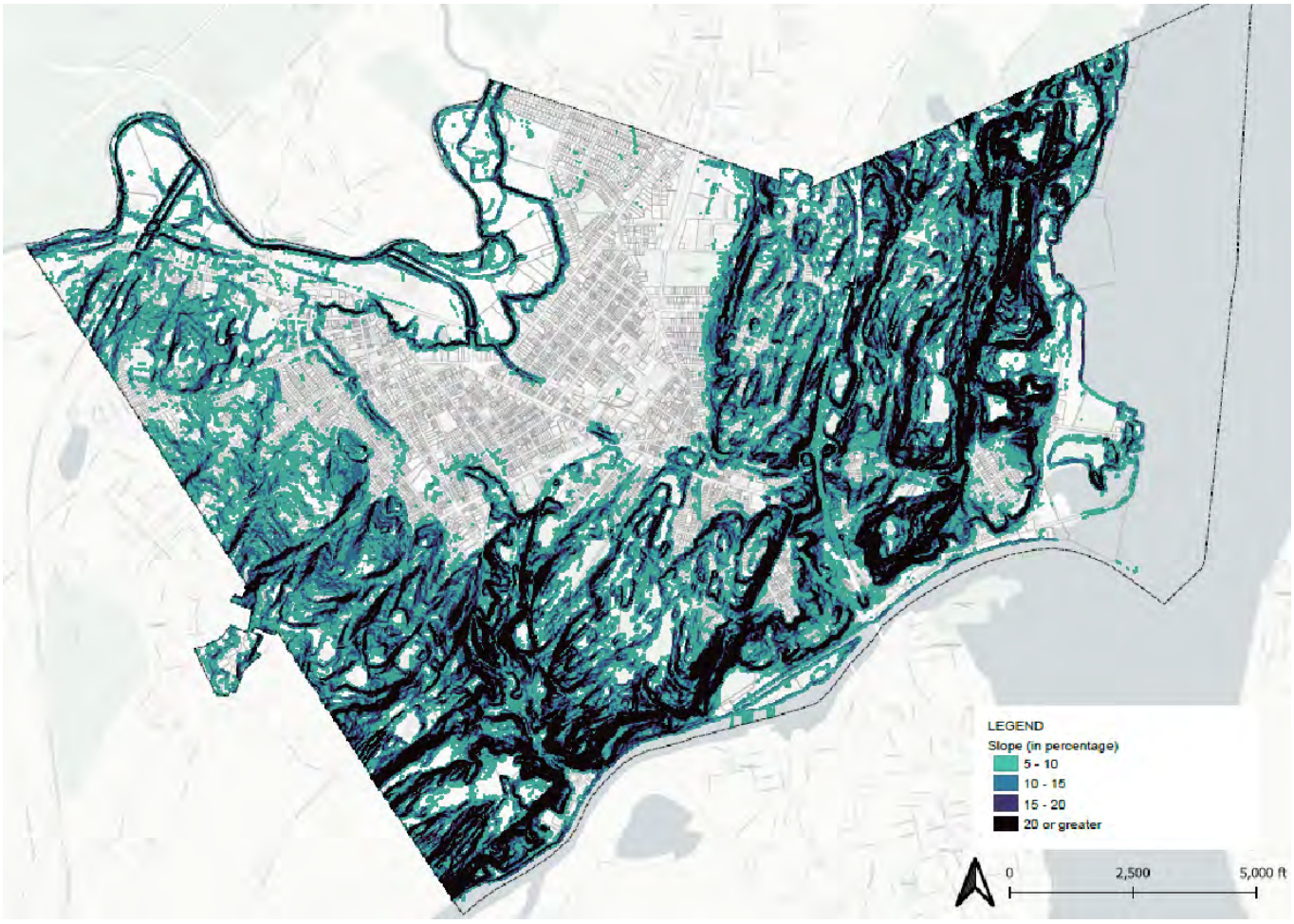


Future development along and proximate to the Hudson should be reviewed for potential erosion problems associated with construction on steeper slopes[4]. It is expected, similar to as is now the case under the existing code, the topography of sites will continue to be shown on site plans, with the depiction of inclines of 10% or more through clear identifying information.

As discussed in the subsection on Potential Impacts, it is expected that any proposed cuts and fills meeting a threshold size will be depicted on site plans within each land use application provided with site-specific review type regulation of development. Likewise, regulated development within floodplains will always be assessed for the potential to cause erosion. Since Geotechnical Design Manual indicates there are some siltation problems along the Rondout Creek, mostly attributable to strong currents, the potential for erosion, and existing protocols within the City Code for erosion and sediment control, will remain in place and continue to be applicable for regulated 'Land Development' as per City Code Chapter 353 Stormwater Management and Erosion & Sediment Control.

[4] Ibid, Page 5

Figure 4: City of Kingston Slope (in Percentages)



Surficial Geology

Surficial geology consists largely of bedrock and a range of glacially and water arranged materials (till, kame, lacustrine and alluvial deposits). Much of the City is covered with very thin bedrock-influenced soils.

The differentially weathered bedrock materials have given rise to some fairly strong relief and diverse, steep regions surrounding flatter, fertile basins within Kingston, namely around the three stream corridors comprising the Hudson River, Rondout and Esopus Creeks and the higher order streams heading into them (See 2018 NRI Figure 2. NRI Map – 'Soils and Hydric Soils of Kingston, NY'[5]). Per the NRI's text, steeper, hilly terrain in the southwest section of Kingston represents the northern tip of the Marlboro Mountains which extend to the south, trending northeast from the Shaupeneak Ridge. But having been isolated for potentially millions of years by the traversing Rondout Creek and somewhat differing geologically, it appears these two regions have expressed somewhat varying ecological patterns and /or processes.

[5] Soils_Geology.pdf (kingston-ny.gov)

The NRI indicates, page 9, there is more to be known and verified regarding the detailed patterns of the limestone geology of Kingston. Regions containing karst topography carry with them enhanced water pollution vulnerability, since any introduced pollutants can move much more quickly through any large, dissolved spaces and inherent to the feature is the relative lack of natural filtration systems.

Soils

Generalized information on the patterns of soils and their features are derived from data available on the U.S. Dept. of Agriculture's Natural Resources Conservation Service Web Soil Survey of Ulster County, NY (USDA Soil Survey) and are depicted in the City's 2018 Natural Resource Inventory (see the soils map on its PDF page 61). One large area of coverage is by Riverhead fine sandy loam, 0-3% slope (RvA), around the grid east of Albany Avenue as well as Uptown. Meanwhile, there is a large swath of north-south running Plainfield Rock outcrop complex rolling (PrC), extending from the City Boundary, by the Foxhall/ Route 9W intersection and extending west of the Rondout core west of McEntee and Hudson Streets. It is also notable, there are agricultural quality soils especially in the Esopus Creek floodplains north of I-587 and west of Albany Avenue.

The most prevalent soil type in the City is the Onondaga Limestone and Ulster Group (Dou) soil. Its geologic onset can be traced back to Lower to Middle Devonian periods. Middle Devonian Onondaga of NY represents broad, carbonate platform facies deposited during early to middle Eifelian time. Carbonates are characterized by calcarenite to cherty to argillaceous limestones and minor shales deposited in a shallow epicontinental sea. The Onondaga is generally subdivided into four members across NY: Edgecliff, Nedrow, Moorehouse, and Seneca. These four members are directly equivalent to those of the Buttermilk Falls Limestone of eastern PA. The Clarence Member has been recognized only in western NY and is here designated a local informal facies of the Edgecliff. Several marker beds within the Nedrow Member are recognized and the upper boundary with the Moorehouse Member is redefined. The Moorehouse contains several fossil horizons and the Seneca contains several bentonite beds, including the Tioga B or Onondaga Indian Nation Bentonite, which defines its base. Named the Onondaga limestone in PA, NY, western MD, VA, and WV for Onondaga Co., PA. Also called gray crinoidal limestone, consists of gray or grayish-blue compact crystalline limestone, overlies the Oriskany sandstone and underlies the Seneca limestone. Consists of calcareous fine-grained sandstone that is readily recognized by peculiar mineral characters and fossils. Overlies the CAUDA-GALLI grit (Esopus grit) and underlies the Onondaga limestone. Carlisle Center formation is buff to brown, sandy shale with top 6 in. being a greenish, glauconitic, sandy shale. Base of unit marked by local glauconite bed. Thickness is 5 to 45 ft. Overlies Esopus formation; underlies Springfield Center Member (new) of Onondaga formation[6].

Other present soil types in the City of Kingston are the Glenerie Formation (Dgl), and Cashaqua Shale (Ds). The Glenerie Formation is part of the Onondaga Limestone and Ulster Group 100-500 ft. (30-50m). Composition of the Glenerie limestone ranges from limestone to solid chert beds, soft shale, and conglomerate. Beds are very blue to nearly black in fresh exposures; characteristically weather buff brown. Thickness is about 30 ft in type exposure. Overlies the Port Ewen beds in type area, but overlies the Connelly conglomerate farther to south[7]. The Cashaqua Shale is part of the Sonyea Group 50-200 ft. (15-60m). In outcrop in western NY, the Sonyea consists of a basal black shale, the Middlesex Shale Member, and an upper gray shale with limestone nodules, the Cashaqua Shale

[6] United States Geological Survey (USGS), Onondaga Limestone - https://mrdata.usgs.gov/geology/state/sgmc-unit.php?unit=NYDou%3B2

[7] United States Geological Survey (USGS), Glenerie Formation https://mrdata.usgs.gov/geology/state/sgmc-unit.php?unit=NYDgl%3B2

Member. Members grade eastward into sequence of siltstone and silty shale, which is part of the general turbidite facies of the Catskill delta. The Middlesex is about 65 ft thick in the reference section 0.8 mi south of the village of Middlesex, Yates Co., NY. Thickens eastward to 75 ft at Chidsey Point Gully. Thins westward to 6 ft in Erie Co. The Cashaqua is thin, but recognizable from western NY, through PA and Garret Co., MD, to southwestern WV and has also been identified in southeastern OH. Age is Late Devonian. Cashaqua Shale Member of Sonyea Formation extended from southwestern NY into western PA and into subsurface in eastern OH, WV, and westernmost MD[8] .

Slopes

To assist in evaluating topography and slopes, **Map Figure 4 – Topography** depicts slope gradients in the following categories: 0 to 5.0; 5.1-10.0; 10.1-14.9%, 15-20%; and over 20%. The slope gradients depicted in **Map Figure 4**, are not based on field slope angle measurements and were instead derived using GIS software and a digital elevation model based on remotely sensing data for NY State. Therefore, **Figure 4** is not a substitute for slope angles determined by field measurements. Where applicable, future projects undergoing pre-development analysis likely must calculate slope gradients in the field through industry-accepted practices to obtain site-specific measurements.

Depth to Water Table

Information garnered from the USGS National Water Information System[9] details the depth to water characteristics of a well site USGS 414429074052001, local number U-1620 in Ulster County. Its location coordinates are Latitude 41º44’29.6”, Longitude 74º05’20.0” NAD83 in Ulster County, New York, Hydrologic Unit 02020007. The well has a well depth of 220 feet and a hole depth of 220 feet. Land surface altitude is 297.01 feet above NAVD88. The well was completed in “Other aquifers” (N9999OTHER) national aquifer, and “Normanskill Formation” (364NMKL) local aquifer. The well currently possesses a daily depth to water level of 6,334 feet below land surface.

Well site USGS 4149488074035001, local number U-1619 also in Ulster County is detailed on the USGS National Water Information System[10] . Its location coordinates are Latitude 41º49’48”, Latitude 74º03’50” NAD83 in Ulster County, New York, Hydrologic Unit 02020007. The well has a well depth of 41 feet and a hole depth of 42.30 feet. Land surface altitude is 236.41 feet above NAVD88. The well was completed in "Sand and gravel aquifers (glaciated regions)" (N100GLCIAL) national aquifer, and "Glacial Delta Deposits" (112GLCD) local aquifer. The well currently possesses a daily depth to water level of 7,270 feet below land surface.

[8] United States Geological Survey (USGS), Onondaga Limestone https://mrdata.usgs.gov/geology/state/sgmc-unit.php?unit=NYDs%3B4.

[9] https://waterdata.usgs.gov/nwis/inventory/?site_no=414429074052001&agency_cd=USGS

[10] Ibid.

Impervious Coverage Patterns

Impervious surfaces are prevalent in the highest density areas in the center of the community. The pattern with impervious area in urbanized locations extends along and around Broadway and in Uptown and the Rondout. When there are land surfaces that are not porous, these usually occur coincident with and proximate to the street grid in locations in the southern, south-east, and north-east portions of the City that are not parkland. In the northeast there is impervious coverage that arises as a result of land use coverage, or combinations of land use plus formerly graded areas and areas possessing steep slopes greater than 15 percent. There is often less impervious cover around wetlands and there is usually low impervious cover in floodplain areas. There are lower levels of impervious cover in the northwest part of the City. Overall, impervious surfaces are usually a by-product of larger scale development comprised of buildings and transportation system infrastructure that consists of asphalt and concrete.

City Zoning Regulations Covering Development on Steeper Slopes

Considering how existing zoning regulates building on slopes and the regulation of development in relation to landform, it is currently the case that building permit applications may be caused to show topographic information. Likewise, in Zoning §405-30 Site development plan approval, there are standards for showing topographic data for existing contours intervals of five feet or less. Other existing regulations for topographic change and management of potential erosion also encompass:

- §405-40. Landscaping requirements;
- §405-26. Flood Hazard Overlay District - which provides for regulation of potential erosion hazards (these standards will be retained in-full);
- §405-31. Development incentives for the RF-R Rondout Creek District and RF-H Hudson Riverfront District (provides for delineation of topographic contours at two-foot intervals); and
- §405-19. RT Rondout District standards, which recognize the relation of lot layout to topography and other physical features, so this regulation permits appropriate flexibility as part of development review, including for site plan submissions.

Stormwater Regulation

There are no modifications proposed to City Code Chapter 353 ‘Stormwater Management & Erosion & Sediment Control’, which is the regulation covering management of drainage during Land Development. The current definition of ‘Land Development’ in Chapter 353 generally involves regulating land disturbance in cases where that land development is equal to or greater than one acre. When that trigger is surpassed, there is a requirement to provide plans for the management of stormwater in proposed conditions.

4.1.2 Potential Impacts

Impervious Cover

FBC Figure §405.5.B: Transect District Dimensional Standards Summary defines limits to the extent of Lot Coverage (% maximum). It is a general surrogate of impervious surface. Lot coverage standards in the FBC are distinct to each transect zone (and sub-zone). They are intended to fit and promote the intended character objectives of the respective transect/ neighborhood according to the FBC Transect Zone Standards. All T5 Urban Centers are allowed a 100% lot coverage to support focused growth in the City's centers, with mixed-use aiding in establishing these highest-order cores. Future construction in T4 sub-transect zones will be permitted to have lot coverage maximums of 60-80%. In T3 Neighborhoods, development is permitted to have a maximum lot coverage of 30-50%. T2C, which is more open character oriented, is 25%. The T1N, with its natural, open, and even parkland orientation is deemed NA, since other Table §405.5.B standards, and other FBC criteria, substantially limit the amount of building that can be conducted on those locations.

Maximum permitted lot coverage within the Special District Transect Zones varies. The Waterfront Special District is 60%, which means the area associated with this community focus area will be maintained with limited coverage.

These standards, when adhered to, will generate slightly decreased amounts of impervious surfaces around Kingston compared with conditions generically arising under existing zoning. This is because, per the Zoning Potential Analysis, there would be a 1,520,604 square feet (sq. ft.) smaller Potential Development Footprint under the proposed condition, than under the existing condition (page 21). Since there are Usable Open Space Standards and no parking minimums set in other parts of the FBC, it is reasonable to expect impervious coverage could be on aggregate be lower as development per the FBC proceeds, compared with present trends continued.

Since there are some thin soils interspersed around the City and some limestone geologic features present, patterns of area development facilitated per Transects and Special Districts assignments do generally provide for lower densities around these features. For instance, there are caves remnant of the area's natural cement industry and they are indicative of karst type topography in the vicinity of Delaware Avenue. Because locations around there may generate potential for quick transmission of stormwater into the ground, it makes sense this location is designated T3L. Compared with currently assigned RRR One-family Residence existing zoning, the form standards enable building positioning close to streets and do not mandate minimum parking. This should enable tailored stormwater practice sitings, beneficial site landscaping arrangements, and flexible building placements, which can be applied to generate fewer potential impacts on groundwater by enabling locations and concentrations of buildings and infrastructure away from sensitive resources.

Groundwater

The FBC indirectly influences construction designs and development layouts which can aid groundwater management. FBC §405.24(C)(1) contains Minimum Usable Open Space standards for development. It prompts the provision of natural character and open space in site designs. In considering geology, soils and landform, it aids and enables managed and adequate direction, flow and passage of groundwater, including infiltration, as well as discharges to the necessary drainage channels or systems.

The minimum Usable Open Space regulation §405.24(C)(1)(b) contains a specific sub-standard relating to any proposal that would include steep slopes, waterways, and flood plains within the onsite designed open area. It only

allows, per letter (f) in that section, up to half of the required minimum set in the preceding §405.24(C)(1)(a) standard to contain those type constraints. This ensures there is a limit to at least half of this open space with the intent to help ensure that the space set aside is usable for active or passive recreation.

Moreover, that allowance may only be provided through a Minor Waiver process. This waiver requires a finding that the design will avoid impacts to sensitive natural features such as steep slopes and exposed rock formations. It helps provide for conserved usable (developable) space on property, plus it supports limitations on the potential for site development and building to arise on more potentially unsuitable spaces onsite, such as on steeper terrain or at the toe or top of hills, where it can be more suitable to provide landscaping or retain existing vegetation to aid reduced runoff velocities and increase the potential for infiltration.

Likewise, there is a provision in Article 3 Building Form standards that allows for building placement build to location and setbacks to be adjusted where there are site constraints. This can also aid in avoiding placement of buildings on or near steep slopes (or other environmental constraints).

Another protective FBC regulation concerns Building Wall Materials & Masonry Detailing (§405.14), which provides for sills sloping away from openings to shed water. This aids the possibility for the portions of buildings below grade to productively interface with ground water levels by ensuring that downward slopes extend outward from first floor foundations/ sills. This provides for water to be directed/ shunted away from buildings and building foundations. This performance criterion complements protective standards already in NYS Building Code that provide for the construction of foundations which will not be inundated or breached due to high groundwater levels.

Regulation of Steep Slopes in FBC

Within the FBC's Landscaping Standards, §405.14.K.3, Steep Slopes are grounds which have an incline of twenty-five (25) percent. The new code provides for these to be preserved. Development on ground which has an incline of ten (10) percent to twenty-five (25) percent will require Planning Board approval through a Major Waiver as detailed in §405.26.E. As mentioned, some steep slopes can be categorized as open spaces per §405.24(C)(1)(a) and per Required Usable Open Space in §405.24(C)(1)(b) with at least ten (10) percent of the gross area of a site 5,000 square feet or greater provided there is receipt of a Minor Waiver as detailed in §405.26.E.

In the FBC, Building Placement Standards in some Transect Zones may be adjusted to the minimum extent needed to avoid impacts to sensitive natural features such as steep slopes and exposed rock formations. Accommodations for steep slopes can be found in T2 Conservation (T2C), T5: Urban Center, T3 Neighborhood, T3 Large Lot, T1 Natural, SD Special District, and Waterfront Overlay Zones. Development standards for Steep Slopes are also mandated and detailed in §405.25.1 for Land Allocation by Transect Zones within a Conservation Village.

Based on a review of the FBC transect allocations per the 'Regulating Maps' displayed in §405.3, the following observations are provided regarding the Transect Standards applied in locations of steeper slopes.

- Considering the generalized Topography Map of the City, the degree of slopes varies around the City.
- Level areas, such as around Uptown and Midtown, seldom rise above 5%.
- Areas with larger percentages of slopes in excess of 10% can be found in southern parts of the City and in its northeastern parts.

- Neighborhoods around Wilbur have undulating topography and areas of significant slopes. This neighborhood and areas to the south of NYS Route 32 extending easterly over the CSX railroad right of way and towards Abeel Street are assigned to lower density transects.

An overview of Transect Standards can be found in Article 3 of the FBC. Transect Zones are categorized by their characteristics ranging from lot width, lot depth, lot coverage, frontage occupancy, building height, building setbacks, parking setbacks, encroachments, allowed frontage types, allowed building types, allowed sign types, etc. Summaries of Transect District Form are contained in §405.5 "Summary Tables" of the FBC.

Transect Standards assigned in areas of greater slope usually include lower development potential.

- **T1 Natural (T1N)**:Steep Slopes are prevalent in the northeastern parts of the City. A large portion of the area assigned to T1N Transect are in New York State Sojourner Truth State Park, which has steep slopes but has been permanently conserved. Land areas categorized as T1 Natural zones possess the following characteristics: Open Space & Natural Areas, Limited Structures/Buildings, Variation in Building Placement, and have standards for Large Setbacks.

- **T2 Conservation (T2C)**: Land areas are categorized as T2C when they possess the following characteristics: Detached buildings, Medium-to-Large Setbacks, buildings with up to 2.5 Stories, parking to the Side or Rear, and Common Yard Frontages. Notable areas assigned T2 include large swaths in the southwest side of the City, overlaying the golf course, plus multiple parcels west of the CSX rail line and Wilbur Avenue, north of Abeel St.

- **T3 large Lot (T3L)**: Some parts of the more easterly and southerly locations are assigned as T3 Large Lot.

The FBC's Steep Slope standards ensure that steep slopes are outrightly preserved when possessing an incline of twenty-five (25) percent or more, or they are approved for construction via Planning Board approval through a Major Waiver when possessing an incline of 10-25%. These stipulations can ensure that steep slopes are not detrimentally tampered with in order to maintain the natural and environmental benefits they provide while preserving their history and character. Construction on steep slopes under the FBC will be more regulated and scrutinized than under current zoning, which has no defined requirements for steep slopes and construction on them. The terms of the FBC will provide for only necessary developments on steep slopes that are in-line with the intended growth trajectory of the FBC for the City of Kingston. The effects of the regulated allowance of development on steep slopes under the FBC could have the effect of guiding building and infrastructure placement while providing needed infill in strategic locations.

4.1.3 Mitigation Measures

The FBC is designed to ensure that managed and limited development will occur on steep slopes. Under the FBC, construction is prohibited on slopes possessing an incline of 25% or more. Meanwhile, Planning Board approval is required for construction on slopes possessing an incline of 10-25%. This ensures that when a landowner needs to construct on these percentage slopes, there is careful review of designs and that development occurs only where the potential benefits to the City and its inhabitants outweigh the potential detriments.

The FBC also is organized to manage potential for impacts on the water table from establishment of impervious cover, or from construction in and by high water table levels. The Open Space Standards in Article 6 outline

minimum required open space to be provided in residential developments and Conservation Village Plans (CVP)/ Walkable Neighborhood Plans (WNP). The standards detail design minimums for usable open space, ways to achieve the minimum required usable open space, plus they specify open space design standards and typologies, and required dimensions that can be applied to conserve these features.

The conservation of open and vegetated areas, or minimization of development in relation to hillsides, and the use of green infrastructure, all provide ways to help manage the impacts of land development on geology and topography, mitigate the potential erosion of soils, and protect surface and ground water quality. It is noted that there is discussion in other parts of this DGEIS on street design and street tree planting which could also possibly aid stormwater environmental quality.

There are also protections and management guidelines for grading in the Waterfront Overlay Standards, which regulates areas in and by shorelines. Within this Overlay, construction of any on-site sewage disposal system is prohibited. There is a requirement that loading operations at docks shall be designed to minimize adverse effects on bank stabilization, plus there is a criterion that provides for avoiding or minimizing modification of, or interference with, rock outcroppings or other significant geologic features through use of minimally invasive techniques. Likewise, it prescribes that New development shall exhibit the use of best practices in sustainable site design, recognizing the challenges of Sea-Level Rise, which may include: Nature-based shoreline stabilization and restoration techniques utilized where feasible to help protect against erosion.

Changes in regulation of stormwater management, particularly adjustments to onsite specifications that call for providing green stormwater infrastructure onsite, are not provided for within the scope of this zoning update. Following the FBC adoption, it is recommended that the City make prospective observations as to whether future buildout under the FBC could benefit from adjustments in the City Stormwater Code, or make additional FBC modifications. The FBC in its current proposed version is more advantageous in this regard than existing zoning.

4.2 Plants & Animal Resources

4.2.1 Existing Conditions

Wildlife

An overarching finding of the City's Natural Resource Inventory (NRI) analysis is a that a large majority of the high-value terrestrial biodiversity within the City is generally found in three large clusters around the urban center:

- Coastal and upland regions to the east along the Hudson River (east side of City).
- Coastal and upland regions along the Rondout Creek on the south side, especially by the Twaalfskill basin.
- The floodplain forests, riparian zones, marshes and grasslands along the Esopus Creek to the northwest.[11]

Overall, the Hudson River and the Rondout Creek environments together were responsible for much of the aquatic rare, endangered or special concern species identified. In the southeastern part of Kingston, along the Rondout Creek, there is a NYSDEC designated significant 'natural community' area. From its confluence with the Hudson River up to the falls in Eddyville (about 3.6 miles upstream), the Rondout Creek is a tidal estuary. It is an important spawning area for migratory fish and an overwintering area for bass.

The Kingston-Poughkeepsie Deepwater, the Flats, and Rondout Creek environments are also noted for their aquatic habitats that support diverse species of birds and animals. These are designated Significant Coastal Fish and Wildlife Habitat areas under the Coastal Management Program. The Kingston-Poughkeepsie Deepwater is a critical habitat for most estuarine-dependent fisheries originating from the Hudson River. One of the concerns mentioned in the NRI report of Kingston is the Flats, which is one of the largest contiguous areas of shallow, freshwater, tidal flats in the Hudson River, as a rare and valuable habitat.[12]

According to NYS DEC (Department of Environmental Conservation), the following species are located in the City of Kingston[13:]

- **Endangered Species**
    - Shortnose sturgeon (Acipenser brevirostrum), Indiana bat (Myotis sodalis), American waterwort (Elatine americana), Riverbank quillwort (Isoetes riparia), Hudson River waternymph (Najas guadalupensis ssp. Muenscheri).

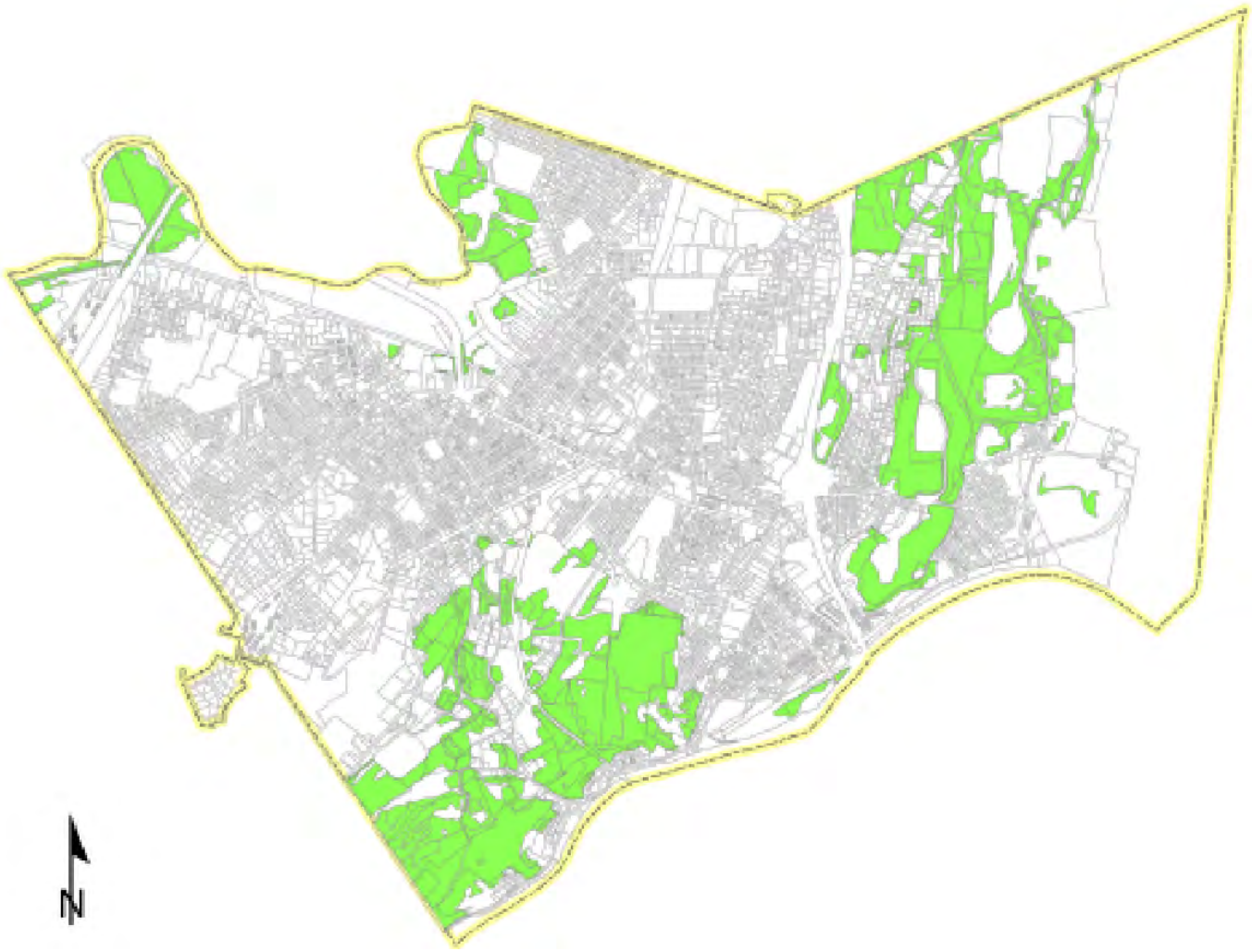
[11] 2018 Kingston Natural Resources Inventory, page 1.

[12] 2019 City of Kingston Open Space Plan, page 53.

[13] 2018 Kingston Natural Resources Inventory, pages 103-104.

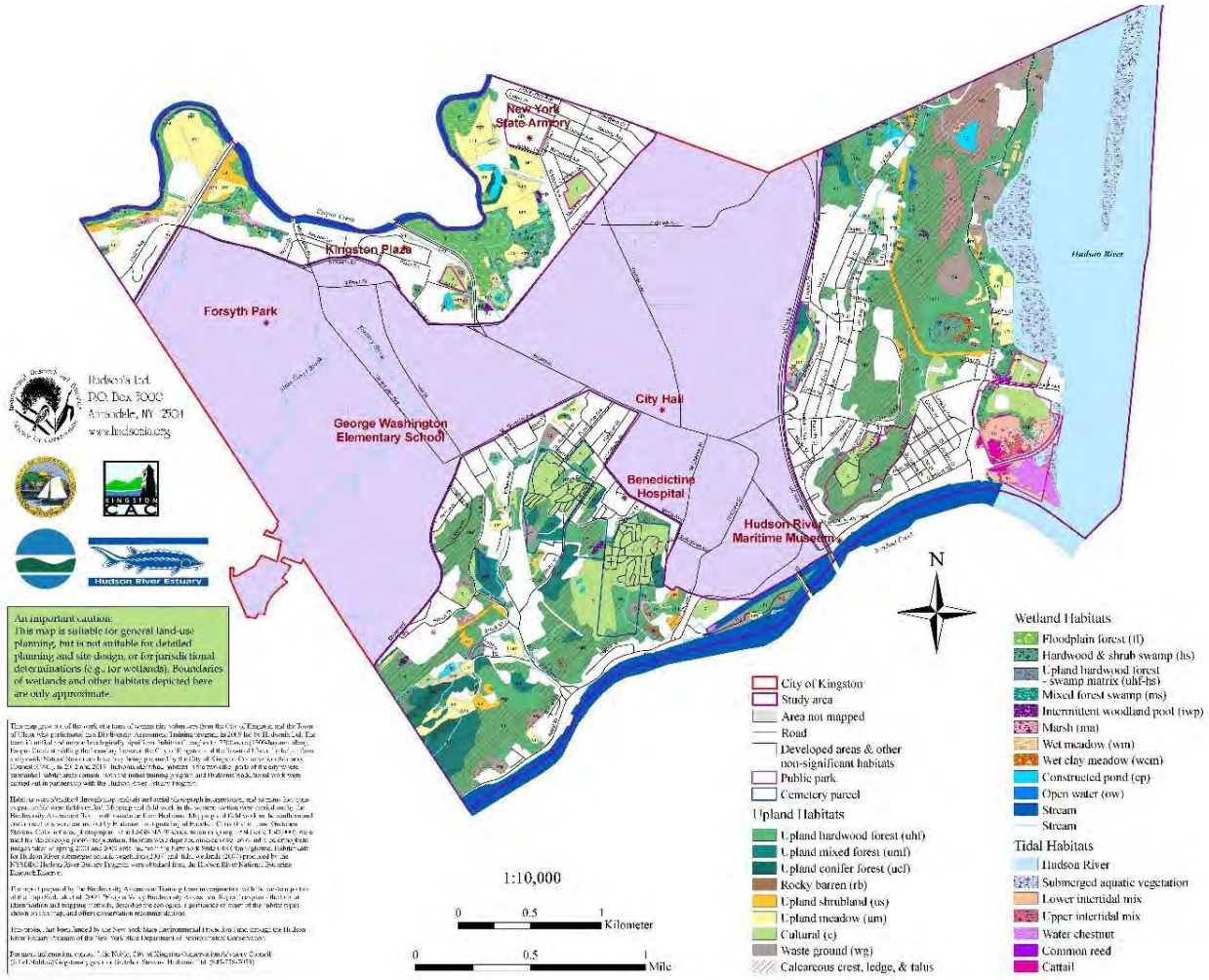
- **Threatened Species**
    - Bald eagle (Haliaeetus leucocephalus), Davis' sedge (Carex davisii), Northern Long-Eared Bat (Myotis septentrionalis).
- **Special Concern**
    - Eastern small-footed myotis (Myotis leibii); Indiana Bat. To date there are three known Indian Bat hibernating spots located in the immediate vicinity of Kingston. The hibernacula are critical to the survival of this species because few are known to exist. The USFWS and NYSDEC are continually documenting habitat utilization by this species once emergence from hibernation occurs. Northern Long-Eared Bat is a listed threatened species found in the majority of the Northeast and throughout New York State.
- **State Rare**
    - Heartleaf plantain (Plantago cordata), Delmarva beggar-ticks (Bidens bidentoides).

Figure 5. Biological Important Terrestrial Areas



Furthermore, there are nine bird species that are identified as the species of greatest conservation need. There is one identified as a threatened species in the City of Kingston area.[14]

Figure 6: Significant Habitats in Selected Areas of Kingston



The areas mapped include the Northwest, East and South portions of Kingston, which have the largest continuous open space. The more urban center of Kingston was not mapped. This data represents, by polygon, habitats of significance in Kingston, including upland, tidal and wetland habitats.

Vegetation / Forest Cover

As is typical of most urban areas, Kingston 's forests are small compared to more rural parts of the Hudson Valley. However, there remain sizeable patches of forest habitat in the more undeveloped parts of the city. Likewise, smaller patches and even tree fenestration can contribute to the quality of life in residential areas.

Kingston's most notable forested area is a fairly contiguous patch in the eastern part of the city between Route 9W and the Hudson River. This band of upland hardwood forest seems to have important ecological value, as it is situated along the unique limestone bedrock corridor between the Hudson Valley Limestone and Shale Significant Biodiversity Areas (SBA) and the Rosendale limestone Cave Complex SBA. Given these features, this forested

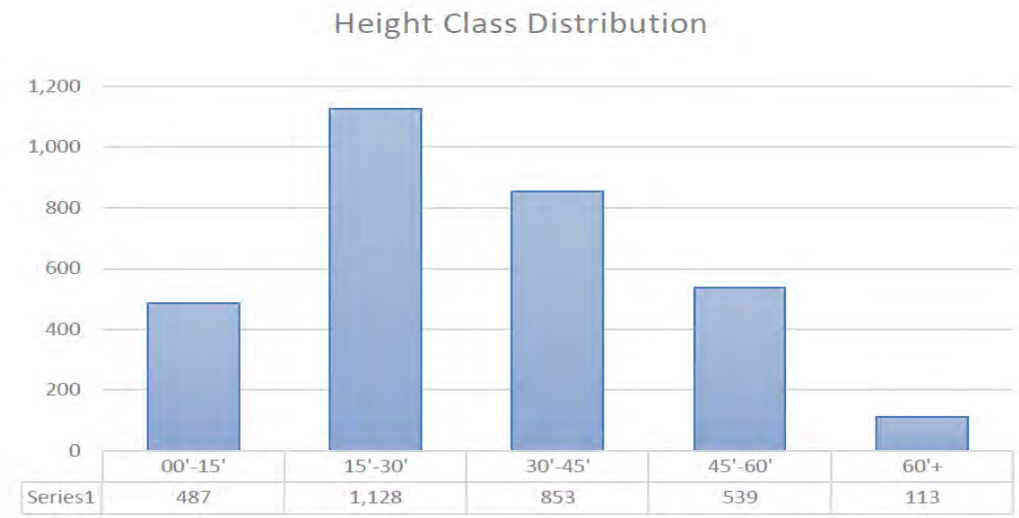
[14] Ibid, pages 105-106

area may serve as a stepping stone for some terrestrial wildlife moving between forest patches to the north and southwest in the Town of Ulster. It also provides terrestrial habitat for vernal pool breeding amphibians. Notably, much of the area in the northeast corner of the City is now protected as permanent parkland within the new Sojourner Truth State Park. There are also patches of predominantly upland hardwood and upland mixed forests in the southwest. While some are more fragmented by roads, development, and cultural features such as cemeteries, and a golf course, there are more contiguous forests west of Twaalfskill Brook that continue southwest into the Binnewater Lakes area of Rosendale. [15]

Outside these locations, the level of forestation on a landscape-scale corresponds with building and road densities. Kingston is a "Tree City" as per Arbor Day Foundation standards which recognize the importance of an urban tree canopy and care of Kingston's vital city trees.[16] Generally, for these areas Kingston's stock is described to consist various maple species, with a high percentage covered by Norway Maple species.[17] In terms of the urban forestry, about 64 % of City trees fall under the fair or good condition bracket. Good means the tree has no structural problem, no significant damages from diseases or pests and fair meaning minor structural problems and/or mechanical damage; significant damage from non-fatal or disfiguring diseases; minor crown imbalance.

The City of Kingston Tree Commission, with funding from the DEC Urban and Community Forestry Program, has periodically offered a Tree Planting Program for residents and business owners. Species and final locations are chosen by the Tree Commission with a focus on encouraging biodiversity, targeting neighborhoods with low canopy cover, and planting sites that are most suitable for tree growth.[18]

Figure 7: Height Class Distribution – 2018 City Tree Inventory Report



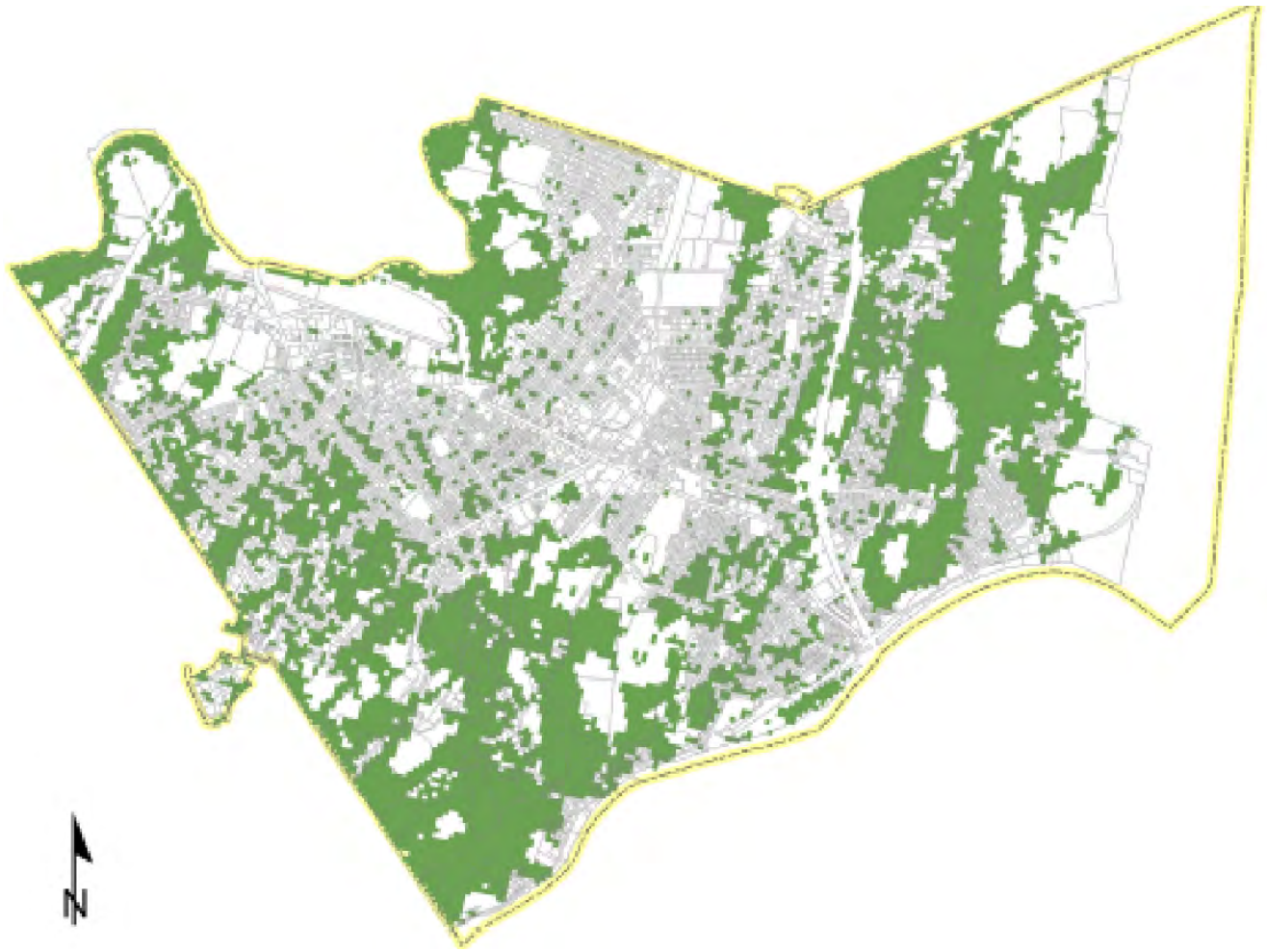
[15] City of Kingston, Open Space Plan

[16] 2018 City of Kingston, Tree Management Plan

[17] Ibid

[18] Kingston Tree Commission, n.d

Figure 8. Forest Cover



NRI map indicating the current geographic extents of the urban forest canopy within the City of Kingston. This measurement included area with 40% or more of tree canopy coverage.

4.2.2 Potential Impacts

This Section analyzes how building development under the FBC may generate potential to change the extent or composition of flora and fauna. Often the standards proposed in the FBC enable flexibility of design that may result in protection of natural resources.

- **Building Placement:** In the FBC, building placement standards may be adjusted to the minimum extent needed to avoid impacts to sensitive natural features such as steep slopes, exposed rock, sensitive habitats, wetlands and floodplains, and mature trees. A Minor waiver for Building Type Standards permits a 10% maximum deviation in dimensional standards for all transect zones (Table §405.26.E).
- **Site Plan Review Process.** Minor site plan review process is applicable for development that does not exceed a SEQRA Type II threshold, or involving land less than 2 acres in size consisting of one or two lots. Having this standard explicit can reduce the burden on incremental development projects and improve predictability in the outcome of future development. Having a streamlined SEQRA process available for Type II actions will enable small scale development that is generally deemed and considered not to have a significant effect on the environment to proceed expeditiously. It can enable

focus by reviewing bodies and agents on types and scales of growth that should be screened using SEQRA and should receive a major site plan review process to assess whether such development could generate impacts that should be considered for attenuation.

- **Open Space Standards:** The FBC, in §405.24 Open Space Standards, prohibits counting open space located in a parking lot – this can support quality layouts of natural areas defined as Open Space. In addition, §405.16F of the parking standards provides for reducing the impact of large areas of pavement and improving the overall area of parking by introducing trees which help heat reduction and can provide natural areas. Guidelines are provided regarding how much open space/green/trees are required in association with particular ranges of parking spaces.

- **Tree Planting Standards**: There are beneficial/ rigorous tree planting standards throughout the form based code. These call for specific linear distances between each street tree planting. Generally, the application of this part will provide for more tree cover overall under the FBC over time, compared with the existing subdivision and zoning, which are quite vague and require overall less planting. Streets are functionally classified into Compact Arterial, Collector and Local, with context classifications C5 - higher intensity down to C1 - lower intensity in the FBC. Various street design guidelines are provided in the FBC and each possibility describes typical tree planting style required for it. There is always an importance assigned for tree plantings in each scenario regardless of whether a road width will be narrow or wide. This will provide for street tree canopy that can provide habitat.

- **Natural Area Requirements**: FBC Article 6 Public Open Space Standards will provide for quality and accessible natural areas as part of property development. FBC Article 6, Open Space Standards, sets standards to promote the sense of identity, image and value creation that can result from the provision of high-quality open spaces that are integrated into development. These standards encourage the best location, usefulness and improvement of open space. Natural resource protection is an express part of this FBC purpose.

- **Pollinator Vegetation**: Article 6 states that, within the different Open Space Types that may be supplied, vegetation that attracts and provides habitat for pollinators is encouraged.

- **High-Quality Open Spaces**: The 10% Usable Open Space Standards also prompt onsite development that has a high quality spatial layout and quality of design. FBC Article 6, Public Open Spaces, sets forth standards to promote the sense of identity, image and value creation that can result from providing high-quality public open spaces and trails that are integrated into new development. It can provide for neighborhood gathering and recreation in a safe, comfortable, walkable environment. These standards encourage the best location, usefulness and improvement of neighborhood open space over the total amount of open space provided.

- **Unusable Space**: Within Open Space Standards (§405.24), in relation to the 10% Usable Open Space Standard for land uses involving four or more units, designing more than half of that proposed set aside so that it consists of unusable space, such as steep slopes, waterways, floodplain, or otherwise inaccessible natural areas, will require a Minor Waiver. The review and analysis that will accompany consideration of a Waver can help ensure there is more likely to be optimized onsite designs, with a practicably higher level of unconstrained portions of sites conserved as open space. Having this waiver will help ensure that the resulting Open Space is more likely to be designed to fit the overall context and physical arrangement of structures and buildings onsite.

- **Conservation Transects:** §405.9 provides transect standards for T3 Large Lot and T2 Conservation Transects. These transect provide for generally low levels of lot coverage. Both applications could benefit the general natural resource pattern. They are also consistent with reinforcing the priority conservation areas identified in the Open Space Plan because they allow for Contextual Setbacks (Note #4) which can support arrangements of a building or buildings so they are not likely to encroach on identified resource areas, like contiguous open space that serves as habitat.

- **Clustering**: Per §405.9, except under low density case exceptions, involving limited new units yields, lots larger than two (2) acres shall follow Large Site Standards (Article 7) per Building Form Note #7. For existing zoning, clustering is an option for sites that are in the RRR or RR Districts, with one principal building per lot, but the FBC will now enable clustering for any place where there is a lot larger than two (2) acres.

- **Conservation Village Plan**: Available under Article 7, the Conservation Village Plan shall achieve the goal of conserving natural features in a walkable, clustered community form (§405.25.A.2.(c)). The transect sub-allocations enabled by Article 7 can aid conservation of habitats and species inhabiting them by not requiring onerous side and rear setbacks on lots. This pattern of lots laid out adjacent to one another in a compact fashion can provide consistency with the existing historic form of parts of the City where there are not large spaces between building and building groupings. It can simultaneously aid the layout of set aside open space that has a habitat function since in a CVP there is a requirement for 50% low density T1, with developed features clustered on the remainder of the site.

- **Block Size**: This standard comes into play for development with new street networks in CVPs or WNPs. A minor waiver may be approved for natural elements such as wetlands or topography to be incorporated into the design of a larger than customary block (Table §405.26.E). Similarly, a minor waiver is available, in the same table, for limited external connectivity whereby it would enable/allow a dead-end to be constructed as a common driveway in a limited case with service to a limited number of dwellings where efforts to provide a higher-order type of connectivity, like a street, may otherwise provide an undesirable impact to sensitive natural resources.

Growth through the FBC will likely be more beneficially compact and flexible in its design under the proposed zoning than it would under existing zoning. As discussed in 4.2.1, one unique habitat in Kingston is the presence of places where large numbers of bats hibernate. There should be attention to promoting the arrangement of site-specific development that occurs near these locations so that the physical building and attendant infrastructure is positioned as far as practicable away from the most sensitive features in order to help conserve this habitat and the associated species.

Generally, once development is authorized, there are no differences in how the process of construction would arise under proposed zoning compared with that which now occurs existing zoning. Therefore, this DGEIS does not take-up the consideration of a potential impact differential to species or habitats during construction under proposed versus existing zoning.

4.2.3 Mitigation Measures

As noted above, the FBC prescribes layouts of T2 Conservation Areas. It also enables flexible patterns of siting new building form and onsite physical development to provide more opportunity to compatibly fit any growth with existing natural character and context.

According to the Zoning Potential Analysis, compared with existing zoning, growth occurring under the FBC will generate a 1,520,604 sq. ft smaller overall footprint of physical coverage at buildout, compared with that buildout calculated to arise under existing zoning. This translates into 34.9 acres that will not be occupied by a principal building. Considering the generic assessment of future growth, it is probable that a sizable portion of this net undeveloped acreage under the FBC could instead comprise open and natural areas covered by vegetation to support beneficial ecosystem services and provide wildlife habitat.

Moreover, considering assignments of transects displayed on the Regulating Map, it is noteworthy that under the FBC there are lower density T2C assignments in places identified as priorities for conservation in the City Open Space Plan. Some areas provided this type treatment include:

- Southeast of Sojourner Truth State Park and north and west of Willow Street;
- West of No. Manor Ave. and east of the Esopus Creek; and
- North of existing disturbed and utilized areas that abut Abeel Street, generally north of buildings/ existing manmade features along Burnett Street and Hamilton Street.

As potential site-specific development proceeds, outside Type II SEQRA applications, there should be documentation supplied showing how a development application assessed the potential for impacts, such as through presentation of evidence in a Full Environmental Assessment Form, a SEQRA Coastal Assessment Form (when applicable, because planned growth is located in the designated City Waterfront Revitalization Area), and/or when advised in writing by a City Agency, or a permit approval body, through an extended/ supplemented Full EAF addendum.

Such initial documentation can describe possible areas of habitat or resources impacts, types, and potential dimensions of impact, and possible mitigation that may be warranted, or which an applicant may seek to apply. Local agencies can then have data and analysis available at an early point to aid in understanding of attributes of potential proposed onsite/ site-specific development and the features of the site and setting, and to aid in weighing and considering such factors in a SEQRA determination. Furthermore, any supplemental environmental documentation can be used by agencies in the process of assessing whether or not to grant individual waiver(s) or associated approvals that may be requested by an applicant. Overall, this can aid in establishing an understandable and consistent framework for acting on waivers, plus providing for streamlined development process, but while still optimizing the potential not to impact any jurisdictionally listed species or habitats.

The Waterfront Overlay Standards in § 405.15 provide for protection of sensitive habitats and species. For one, Heavy Industrial Uses are prohibited in this Overlay per its part D Development standards. Moreover, in that same part, loading and unloading operations at docks shall be constructed so there is minimal potential for adverse effects on water quality, fish and wildlife, vegetations, bank stability, and water flow. Furthermore, there cannot be construction or placement of onsite sewage disposal systems.

The existing zoning prescribes that the layouts of marinas shall consider water depth and habitat features, like the location of the Rondout Significant Fish & Wildlife Habitat, as well as other habitat on the bottom of waters. It specifies that dredging at marinas is the purview of the City. There is not as direct criteria in FBC 405.15.D.6., thus, this is an potential impact to assess and address at the site-specific development stage for actions in the designated Local Waterfront Revitalization Program Boundary and for this type use, to ensure a similar level of treatment

under the FBC. Providing for layouts of infrastructure in the water and along the shoreline that practicably advance best practices during site-specific development can help minimize the potential for undesirable impacts to be conveyed to benthic environments in and around marinas.

All future site-specific development will need to confirm whether there is a need for any individual permit from the U.S. Army Corps of Engineers and/or an Article 24 permit NYSDEC for impacts to wetlands, jurisdictional waters or watercourses, or any other local or State permit concerning habitat. Consistent with the regulatory framework existing now, the process of jurisdictional determination and delineation and formulating of a permit application can be used to confirm whether within an associated regulated area there may be a potential need for mitigation in order to avoid impacts to any particular regulated habitats or species pursuant to a specific governmental regulation. Furthermore, for any site-specific development action that is Unlisted or Type 1 according to SEQRA, the scoping process, or the process of a lead agency making a SEQRA Determination, can be used to define whether there should be an investigation of the potential for any regulated plants, animals, or habitats to be impacted by the planned physical activity.

To advance natural resource protection, the Waterfront Mixed-Use District and the Waterfront Overlay District further policies of Kingston's Local Waterfront Revitalization Program (LWRP). The SD-WMU District standards require the provision of public access to the water and demonstration that site conditions will support proposed development, including analysis of environmental constraints. Per the Overlay's standards, public access requirements may be adjusted to the minimum extent needed to avoid impacts to sensitive natural features. It stipulates floodplains, banks and wetlands shall be preserved in their natural state to the maximum possible extent practicable to protect water retention, overflow and other natural functions within T1 and T2 districts. It also requires that new development shall exhibit the use of best practices in sustainable site design, recognizing the challenges of Sea-Level Rise, including using Nature-based shoreline stabilization and restoration techniques where feasible, including to help protect against erosion, provide habitat for aquatic species, or improve water quality.

4.3 Water Resources

4.3.1. Existing Conditions

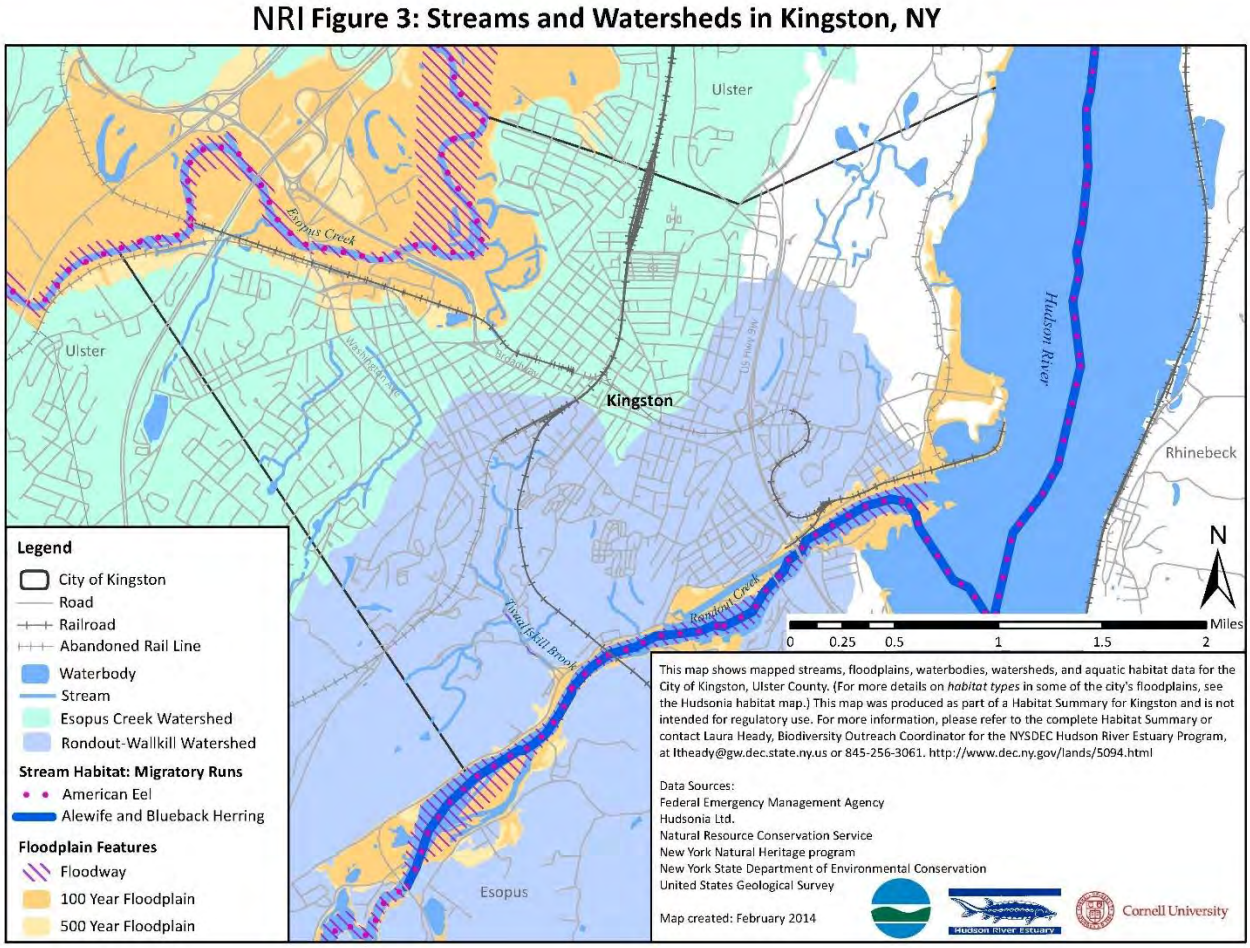
Streams & Surface Waters

Kingston is overlapped by two main watersheds, which according to US Natural Resource Conservation Service Hydrological Unit Code 12s are the:

- Middle Hudson drainage or watershed; and
- Rondout watershed.

The former includes a part of Esopus Creek. All waters in the City eventually flow into the highest and 7th order Hudson River, which is a major defining water feature in the whole region.

Figure 9: Streams & Watersheds in Kingston, NY



Two other higher-order local streams are the Rondout Creek and Esopus Creek. These major tributaries each flow into the Hudson. These streams and tributaries to them influence the pattern of natural resources and development. Importantly, the Rondout Creek carries with it a lot of history. Initially a key port for the shipment of timber and agriculture in the colonies, the area also boomed as the terminus on the Delaware & Hudson Canal in 1828, evolving as a trade hub for coal from Northeast Pennsylvania, Catskill Mountains bluestone, Rosendale cement, and bricks made from local clay.

There are multiple smaller tributaries which feed into these local streams and they often have attendant wetlands and floodplains. The associated floodplains (and immediately adjacent uplands) are recognized for benefits they provide in helping keep water and air clean. Therefore, and it is important to conserve or restore water resources and their shorelines.

Kingston has 11 main groupings of perennially flowing surface water streams that are classified between Type 'A, B, C or D', with two unclassified streams in the vicinity of Lucas Avenue and Linderman, as follows[19]:

- The Hudson River, with 2.40 miles of frontage, on the City's eastern boundary, is Class 'A';
- Rondout Creek, runs roughly 2.65 miles on the City's southern boundary, and is Class 'C';
- Esopus Creek, in the northwest quadrant of the City, runs under the Thruway and Washington Avenue, and flows north-northeast away from Schwenk Drive, and is Class 'B';
- Twaalfskill Brook (Class C), in the Wilbur area, runs from the west-central part of the City into the Rondout at the City's southern edge, and there are many tributaries to it.
- Four type 'C' fresh surface water streams/rivers are located along the City's north-west and north-east edges, Type C per the NYSDEC Environmental Resource Mapper.
- Two short Type 'A' streams on the City's eastern edge flow into the Hudson River. The northerly one is partly shown in the above image primarily east of 1st Avenue and north of Kingston St. The southerly one is within the Kingston Point parkland complex.
- In the north-west a Type 'C' stream flows northerly, east of the Thruway, into the Esopus.

As shown in the NRI Open Space Index 'Figure 59 Surface Water (Rivers, Streams, Ponds) – SURFH20' map, there is a limited, disperse collection of surface waters besides the aforementioned river, creeks and streams. One larger pond, in the northeast quadrant, is in new State parkland. There are also two ponds in Esopus creek floodplains, one south of the terminus I-587, and another just north of the west of North Manor Avenue and Albany Avenue. Other smaller waterbodies on the mid-west edge are the sources of smaller "urbanized" streams that flow northerly into the city's core.

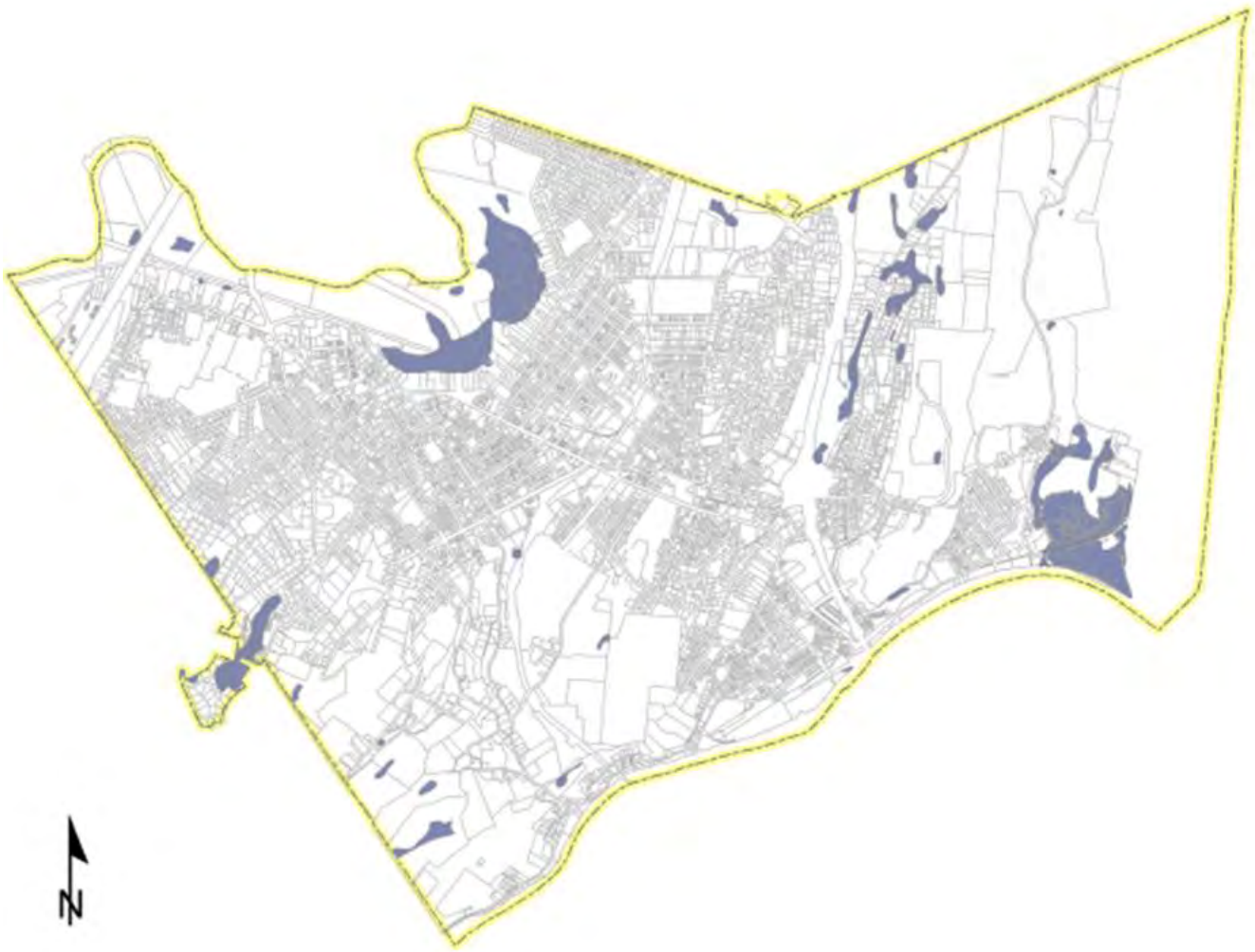
[19] Per NRI map Figure 3 'Streams & Watersheds in Kingston, NY' and the NY State Department of Environmental Conservation (NYSDEC) Environmental Resource Mapper (ERM) data accessed online on March 13, 2022 (*https://gisservices.dec.ny.gov/gis/erm/*),

Figure 10: Surface Water (Rivers, Streams, Ponds) – SURFH20

Wetlands

NRI Open Space Index 'Figure 63 Wetlands and Hydric Soils -WETHYD' map, shows the spatial pattern of wetlands/ hydric soils. Two larger concentrations of wetland attributes occur respectively adjacent to the Hudson River (concentrated at Kingston Point), as well as around the Esopus Creek and its floodplains west of Albany Avenue. The Kingston Point wetlands (which are part of parklands), are 'Class 1' State Regulated Freshwater Wetland, with a total of 43.4 acres per the NYSDEC. Per the NRI, that is the only State Regulated Freshwater Wetland in the City; however, there are multiple disperse smaller-scale wetlands around the City such as: Freshwater Forested/Shrub Wetland, Freshwater Emergent Wetland, Freshwater Pond, and Riverine types per the NYSDEC.

Figure 11: Wetlands & Hydric Soils – WETHYD (NRI Figure 63)



Floodplains (SHFA 100-year Floodplain)

Figure 10: Streams & Watersheds in Kingston, NY[20], as presented earlier, illustrates the concentrations of FEMA-classified floodplains along the Esopus Creek, Rondout Creek and the Hudson River (NRI Figure 20). 'NRI Map (NYSDEC)', NRI page 57, also depicts the locations of 100- and 500-Year Floodplain.

Floodplain management regulations in existing zoning §405-26 Flood Hazard Overlay District (§405-27 in FBC), provide for health, safety, and welfare, and the minimization of losses due to flood conditions in specific areas. This framework identifies areas with flooding risk and requires floodplain permits and utilization of floodplain management practices in areas like 100-year floodplain. This FBC project is not altering the City floodplain regulatory policies that are in place.

Still, the identification of 500-Year floodplain (Special Flood Hazard Area C & X), and potential to attempt to practicably avoid development within it, is relevant due to growing concerns of flooding for communities in the greater Hudson River watershed. For instance, there were major storms in 2018 that resulted in disaster declarations. Looking at Figure 10 'Streams & Watersheds in Kingston, NY above, which is NRI Map Figure 20, from NRI page 57, concentrations of 500-Year floodplains can be found: along the community's southern border, in and by the Rondout Creek; in the City's northeast by the Esopus Creek; plus near and usually adjacent to the current concentrations of 100-year floodplain along the main stem of the Hudson.

The Army Corps of Engineers has decertified levees along the Esopus Creek - there may be an increased risk and potential for damage during extreme storm events. The suitability of lands along the Esopus Creek to support future development is in some locations limited and should be provided with mitigation analysis. According to the Kingston 2025 Comprehensive Plan, other locations experiencing flooding include areas along Main Street near Emerson Street, along Hurley Avenue, along Tannery Brook at Amy Court, and along the Strand. Future development in these areas must consider these physical constraints.

LWRP & Coastal Zone Boundary

The 1992 City-adopted Local Waterfront Revitalization Program (LWRP) provides for marine resource area stewardship. It gives priority to water-dependent and water enhanced uses. LWRP page 23 depicts a map showing the City's coastal boundary, also referred to as the LWRP Boundary or Waterfront Area[21]. In 2015, this LWRP boundary was amended as shown in its Figure 1 'City of Kingston Waterfront Brownfield Opportunity Area Location Map'[22]. The 2015 Brownfield Opportunity Area study provided DGEIS analysis of upgrades to LWRP-related policies. There is an extensive regulatory framework covering the Waterfront Area and in addition to local criteria, multiple State Coastal Policies oversee the protection and management of water resources in the Waterfront Area as mandated by the State of New York Coastal Management Program of 1982.

[20] NRI map Figure 3

[21] https://www.kingston-ny.gov/filestorage/8463/10953/10960/City_of_Kingston_LWRP.pdf

[22] https://www.kingston-ny.gov/filestorage/8463/8511/8682/8690/KingstonBOA-LocationMap.pdf

Local Water Resource Regulations

There are no uniform existing City Zoning wetland regulations, or uniform citywide watercourse regulations, that provide standards that are uniformly applicable across the whole City, such as based on the definition of wetlands, or the defined classifications of watercourses. This means that prevailing applicable State and Federal standards provide the framework for regulating and managing impacts to these type resources. Generally, the way the new FBC is structured, there are multiple proposed standards which promote and provide for the avoidance of growth in and adjacent to wetlands and watercourses in the City. This is considered an improvement upon the existing zoning. It will serve to complement the protection and regulatory guidance provided in State and Federal policies.

As discussed under 'Floodplains (SHFA 100-year floodplain)' above, existing zoning standards in §405-26 are, with the exception of one changed reference, replicated in their entirety within FBC Article 9 'Supplemental to the Form Based Code'. Specifically, the review body for any requested waivers to floodplain standards was changed to the Planning Board from the Zoning Board of Appeals. The rationale for this is that the Planning Board and agencies supporting it are more versed in issues related to floodplain management.

As discussed in 'LWRP & Coastal Zone Boundary' above, there is a City-defined and State and Federally recognized Local Waterfront Revitalization Area. Activities in it fall in the purview of existing zoning parts: §405-25 Rondout Creek Riverfront District (RF-R) & Hudson Riverfront District RF-H; §405-27 Waterfront Design Overlay District (establishes a map on file with City Clerk); and §405-27.2 TNDOD Traditional Neighborhood Development Overlay District. The TNDOD covered former "Tilcon Mining" properties in the northern waterfront, but since these were converted to State Parkland, there is no further discussion of the TNDOD since those lands are permanently protected as open space, which will protect water resources. The RF-H & -R frameworks, meanwhile, provide for water resource protection by setting criteria for marinas, such as to ensure that designs do not impede tidal water circulation. It also provides for setbacks of parking from surface waters and the use of porous pavers and stormwater treatment techniques to aid runoff and stormwater quality management.

4.3.2 Potential Impacts

Impervious Cover

The FBC presents alternative land use form, building footprints and development densities. Based on generic buildouts, there will be lower corresponding levels of buildings footprints compared with the pattern projected to arise under existing zoning. This proposed footprint 31,973,147 sqft under the FBC, which is 1,520,604 sqft less than the 33,493,751 sqft under existing zoning. This will be a decrease of 4.54% (DGEIS Appendix 3: Zoning Potential Analysis). This implies that under the FBC generic buildout, there will be less unmitigated introduction of impervious cover and therefore a reduction of undesirable impacts to the City's water resource environment.

Street Design & Stormwater Management

In existing Subdivision regulations of the City, last updated in 2005, which serves as the current guide for layouts and adjustments of streets, there are limited and often no references and prescriptions for providing street trees, planting areas, and guiding drainage design, such as through defining Edge Drainage and guiding the introduction of the use green stormwater infrastructure, like is done in graphic and text form in different points of the FBC, including the Design Standards Matrix and the depictions in Street Design Standards Administration (Article 5).

Nor do the existing subdivision regulations contain graphics or diagrams that guide aspects of subdivision design. There are only five references to trees, either in proposed streets, or on plots proposed for development. For example, a reference to planting trees in Section 3. Street Design, B. Improvements, is vague – it prescribes street improvements inclusive of but not limited to pavements, curbs and gutters, drainage facilities, and street trees.

Conversely, the FBC's design standards in §405.23 are detailed. They elaborate on multiple standards that can aid stormwater quality, informing on when open drainage designs are allowed and when swales and rain gardens can be used to attenuate flows (and provide possible treatment). For 20 different types of streets, the FBC delivers detailed diagrams and guidance on street tree planting and planting areas. Meanwhile, it promotes preservation of mature healthy trees in the right away and it describes planting styles and fenestration.

Since a large but undefined part of the City's land area is contained in streets, the future evolution of new and existing streets under the FBC will positively enhance the stormwater environment and support the sustainability of water resource. This is because the application of designs in the FBC will slow flows, such as due to prescribed street tree canopy (and corresponding larger surface areas), or due to open drainage designs (such as where there are not curbs prescribed to enable overland flows to increase groundwater infiltration and decentralized flow patterns. This will ultimately aid healthier wetland, stream, and water body conditions because there is more gradual, distributed, and more polished runoff, the latter as a result of the of vegetation cleansing stormwater.

The current FBC does not change citywide specifications for stormwater management in Chapter 353. However, it does define parking lot landscape standards (§405.16.F). It also prescribes green infrastructure techniques in planting areas to help aid and enhance stormwater management. Surface parking lots in the FBC are regulated in 405.16.F. in order to manage the extent of impervious area, such that there cannot be more than 5,000sf within 500 feet of streams, creeks, rivers, wetlands and/or located in the 100-year floodplain, and in which case they must provide for retention and filtration of stormwater runoff from the impervious surface for a 10-year, 24-hour storm event in bioswales, rain gardens, or other facility that provides for the bioretention and biofiltration of stormwater on site. This is one example of a standard that provides a beneficial siting relation of infrastructure in terms of its relationship to features like wetlands, as it supports stormwater quality, and beneficial landscaping.

Water Resources & Shoreline Stabilization

Development and projected buildout because of the FBC prescriptions is also expected to further the protection of the City's waterfront resources and the Hudson River and Rondout Creek water environments. There are also multiple Development Standards within the Waterfront Overlay §405.15.D, that prompt conservation of contiguous tree stands and provide for green/ living shoreline stabilization and restoration. These standards will aid water quality by encouraging the shading of such resource areas and minimizing potential to contribute harmful erosion.

Flood Resiliency

Similarly, the FBC Waterfront Overlay Standards provide for a design flood elevation utilizing the 500-year floodplain. This will cause a reliance on floodplain best management practices over more area and in areas of significant but still emerging risk. This will ensure that any new development are built to withstand potential flooding. This can help avoid disruption of materials used onsite, which if exposed to flooding could end up entering and contributing to contamination to waterways. Likewise, standards preventing stockpiling of road salt and

requiring loading areas in the waterfront to be designed and operated so as to not convey deleterious potential effects on water quality will benefit the water resources for the same reason.

Water Dependent Uses

Finally, the FBC will protect water resources in the Waterfront by encouraging the phasing out of certain uses which are incompatible with and detract from the waterfront areas. Specifically, use allowances that link with §405.15 Waterfront Overlay Standards of the FBC provide for water dependent industry, but not the heaviest and most intense and potentially detrimental ones.

4.3.3 Mitigation Measures

Compared with existing zoning, the FBC retains and enhances more pervious, vegetated areas. This will serve to better mitigate stormwater by slowing flows (through interaction of rains with generally greater vegetation surface areas) and by prompting its infiltration more often due to a smaller Footprint Area. The FBC also specifies integrated development. This means that growth under the FBC should present lower potential to cause an adverse potential environmental impact on water resources in Kingston.

Erosion problems are evident along the City's shorelines. Unprotected shores are being eroded by stronger currents. Such erosion potential, when unmitigated, is causing siltation problems in the Rondout and will necessitate frequent dredging for boating and docking activities.[23] It is an objective for work on the shoreline interface, including proposals for modifications to bulkheads and dock, to be provided with sufficient information as part of site plan submissions (and any waterfront development) to enable evaluation of whether and how designs influence shoreline stability and in-water erosion and siltation potential.

This DGEIS does not provide site-specific analysis, so when development is proposed in and around the floodplains, including by levees along the Esopus Creek, reviewing bodies must define the required level of floodplain analysis. Applicants will need to provide an appropriate level of supplemental environmental assessment of potential flood impacts and how the use of BMPs is proposed to reduce the risk of harm being introduced to the water resource environment due to the potential flooding of proposed land uses.

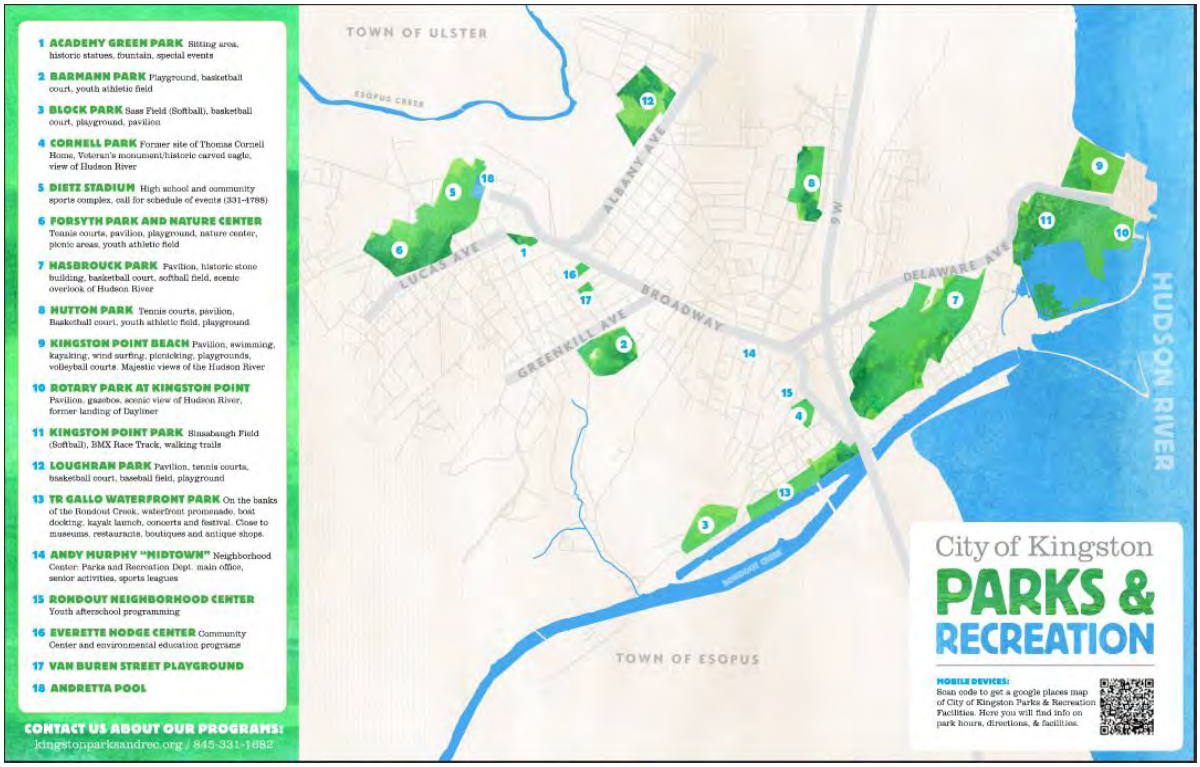
As site-specific development proceeds on and around the shoreline and in designated Waterfront Areas, it is essential that applicants document how planned development relates to the FBC, this DGEIS, the existing LWRP, its associated supplemental documentation, including all applicable LWRP GEIS analysis and prescriptions, plus special studies. It will enable the provision of a thorough level of detail and an adequate level of documentation and descriptions that would be supplied in a SEQRA Full Environmental Assessment Form and the required adjunct EAF (Part 2) Coastal Assessment Form. This rigorous assessment can define unique onsite context and identify how proposed new or altered site plans will adhere to multiple design objectives. This will support comprehensive but efficient Waterfront Consistency Determinations.

[23] 2013 NYSDOT Geotechnical Design Manual, Geology of New York State, Section 2, Page 5

4.4 Open Space & Recreation

4.4.1 Existing Conditions

Figure 12 – City Parks & Parks Facilities Spatial Footprint



Excerpt from an Undated City Parks Brochure That Does Not Show State Parkland

Park & Recreation Resources

The City contains a diverse collection of parks. The attributes for each park and recreation asset and the features of the parks and recreation facilities recreation services are described in detail within the 2015 Parks & Recreation Master Plan. They are also described in other subject plans, which are discussed as follows. Overall, the array of parks and recreation facilities in the City provide a variety of neighborhood, communitywide, and regional recreation opportunities. These resources are scattered throughout the City.

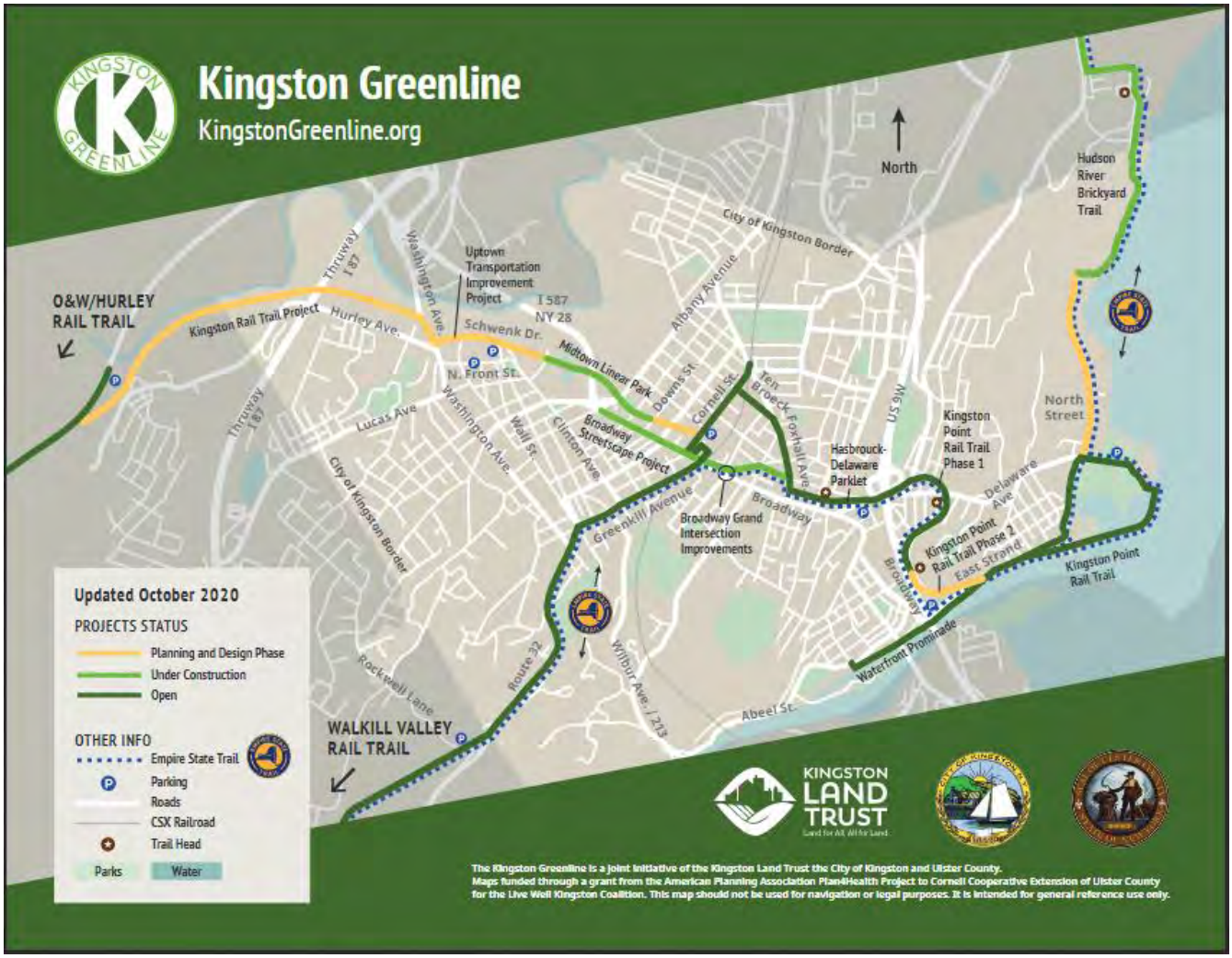
Since the establishment of City plans that guide open space and recreation, including the 2015 Parks & Recreation Master Plan, the 2019 Open Space Plan, and the LWRP and its attendant documentation, there have been substantial changes in the supply of parks and opportunities within the City. Specifically, these developments include, but are not limited to:

- Establishment of Sojourner Truth State Park, comprising over 300 acres in the northeast quadrant of the City, which contains a non-motorized segment of the regionally important Empire State Trail along the shoreline of the Hudson River.
- Additional buildout of a network of non-motorized trails throughout the City. This multi-segment, city-wide system of shared-use paths and trails continues to be expanded to connect areas and provide varied

recreation needs to a diverse population. The trails system serves as linear park amenities and it is a transportation alternative. These assets offer walking and bicycling opportunities and provide both accessible recreation and mobility benefits.

- The adoption of a broad capital investment and enhancement program involving Forsythe Park/ Deitz Stadium complex, inclusive of the pool.
- Extension of Kingston point amenities, inclusive of the addition of a soccer field.

Figure 13 – Linear Trails & Parks Network Layout



The above linear trails depiction, from https://kingston-ny.gov/kingstongreenline, shows the network in Kingston that exists or is planned. As depicted, there is limited northerly access with the exception of Empire State trail on the City's eastern shore.

Open Space Resources

The City of Kingston's Open Space Plan of 2019 is a definitive guide for conserving and reinforcing open space. The open space vision of the City is guided by its Open Space Vision Map. Generally, open space in the City is characterized by, and its context influenced by, its surface waters (including creeks, streams, and shoreline), forest patches, street trees, parks, greenways, and trails. Per the Open Space Plan categorizations, the three unique core open space areas/ environments of the City are the:

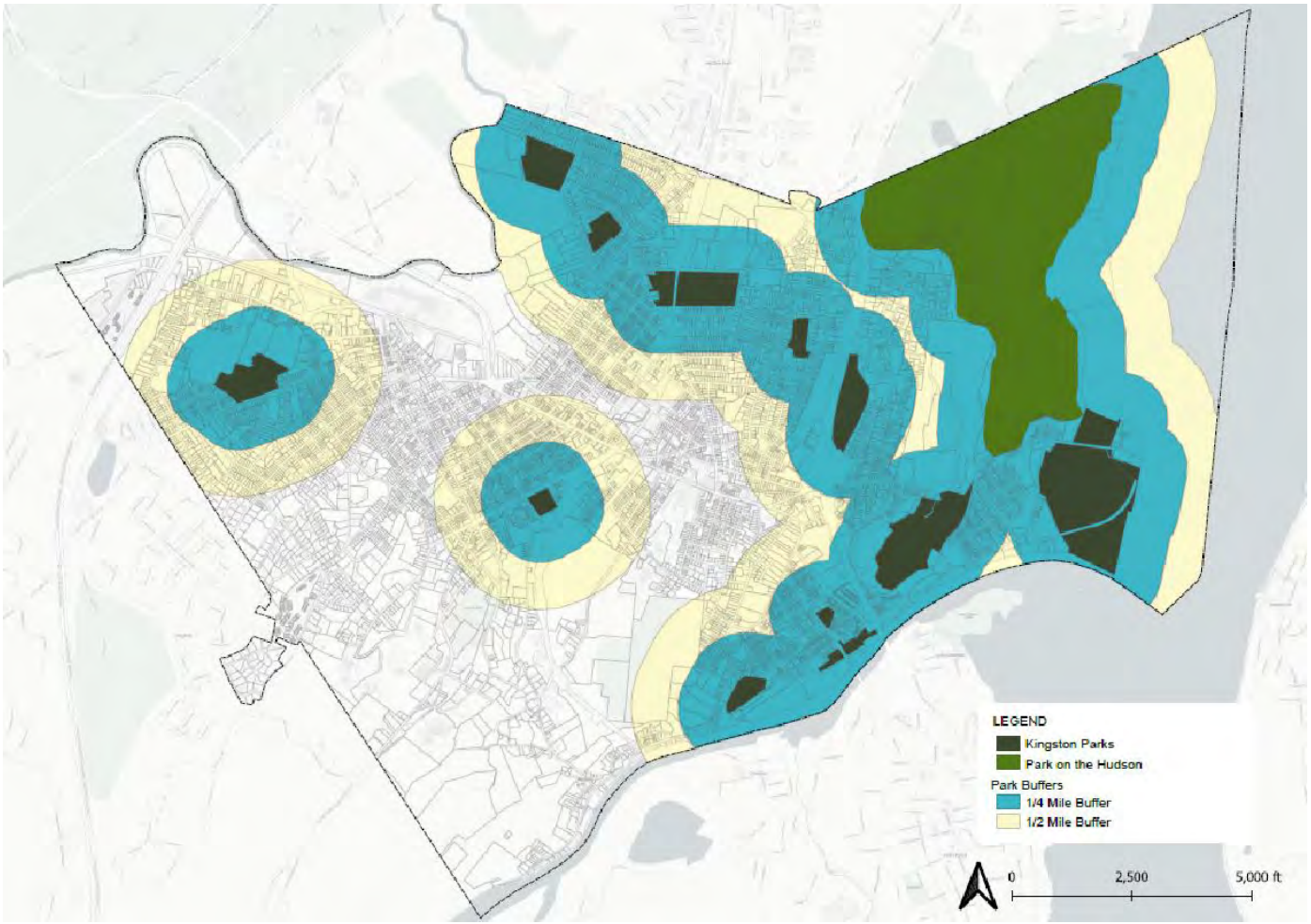
- Hudson River, Shoreline and Uplands;
- Rondout Creek Corridor, Shoreline and Uplands, and
- Esopus Creek Corridor and Lowlands.

The Open Space Plan, reflecting the 2015 Parks & Recreation Master Plan, supports providing recreational opportunities near residential populations -- particularly in areas where there are not nearby open space or park resource available. During public outreach around the Open Space Plan, expanding access in core urban neighborhoods, where there is an abundance of hardscape and relative lack of greenspace, was a common theme. One neighborhood noted as experiencing this need was Midtown, particularly north of Broadway. The Open Space Plan suggests this need can be addressed in multiple ways, including by expanding the City's existing greenway trail and linear park system, and adding small pocket park opportunities along trails.

The Plan observes that Kingston's urban forest compliments the pattern of public lands and open space. Kingston is a "Tree City USA" per Arbor Day Foundation criteria. The City tree inventory characterized 3,937 street and park trees. These natural amenities reinforce parks and trails and access around and across the street network and support a healthy environment that supports patterns of active mobility for people of all ages and abilities.

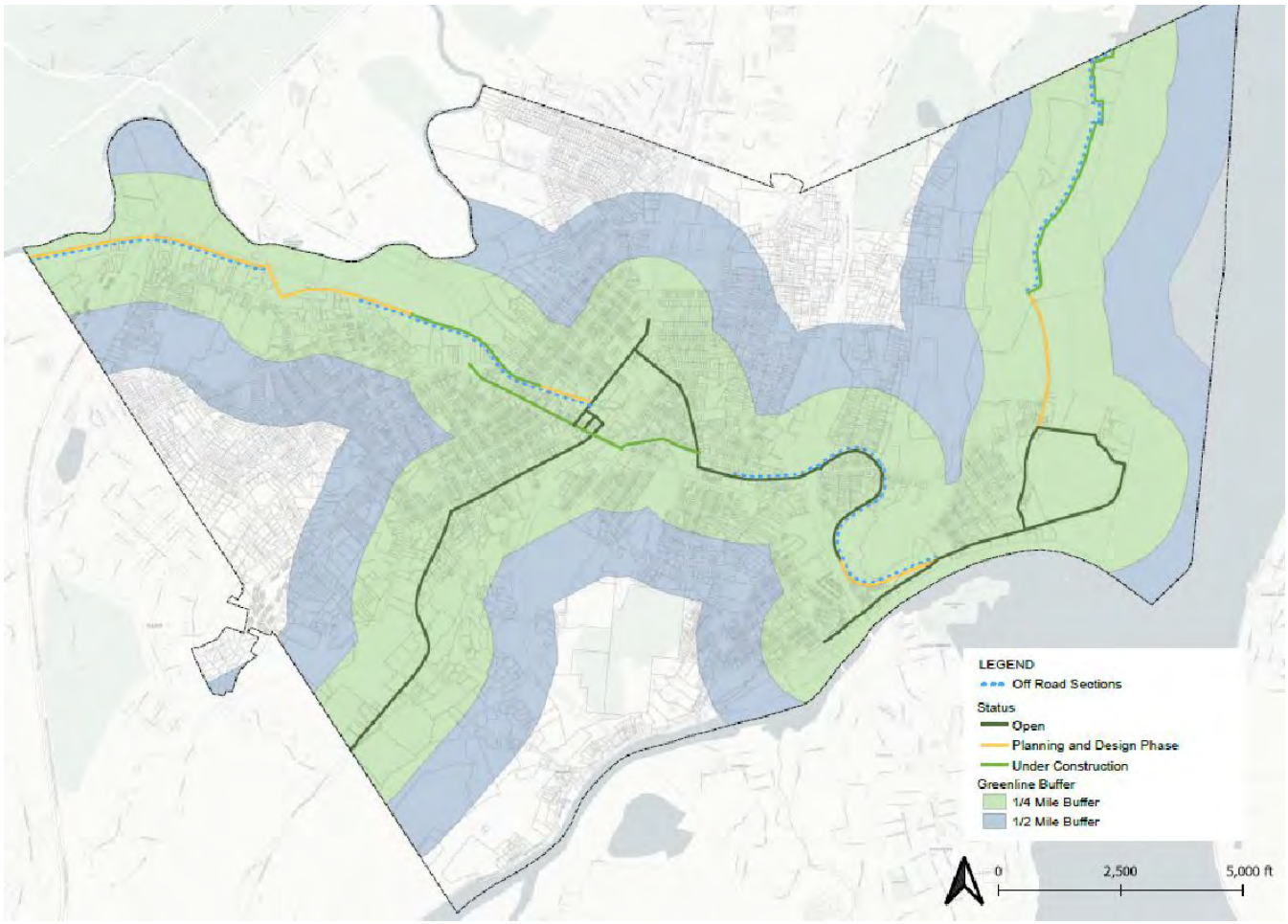
Parks Buffer Map covers existing conditions and depict parks, plus the Greenline non-motorized trail system footprints, with distances drawn around them of ¼ (blue) and ½ mile (yellow). Considering the set of City and State parklands, and the portions of the City that are depicted as greater than ½ mile away, there is limited availability of parks in and around the established population densities in Mid-Town, north of Foxhall Avenue, and in portions of Uptown, although there is now also some passive public available space around the Louw-Bogardus House (Frog Alley) property which was restored as part of the NYS Downtown Revitalization Initiative .

Figure 14 - Parks Buffer Map



Tiers of walkable 1/4 and 1/2 mile distances around Parks (Dover, Kohl & Partners)

Figure 15- Walkable Distances of 1/4 and 1/2 mile from Greenline Sections



Considering the Greenline, and especially locations of its component non-motorized trails, like the Mid-Town Linear Park (Ulster County), Greenkill Avenue Bikeway, and the Kingston Point Rail Trail and its emerging Hasbrouck-Delaware Parklet, these non-motorized trails supply another form of accessible and unique recreation opportunity, including in places not within ½ mile proximity of parkland. These places have large existing populations, so non-motorized trails are important potential outlets for recreation.

Recreation Policies

The City's zoning code and subdivision regulations impact the provision of recreation and open space during land development involving particular properties. Generally, outside basic bulk regulations, existing zoning is silent about attributing minimum levels of onsite space in proposed developments. Yet, standards define related performance features. For instance, there is a definition of Usable Open Space, and the RF-R and RF-H criteria promote public shoreline access and recreation. In the Subdivision law, there are only general standards that guide design of onsite open space and recreation in relation to plats and streets. For instance, these standards do specify under its Article III, Section 6 'Ownership and Maintenance of Park and Playground Area', when a park and/or playground area shall have been required, that Planning Board may require the Plat to be endorsed with appropriate

notes to this effect, and it may also require the filing of a written agreement between the applicant and Common Council covering future title, dedication, and provision for the cost of grading development, equipment, and maintenance. Otherwise, the Planning Board currently relies on NYS City and General Municipal Laws[24] for guiding the providing onsite recreation or providing for a fee in lieu thereof.

The City's Comprehensive Plan has a principle, page 15, that recreational offerings must be diverse and robust, including both public and private and indoor and outdoor options. On page 17, it identifies the City's three mixed-use cores as centers for local life providing food, personal services, transport and mass transit options, employment opportunities at a range of incomes, a diversity of housing options, and nearby public and private recreational facilities. The general plan has numerous recommendations for advancing recreation and open space, but I does not call for zoning policy changes to support recreation opportunity. For instance, it indirectly recommends reviewing urban agriculture standards (page 96) and illustrating subdivision regulations (page 102). Conversely, the public input gathering at the Charrette as part of preparing this FBC showed very strong community interest parks and greenways (see page 9 in the December 2021 Charrette Summary by Dover, Kohl and Partners).

4.4.2 Potential Impacts

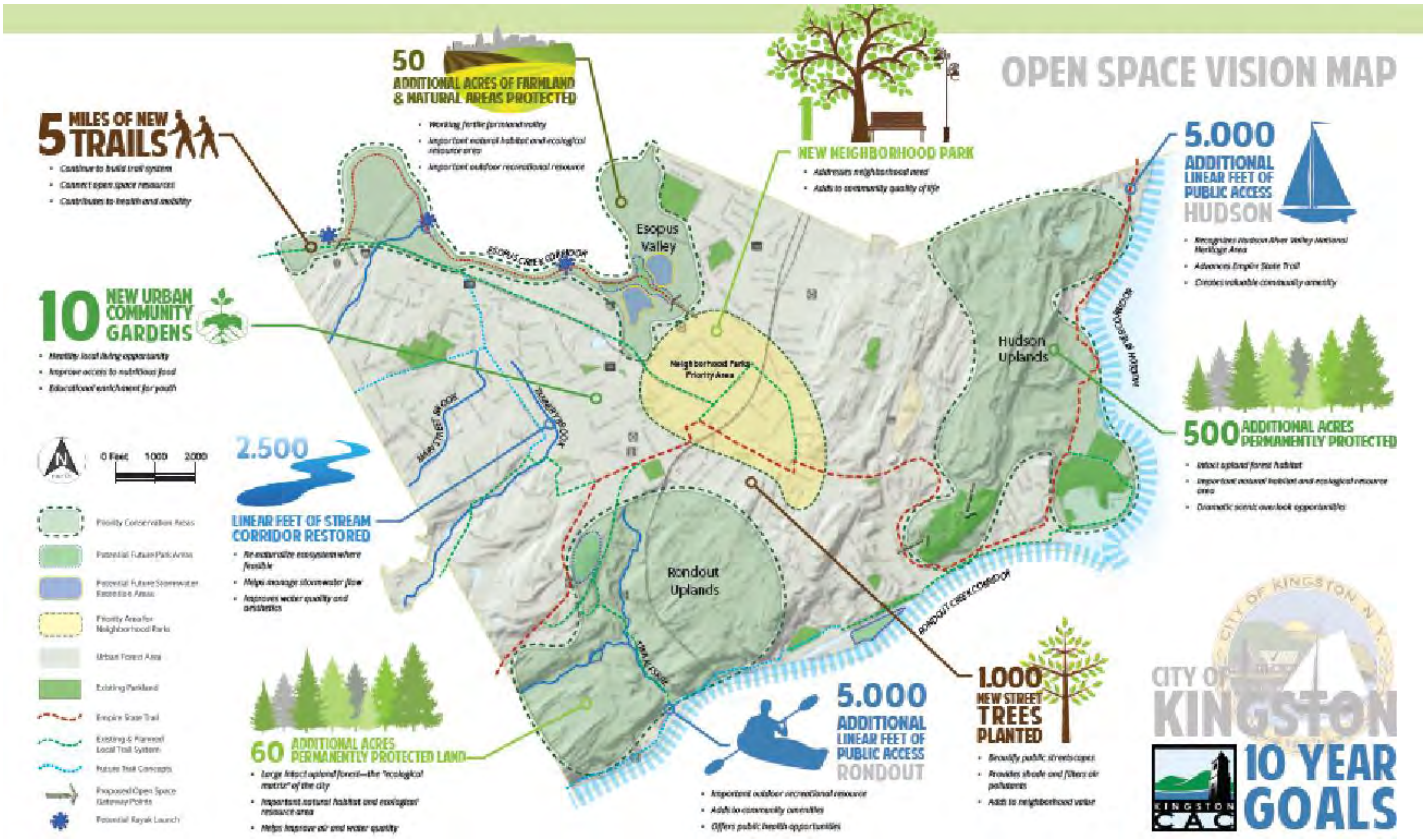
The T1 Natural, T2 Conservation and T3 Large Lot Transect assignments on the Regulating Map, plus Special Districts assignments made on the 'Special Districts & Parks Map', will impact future open space layouts. Generally, the lower density type transects more often overlay or are adjacent to Priority Conservation Areas (PCAs). The general footprints for the three defined City PCAs are identified on the Open Space Plan Vision Map. Assigning patterns of lower densities of land use in and around the PCAs is consistent with intent for open space design by buffering the PCAs from higher density building. The growth that does arise is therefore directed to occur more in higher-density transects, like T5's and T4s, which currently represent more populated areas. These same places where growth is directed, outside the PCAs, are de facto designated growth cores which are best equipped to accommodate growth and which contain more ideal mixes of infrastructure to support this growth.

The enhancement and development of parks and green spaces and advances in walkability are goals embodied in the FBC. For places where development may occur, the FBC presents minimum usable open space requirements which call for an assignment of 10% of sites 5,000 sq. ft or greater for this purpose. This standard is applicable within T-Districts when there is residential development involving four or more units. The same 10% open space standard applies to conservation village plans (CVP) or walkable neighborhood plans (WNP), which are types of development available per Large Site Standards in FBC Article 7.

Open space design standards - Different Open Space Types & Dimensions are defined in the FBC Table §405.24.D.1. The Table illustrates open space types it stipulates size objectives for the different types. The Table also describes design intent to guide the establishment of varieties of open space. Specifically, it links and associates them with pattern gradients and the contexts of transects to show the districts they should typically be located within.

[24] https://www.nysenate.gov/legislation/laws/GMU

Figure 16: Summary "Vision Map" from the City Open Space Plan



The proposed development intensity under a FBC future buildout will contain 2,696,990 sq. ft. more of building floor space than could occur under existing zoning (ZPA,). However, compared with existing zoning, the FBC yield will be more compact, both in terms of locations where growth is channeled in the City, and in terms of the Footprint Area of potential buildings. This overall increase in building space will be contained in relatively taller and volumetrically larger buildings, which have on aggregate this relatively smaller footprint. Still, in the City cores, there could potentially emerge higher proportions of residential units based on the allowance for residential units in more locations plus the greater enabling of mixed use.

Under the existing zoning buildout, the buildings that can be developed on individual properties will on aggregate contain less space and be more sprawling with 33,493,751 sq. ft. of building Footprint Area. This compares with 32,045,467 sq. ft. of building Footprint Area under the FBC buildout (ZPA). Furthermore, of the total amount of potential building under the FBC buildout, locations where the greatest potential growth could occur are concentrated in locations in and around Mid-town, on both sides of Broadway, West of Grand Street, as well as on major corridors, such as around northern Albany Avenue, Delaware Avenue Rte. 9W, as well as on the waterfront.

These areas where new growth has a potential for higher proportions of residential units often correspond with the T5 and T4 transect zone assignments. Within these transects the FBC prescribes open spaces as follows:

- **Greens** – which consist of lawn or vegetated ground cover and informally arranged trees and shrubs, typically furnished with paths, benches, and open shelters and have at least ½ acre.

- **Squares** – acting as formal open space available for recreational and civic uses and spatially defined by abutting streets and building frontages, with landscaping consisting of lawns or vegetated ground cover, trees, and shrubs planted in formal patterns, and typically furnished with paths, benches, and open shelters and a 5,000 sf minimum area.
- **Plazas** – available for civic and commercial uses and spatially defined by building frontages with landscaping consisting primarily of pavement (can be pervious) and trees and shrubs that are optional and have a 4,000 minimum area.
- **Pocket Parks/ Playgrounds** – for informal activities in proximity to neighborhood residences, where landscape design may vary but shade trees should be included and typical minimum area should be at least 2,000sf.
- **Community Gardens** – containing grouping of garden plots available to nearby residents for small-scale cultivation with typical minimum area of at least 1,000sf.
- **Trails** – which are public paths that supports non-automotive mobility of pedestrians and/or cyclists which in the T4/T5 should have 10' min trail width.

The Zoning Potential Analysis (DGEIS Appendix 3) identifies 12,080 potential dwelling units that would be currently allowed under existing zoning, and a potential total of 16,531 dwelling units that would be possible under the FBC. This future buildout will occur over an undefined time frame. Having an undefined period of buildout means the analysis does not make assumptions regarding when or at what rate land development may arise, as this is uncertain and a function of many unanalyzed factors. Still, the net change in the total amount of residential building under the FBC could translate into a significant impact, with 4,457 additional dwelling units under the FBC buildout than a under an existing zoning buildout. There should be continued enhancements of existing parks, linear trails, and protected open spaces, plus some mix of undefined new additions to these types of assets in order to serve the substantial future recreation demand that will accompany growth within Kingston's residential sector.

Since there are limited parks directly in and around Midtown, the location and density of potential growth in this part of the City, with the addition of significant new residential units, will generate higher location-based demand for recreation opportunity. The City's Master Plan notes a need to promote parks and recreation supply in Midtown, including through establishment of pocket parks (p69) and indoor recreation use(s) (p74). There are no limitations in the FBC that would impede this.

Likewise, since waterfront tourism, restaurants, and active recreation underpin the unique character base of the Rondout, reinforcing easternly extending trails should provide for a way for users from Midtown to conveniently connect with those areas. Moreover, besides providing for Required Usable Open Space onsite as part of developments, per §405.24, the FBC standards are organized to advance walkability and complete streets, so there will be higher-quality access and more pleasing street environments achieved over time due to the FBC's streets development guidelines.

The FBC will cause improved open space layouts on sites through using Article 6 standards. There are explicit definitions of usable open space set forth in §405.24 of the FBC. Likewise, the associated design standards of405.24.C.2. require the provision of shading, street-facing open space layouts, and buildings oriented to open space. The visual qualities of open space and recreation amenities will be enhanced through tactics like limiting fencing around stormwater infrastructure and providing electricity and water fountains that enable extended visits

and support civic functions. Moreover, this part also sets standards for connecting development sites to trails which will support the character, context and multiple functions of trails.

Waterfront – FBC §405.15.C requires public access to the Rondout and Hudson. It greatly improves on the existing zoning by defining what this constitutes. Public access there is also incentivized in §405.20 by enabling bonus building space through greater height which is allowed in conjunction with establishing new public open space of at least 5,000 sq. ft.

Urban Agriculture - The FBC definitions and standards for urban agriculture enable sustainable food systems development as they provide for establishing this type use in multiple transects. §405.21.C Supplemental Use Standards, provides regulations for this activity in alignment with §405.5.C Permitted Uses. It frames compatible sites and a fit with adjacent existing uses. This code far exceeds the limited guidance available in existing zoning by regulating actions like composting, accessory structures, fencing, and chicken coops. Importantly, Urban agriculture is only allowed as community gardens or rooftop gardens in T5MS and T4MS districts; yet, this arrangement can enable the provision of a beneficial form of community-oriented and vegetated open space in the urban core. When it is on a rooftop, it extends the available outdoor surface/plane available to support food production/ development of the food supply. At the same time, this potential for agricultural gardening can generate a valuable space that can serve as an outlet for using this activity as a form of outdoor recreation and a source of enjoyment for residents.

4.4.3 Mitigation Measures

At the landscape level, due to FBC transect assignments and the prescriptions in its standards, the FBC will reinforce natural areas as it prompts a city-scale pattern of three distinct PCAs/open space cores and three offset mixed-use cores centering on Uptown, Midtown, and lower Broadway/ the Rondout. At the site level, it will also foster the creation of onsite open space and recreation attributes that enable recreation and leisure plus contribute to pleasing property- and location-based configurations which supply open space and provide context which fits with and enhances the associated Transect or Special Districts.

Considerations should always be given during site-specific development to improving neighborhood connections and neighborhood design. This will ensure that active transport can be integrated into site plans to aid area-level mobility, including through support of safe recreational as well as utilitarian walking and bicycling.

In addition to the importance of property owners/ developers contributing improvements of their street frontage, it is necessary to contemplate how site plans configure design in relation to adjacent rights of ways, open space or recreation features. In some cases, there may be promotion of onsite land reservations, such as when space on an adjacent property may be available for jointly establishing amenities. Likewise, there should be vigilance for opportunities to create pocket parks around the City as development occurs.

To mitigate the FBC's residential growth impacts on the open space and recreation environment, as part of considering whether to grant or recommend the grant of waivers, and as part of reviewing development applications, the City's assigned reviewer(s) can provide balancing tests to consider whether an applicant is proposing any actions that can help offset the effects of granting a waiver. In such situations, it can be acceptable for the reviewers to promote options to develop and enhance recreation or open space features onsite or in the surroundings. Alternatively, in situations where waivers are being contemplated, it also is acceptable for owners to volunteer

contributions towards advancing priorities for open space and recreation, such as that are defined in plans or policies, to provide mitigation in exchange for the approval of a waiver.

The City should continue to provide ongoing assessment around the variety of recreational and open space needs that may evolve around the City as growth occurs. This assessment will aid future policy and investment actions. It will ensure that the form and level of growth influenced by the FBC can be accomplished with optimal fit in relation to public resources.

There must be significant attention to continuing with efforts to design and strategically implement investment in enhancing the supply and mix of open space and recreation amenities in the Hudson and Rondout Waterfronts. For Waterfront Areas, there is an extensive LWRP and other policy documentation, including an existing Brownfield Opportunity Area GEIS, that informs development context and guides the design and management of growth so as to not detract from open space character or the supply of recreation opportunities. The effect of proposed development under the FBC within the Waterfront and Waterfront Mixed-use Special Districts on recreation and open space must be addressed using Coastal Consistency Determinations and other site-specific stage reviews. At minimum, this analysis should be presented using Full Environmental Assessment Forms.

In the Rondout, the "Wilbur" hamlet has limited recreation opportunity and access to publicly available/ accessible open lands. This is in part due to a physically limited supply of land disconnection from the rest of City based on steepness of terrain, distance, a lack of pedestrian facilities (no or limited sidewalks or publicly accessible paths along Wilbur Avenue), and based on the land use mix and land use form. Bike and pedestrian connections could be useful for connecting residents of Wilbur with waterfront points like Strand Street, plus there can be formalization of water access locations. It may also be possible to develop recreation outlets on Island Dock.

Based on discussions in the City's 2015 Recreational Master plan, and its 2019 Open Space Plan, recreation opportunity and space is needed in the neighborhood between Albany Avenue and Cornell Street. In addition, there can be attention to opportunities to protect some of the undeveloped open spaces within larger blocks of open land on the west side of NYS Rte. 9W, west of East Chester Street.

To support the higher-density cores, the Open Space Plan recommends securing and improving a new open space and recreation site in Midtown. Ideally, such new site, or sites, could provide active recreation (e.g., field play/indoor recreation) plus passive recreation (e.g., walking paths, community gardens) in convenient spots. There will also be a need for publicly accessible playgrounds. Additional considerations can also be made to identify and buildout plazas and pocket parks along the path of Empire State Trail from East Chester Street and further west to provide places where people can stop and relax, and/or gain trail access.

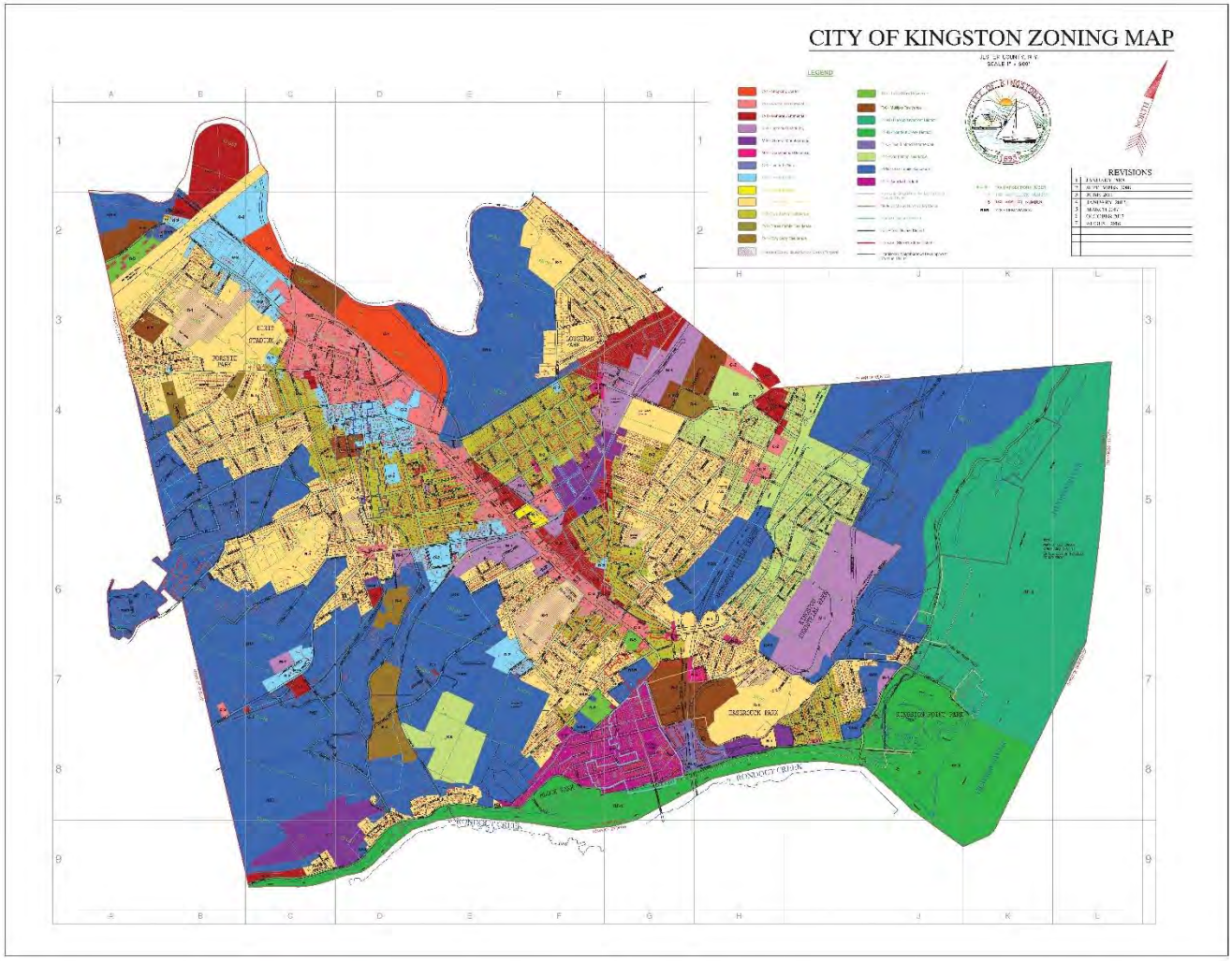
One of the organizing principles of the FBC is to support a green and resilient future, which it does by framing and by encouraging development that possesses a range of high-quality open spaces. This can include parks, greens, squares, plazas, playgrounds, trails, and community gardens that are distributed within neighborhoods and mixed-use centers. The FBC facilities the proliferation of open spaces by providing multiple open space and recreation design standards and providing a clear process of development application review that can support efficient action on proposals that fulfill the purposes and intent of the FBC and conform with its standards. A streamlined process is available for SEQRA Type II actions that are deemed to not have a significant effect on the environment, per New York Environmental Conservation Law Article 8 and this can reduce the burden on small, incremental development projects that fit with City FBC requirements.

Overall, the Form Based Code is no less limited or restrictive than existing zoning in how it brings forth usable Open Space. Importantly, the FBC would through its transect allocations, code prescriptions, guidelines, and standards, compel enhanced City form and better ambiance, including through its facilitation of a more compact arrangement of building compared with that which would arise under existing zoning. Yet, since the FBC provides for more opportunity for creating new housing stock to meet potential population growth than is expected now under existing zoning, the above mitigation is specified to ensure that there is realization of a quality future supply of open space and recreation amenities.

4.5 Land Use & Zoning

4.5.1 Existing Conditions

Figure 17: Existing Zoning Map



The City's current zoning is depicted with the various zoning districts displayed on the Zoning Map. The following zones are applicable across the municipality:

- C-1 Shopping Center
- C-2 Central Commercial
- C-3 General Commercial
- M-1 Light Manufacturing
- M-2 General Manufacturing
- N-B Convenience Business
- O-1 Limited Office
- O-2 Limited Offices
- R-1 One Family Residence
- R-2 Two Family Residence
- R-3 Three Family Residence
- R-4 Tow Story Residence

- R-5 Three story Residence
- R-6 Multiple Residence
- F- H Hudson Riverfront District
- RF- R Rondout Creek District
- RCL Res. Limited Commercial
- RR One family Residence
- RRR One Family Residence
- RT Rondout Creek

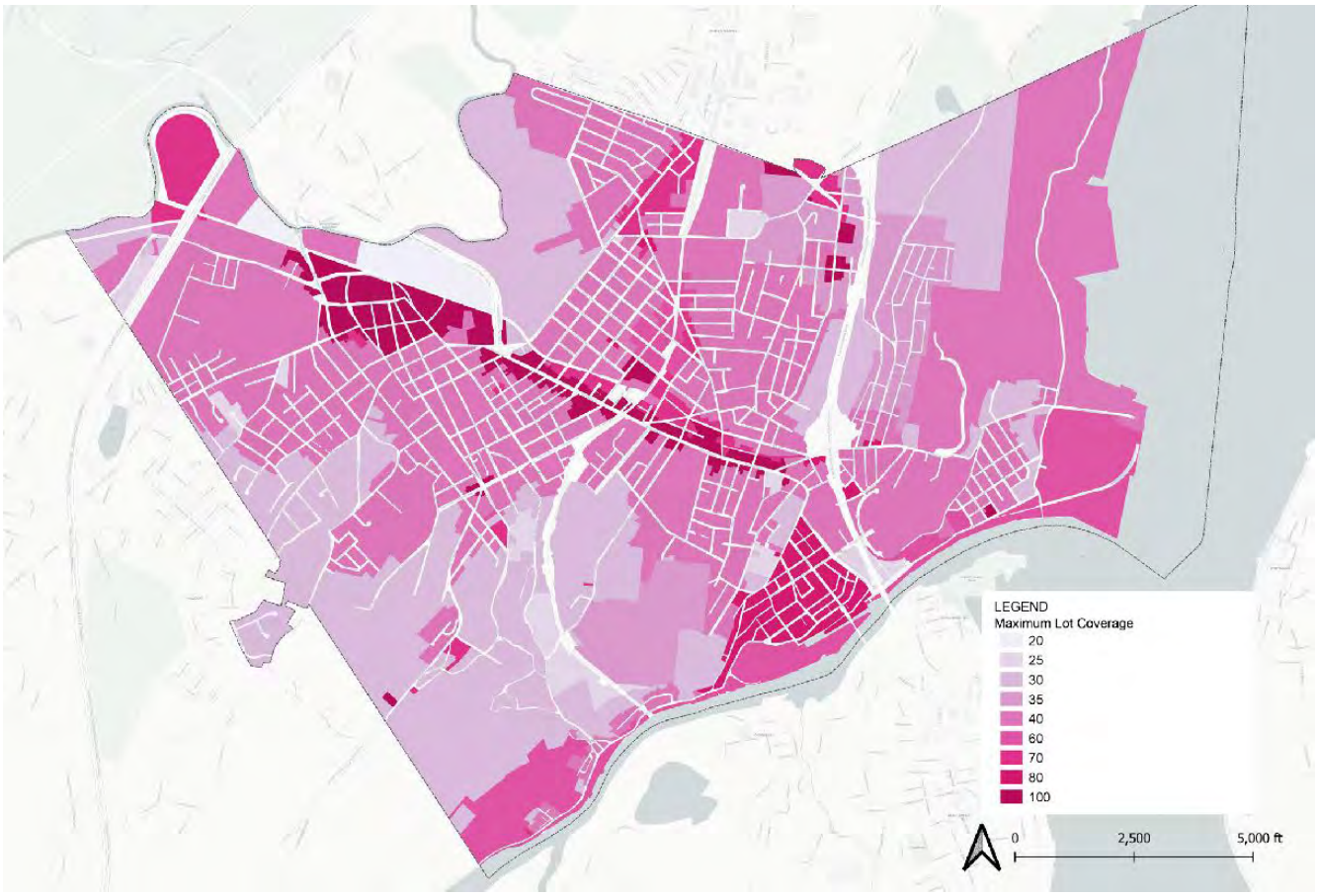
The spatial allocations under the existing zoning reflect the existing context and the land use characteristics. As displayed, considering the pattern of existing zoning, it is apparent that much of Kingston's periphery is currently programmed for low-density development. This is associated with the One Family Residence Districts (RRR, R-1 and RR). In addition, the northeastern edge of the community is overlain by the Hudson Riverfront (RF-H) that allows for a more moderate density, yet, large proportions of the land area within this RF-H Zone are now contained in the Sojourner Truth State Park and will not be developed.

Table 3: Current Zoning Allocations in Tabular Format

Zoning District/ Land Uses	Area (Acres)	Percent of Total Area
C-1	69.26	1.79%
C-2	133.77	3.46%
C-3	113.01	2.92%
M-1	173.56	4.49%
M-2	97.90	2.53%
N-B	3.40	0.09%
O-1	0.55	0.01%
O-2	147.90	3.83%
O-3	3.34	0.09%
R-1	785.00	20.30%
R-2	274.64	7.10%
R-3	0.16	0.00%
R-4	48.48	1.25%
R-5	27.16	0.70%
R-6	54.86	1.42%
RF-H	272.15	7.04%
RF-R	162.70	4.21%
RLC	7.65	0.20%
RR	188.85	4.88%
RRR	1,227.10	31.74%
RT	74.74	1.93%
Total	**3,866.18**	**100.00%**

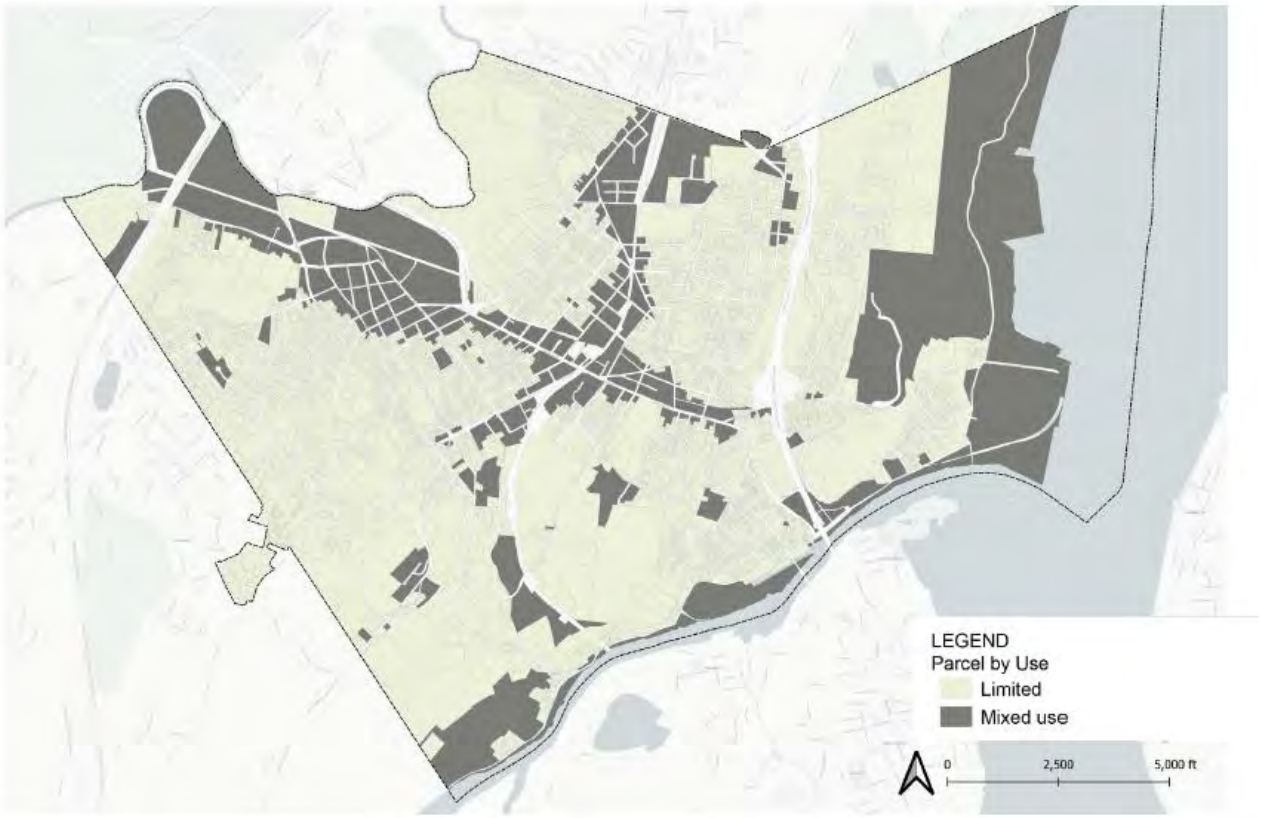
The current zoning allocations table shows the acreages breakdown by zoning district as addressed in the Zoning Potential Analysis without excluded areas. As depicted in this table, over half of this total landscape, or 56.9%, is allocated within the three low density One-Family Zoning Districts (RRR, R-1 and RR). A sizable area of the City, generally arranged around its outer edges, is comprised of residential neighborhoods within a pattern of detached homes.

Figure 18: Maximum Lot Cover Allowances (Existing Zoning) from 2021 Charrette Summary



The Comprehensive Plan in the first sentence of its Overview, page 17 states: "The guiding principle of the plan for Kingston is to concentrate density and retail commercial uses in three core areas: Uptown centered at the Stockade District, Midtown centered at the Ulster Performing Arts Center, and Rondout centered at the foot of Broadway". Considering the patterns of land use influenced by zoning, as depicted in the graphic drawn from page 6 of the Charrette Summary, coverages allowed are highest in and around the Broadway spine/ corridor. The three cores of Uptown, Midtown and the Rondout are arranged around it. The pattern of coverage lowers radiating outward around them, although this pattern is not absolute and there is some moderate density also allowed throughout the Rondout between McEntee and Abeel Streets.

Figure 19: Limited Versus Mixed Use Parcels (Existing Zoning) from 2021 Charrette Summary



The generic depiction of where mixed-use development is allowed under existing zoning is shown in Figure 19. As illustrated, mixed-use development under existing zoning is concentrated along Broadway and within the three City cores. It also arises by the north part of Albany Avenue and on the northern part of Foxhall Avenue.

Existing Zoning Framework Zoning Objectives

Zoning codes and subdivision regulations directly establish the City's land use patterns and have great influence over development. This includes the uses, mix, intensity and general ambiance and context. Zoning can also influence the City fiscally, impacting the land assessment mix and the respective amount of land set aside for residential, commercial or industrial development. This eventually impacts the physical environment and how the city looks and feels, and what areas are more likely to be developed.

Considering the existing zoning regulatory framework, site plans and special permits for the use of land and buildings are issued by the Planning Board. The Lot and Bulk Requirements table of the City Zoning code details the minimum lot and yard requirements, maximum building height (feet/stories), maximum lot coverage, maximum usable open space, floor to area ratio, maximum length of building and minimum distance between buildings permitted in all zoning districts of the City. Meanwhile, the text of the zoning law for each particular zoning district outlines the uses permitted by right, while the supplemental standards outline the additional allowances, such as by special permit.

Based on interviews with building and planning staff, the Planning Board currently spends a significant portion of its time reviewing annual special permits and operating permits compliance renewals. As a result, it was identified

as a priority for the FBC an area to achieve streamlining and establish clearer, more straight forward permitting standards. The complexity of the existing City zoning code, Chapter 405, is an impediment to redevelopment. A simpler code would reduce the processing time of development applications and thereby mitigating an impediment to economic development.

There is also a general problem that the current zoning code is outdated. For example, it does not provide for and facilitate a pattern of site, area, neighborhood, district, and City-scale design and growth that will provide for new and upgraded buildings and streets that will compliment and fit with Kingston's historic physical patterns and its distinct ambiance and sense of place. In fact, Kingston's Comprehensive Plan calls for a new zoning code and it recommends consistently aligning zoning with other subject-specific and character plans of the City.

Figure 20- Excerpt from Public Input Gathering on Interests for Zoning Update

The following are examples of some recommendations within the Comprehensive Plan:

- **Strategy 4.12.2:** Simplify and Illustrate Zoning & Strategy 4.12.4: Simplify Code. The complexity of the existing zoning code is an impediment to redevelopment. A much simpler code would reduce

processing time of development applications thereby mitigating an impediment to economic development (p39). It notes that the presentation of simplifications will not result in adverse impacts where the actual land use controls are not compromised.

- **Strategy 4.12.5:** Develop revised procedures for site plan review which give authority for approval of site plans below certain thresholds to the staff of the Planning Department. This procedure will expedite the site plan review process and relieve the Planning Board of basically ministerial functions. In establishing the thresholds for administrative review, the City should consider those items which are listed in 6 NYCRR 617 as "Type 2" actions as well as those which are regularly approved by the Planning Board as a matter of course.
- **Strategy 4.12.3:** Establish a procedure for change of use.
- **Strategy 6.2.1**: Develop procedures to coordinate and streamline review functions by multiple agencies.

The 'Kingston Forward Charrette Summary', December, 14, 2021 is provided in DGEIS Appendix #4. It provides extensive supporting documentation on existing land use and the needs and interests around design, infrastructure, and growth that can be supported by reforming or replacing the existing zoning so it does not inhibit the growth of the City. Its 'Big Ideas – Envisioning a Better Code', pp 28 through 42, list various needs and the rationale for making a zoning overhaul.

Figure 21: Examples of the limited graphics contained in existing zoning

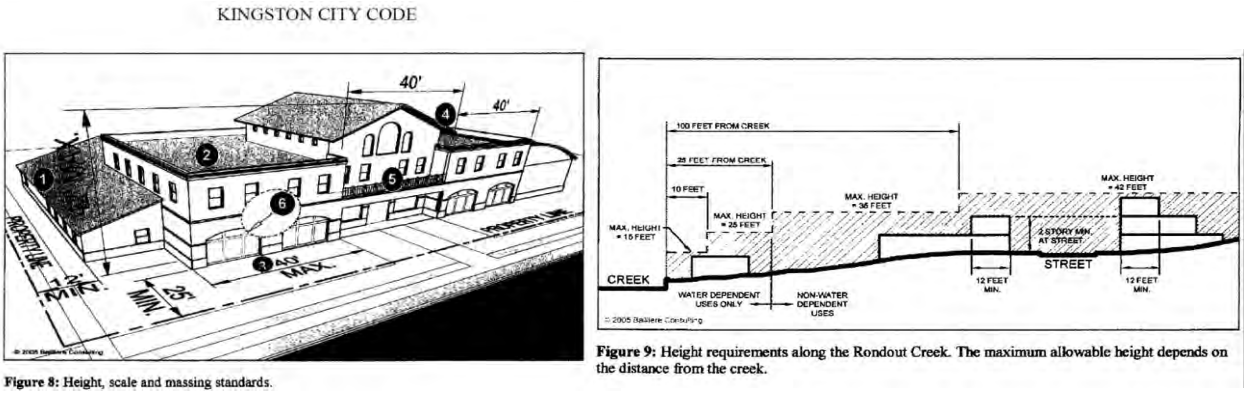


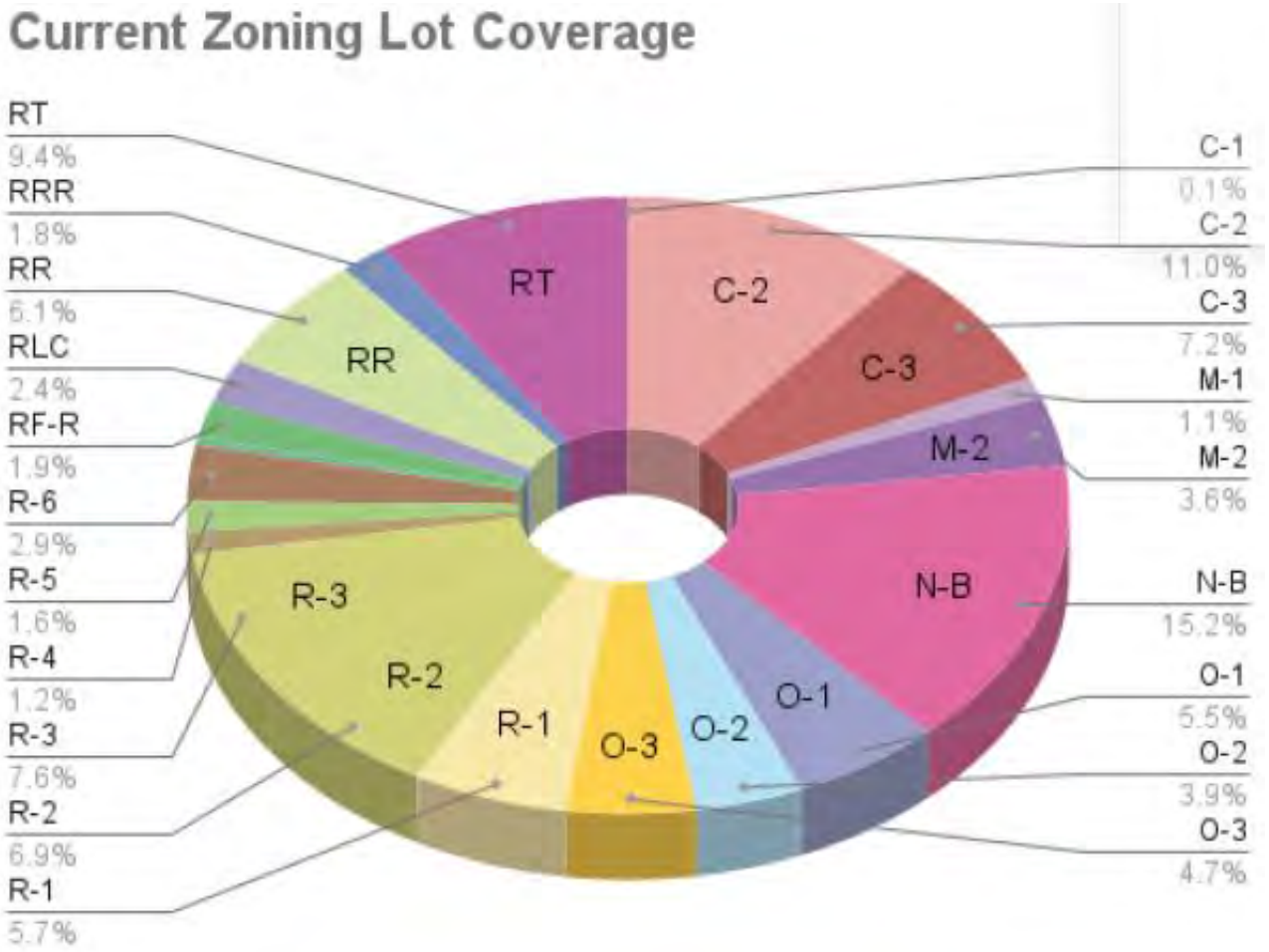
Figure 8: Height, scale and massing standards.

Figure 9: Height requirements along the Rondout Creek. The maximum allowable height depends on the distance from the creek.

Existing Zoning Buildout Analysis

There are 8,342 parcels in the City. The Zoning Potential Analysis examines the characteristics of these using a Geographic Information System (GIS) model. By presenting a generic buildout analysis on 7,334 lots, it is possible to compare land use changes that will occur according to the FBC regulating plan with the impacts that could arise under policies for land use regulation under existing zoning. This generic modeling of buildout enables understanding around how the potential spatial pattern of land use, building densities, and growth generally may change under the FBC compared with what is provided for under existing zoning.

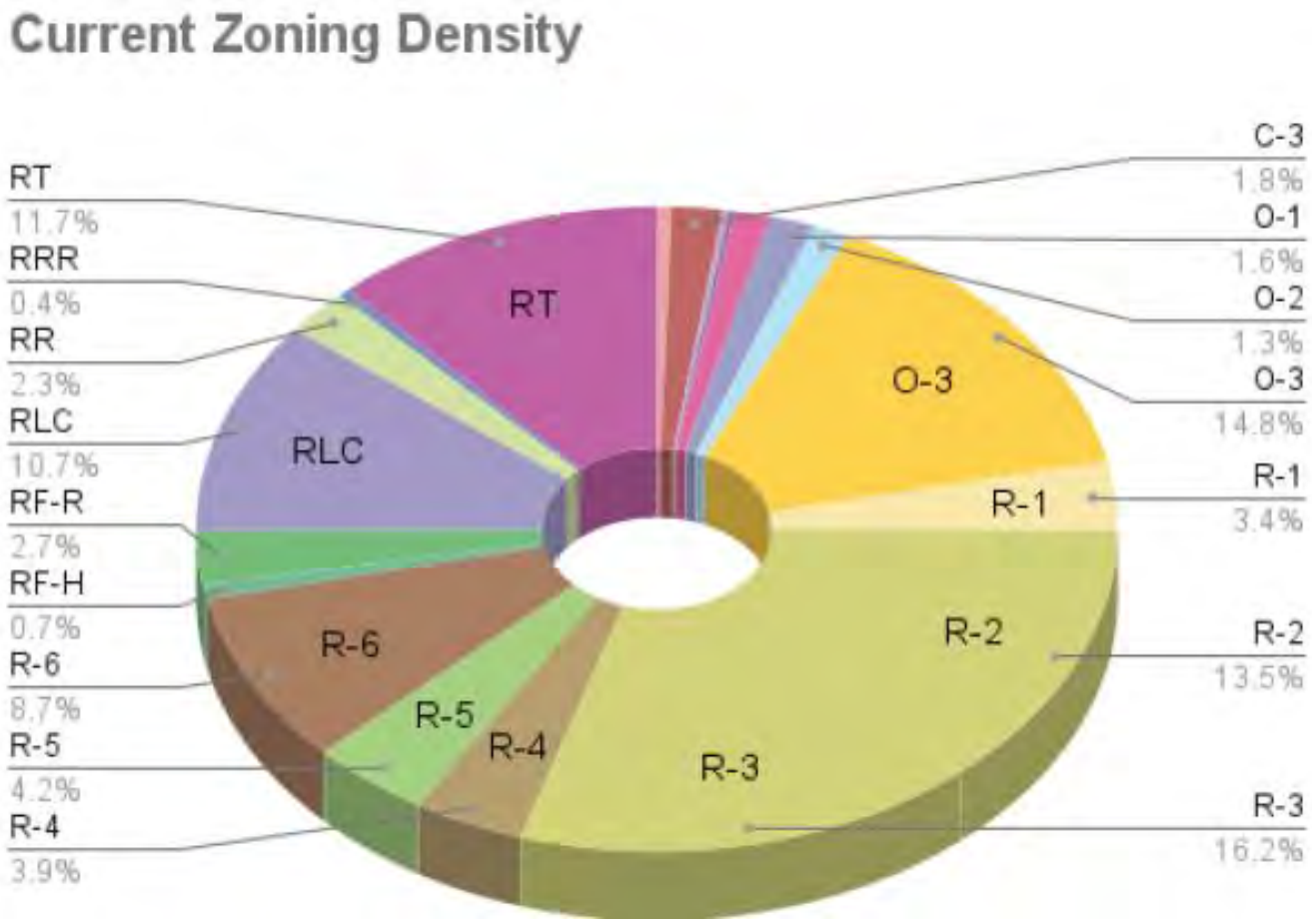
Figure 22: Lot Coverage Under Existing Zoning (from Zoning Potential Analysis)



Much of the development footprint under the current zoning regulations is concentrated in the commercial and residential higher density zones. Locations in Mid-town, around Albany Avenue and Flatbush Avenue and broadly around Uptown often exhibit relatively high levels of zoning lot coverage under existing zoning. When zoning coverage allows sprawl on sites, and there are large parking lots, often with buildings setback far from the road frontage due to the parking areas being situated adjacent to the street, this can result in form that is not fitting with the traditional or historic building pattern. It influences undesirable character and changes the ambiance of such areas.

The majority of the development density potential of the current zoning regulations are concentrated in the higher density residential zones.

Figure 23: Zoning Density Under Existing Zoning (from Zoning Potential Analysis)



General Overall Future Development Potential Under Existing Zoning

The 'Zoning Potential Analysis - City of Kingston, NY', by Gridics (DGEIS Appendix 3), also referred to as the ZPA) assesses possible growth under existing versus proposed zoning. Under existing zoning, the general development potential is displayed in terms of the yield of future square feet of building area that may be experienced (Buildable Area), and the building footprints that may be possible associated with this. These are broken down across all existing zoning district.

Table 4: Existing Zoning – Future Development Potential

Current Zoning	Allowed Maximum		
	Building Area	Footprint	Res. Units
C-1	39,272	14,034	4
C-2	9,541,993	3,367,417	73
C-3	3,830,717	1,857,018	235
M-1	1,034,921	452,180	42
M-2	1,675,760	814,340	25
N-B	148,307	118,623	5
O-1	34,683	6,865	1
O-2	6,520,056	1,341,032	225
O-3	72,828	36,414	58
R-1	20,509,474	10,244,260	3,169
R-2	8,850,032	4,380,584	4,334
R-3	5,502	2,751	3
R-4	260,308	130,200	220
R-5	254,959	98,661	133
R-6	1,500,512	370,130	558
RF-H	728,121	250,740	231
RF-R	1,328,579	694,531	505
RLC	83,030	41,557	96
RR	5,402,916	2,645,568	502
RRR	10,156,801	5,020,637	633
RT	2,083,175	1,606,209	1,022
TOTALS	**74,061,946**	**33,493,751**	**12,074**

As drawn from the ZPA, parcels zoned O-2 Limited Office, if developed, could generate a maximum building area of 6,520,056 square feet, with a maximum footprint and permitted residential units of 1,341,032 square feet and 225 units. In areas zoned C-2 Central Commercial, the maximum buildout would be 9,541,993 square feet, along with a maximum footprint and permitted residential units of 3,367,417 square feet and 73 residential units. The development potential in these two non-residential zones represents 21.7% of all existing buildout potential. Yet, although these represent areas of high growth potential within the generic development footprint, these districts provide limited potential for residential growth.

There is substantial existing potential for future development according to the current existing zoning. The existing residential buildout potential of the City defined in the ZPA. According to the ZPA, and also as depicted above, the existing zoning potential for the City is 74,061,946 square feet. The future residential units yield is 12,074 units under existing zoning.

4.5.2 Potential Impacts

Since the Proposed Action is new legislation, not a construction project, the adoption of the FBC itself will not have any immediate impact on land use. Potential impacts of adopting the proposed FBC include a potential for changes in land uses from those currently in existence. This includes an increase in residential (with the introduction of new residential allowances and residential unit types) and mixed-use land uses in the study area.

Proposed Regulating Framework

The Proposed FBC supports high quality urban design in Kingston. The standards, guidance and flexibility allow new construction and infill to be tailored to an individual neighborhood or street. There are numerous design-based and character area-based standards and guidelines in the FBC.

The FBC separates Kingston into five different "transect" zones (and sub-zones). Each transect zone has its own development characteristics and accordingly each one has different regulating standards. For example, some transects are neighborhood-oriented (for mainly residential uses), while "main street" areas are designed to encourage mixed-use buildings and settings. Each place in the City has a Transect all its own that reflects its own particular character.

Table 5: Proposed FBC Transect Allocations in Tabular Format

Transect	Area (Acres)	Percent of Total Area
T5 - MS	67.19	1.74%
T5 - N	104.41	2.70%
T5 - F	86.69	2.24%
T4 - MS	4.34	0.11%
T4 - N	290.61	7.52%
T4 - N-O	244.26	6.32%
T3 - N	671.41	17.37%
T3 - N-O	92.36	2.39%
T3 - L	590.5	15.27%
T2 - C	837.94	21.67%
T1 - N	475.55	12.30%
SD - MF	138.23	3.58%
SD - F	69.55	1.80%
SD - I	133.02	3.44%
SD - C	28.64	0.74%
SD - WMU	31.47	0.81%
Total	**3,866.18**	**100.00%**

The proposed transect allocation shown are for an area that is the subject of a comparison between the existing and proposed zoning in the Zoning Potential Analysis. There is a sizable land area of 2,667acres, or 69.0% of the analyzed area, that are contained in the lower and more moderate density transects, inclusive of T3's, T2 and T1.

There are also additional special district zones that cover land that does not, based on synoptic analysis performed in conjunction with prescribing new zoning apportionments, fit well into any of the base transect zones. This includes Commercial and Multifamily Special Districts that allow for existing drivable commercial, industrial, as well as garden apartment style multifamily apartment areas to have conforming uses and roles in the City. It also provides for the Institutional Special District that will, likewise, allow for continuing roles for existing civic uses, educational facilities, public safety facilities, offices, and other civic support functions.

Special District Zones also include the Waterfront & Waterfront Mixed-Use Special Districts that frame and prescribe how to provide and allow water-dependent uses. These Districts are organized to evoke development that is compatible with waterfront environmental attributes, including those that reflect the context of the existing historic building fabric. These defined FBC standards provide for the enhancement and additions of public access to the waterfront, and enhance existing public access and publicly available spaces, and provide for well-managed physical change around the shoreline, inclusive of assisting with sustaining and modernizing the system of bulkheads when there is development proposed on properties.

While there are no decreases in the levels of protection evident in existing zoning, in some cases additional requirements may apply. For example, the Flood Hazard Overlay District is replicated in its entirety from existing zoning (Proposed §405.27). At the same time, the Usable Open Space Standards (§405.24) promote the establishment of natural resource protection and the provision of quality usable open space areas (see discussion on that in preceding Section 4.4). The Form Based Code also includes special environmental requirements, such as the aforementioned waterfront development standards and the Waterfront Overlay.

The new code's regulating maps communicate the preferred development pattern for every neighborhood with graphics and tables, making the FBC a more user-friendly document for citizens and investors alike compared with existing zoning. The pattern for every transect is framed by transect form summaries. These describe the general pattern of use for each one, the primary characteristics, and the typical allowed building types. The Lot Standards (in Transect District Dimensional Standards) also define the maximum lot coverages, and importantly, the location of parking (in relation to and secondary to the more primary building placement standards). These standards thereby promote human-scale and walkable form. Additional standards, like parking setbacks, which are more rigorous than the more permissive standards in existing zoning, ensure that automobility and the potential oversupply of parking, which is emblematic of inefficient land use, do not dominate the use of space.

The applicable building layout criteria in the Transect District Dimensional Standards likewise aid in creating efficient land use by prompting land development organization with strong relationships between buildings and streets. Specifically, there is a Front Build-to-Zone (setback), which was not a type of standard in existing zoning. The Build-to-Zone prescribes building placement so new construction matches surrounding form and provides for walkable frontages when there is proximity of facades and building entrances to streets. There is also a Side Build-to-Zone and generally more permissive side and rear setbacks that provide for compact building placements.

For instance, the massing of existing zoning in certain districts indicates a minimum of 25 feet from front and 12 feet setback from sides. Meanwhile, the FBC prescribes lower front setbacks 0 to 5 and 0 to 10 feet, respectively, in its T5 Urban Center building front and sides. Moreover, the Frontage Occupancy is carefully defined and limited

in a gradient, in the FBC, ranging from 90% in T5-MS to 50% in the T4Ns. This ensures that new development will reinforce and create street walls, façades and enclosures that provide for sense of buildings and sense of place throughout the City.

Considering the influence of the FBC bulk requirements on maximum and minimum scale, there are architectural standards, such as in 4.12-4.14, that mitigate any potential impacts of taller buildings. For instance, expression lines provide sense of scale and define the pedestrian realm. In T5, a minimum height of two stories ensures proper definition and sense of enclosure for the pedestrian realm.

Importantly, the Transect Form Standards guide the primary characteristics of buildings, defining the applicability of factors influencing scale, massing, and building and space relationships, such as not only where buildings are situated in relation to the right of way, but also whether or not buildings are attached to adjacent structures. There are also descriptions of the intent for the types and mix of frontages, which influences form and scale. These link with the Allowed Building Types, which are tied to the particular intent for form in each transect (see Allowed Building Types Table and the Transect District Form Summary). Finally, regulations guiding the placement of parking in the FBC ensure this parking accessory use is located in a way that it does not detract from form and the pedestrian experience.

The Maximum height in the existing code for any buildings is 42 feet (3.5 story), whereas the new Form Based Code T5 Urban Center transect has a 4-story principal height (or a six story height in the Special Height Overlay) plus a potential bonus of 2 stories in exchange for greater levels of affordable housing in T5, and a potential affordable housing bonus of 1 story in T4. This will support future residential growth in the City's primary urban cores. To keep growth centered in the T5 , however, there is only an allowed potential bonus height of 1.0 story in T4. This has the effect of channeling height citywide into the cores and more so to the T5s, than the T4s, so as to reinforce the urban continuum and the form and scale gradient.

Proposed Zoning Buildout Analysis

Comparative analysis was performed in three elements: intensity, footprint coverage, and residential units yield.

- Intensity refers to the amount of building square footage allowed to occur.
- Potential Development Footprint refers to the amount of square footage of a parcel that can be occupied by a building footprint, which is an indicator of the relative coverage by a building.
- Potential Housing Opportunity Comparison is the number of residential units allowed within each parcel across the City.

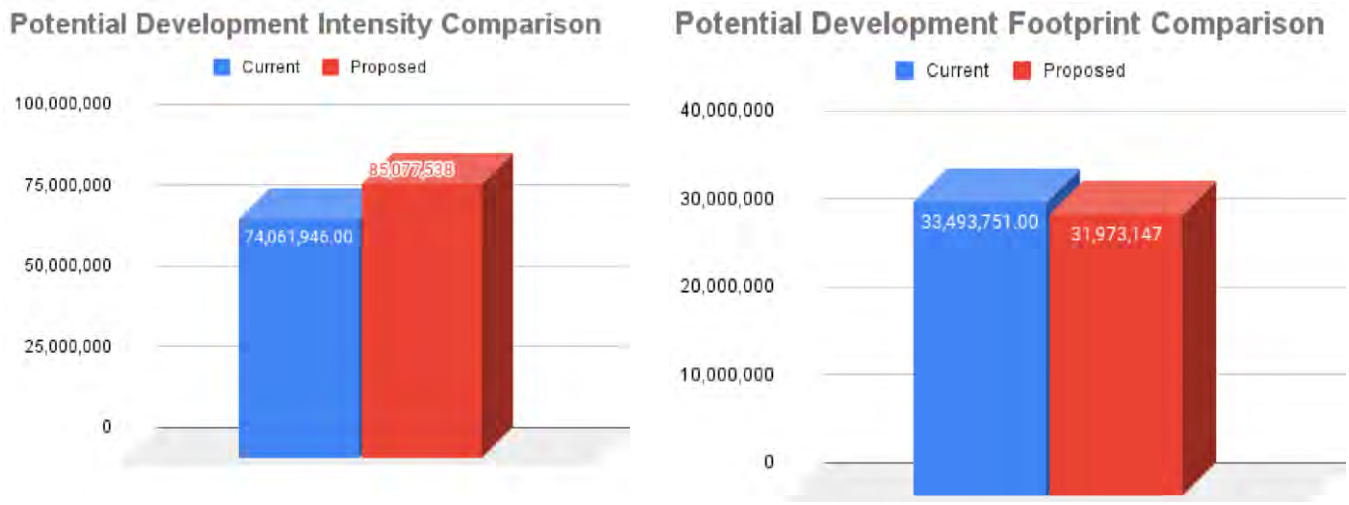
The analysis finds that the proposed zoning regulations only slightly increase the overall intensity of the development potential in comparison to the current zoning regulations. Using figures from the ZPA, while existing zoning has a generic potential for 74,061,946 square feet of new building, the new proposed code could yield 85,077,538 square feet. This difference of 11,015,592 square feet greater growth is an increase in intensity of 14.9% (ZPA).

If there is a greater potential supply of overall building space, this should mean there is generally less demand per unit of building. It should influence, since there is a greater supply of potential building, all other factors held equal, relatively lower demand and lower prices, with more affordability of property, including residential units.

The Potential Development Footprint Comparison, provides for 33,493,751 square feet of footprint under existing zoning, compared with a smaller 31,973,147 under proposed zoning. The net difference of a 1,520,604 smaller generic building footprint under the proposed zoning than existing zoning means that there is a 4.5% smaller area utilized for buildings placement under the FBC compared with existing zoning. That space could be put to other productive purposes. Citywide, this 1,520,604 square feet equates to 34.9 acres.

Moreover, it is important to consider that future growth potential under the FBC is channeled into certain locations within the City. There is an intensity of building, but it is organized to be more compact, or concentrated. Growth will occur, including through mixed-use development, but even though there will be greater development in terms of overall square footage of building, this development will take up a smaller footprint. That 35 acres that is not used for building footprints can be assigned to other purposes like open space, accessory buildings, or other productive uses.

Figure 24: Potential Development Comparison (Intensity & Footprint)



In the proposed regulating map, the development intensity of the proposed zoning regulations are concentrated in the higher density zones and special districts. For instance, the T5s cover 6.7% of the City, yet the T5s contain half (49.7%) of all of the Proposed FBC Development Intensity (ZPA).

Likewise, the majority of the development footprint of the proposed potential land uses are concentrated in the higher intensity zones and special districts. The majority of the development density potential of the proposed zoning regulations are concentrated in the higher intensity zones and the SD-MF special district. The T5's will have nearly half (48.3%) of the proposed density (Ibid). Considering the FBC Density pie chart, the T4s will cover over another third (35.3%) of density), and two Special Districts shown will carry 12.8% of density. This means under the proposed zoning, much of the growth will be channeled and directed to arise along main corridors and around cross-roads, where the T5s and T4s are more often situated.

There is a substantial increase in residential potential possible in the proposed zoning regulations in comparison to the existing zoning regulations. Under the FBC there is a generic potential for 16,531 Dwelling Units (du), per ZPA. This growth is channeled into the higher density transects and the special districts. As shown in the ZPA, the new residential density is especially likely to happen along the Broadway corridor in Mid-Town.

While there would be 12,074 future dwelling units generically expected within a buildout under existing zoning, under proposed zoning the ability to establish mixed use and residences in more locations would mean that under the FBC there could be a future yield of 16,531 dwelling units, as shown on ZPA. This is an increase of 36.9% in the units under the FBC compared with the 12,074 new units yielded under existing zoning. Under the FBC, there will be a greater potential supply and mix of housing, and an undefined but higher dwelling units density per acre of land, all of which should aid housing opportunity and choice.

The FBC includes incentives for bonus height (two or one extra stories) in some transect zones. This means there could be some undefined additional number of residential units under the proposed zoning. Bonus height is available in exchange for new development providing beneficial affordable housing creation, or new public open space dedications in the Waterfront Overlay.

Considering the proposed Form Based Code's regulatory framework, it encourages growth and infill that is generally compatible with the built character and scale of the respective areas. Often the growth that arises will be incremental, in that there are standards and guidelines that provide for limited and small-scale changes in properties, such as in T3's, that will provide added internal building space, but which will also fit and blend-in with the prevailing pattern of land use in the associated neighborhood. Overall, the growth and infill arising within the City will mesh with historic development patterns. This will provide for growth consistent with that which exists and is documented in each neighborhood location. Pictures and graphic standards and integrated regulating maps aid in ease of understanding of the FBC and its application.

The new code allows for a greater mix of commercial and residential uses. It also allows for a greater variety of housing types that fit with the prescribed patterns to be built by-right. One primary aim of the FBC is to increase housing choice and affordability by removing barriers to building a larger and more diverse supply of housing that will service the needs for shelter for a variety of household sizes and types and living situations. Live/work buildings and cottages are legalized in some transect areas and there are provisions for other small- and moderate-scaled "missing middle" housing such as duplexes and triplexes which are allowed in most transect areas.

The FBC is meant to be simpler with reduced processing times involved in the reviews of development that fits and is called for. For instance, the code will provide a standard allowance for Accessory Dwelling Units across the City (see Section 405.18). These ADUs would be limited in size and would have to comply with building codes. Yet, overall the development would be incremental and reflect the development context and the development types identified as desirable and the form would match that which is already found in a particular location. This would be the case even if there is, for instance, some allowed small additional floor area permitted in a building and there is a somewhat larger number of dwelling units able to be established onsite, such as in the Small Multiplexes within the T3 Transect.

Any proposed development that fits the form and type allowed by the FBC will often be "by-right." This means that review of the project could be streamlined, meaning that the complexity of the FBC is not an impediment to development. The more straight-forward process, including the availability of minor site plan approvals, absent of waiver requests, will reduce an impediment to new buildings and infill as called for in the comprehensive plan. In order words, the FBC identifies building that should be more straight forward to approve and build because it fits with and is compatible with existing form and character and the infrastructure base in a particular transect and neighborhood. The Minor Site Plan Review Process that is laid out Article 8 is one effort to achieve streamlining of desired incremental type growth.

Meanwhile, the extensive new illustrative, tabular, and text standards, and guidelines, will discourage development that doesn't fit the historic context and form. If growth does not fit, and it requires consideration of a waiver, this means that there will be a greater level of scrutiny and more complex processes to follow to define whether a waiver may be warranted. Moreover, when a waiver may be required, there are standards provided for contemplating the waiver, plus there are thresholds put forth and available to define whether explicit mitigation may need to be provided to overcome the effect of allowing growth on a particular place or site to proceed .

Given that the proposed zoning regulations reduce the number of zoning districts, streamlines and simplifies processes and clarifies regulations, and generates new building in a smaller development footprint compared with existing zoning, the proposed zoning regulations will have a positive effect in the City of Kingston without adversely changing its character.

4.5.3 Mitigation Measures

The proposed action to adopt and implement a Form Based Code for the whole City is consistent with the existing comprehensive plan. The new FBC enables mixed use and a higher level of residential growth, thereby providing a pattern of future growth prescribed in the Comprehensive Plan.

The FBC has evolved based on the extensive public feedback received on the versions prior to FBC Draft 3.0. This Draft 3.0 is highly consistent with the very large volume of community input received during various diagnostic processes carried out earlier in this project. Based on these community consultations and input gathering, extensive feedback received was used to identify and analyze opportunities and issues to consider, and address, as part of refining and calibrating this new comprehensive zoning law.

On the one hand, the FBC will create generally small changes in land use. For example, allowing accessory dwelling unit development on portions of lots where there is already existing site coverage and structural development will not necessarily create a negative impact since it will use existing infrastructure and be substantially blended with existing residential form. The FBC also makes it easier for mixed-use infill in existing urbanized areas. It relieves the pressure for sprawl on/ new development on the City's outer edges where there are lower densities and a higher prevalence of environmentally sensitive resources. In addition, larger sites are required to be developed in a walkable, mixed-use fashion with clustering so that density is directed and concentrated onsite so the pattern and form of land use results in the conservation of substantial open areas.

Meanwhile, the generic cumulative new growth that is expected will have a smaller land use footprint compared with the potential growth arising under existing zoning. This will enable better site design and the potential provision of more amenities onsite.

In addition, the FBC adequately provides for the mitigation of large existing surface parking lots. When parking areas are too big, they contribute to sprawl. They create large open areas which are inhospitable to pedestrians and generate large distances that pedestrians must traverse before arriving at the next buildings. The technique used involves setting parking maximums and removing parking minimums.

There are extensive protective zoning criteria, user descriptions, and process instructions newly presented for implementation across the FBC. These standards will enable easy changes in use provided any new configurations of buildings and sites correspond with the applicable FBC framework. The FBC standards will foster new physical growth that positively contribute to desired context and which enhance and complement the existing historic pattern

of development in Kingston. Since no significant adverse impacts to land-use are anticipated, no mitigation measures are proposed.

Thus, it is a finding that this FBC will encourage vibrant mixed land use patterns. At the same time, it will better accommodate a larger new housing supply plus a range of desirable nonresidential uses, ranging from industries to those relating to the arts, retail, recreation, tourism, medical, office, manufacturing, agriculture, and a whole range of civic in public service uses.

The FBC will use multiple standards to guide growth to locations that are equipped to receive new building based on locational attributes. The high density and largest scale growth is appropriately directed to the three city urbanized cores, along Broadway and other high order streets that radiate from there, plus on the targeted portions of the Rondout waterfront. There are many bulk regulations treatments and architectural standards that help ensure that new building will fit and appear compatible with the general existing form and which will appropriately situate and blend with allowed changes in scale. This is particularly the case in the high-order T5 (and to a lesser extent T4) transects, where growth is most likely under the FBC.

Once the FBC is adopted, there is nothing preventing further refinements to this zoning, when based on use and experience, it is warranted to consider additional adjustments to this policy. Therefore, it is suggested to routinely document the features of applications and the types of growth arising and for city staff, the Mayor, and Common Council to regularly assess how the new code is performing as a way to routinely examine whether there is a potential need to further refine and optimize the FBC.

4.6 Historic & Archeological Resources

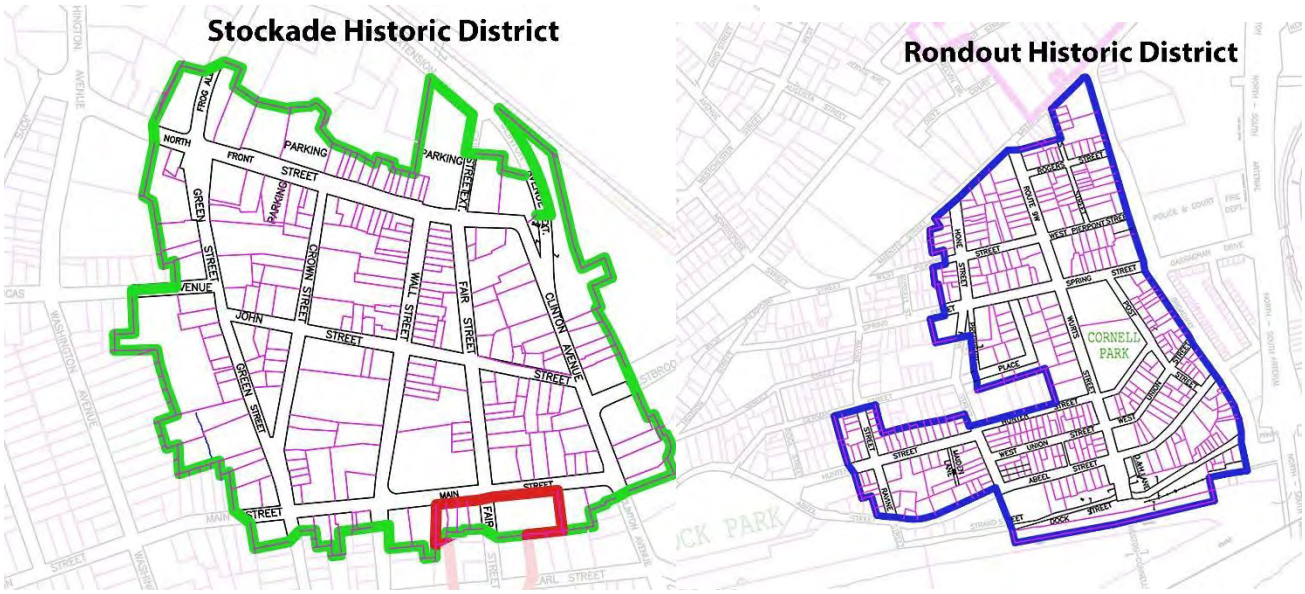
4.6.1 Existing Conditions

Historic and cultural resources are among the crucial factors with respect to community identity and quality of life. The preservation of places of historic value, including resources of historic significance, is key to a community's well-being, economic stability, and identity.

There are four (4) formally designated historic districts/ areas in City of Kingston:

- The Stockade District
- Fair Street District
- Rondout West Strand District
- Chestnut Street District

Figure 25: Maps for Two Historic District Footprints



Two of these, the Stockade District and Rondout-West Strand District, are included on the National Register of Historic Places. Two others - Fair Street District and West Chestnut Street District - were designated by the City under its local landmarking law.

The Stockade Historic District is located in Uptown and contains several contributing structures, notably the Senate House State Historic Site, the Old Dutch Church, the Ulster County Courthouse. The Stockade Historic District itself is located over the historic site of Wiltwyck, a historic village originally surrounded by stockade walls providing the district its name. Contributing structures or parts of structures date back to 1660, when the area was first settled by order of Peter Stuyvesant to avoid conflict between settlers and the Esopus Native American tribe.

Kingston's historic buildings and districts form a significant part of Kingston's Heritage Area, an ongoing program supported by the State of New York. Thus, historic preservation in Kingston is presently overseen by two different

commissions operating under different mandates. The first is the Historic Landmarks Preservation Commission (HLPC). The HLPC, since 1986, has been part of the NYS Certified Local Government (CLG) program. The HLPC conducts architectural, and appropriateness reviews affecting local landmarks and the landmark districts.

Typical stresses or threats that affect potential historic resources and their preservation are inappropriate or incompatible development inconsistent with design standards and/or nearby historic resources, demolition, as was common during the urban renewal era in Kingston, and failure by owners to follow design standards, resulting in code compliance issues and/or diminution of the cultural resource or resources affected. The economic effects of these stresses and threats can be significant as inconsistent actions can result in degradation of cultural resources and the historic building fabric of the City. Owners of National and State Historic Register listed properties may qualify for historic tax credits, which can help pay for qualifying improvements and preserve community character.

Regulatory Consistency

Historic and cultural resources of the City must be strongly protected and leveraged to the maximum extent to attract and support residents, businesses, and tourism.

- Comprehensive Plan Goal 6: The City's Comprehensive Plan provides for promoting further preservation of City historic and architectural resources and leveraging them for further economic development.
- Comprehensive Plan Goal 4: Enhance employment opportunities and promote economic vitality in the City by leveraging NY State Historic Rehabilitation Tax Credits to Rehabilitate Vacant Obsolete Commercial and Industrial Buildings for new uses.
- Comprehensive Plan Goal 5 (Strategy 5.2.1): Develop new policies and tools to promote implementation of Complete Streets standards, in partnership with the Complete Streets Advisory Council, and promote implementing policies & strategies to preserve the City's historic bluestone sidewalks. It encourages incorporating treatments for them into complete streets guidelines to promote implementation of the recommendations of the 2012 Kingston Bluestone Sidewalk survey[25] with regards to rehabilitating, restoring, and preserving bluestone sidewalks and resources in Kingston.
- Comprehensive Plan Strategy 6.1.8, calls for development of a City-wide Preservation Plan that catalogs historic resources, existing preservation mechanisms, ways to aid historic preservation, plus identify additional resources to be preserved.

4.6.2 Potential Impacts

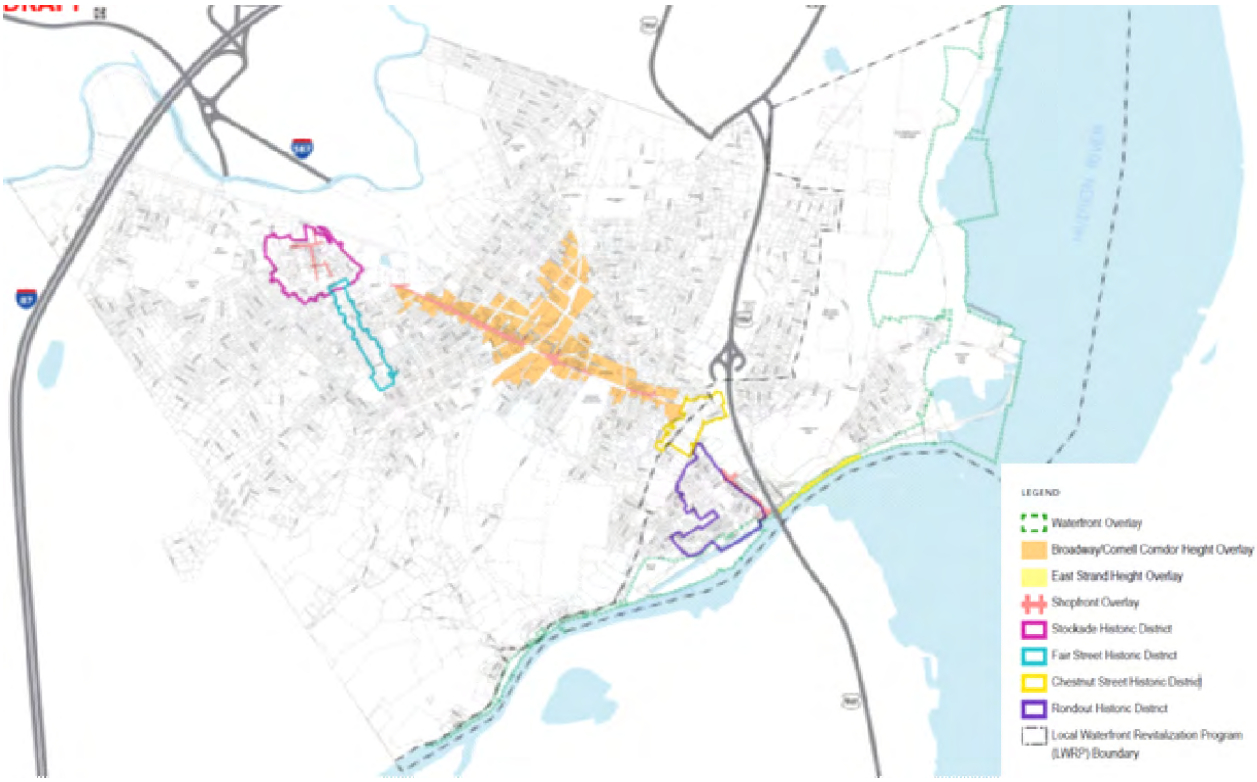
Kingston has a rich history and architecture. The City of Kingston's existing Zoning consists of regulations to oversee historic resources in the City (Zoning Art. IX 'Historic Landmarks Preservation Commission'). This full Article IX is replicated in its entirety within the proposed FBC Article 8 'Administration & Enforcement', which is §405.26. Specifically, the recited 'Historic Landmarks Preservation Commission' process standards are in Subsection I. Since there is no proposed change in the regulation of existing and potential historic resources, there is little practical potential for different impacts to arise under the proposed FBC.

[25] https://irma.nps.gov/DataStore/DownloadFile/582129

As reviewed in Section 4.5, the FBC will create broadly applicable zoning standards that better fit the City's historic and traditional settlement patterns. These standards will enhance building-to-street relationships and provide for accentuating and in instances replicating architectural and historic qualities.

The FBC defines and elaborates on built form and exterior architectural treatments which can accentuate placemaking and historical building and landscape coherence, and reinforce the prevalent architectural styles in different areas. Overall, the FBC guides a more traditional pattern, with compact building form evoking designs and building placements that will enable highly characteristic site and block-level building general arrangements, streetscapes, facades, and the related building and signage types, frontages, and architectural standards.

Figure 26: Depiction of Features on the FBC Special Requirements Map



There are allowed height increases in buildings under the FBC compared with existing zoning. Enabling additional increments of height is generally expected to provide for compatible scale relationships between a new building and potential historic structures, or the patterns among sets of buildings within a preservation district. Yet, is a completely appropriate for the HLPC to consult the Secretary of the Interior's Standards for Historic Preservation, or other sources, to evaluate the effects of changes in height and scale and in defining best practices which may be stipulated in order to mitigate the potential for environment effects from new or rehabilitated building.

Figure27: Example of a Historic Mixed Used and Small Multiplex in a Historic Structure.

The FBC provides over 20 pages of text, diagrams, and illustrative guidance, within FBC §405.12 Building Type Standards. These will serve to guide and incubate design, form, and reinforce distinct character and scale of contextually unique transects and neighborhoods.

Moreover, FBC Section §405.14 Architectural Standards presents 10 pages with a similar mix of techniques in the FBC to support the creation of recognizable building patterns and their relationship to the public realm. This will support historic character and sense of place. These standards will regulate façade composition, prescribe the design elements and mix in shopfronts, and reinforce building wall and masonry detailing of public facing facades. The regulations for building details will influence the type and style of windows, doors, lights, rooflines, screening, and other appurtenant features in new development. Specific architectural standards described in FBC that relate to historic structures in §405.14 are:

- In designated Historic Districts, size, the proportion and rhythm of windows should be similar to other buildings on the same block.
- Liner buildings are required to shield the view of new parking areas in T4 and T5 areas as well as Historic Districts; this shall apply to parking structures and surface lots larger than 5,000 sq ft.
- In Historic Districts, windows and doors shall be vertically proportioned. Window openings may be horizontally proportioned, but only if composed of vertically proportioned windows grouped together and each separated by a mullion, column, or wall section with a minimum width of four inches. Horizontally proportioned transom windows are permitted if part of an overall vertical composition.
- Within Historic Districts, balconies are only permitted on new construction or to replace a previously-existing balcony.

§405.17 Signage Standards will also provide for architectural coherence. For example, electronic message/ LED display signs are prohibited in historic districts. New signs require permits except for memorial plaques, cornerstones and historical tablets. Signage that does not fit the specific regulations of the §405.17 may be approved as a minor waiver, based on its merits, as it relates to the unique architectural qualities of a building or a building's historical significance (FBC §405.17).

Overall, the FBC encourages high-quality architectural development. It will provide for and emulate the unique and varied building character. It will foster and facilitate the loved, historic patterns in Kingston (FBC Pg 1.1).

4.6.3 Mitigation Measures

The proposed FBC will improve the visual character of existing underutilized or underperforming buildings and areas, such as near individual or potential landmarks and landmark districts. The FBC is organized to ensure that development is designed and constructed in a manner consistent with the "historic" building patterns of varied locations. It will also improve streets context, so these street environments and public areas complement and relate to existing buildings and link with and support targeted infill.

The Proposed Action will beneficially influence the extent of development in the City because it provides for more compact onsite building arrangements which aid traditional neighborhood designs. It will also provide for better arrangements of buildings to advance development goals through a smaller citywide building footprint. Based on generic analysis, the future building pattern will not increase the potential for impacts to cultural (historical and archaeological) resources compared with existing zoning. The Landmark Preservation review framework will still be used managing the potential for impacts to covered properties.

When there is HLPC jurisdiction and potential concerns about the impact of a proposed site-specific development due to a proposed addition of height to a new or rehabilitated building, it can be appropriate for the HLPC to call for generating what is akin to a Historic Structure Report, or a Conditions Assessment Report. Such tools would serve as a preservation and rehabilitation report prepared by a qualified professional. They can provide an organized profile of property, including buildings, and would identify, describe, and evaluate the existing condition of historic structure(s) and the associated environment. It could present analysis with recommendations for the potential treatment of proposed building, when there are concerns for how such actions can be structured to fit and blend proposed growth with area historic form and scale. Landmarks Preservation Commission

The FBC continues the Landmarks Preservation Commission (LPC) review of site plans within designated historic districts (§405.26.I). This will provide for compatible design and fit. Furthermore, all future redevelopment or site disturbance will be evaluated during the site-specific plan review process to determine whether further investigation is warranted due to the potential for impacts to building or archeological resources. This can help identify whether a particular site-specific application may warrant a particular level and type of assessment or impact analysis, inclusive of a Phase IA (and possibly a Phase IB) Archaeological Survey, or other City's LPC review, and/or a consultation with NY State Historic Preservation Office (SHPO). These additional consultations and/or cultural resource investigations may be warranted as determined by the City's assigned agents/ regulators during development review in conjunction with site-specific SEQRA (6 NYCRR Part 617) analysis.

When a historic property or potential historic property requires analysis on existing, adjacent, or area historic and cultural resources, this shall be performed by a qualified professional as part of site-specific development review. The analysis should identify and discuss potential resources, areas, and pertinent studies and inventories, to aid in the screenings of potential impacts to historic and pre-historic sites and buffers.

Comprehensive Plan Strategy 6.1.8, calls for a City-wide Preservation Plan. As part of future preservation programming, it is suggested for the Landmarks Commission to consult other City officials on potential to conduct this planning. It provides a way to advance historic character preservation and enhancement after FBC adoption.

Rondout Area

In the Rondout environs, encompassing locations west of Broadway by Broadway/ West Strand, site plan applications should be encouraged to identify, within written submissions, such as on the Environmental Assessment Form, or as narratives supplied within application, how their building fits and is compatible with the original established character of the district, which exemplifies the architecture and life of the 19th century. Given this history and context, this DGEIS prescribes that regulators can promote the use of bricks (or appearance) and bluestone in new development, as well as cast iron and stamped metal (or appearance). The Kingston Urban Cultural Park – Final Report, 1987, in its discussion of facades programming and maintenance, on page 119, also notes that many 19th-century buildings had cast iron applied to their facades as decorative elements. It also notes at the same point that stamped metal material was used frequently for elaborate cornices of facades.

Waterfront Area

For projects in the LWRP boundary, such as site plan reviews, there will be referral to the Heritage Area Commission, at the point of application. This can elicit comments on the impact of a proposed action, including but not limited to, on character of the area. This referral shall not in any way eliminate requirements for approval as set forth elsewhere in the City Code inclusive of the FBC.

As part of forming guidance on the replication of historic building and landscape patterns and features, this entity can offer guidance on techniques for waterfront development. This can include making recommendations for street furnishings like: tree grates, benches, trash receptacles, light poles/ fixtures and sign posts, so as to aid in creating contextually unique streetscapes. As paraphrased from discussion on a proposed Landscape/ Streetscape program, on pages VII-16 to 17, and IX-21, in the Kingston Urban Cultural Park – Final Report, elements like these can supplement paving landscaping treatments in order to assist placemaking and unify designs for these areas, and those in the Kingston Urban Cultural Park boundary.

Additionally, the Form Based Code introduces a new Waterfront Overlay, which includes public access and environmentally-focused development standards for those parcels that border the Hudson River and Rondout Creek waterfront (where marked on the Special Requirements Plan). These standards, are based in part on standards of the LWRP, as well as input from the City of Kingston Conservation Advisory Council during the code-writing process, will be enforced as part of site plan review by the Planning Board or Minor Site Plan Review Board.

Historic Character

The city-wide historic character shall be reinforced through the proposed action. It will guide and provide for the enhancement of locational context, resulting in a greater sense of place, and aiding and refining the form and the built environment context in and around individual landmarks and potential historic properties. As such, the design-based placemaking that is fostered is a primary mitigation measure that will prevent negative impacts to arise due to form-based code adoption. The enhancement of places will ensure there is quality contextual infill development because it evokes the historic character of the City. History and historic interpretation, historic design, layout, industry, and culture each inform and strengthen a place, especially within the greater context of the city. The proper enactment of a form-based code serves to preserve and strengthen the current assets which provide for that sense of place and it will allow for development that is compatible with and blends into the desired form of each respective neighborhood, district, other potential historic resources, and the city overall.

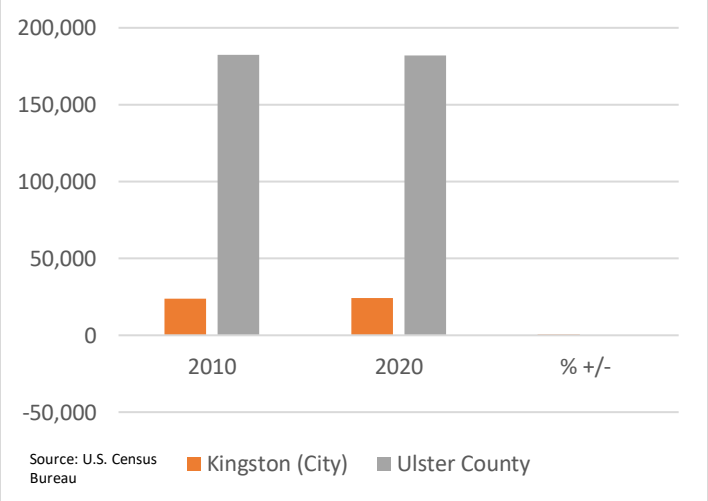
4.7 Socioeconomics

4.7.1 Existing Conditions:

Population

The Decennial US Census lists the 2020 City of Kingston population count as 24,069 persons. This means the County's most populous City experienced slight urban population growth, with a less than one percent, or roughly 0.7%, rate of increase in population between 2010 and 2020, as population went from 23,893 to 24,069 persons. The change in the City contrasts with Ulster County overall, with its minor population decrease in the same 10 years, going from 182,492 to 181,851 persons (minus 0.4%).

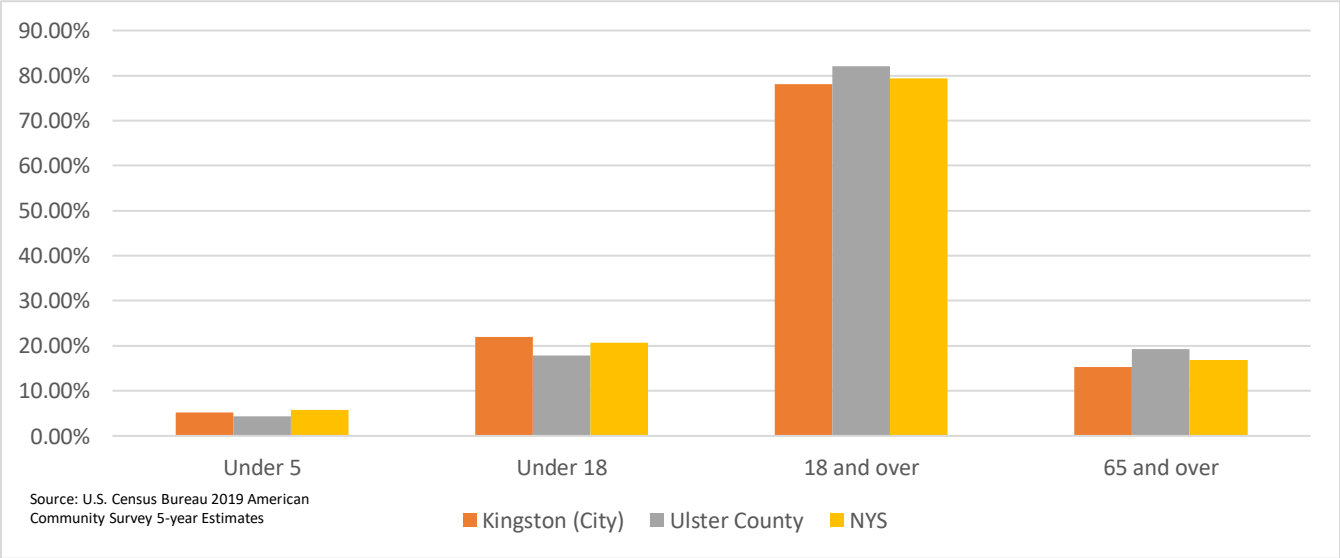
Figure 28: Population (U.S. Decennial Census)



Population Age Characteristics & Household Features

Kingston's 'median age' is 37.2 years per ACS (2015-2019), whereas the County's is 44.3. Thus, the City population is generally younger than in the overall County, and aging at a slower pace. Looking across 'Figure 29', there is a similar correlation of individuals in various age cohorts across the City, County, and State. Yet, as noted, the City's population is comparatively younger.

Figure 29: Population by Age Cohorts (2019 ACS)

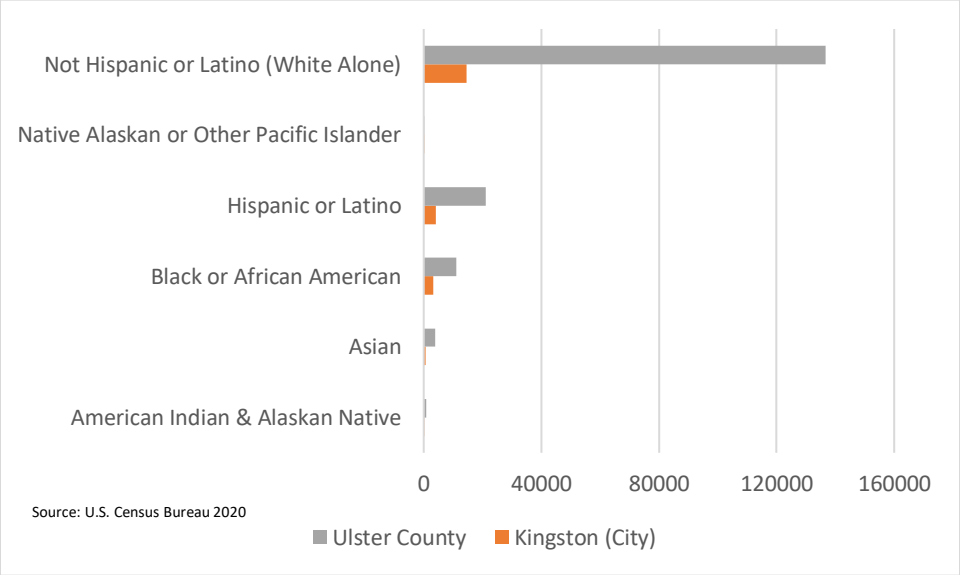


Average household size in the City is 2.46 persons per ACS five-year estimate figures for 2019. This is consistent with that of New York State, which stands at 2.54.

Culture, Ethnicity & Race

Kingston has a diverse racial and ethnic makeup. Yet, per the ACS 2019 five-year estimates, the most prominent racial and ethnic group in the city are people who are Not Hispanic or Latino but White Alone.

Figure 30: Race & Ethnicity (2020)

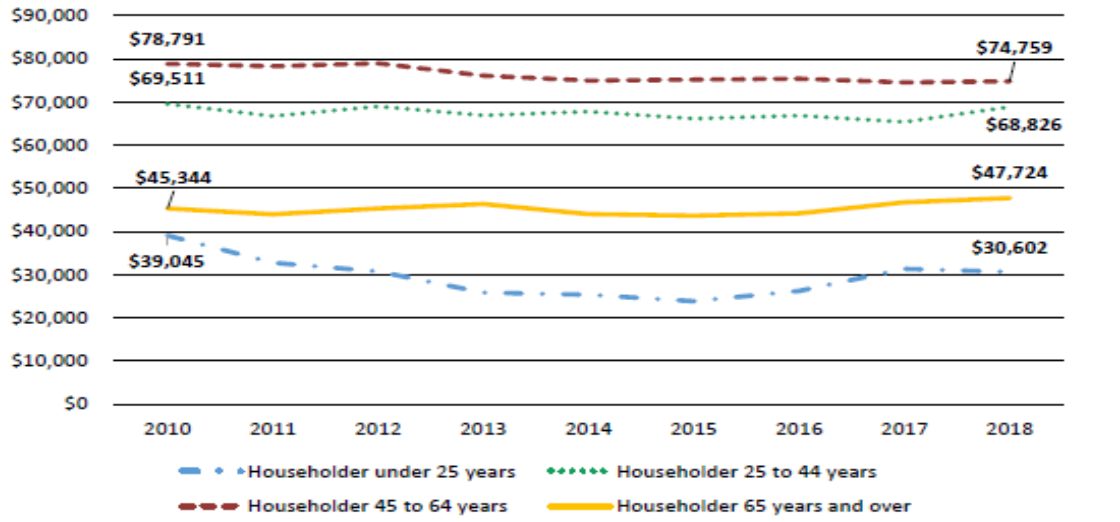


Income

Based on the five-year rolling estimates generated by the US Census, the 2020 Median Household Income in Kingston is $54,311. The poverty rate in the City is estimated at 18.8% (2020 ACS 5-Year Estimates). Ulster County's poverty rate increased from 12.9% to 13.9% of total population from 2010 to 2018. Meanwhile, the City of Kingston has seen a slight increase in that time from 17.4% to 18.0%. [26]

[26] Ulster County Housing Action Plan 2021, https://ulstercountyny.gov/sites/default/files/documents/planning/2021_uc_hap.pdf

Figure 31: Median Wages by Age Cohort 2010 to 2018 (Dollars)



*Wages are adjusted for inflation to 2018-dollar amount
**Data for the Towns of New Paltz, Saugerties, and Wawarsing includes the incorporated areas of these towns. This is the area within the villages.

Source: U.S. Census - American Community Survey 2010 to 2018

The above figure shows median wages by age cohort from 2010 to 2018. In Ulster County, only householders over 65 years of age have seen a wage expansion since 2010. All householders between the age 25 and 64 have seen an average wage reduction in the same period. The most significant decline in wages was for people under the age of 25, for which wages dropped by $8,443 or 21.62%.[27]

Figure 32: Median Household Income (Unadjusted)

Household Type	2010 Median Income	2018 Median Income	$ Change	% Change
Owner Occupied Households	$71,016	$78,914	$7,898	11%
Renter Occupied households	$35,000	$34,730	-$270	-1%
All Households	$57,584	$63,348	$5,764	10%

Source: U.S. Census - American Community Survey 2010 to 2018

From 2010 to 2018, overall median household income has gone up by 11% in Ulster County. Owner occupied households saw their income increase by 11% and renter occupied households experienced income stagnation.[28]

[27] Ulster County Housing Action Plan 2021

[28] Ulster County Housing Action Plan 2021

Figure 33: Change in Median Household Spending Power after Adjust for Inflation

Household Type	2010 Median Income	2018 Median Income	$ Change	% Change
Owner Occupied Households	$81,235	$78,914	-$2,321	-3%
Renter Occupied households	$40,036	$34,730	-$5,306	-13%
All Households	$65,870	$63,348	-$2,522	-4%

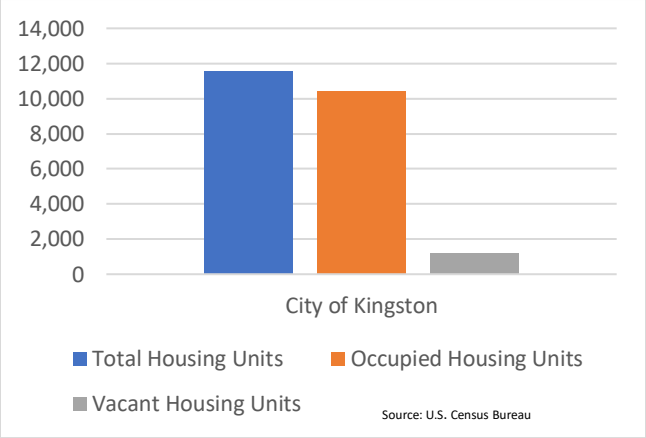
Source: U.S. Census - American Community Survey 2010 to 2018

While median income increased overall, when 2010 incomes are adjusted for inflation, the data shows that household spending power has decreased for all household types. In other words, the increase in median household income in Ulster County from 2010 to 2018 did not keep up with the rate of inflation. Households overall have less spending power in 2018 than they did in 2010.[29]

Housing

According to the U.S Census's 2020: Decennial Redistricting Data, there are a total of 11,571 housing units in the City. Of that, 10,407 housing units are occupied, and 1,164 are vacant. Thus, Kingston has an 89.40% occupancy rate of its total stock of housing (dwelling) units.

Figure 34: Total Housing Units (2020)



The proportion of housing stock built over 50 years ago is 60%. Older houses may exhibit potential constraints due to physical quality, such as because they may need structural repair, or replacement of systems like heating or plumbing.[30]

Tenure

Of 9,088 occupied housing units in Kingston (2019), 4,128 (45.4%) are estimated as owner-occupied while 4,960 (54.6%) are renter-occupied. There was a slight reduction from 4,372 (39.3%) owner-occupied housing units in 2014 to a slightly more significant reduction of 5,462 (49.1%) renter-occupied housing units from 2014's total housing stock of 11,120 units (ACS 5-year estimates). The City of Kingston (and Villages of Ellenville and New Paltz) are the only municipalities in Ulster County where renter occupied housing units exceed owner-occupied housing units, per the Figure 35, which is excerpted from the County's Housing Action Plan.[31]

[29] Ulster County Housing Action Plan 2021

[30] Ulster County Housing Action Plan 2021

[31] Ulster County Housing Action Plan 2021

Figure 35: Housing Stock Summary Metrics

	Total Housing Units	Occupied Housing Units	Renter Occupied	Owner Occupied	Vacant Units*	Vacancy Rate*
VILLAGES						
Ellenville	1,849	1,592	54%	46%	152	9%
New Paltz	2,288	1,935	73%	27%	308	14%
CITY						
Kingston	10,592	9,361	53%	47%	1,047	10%
COUNTY						
Ulster	84,874	69,539	31%	69%	7,579	10%

**housing units "for seasonal, recreational, or occasional use" and "for migrant workers" are excluded from the number of vacant units and the vacancy rate*
Source: U.S. Census - American Community Survey 2018

Housing Costs & General Housing Affordability -

According to 2019 ACS 5-Year Estimates, median gross rent in the City of Kingston stood at $1,050, compared with $1,309 for the entire NY State. The median price of owner-occupied units in 2019 stood at $177,500 compared to $178,000 in 2014. Since this data was assembled, there was the inception of the COVID-19 pandemic. The City's Director of Housing Initiatives identifies concern that the housing market has become tight and prices have gone up. The 'Plan for Redevelopment: The City of Kingston's Vacant & Abandoned Housing', undated, by Hudson Valley Pattern for Progress, discusses the effects of the pandemic on residential real estate, on page 20. It identifies that the local housing market has been influenced by the pandemic, taking noting that a tight inventory is likely to cause continued upward pressure on prices and this must be taken into account in affordability analysis.[32]

Figure 36: Change in Renter Income and Median Rent

	2010	2018	Change	Percent Change
Median Income of Renter Households	$35,000	$34,730	-$270	-1%
Median Rent	$939	$1,086	$147	16%

Source: U.S. Census - American Community Survey 2010, 2018

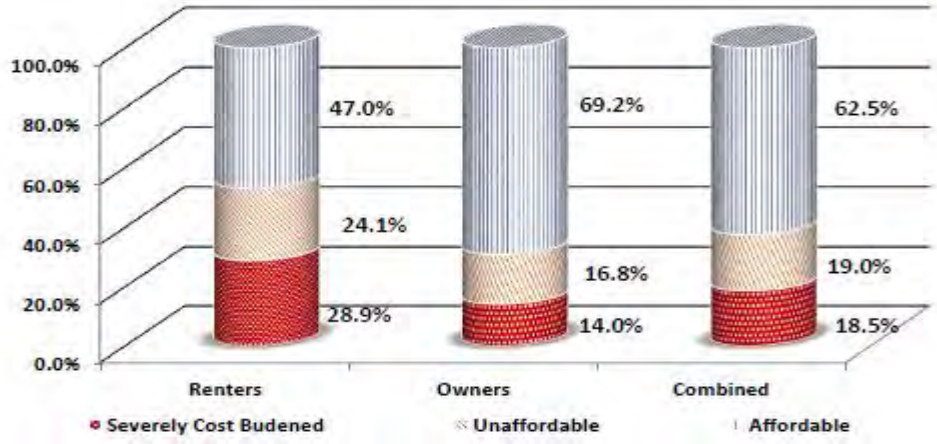
From 2010 to 2018, the median income of renters has remained largely unchanged, slightly decreasing by 1%. While renter incomes stagnated, median rent has gone up by 16%. This increase in rent represents an additional $147 per month. In other words, from 2010 to 2018, renters in Ulster County have experienced a $270 decrease in annual income and a $1,764 increase in annual spending on rent. Renter incomes are stagnant while rents are increasing. This is further exacerbated by inflation; the spending power of renter households has decreased by over $5,000 since 2010.[33]

[32] kingston-ny.gov/filestorage/8399/8469/15358/City_of_Kingston_Housing_Study_10.15.20_final.pdf

[33] Ulster County Housing Action Plan 2021

Figure 37: Ulster County: Housing Cost Burden Details

	Affordable	Unaffordable	Severe	Total
RENTERS	9,865	5,070	6,060	20,995
as a % of the total number	47.0%	24.1%	28.9%	100%
OWNERS	33,480	8,100	6,765	48,345
as a % of the total number	69.2%	16.8%	14.0%	100%
COMBINED RENTERS AND OWNERS	43,345	13,170	12,825	69,340
as a % of the total number	62.5%	19.0%	18.5%	100%



Clearly, there are challenges establishing an adequate supply of generally affordable housing in the City, either in the rental or ownership tenure types. Among renter households in Ulster County, 53% pay 30% or more of household income to the cost of housing, indicating that a majority of renters do not have affordable living situations. Meanwhile, 30.8% of owner-occupied households spend 30% or more of income on housing costs.[34]

The percentage of household income used to pay rent in Ulster County continues to be among the highest in New York State. Figure '37' above details the housing cost burden on the County's residents. It shows that amongst renters, 28.9% are severely cost burdened, while 53.0% are living in severely cost burdened and unaffordable housing. Among homeowners, 14.0% of them are severely cost burdened, while 30.8% of homeowners in Ulster County are living in severely cost burdened and unaffordable housing. Of both renters and homeowners combined, 18.5% are severely cost burdened while 37.5% are living in severely cost burdened and unaffordable housing.

As a result of current housing costs, often occupants make a choice to squeeze into housing units they can attain. Per ACS estimates, 25.0% of the community lives in a household where there is greater than one occupant per room, which can be characterized as "crowded" according to US Department of Housing & and Urban Development data. As discussed further along within this section, changes in the total supply of housing units and changes in the sizes and distribution of different dwelling unit types as influenced by the prescriptions and allowances in the FBC can influence the supply of and access to housing in the community. It can also influence its general and relative affordability, as well as in terms of factors like the quality of the housing stock and housing conditions.

[34] Ibid

Employment

According to 2020 ACS 5-Year Estimates, the employed civilian population 16 years and over (full-time and part-time) stood at 11,673 in the City in 2020.

Figure 38: Employment Rate (2020 ACS 5-Year Estimates)

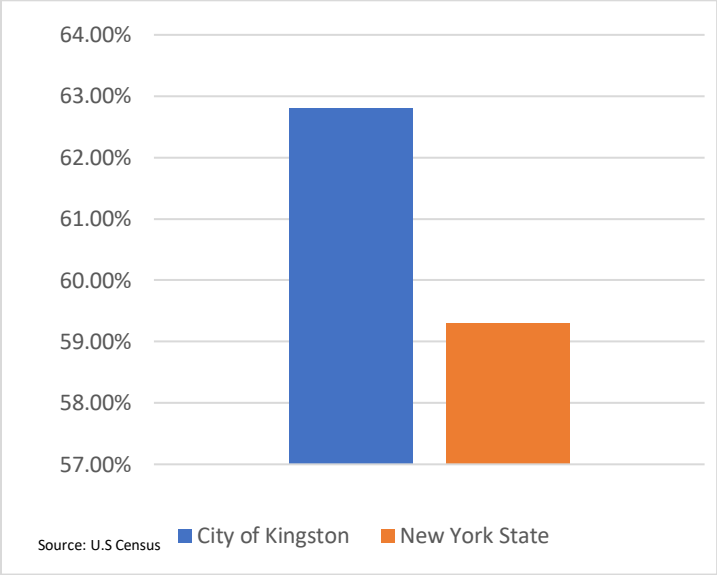
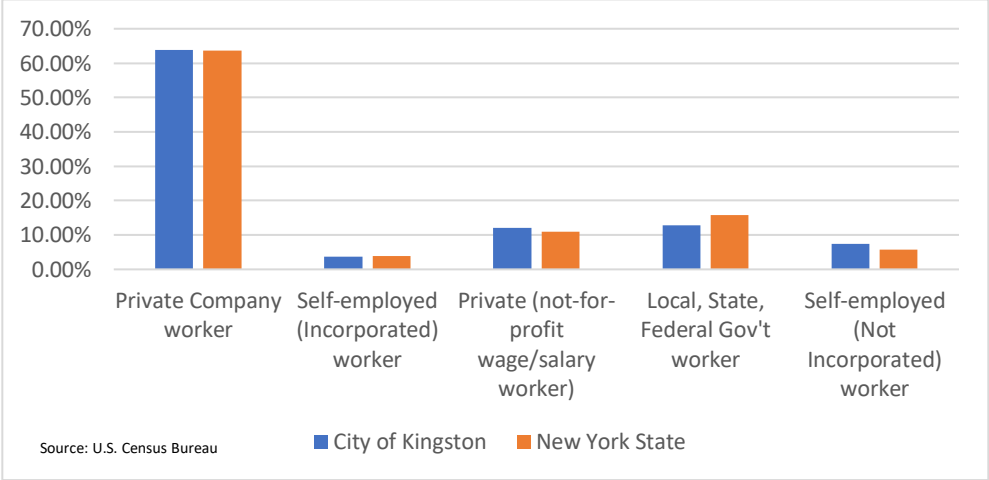


Figure 39: Class of Worker (2020 ACS 5-Year)



Per 2020 ACS 5-Year Estimates, the employment rate in Kingston was at 62.8%. This is higher than in the State of New York overall, which stands at 59.3%. Figure 39 shows a similar pattern of workforce employment between the City of Kingston and the State as a whole. Of all employed persons in Kingston, the largest part of the employed local workforce is found in private companies, with a 63.90% of the entire employed populace, similar to the Statewide average of 63.60%. Another 12.90% are employed by the local, state, or federal government, compared with 15.80% Statewide. A third highest concentration of workers are Private not-for-profit wage and salary workers who make up 12.10% of the entire City of Kingston workers, versus 10.90% in the State.

Figure 40 shows job numbers and wages by NAICS industry code for year 2018 along with the change since 2010 in Ulster County. As an industry sector, Government is the largest employer in Ulster County, making up 21.5% of jobs. Healthcare Care and Social Assistance is quickly growing industry and accounts for the second largest number of jobs (16.3%) with an average salary of $43,258. Another fast-growing sector, Accommodation and Food Service, makes up 12.3% of all Ulster employment at the average wage of $22,288. Despite continuing to hold large numbers of jobs, Government had the highest loss of employment in absolute numbers (-1,019). The Manufacturing sector also lost a significant number of jobs (-339) as did Transportation and Warehousing (-226).[35]

Figure 40: Percentages of Jobs and Average Wage by NAIC Code

	2018 Annual			Change 2010-2018			
	Number of Jobs	% jobs of total	Average Wages	Number of Jobs	% of Jobs	Average Wages	% of average wages
Agriculture, Forestry, Fishing and Hunting	1,018	1.7%	$32,700	75	8%	$1,670	5.38%
Mining	105	0.2%	$54,794	10	10.5%	$2,891	5.57%
Construction	2,851	4.7%	$55,555	869	43.8%	$8,293	17.55%
Manufacturing	3,328	5.5%	$50,121	-339	-9.2%	-$256	-0.51%
Wholesale Trade	1,489	2.5%	$57,515	172	13.1%	$3,816	7.11%
Retail Trade	8,634	14.2%	$30,475	-168	-1.19%	$699	2.35%
Transportation and Warehousing	1,262	2.0%	$35,814	-226	-15.2%	$1,064	3.06%
Information	852	1.4%	$41,162	-61	-6.7%	-$6,079	-12.87%
Finance and Insurance	1,438	2.4%	$65,787	-267	-15.7%	$9,399	16.67%
Real Estate and Rental and Leasing	892	1.5%	$45,918	178	24.9%	$7,635	19.94%
Professional and Technical Services	1,737	2.9%	$60,839	267	18.2%	$13,780	29.28%
Management of Companies and Enterprises	344	0%	$73,155	117	51.5%	$14,761	25.28%
Administrative and Waste Services	2,217	3.7%	$40,750	121	5.8%	$1,200	3.03%
Educational Services**	803	1.3%	$34,658	-29	-3.5%	$5,394	18.43%
Health Care and Social Assistance	9,927	16.3%	$43,258	1,080	12.2%	$2,801	6.92%
Arts, Entertainment, and Recreation	861	1.4%	$29,313	90	11.7%	$4,967	20.40%
Accommodation and Food Services	7,442	12.3%	$22,288	1,519	25.7%	$3,241	17.02%
Other Services, Ex. Public Admin	2,369	3.9%	$27,290	422	21.7%	-$290	-1.05%
Total, All Government***	13,074	21.5%	$60,291	-1,019	-7.2%	$1,075	1.82%
Unclassified	96	0.2%	$38,946	-17	-15.0%	-$44,785	-53.49%
TOTAL	60,739			2,794			

**2010 wages adjusted for inflation*
*** Private education services only-not public*
****Includes all public education jobs*
Source: New York State Department of Labor - Quarterly Census of Employment and Wages (QCEW), Annual 2018

The economic impact of arts and culture cannot be understated. In Ulster County, it contributes the 3rd highest percentage (20.4%) of average wages amongst the workforce. In Kingston, the sector generates over 1,600 jobs, $57 million in wages, and $167 billion in revenue. Compared to 10 other New York State cities with similar residential populations, Kingston has the highest concentration of arts and cultural establishments.[36]

[35] Ulster County Housing Action Plan 2021

[36] Kingston Arts & Culture Master Plan, 2022
2566f3b0f68abd004808059459800af7_Kingston_Arts___Culture_Plan_Jan2022_FINAL_rev2.14.22.pdf (amazonaws.com)

4.7.2 Potential Impacts

FBC implementation will positively impact the supply of housing, its affordability mix, and other socioeconomic conditions. Specifically, instituting the FBC will stimulate a range of housing types and options, including in the "missing middle"[37]. The FBC establishes Transect Zones and Special Districts which are designed to stimulate and create more walkable, mixed-use environments, with layouts of development which reflect and enhance the existing, human-scaled pattern of diversified and compact land use that is already evident in many neighborhoods.

Beneficial Land Use & Transport Relationships

The mixed and often times moderate density land use pattern and form fostered by the FBC will support active and multimodal transport, with people more readily able to walk and take transit. There will be beneficial land use and transportation relationships established and reinforced, whereby greater levels of jobs and services are more likely to be available near locations where high proportions of people live.

Thus, the FBC can create conditions where it is not a requirement for people to have to spend as much household income on transport because it is such a necessity within auto-oriented spatial form to own or have access to a car. Rather, it can be a personal and household choice as to whether it is necessary to have access to one or more cars. Active transport potential feasibility also benefits groups that do not drive, like children or elderly adults.

This contrasts with the primarily automobile-dependent configurations of land use, with large areas devoted primarily to single and isolated land uses, including exclusively commercial areas and very low-density residential neighborhoods. With greater parking balance, there can be less sprawl and lost space between buildings and more of the total land footprint in the City could be available for building development. This should provide for economies of scale in infrastructure and aid in fiscal conditions, whereby land that was converted from open parking lots is now generating assessments value from having buildings on them.

With this project's 'Charrette Summary' presentation of "big ideas" there is a notion presented for the benefits that will be derived from right-sizing parking using the FBC[38]. As discussed on page 29, it notes that many participants believe minimum parking requirements were a factor that holding back the production of additional housing. Removing minimum parking standards reduce development costs and allow for greater use of land (a higher density of units). The requirement for minimum parking can increase the cost of development due to the cost to purchase land to assign to the purpose.[39] According to the Victoria Transport Policy Institute's 'Parking Requirement Impacts on Housing Affordability', by Todd Litman, a with a typical affordable housing development, one parking space on average increases costs by approximately12%.[40]

[37] https://missingmiddlehousing.com/

[38] //kingston-ny.gov/filestorage/8399/8469/48370/ac17d450e091a2dd6d06b996a86a395f_Kingston_Forward_Executive_Summary_draft_121421.pdf

[39] https://localhousingsolutions.org/housing-policy-library/reduced-parking-requirements/

[40] www.vtpi.org/park-hou.pdf

Addressing potential for better transport options, the Form Based Code Institute's 2021 study 'Zoned in', paraphrased, page 8, notes:

> *[W]hen zoning codes separate development according to use, they typically prevent workers from living near their jobs, children from being able to walk to school or the playground, and everyone from experiencing any aspect of their neighborhood without using a car or being exposed to the well-documented dangers for pedestrians. Because the adoption of a form-based code often results in higher intensity development and overall connectivity, active transportation and transit can become more viable options for residents (when paired with supportive infrastructure design). Form-based codes focus on life at a human scale, not a building scale.*

FBC Potential Influence on Housing Supply & Demand

The City of Kingston Regulating Map categorizes all land parcels into 'Transect Zones' and 'Special Districts'. This categorization promotes their organization in a continuum from rural to urban, ascending from T1, T2, T3, T4, through to the higher order T5, with each transect having different characteristics (lot width, lot depth, lot coverage, building height, building setback, allowed frontage types, etc.). One way the housing supply will be enhanced is through an allowance for Accessory Dwelling Units (ADUs) by-right in all zones. This can help establish a larger, incrementally developed housing supply to assist housing choice, particularly by enabling more very small units, such as can be occupied by single persons, inclusive of new labor force entrants, or older persons who may seek to downsize from their current living situations.

Within transect zones there is further increased flexibility to establish many types and sizes of housing units in diverse price ranges. This generates the ability to foster housing options that satisfy demands of inhabitants irrespective of socio-economic status. Current zoning best practices more often address removing single-family only exclusionary zoning[41]. This FBC is increasing the potential to develop a greater number of housing units citywide, and not just by adding ADUs by-right. In places where there was R-1 zoning, where there is now T3N and T3L planned, it will be possible to establish more dwelling units, such as in Small Multiplexes, duplexes and other 'Allowed Housing Types'. There are still dimensional requirements that must be complied with to construct these and which will provide compatible form. Since households sizes are changing in the Mid-Hudson Valley, with more older householders, fewer married couples with children, and slightly more persons living alone, enabling a broader range of unit sizes will support a more versatile supply which can provide for diverse housing needs[42].

In addressing potential for 'housing diversity', the Form Based Code Institute's 2021 study 'Zoned in', page 7, paraphrased, notes that because form-based codes focus on the height, placement, and scale of buildings, rather than number of units per acre, residential developers can provide a wider diversity of housing types[43]. For example, accessory dwelling units can be built in neighborhoods where only large single-family detached units are allowed under conventional zoning. Alternatively, it can enable a higher number of moderate-income units in a location

[41] See https://www.countyhealthrankings.org/take-action-to-improve-health/what-works-for-health/strategies/zoning-regulation-and-land-use-policy-reforms & https://www.cnu.org/publicsquare/2022/11/15/ending-exclusionary-zoning.

[42] https://mhvcommunityprofiles.org/demographics/household-types

[43] https://smartgrowthamerica.org/resources/zoned-in-economic-benefits-shared-prosperity-with-form-based-codes/

where it would be financially infeasible under a conventional code's density limits. By allowing higher densities, form-based codes enable households with different needs and income levels to join or stay in the community and participate in the local economy.

Per this FBC, an Accessory Dwelling Unit (ADU) is a Dwelling Unit of limited size that is on the same Lot as a Primary Dwelling Unit. ADUs can be located in the main structure or in an Accessory Building. ADUs must comply with all building code requirements. ADUs are an affordable and flexible housing option and can play a role in meeting the citywide housing need. ADUs can be used to provide independent living space close to family for aging adults, or can be leased as an affordable option for unrelated renters, which would generate income for property owners.

These actions are consistent with recommendations in the Ulster County Housing Action Plan, 2021. For instance, on page 88, in discussing desirable land use change, it promotes 'mandatory affordability' provisions, as well as "upzoning', which can provide for additional areas in the community where multi-family units can be constructed, or there is an allowance for 2-family dwellings without an increase in lot size. On page 93 this same plan notes "Social benefits" of upzoning and affordability, noting, directly paraphrased:

> *Density also supports mixed income and diverse communities, which provides the chance for interaction between different social groups, an important piece of equality and inclusion as well as of a healthy democracy.*

As the City grows it is particularly important to maintain a supply of housing that is accessible to people of all incomes and backgrounds. Without a diversity of housing types and prices, people with lower household incomes could face displacement, especially if the demand and prices within the housing market escalate and there are not rises in the wages and incomes of persons, households and families that, like everyone, need shelter. Displacement is a major cause of community destabilization across New York and it disproportionately harms low-income communities and people of color, furthering racial inequity and causing increased and entrenched poverty, economic immobility, and weakened cultural ties and support networks[44].

Within this Form based Code, there is removal of standards that tie the number of units that can be established on an set area of land. For one, the allowance for ADUs in transects is meant to be a relatively inexpensive way to create low-cost housing units that can easily be established on existing lots, even within existing buildings, which can cost-effectively access existing infrastructure, like streets and water and sewer service. ADUS are relatively low cost to construct and they offer flexible arrangements for owners as well as occupants[45]. Allowing other than exclusive single-family houses on lots also supports diversification of supply. Moreover, the FBC creates deed-restricted affordable housing that can, depending on how rental or ownership of the units is stipulated, provide a supply and source of housing for low, moderate, and even middle income persons and households. Having access to these type units can provide security for residents[46].

Mixed-Use Development

[44] https://kingston-ny.gov/news/?FeedID=1318

[45] https://localhousingsolutions.org/housing-policy-library/accessory-dwelling-units/

[46] https://smartgrowthamerica.org/form-based-codes-a-means-to-equity-in-a-compassionate-city/

More mixed-use form enables improved socio-economic interaction and diverse social and economic activities. The transects will create a highly connected neighborhood grid that fosters walkability and supports mixed development. This reduces dependency on auto-oriented forms of mobility. It reduces potential for environmental impacts from spawl when disproportionately more low-density single-family housing is created on the City's edges as opposed to in or adjacent to three Broadway cores. Likewise, the intended productive re-use of under-utilized or vacant or abandoned buildings will positively impact the City's housing stock of 11,571 housing units (2020 U.S Decennial Redistricting Data).

Furthermore, as paraphrased 'Zoned in', page 7, FBCs are designed to create more opportunities for mixed-use development than Euclidean zoning, resulting in new residences in places with good access to employment, retail, entertainment, civic realms, and other everyday activities and services. This can lower transport costs by shortening the distance between where residents live and their other destinations. This can provide other (often cheaper) options for getting around. Mixed-use development also reduces the time required to reach destinations -- an important commodity, particularly for low- and moderate-income households. Mixed-use is also known to benefit local businesses by attracting more commercial activity (that is, more spending) from pedestrians and other street users, making form-based codes a tool to support both residents' access to quality-of-life opportunities and businesses' access to employees and spending power. In Kingston the Walkable environment and character fostered and enhanced by the FBC will also aid in arts and tourism markets development and it will sustain those segments of the economy.

Influence of FBC on Housing Affordability

Under this FBC, all new development must comply with the Code's requirements for 'affordable housing' (Affordable Housing Standards - §405.19). This mandates that 10% or more of units within a new development including seven or more housing units shall be dedicated to affordable housing. The requirements call for applicable development complying, at a minimum, with the following requirements of affordable housing:

a) The rental cost of Affordable Housing Units will be calculated as not to exceed 30% of a household's income.

b) The maximum income for a household to occupy and Affordable Housing Unit will be 80% of the Ulster County median income, with adjustments for family size and shall be updated yearly.

c) Affordable Housing Units shall be dispersed throughout the housing development and shall be indistinguishable from market-rate units in design, access, appearance, construction, and quality of materials.

d) Affordable Housing Units shall be phased in during any build-out period. Such units shall be provided concurrently with to the development of market-rate units.

Moreover, there are standards that mandate that larger developments greater than 19 new units also provide an additional increment of Workforce Housing (120% of AMI). This is 5% in development of 20 to 49 units and 10% in 50 or more units. When there are bonus stories, there are also affordable housing stipulations for that bonus story as 50% of the additional story and 20% of total units within the property as Affordable Housing Units. The standards also provide administrative guidelines to ensure they are been followed.

The County's 2021 Housing Action Plan provides a recommendation for the adoption of short-term rental regulations as part of its Housing Smart Communities Initiative (page 108). It goes onto note on the same page that

these type of rentals can have both positive and negative impacts on a community. In Kingston, many in the public expressed that the short-term rental supply should not take a significant number of units out of the long-term market, which could cause demand to increase and average costs of rentals to escalate. At the same time, there were many property owners who advocated that short term rentals can aid incomes and the lodging and tourism economies and therefore the municipal fiscal condition.

While there were limited regulations in existing zoning, the FBC defines these short-term rentals as residential living spaces rented to transient nonpermanent guests, for terms shorter than 30 days, without staff on the premises. It advances standards for full permit (STR-F), limited permit (STR-L), and resident occupied permit (STR-RO) in FBC Sec §405.21.D. As a way to strike a balance, the Short-Term Rental Full Permits are limited to 1% of the City's housing units per defined US Census data. This will ensure that there is a limited supply of short-term rentals to give property owners a reasonable opportunity to create some of them. Nonetheless, the 1% restriction will aid in maintaining a practicably larger supply of full-time rental housing and provide support for some moderation and price stability in the rental housing market .

4.7.3 Mitigation Measures

The FBC encourages infill development and a more highly diversified supply and diversity of housing in and across the City. It is organized so that more housing can be created than is feasible under existing zoning. This should mean that there will, over time, be a greater diversity of stock and units sizes, with more overall units, as well as better affordability. This will translate into housing options and price stability and housing choices for people from varied income backgrounds and with different housing needs and interests.

There will also be deed restricted affordable housing created and that is accessible for eligible persons and households. This will help alleviate and counter any potential for housing displacement. There is a City Housing Office that is charged with supporting housing planning, including monitoring housing trends and housing action planning[47]. Its publication of routine reporting and germane policy analysis should be provided in order that there is broad public awareness of conditions and efforts to support housing choice and market stability.

Meanwhile, the incremental and blended growth in the housing supply should also mean that the effects of new buildings will be manageable. The new housing and mixed use development will aid the community's evolution as a beneficial place to live, work and play. It should not detract from the community's appearance and character, or the advancement of a robust and developing economy and base which provides for community wellness and a sustainable pattern of balanced and coherent development consistent with both the general and subject-specific plans of the City and region. Based on this rationale, there is no mitigation specified in terms of housing or the advancement of overall community and economic development.

[47] https://kingston-ny.gov/housing

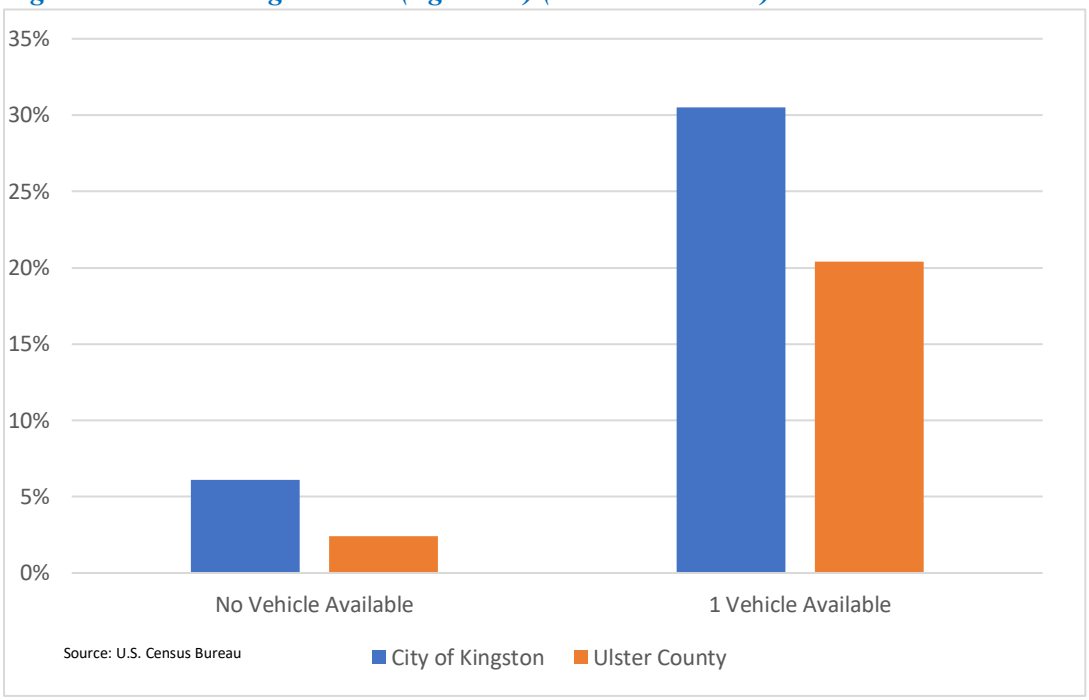
4.8 Multimodal Transportation & Parking

4.8.1 Existing Conditions

Commutation

In Kingston, transportation activity patterns are characterized by relatively high levels of people walking and relatively low reliance on single-occupant motorized vehicle trips compared with other communities in the Ulster County area. Based on commuting patterns of those aged 16+, as depicted in the 2020 American Community Survey (ACS) 5-Year Estimates, 32.0% of this select total group walked to work, used transit, carpooled, worked from home, or used a means such as bicycle or taxi. This contrasts with a lower rate of 24.8% in Ulster County overall. Public transit use in Kingston is nearly twice (1.7 times) that of the rest of Ulster County, which was 2.4% compared with 4.0% in the City. [48]

Figure 41: Commuting Patterns (Aged 16+) (2020 ACS 5-Year)

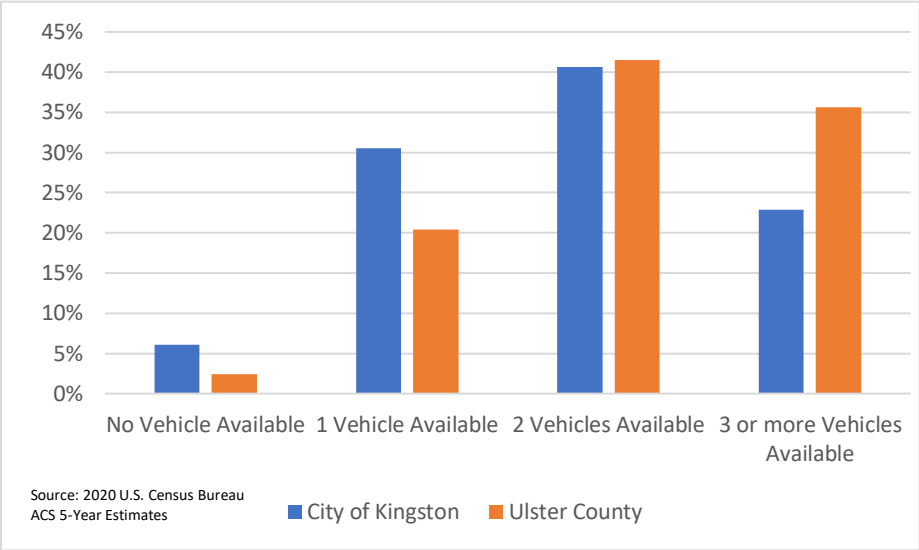


Conversely, also indicative of high local reliance on multiple modes and active transport, 6.1% of households in the City do not have a car. This rate is well over twice (2.5 times) greater than the rate in the County (2.4% households without a vehicle). There are also a significant number households with only one vehicle available for all occupants (30%). This is notable in terms of a relatively low local existing reliance on autos as a primary means of transport, as in the City there are lower percentages of households with 2 and 3 vehicles available.

The lower levels of households with two or more vehicles than in the County overall appears to confirm a local reliance on walking and means other than single-occupancy vehicle trips in the City (Ibid). Moreover, per the Journey to Work data, the 70.8% of people who drove to work alone is lower than 76.8% of people who drove alone in Ulster County.

[48] https://data.census.gov/

Figure 42: Vehicles Available (Aged 16+ Workforce)



Existing Network Characteristics

The form and spatial pattern and layout of Kingston's transport network has impacts how residents and visitors access property and conduct daily affairs. From the 1960s through early 2000s, road networks evolved principally with an aim of conveying motor vehicles through the network with the least amount of delay. In some areas of the City, this has led to wide lanes of free-flowing traffic, multiple turning lanes, signalized intersections, and relatively high speeds.

In 2010, the City adopted a Complete Streets Policy.[49] This policy promotes transport network and infrastructure development that provides for multimodalism. This DGEIS assesses ways the FBC may impact active transport potential and the capacity for walking, bicycling, and transit use, as well as automobile use, in the city and region.

An arterial road or arterial thoroughfare is a high-capacity urban road that sits below freeways on the road hierarchy in terms of traffic flow and speed as defined by the U.S Federal Highway Administration (FHWA). Arterials can be classified as: Other Principal Arterials and Minor Arterials. Other Principal Arterials serve major centers or metropolitan areas. Minor Arterials provide for trips of moderate length and serve geographic areas that are smaller than their higher volume counterparts.

[49] https://kingston-ny.gov/filestorage/8463/10432/10434/Common_Council_Authorizing_Resolution-CSAC_11-9-2010.pdf

Figure 43: Functional Classification of Roadways, from the Ulster County Transportation Council (UCTC) 2045 Long Range Transportation Plan, pg.69, depicts Kingston's "Urban" Functional Street Classification. It shows various Arterials and Collector Streets. Collectors gather traffic from Local Roads and funnel them to Arterials. Within the context of functional classification, Collectors are broken down into two categories: Major Collectors and Minor Collectors.[50]

Linked with functional classifications, critical corridors in Kingston include the NY State Thruway (I-87), I-587, NYS Rte. 9W and NYS Rte. 32 as shown in **Figure 44**: **Critical Transportation Corridors.**[51]

Critical corridors serve major population centers including future growth areas; carry higher volumes of through traffic; carry higher volumes of freight; and serve primary economic generators, including recreational venues and traditional businesses. Ulster County's critical corridors also include, US 209, NY 28, and NY 299.

While not a Critical Transportation Corridor, Broadway is a highly important and active commercial and cultural corridor. It bisects higher-density neighborhoods and three geographic city centers, including the high order Mid-Town core, and Uptown and the Rondout.

Figure 43: Roadway Functional Classifications

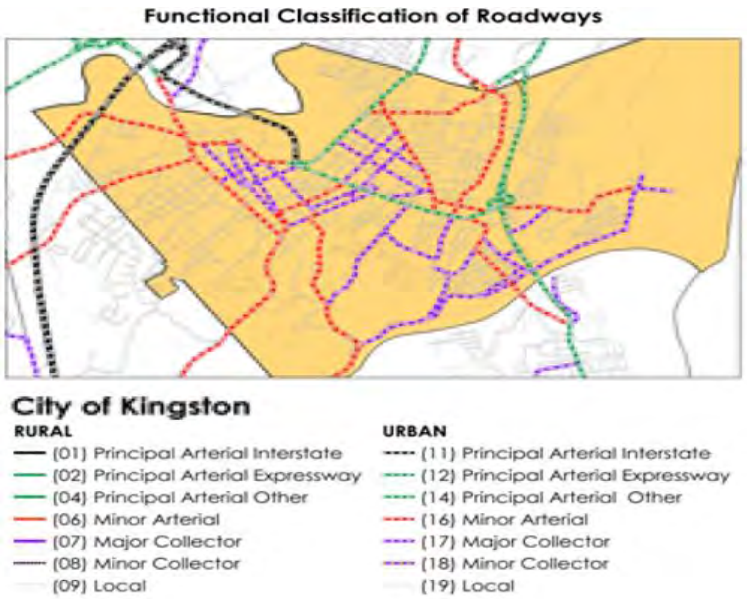
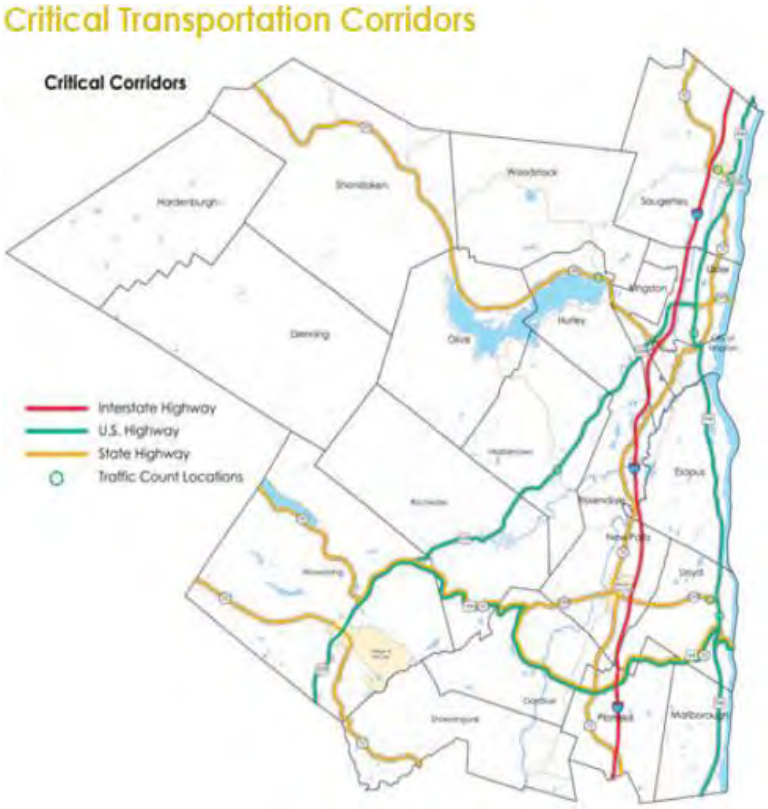


Figure 44: Critical Transportation Corridors



Intersection & Block Characteristics

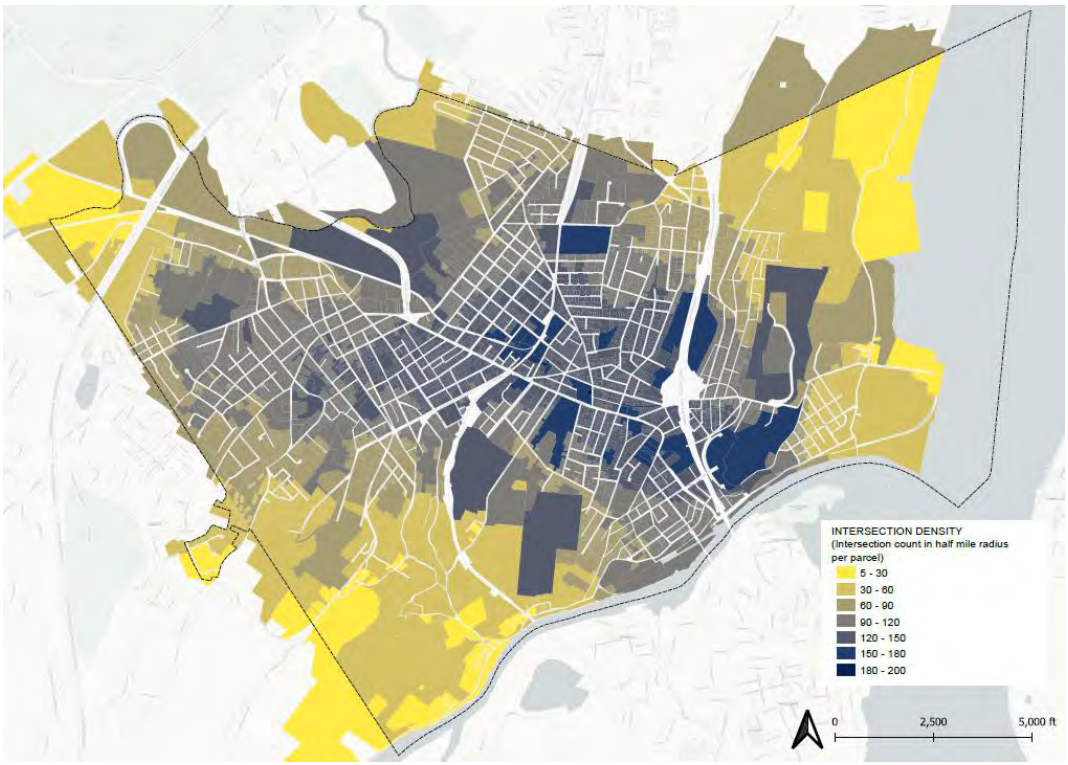
Intersection density is the number of intersections in a set area. It correlates closely to block size – the greater the intersection density, the smaller the blocks. Small blocks generally make a neighborhood more walkable. **Figure** 45 shows a high intersection density in the City's centers, in the grid neighborhoods north and south of Broadway, and in the vicinities of the long-standing

[50] **U.S. DOT FHWA document** www.fhwa.dot.gov/planning/processes/statewide/related/highway_functional_classifications/fcauab.pdf **Doc Pg 16 Section 3.1.5**

[51] **Ulster County Transportation Council (UCTC) 2045 Long Range Transportation Plan** https://ulstercountyny.gov/sites/default/files/documents/planning/UCTC_2045LongRangeTransportationPlan-Final-Web.pdf

neighborhood grids around Washington Avenue, and Lucas / Hurley Avenues neighborhoods. Such high levels of connectivity improve walkability and encourage other active forms of transit[52].

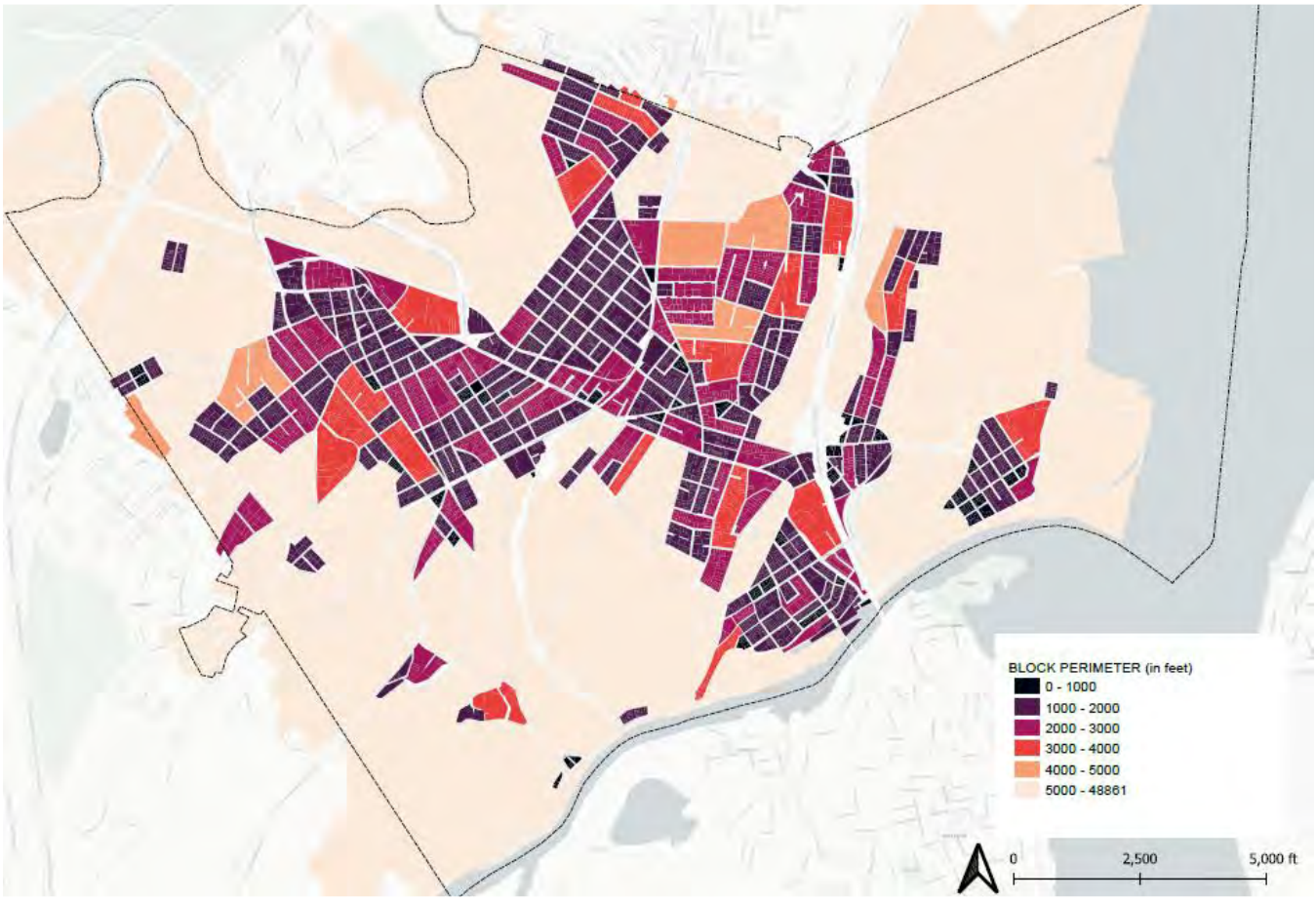
Figure 45: Street Intersections Concentrations Gradient



Block perimeter is encapsulated by the size of blocks. The smaller a block, the less perimeter available. A lower perimeter points to denser locations in the existing street grid and indicates a more walkable scale. The presence of many tiny blocks closely located in a street grid points to varied route choices and many street crossings. Having route choices available means it is easy for someone walking (or traveling by car) to choose the streets they will travel over in a grid to get to a destination. Figure 45: Block Perimeter Map shows the City's variations in block perimeter. A beneficial perimeter arrangement arises on both sides of Broadway in Midtown. These existing conditions enable connectivity and pedestrian travel within locations east/west of the CSX Rail line, west of Grand Street, and east/west of Greenkill Avenue.

[52] Users should note this is a general depiction and based on the methodology, the darker highlighted shades often correlate with large parcels, which by function of large perimeter, have many intersections within a half mile, so this context mapping showing darkest purple around large parcels should not be construed to have high intersection densities.

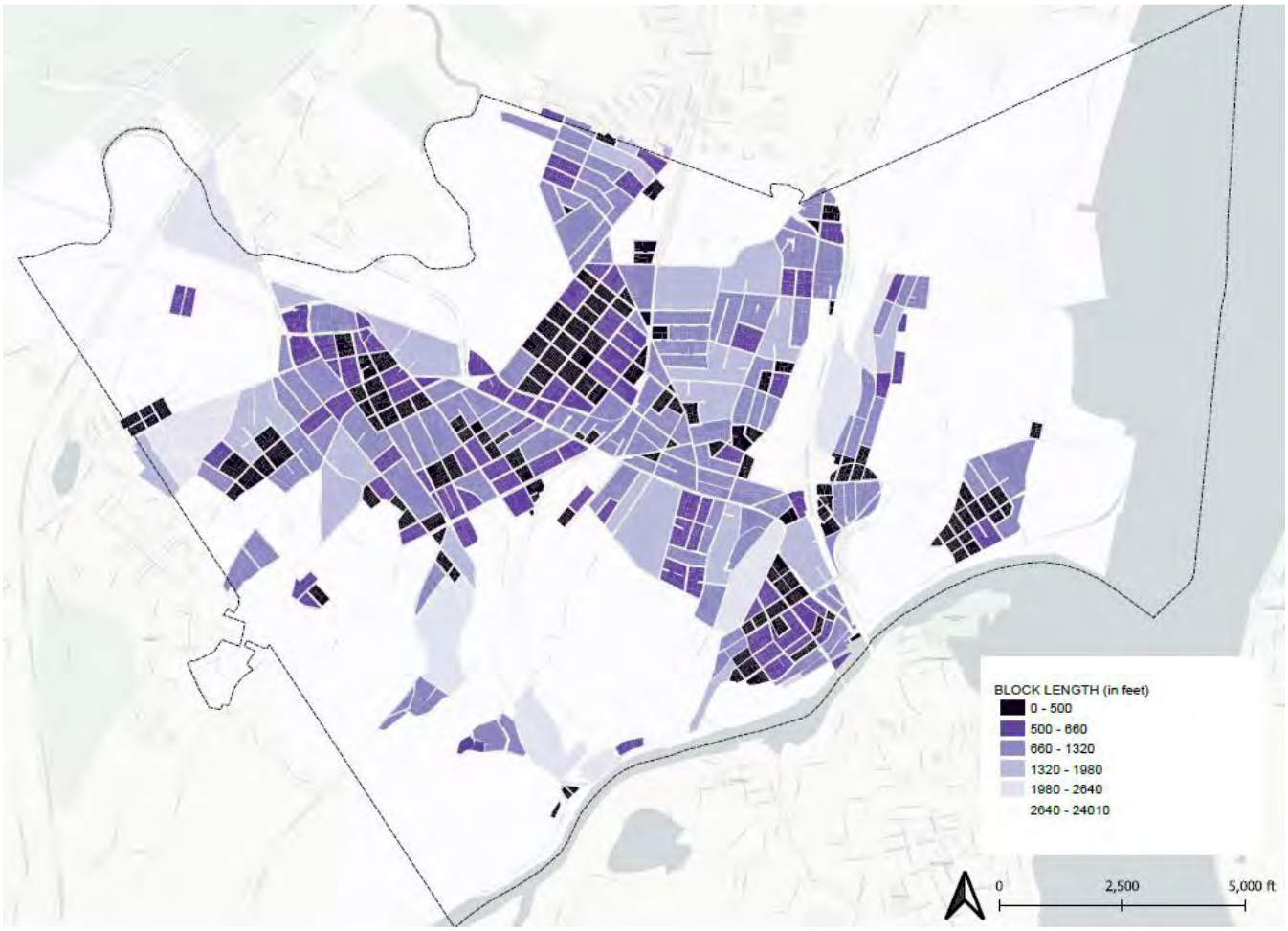
Figure 46 – Block Permitter



Block Length

Similar to Block Perimeter, Block Length influences the level of walkability and interconnection in a street grid and plays a role in establishing a desirable walking environment. Smaller block length make it easier to choose a route. Lower block length also creates more street frontage, thereby enabling a higher linear frontage of facades per block, which offers more features and attractions for pedestrians, which in turn increases the chances of an individual embarking on a short distance walk due to the building environment and scale. The Block Length map shows varying block lengths in the grid, especially just east of Albany Avenue and north of Broadway. This can allow for a variety of land uses.

Figure 47: Block Length



Complete Streets & Intermodalism

The street grid layout of the City has in places evolved with walkability. Yet, the features of actual streets, like the availability of, and the quality of sidewalks, play a crucial role in aiding, or hindering, potential for non-motorized transport. The City's Pedestrian Bicycle Master Plan[53] indicates that many streets with concrete or asphalt sidewalks can present as uneven, with aesthetically displeasing conditions, and they may not be compliant with ADA standards. That City sidewalks can be difficult to navigate in some areas, pointing to a need for upgrades in these types of infrastructure.

The City of Kingston Complete Street policy was adopted in November 2010. "Complete Streets" are comprehensive, integrated roads that provide safe and convenient travel along and across the street network by all users: walkers, bicyclists, drivers of various types of vehicles and riders of public transportation, of all ages and abilities, including children and youth, older adults, and persons with disabilities. The Complete Street policy is designed to aid in achieving active transport potential and provide an equitable supply of street conditions,

[53] Website accessed March 25, 2022, (https://engagekingston.com/pedestrian-bicycle-master-plan/widgets/31480/faqs#5516

especially for Kingston residents who do not drive, or choose not to drive, including older adults, low-income people, people with disabilities, and children.

This policy highlights the importance of streets as public spaces that represent major City infrastructure, which cover a large part of its total land area, and which serve as a platform for community mobility and community development by influencing business opportunities, public welfare, and shaping resident, visitor, and shopper experiences. This legislation notes that implementing Complete Streets is consistent with State and Federal policies to integrate pedestrian and bike facilities more fully in overall transport planning, implementation, and operations.

The Complete streets policy sets a City goal to foster transportation choices by developing a Complete Streets program. It also provides standing to recognize pedestrians, bicyclists, transit riders and people with disabilities on the same level as motorists in the planning and design of street reconstruction and upgrades and as part of new street development. A Complete Streets Advisory Council meets monthly and provides guidance on the development of complete streets within the City.

Recently, the City committed to producing a Pedestrian & Bicycle Master Plan as part of achieving complete streets. That plan will provide strategies for advancing intermodalism. The FBC can be assessed in terms of how it assists objectives for complete streets, multimodalism and pedestrian safety.

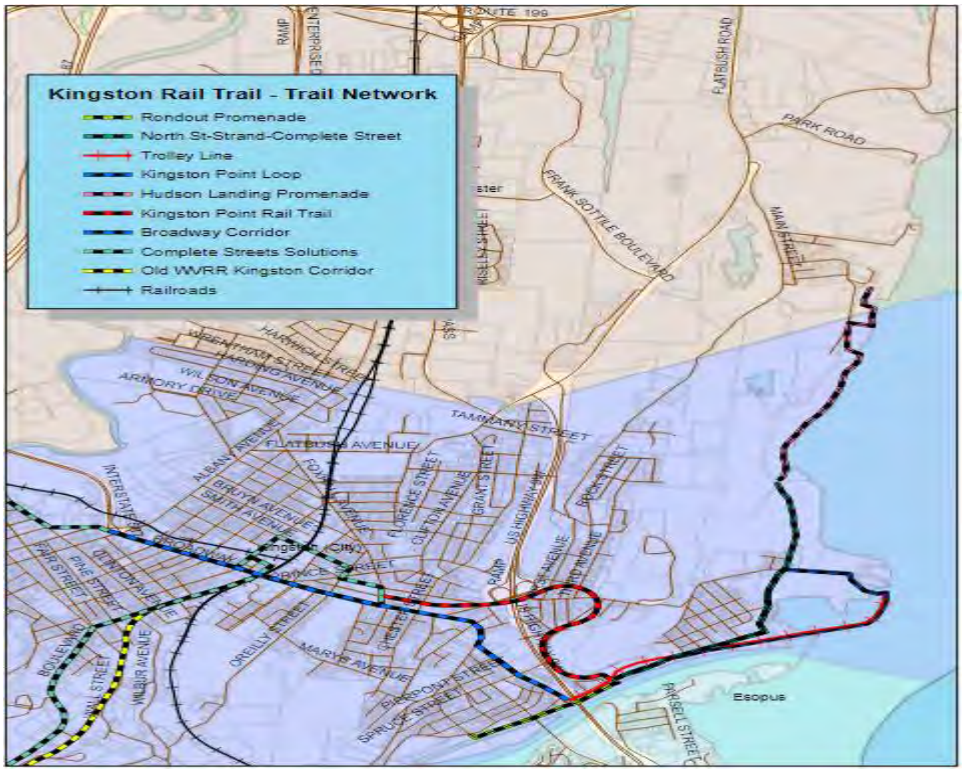
Trails

Kingston Greenline is a connected grid of urban trails, complete streets, improved sidewalks, bike lanes and linear parks. First conceived in 2014, the goal for this infrastructural development is to connect parts of the City and to advance a network of trails and rail trails, including County trails, and become a hub for non-motorized transport and tourism from four different directions in Ulster County. **Figure 48** 'Kingston Greenline' shows a trail network map of the then existing Rail-Trail network in the City.[54]

[54] **from City website** https://www.kingston-ny.gov/Kingston-Greenline

Figure 48: Kingston Greenline

Figure 49: Kingston Rail Trail – Trail Network



Transit Environment

Considering existing transit environment features, **Figure 50** above (**UCAT (Transit) Service in Kingston)** shows three transit routes primarily serving the City operated by the Ulster County Area Transit (UCAT). In July 2019 UCAT consolidated with municipally operated Citibus. UCAT has undertaken a leading role in providing public bus-based transit service in the City. These routes cover all three urban cores within the City. There is service along principal and minor arterials and major collectors like the Broadway spine, on Route 9W, on parts of Washington and Lucas Avenues, and Foxhall Avenue. The local bus routes link with other ones that extend into the region, like which connect with other population or geographic centers, like the one in and by Ulster Avenue.

Figure 50: UCAT (Transit) Service in Kingston

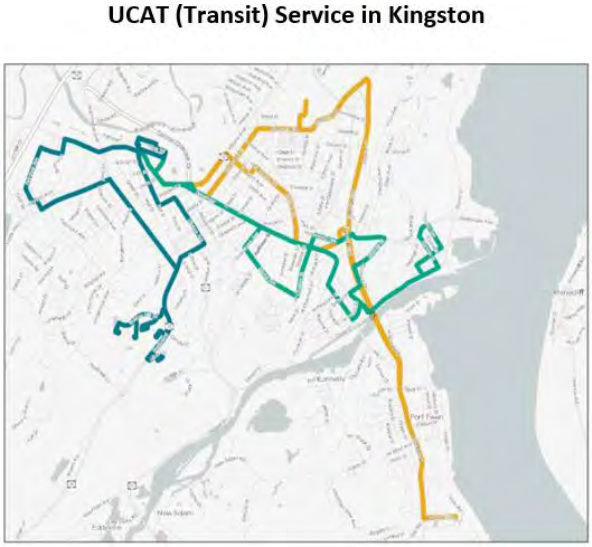
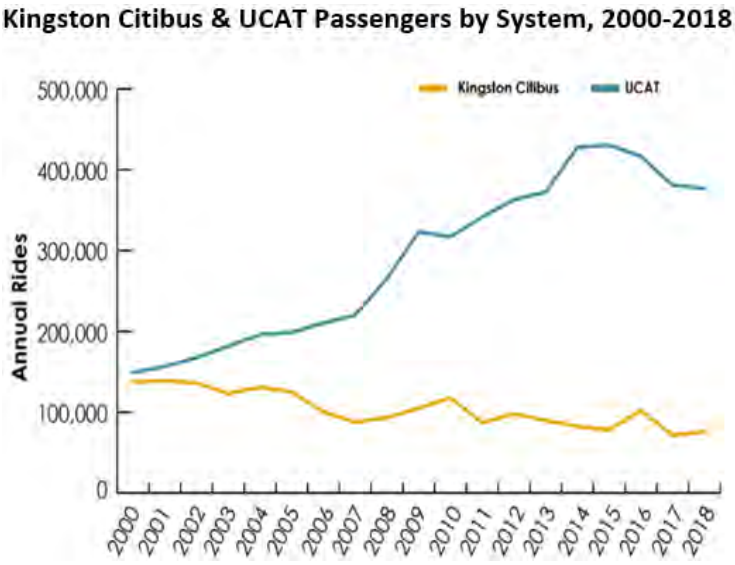


Figure 51 (Kingston Citibus & UCAT Passengers by System, 2000 – 2018) summarizes UCAT and Citibus annual ridership for the period 2000 to 2018. As paraphrased from the 2021 UCTC '2045 Long Range Transportation Plan', this data illustrates extensive growth in the UCAT system, with a 118% upswing in passengers in the past decade. Paraphrased from this 2045 Long Range Plan, page 83, this growth is attributed to an expansion in service area and adjustment to riders reporting practices, which allowed transfers to count as an additional rider.

Per the same source, which is a most readily available source of data on ridership features, Kingston Citibus ridership trends illustrated a decline in ridership, with an loss of 37% since 2004. The plan anticipates that expansion of UCAT service into the City in 2019 could positively affect overall ridership throughout the county by establishing more frequent service in the City of Kingston, and by providing a consistent fare and scheduling system throughout the public transit system, and further ease of use for riders.

Figure 51: Kingston Citibus & UCAT Passengers by System, 2000-2018



According to Ulster County Transit Development Plan; Final Report, 2012, by Nelson Nygård, discussing the then Citibus "passenger amenities", page 2-2, it is noted that a small number of bus shelters are available throughout the system. However, at that point the operator was installing bus stop signs at regularly used stops and developing a program to ensure that bus shelters are installed and maintained at key locations (ibid, page 2-7).

The Ulster County 2045 Long-Range Transportation Plan, adopted in 2020, does not mention a formal shelter deployment plan. However, the plan does support land-use concepts that result in more compact development in and around existing activity centers. It further notes, page 151, that the Ulster County Transportation Council will continue its focus on transportation investments that are consistent land use policies. Based on this analysis, there is limited guidance in this body of regional transportation policy on the development and deployment of bus transit infrastructure in and by the streets within the City.

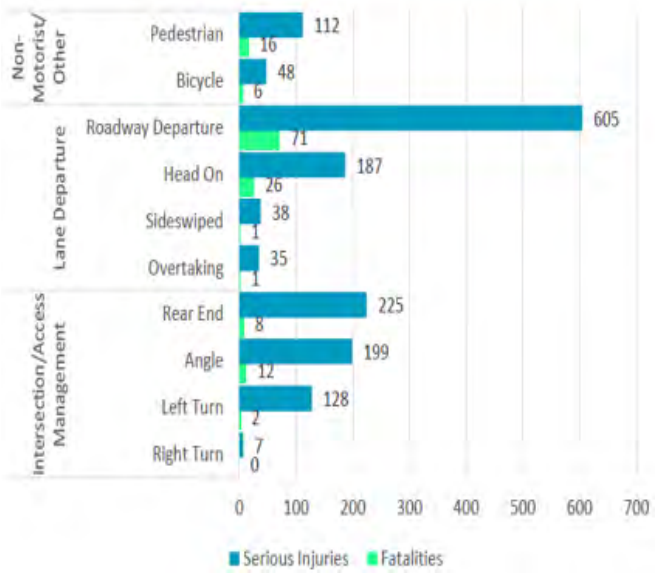
Transportation Safety

The 2021 Ulster County Road Safety Plan (RSP)[55], outlines the transportation safety conditions and needs throughout the Ulster County Transportation Council (UCTC) planning area. It supplies an

55 https://ulstercountyny.gov/sites/default/files/documents/planning/UCTC_TSAP_RdSftyPln_Final.pdf

informational and planning framework for understanding how FBC implementation could influence the potential for lower transport-related fatalities and serious injuries in the city and region. The RSP looks at emphasis areas, including pedestrian/bicyclist crashes and roadway departures, which are both priority issues at the State level, although each has different causal factors and different potential solutions (pg. 49).

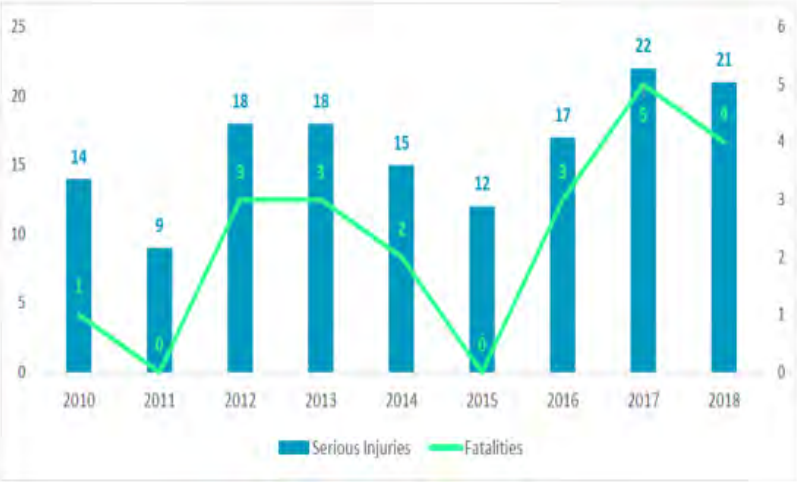
Figure 52: Fatalities & Serious Injuries by Crash Type



Serious injuries and fatalities among cyclists and pedestrians are a key emphasis area for the region. Figure **'53'** offers general insight into the number of fatalities and serious injuries caused by crash type in Ulster County. These fatalities and injuries are heavily concentrated in the largest jurisdictions, with 24 percent occurring in Kingston and 11 percent each in New Paltz, Saugerties, and Ulster[56].

Non-motorists make up a relatively small percentage of total fatalities and serious injuries for the region, but this is a growing area of concern. While overall numbers of fatalities and serious injuries to people walking and biking remain relatively low, per the RSP, the last two years of available data show an increase. Pedestrians and bicyclists are some of the most vulnerable system user types. They have a much higher chance of being injured or killed in a collision with a motor vehicle compared to other modes of travel or even other collision types[57] (RSP, pg. 49).

Figure 53: Pedestrian & Bicyclist Fatalities & Serious Injuries by Year



Safety is one category of benefit that is advanced when there are more complete streets. With fatalities and serious injuries among people walking and biking heavily concentrated in the county's most populated jurisdictions, the RSP's deeper analysis showed collectors and arterial streets as the predominant functional classes for pedestrian and bicyclist fatalities and serious injuries. Also, non-motorist serious injuries and fatalities are more likely to occur during clear conditions (69% of crashes) than vehicle occupant injuries or fatalities (63%), possibly due to an increase in cyclists and pedestrians in clear conditions.

In order to curtail pedestrian and bicycle crashes, the RSP presents strategies and recommendations in order to assist in reaching safety goals. The RSP identifies practices that can advance goals. It also generated non-motorist crash rankings for network segments and intersections from within the region, using the findings to prioritize recommended pedestrian and bicycle infrastructure improvements at particular locations[58].

[56] Ibid, page 13.

[57] Ibid, page 49.

[58] Ibid, Page 26.

Existing Regulations Influencing Streets Layouts & Intermodalism

Zoning

In numerous existing zoning districts in Chapter 405, as shown on the existing Zoning Map, when there are large lot size requirements (large minimum lot sizes), the public street network is more likely to possess a low intersection density. In situations with lower densities and larger blocks, active transport is less feasible due to factors such as having to travel high distances to get to intersections on large blocks before it is possible to adjust course. Yet, walkability on properties is also influenced by how development regulations foster layouts of onsite buildings, infrastructure like sideways and driveways, and open space.

The following discussion highlights how the existing zoning code impacts the layout or modification of public streets, onsite circulation, and the establishment of parking. This can help in diagnosing and assessing ways that, and the extent to which, the FBC will alter prescriptions for complete streets and support more traditional urban form or patterns of circulation that will support compact land use and travel by multiple modes, including walking and bicycling. Specifically, the Comprehensive Plan, in its presentation of principals, page 15, indicates streets must be accessible to non-motorized modes of transportation and respect all ages and mobility levels including cyclists, pedestrians, and wheelchair-bound persons (complete streets).

Zoning: Site Development Plan Approval (§405-30)

Any new or existing development that creates a change in use or intensity of use and which will affect the characteristics of a site in terms of parking, loading, drainage, access or utilities in the City is subject to site development plan approval by the Planning Board per Zoning *§405-30*. This major aspect of the zoning law does not list changes in the active transport environment as a reason triggering site plan approval. Nor does it provide detailed prescriptions for how to provide for the addition of onsite attributes and features which will advance the supply of active transport facilities.

Rather, that subsection does provide significant emphasis on regulating automobile access. Its parking provisions require "*That adequate off-street parking and loading spaces are provided to prevent the parking in public streets of vehicles of any persons connected with or visiting the use, and that the interior circulation system is adequate to provide safe accessibility to all required off-street parking lots, loading bays and building services*". This appears to heavily regard and emphasize layouts which support motorized access and the provision of parking supplies over establishing multifaced transport access. An emphasis on space for parking cars sets up for wide open, sprawling conditions with inefficient land-use. It establishes large open spaces between buildings, with an environment and setting that is less likely to be suitable for enabling and supporting active transport. The attendant surface parking lots, driveways and aisles provide far less suitability for people achieving active transport due to the large distances between buildings and different land uses.

Zoning: Off-Street Parking & Loading (§405-34) –

The provision of off-street parking is regulated by existing *§405-34*. It lists numerous off-street parking criterion that are subject to Planning Board site plan approval, including: A.) Landscaping; B.) Screening; C.) Two or more uses on the same lot (with exceptions); D.) Joint use of parking areas; E.) Layout and Location of off-street parking facilities; F.) Connections between abutting parking areas; G.) Operation and maintenance of off-street parking facilities; H.) Waiver of parking requirements; I.) effects of parking requirements on existing uses; and J.) Parking

space ratios for: i.) Residential and related uses, ii.) Commercial and office uses, iii.) Industrial and heavy commercial uses, and iv.) Off-Street loading facilities.

The 2025 Comprehensive Plan Strategy 5.1.7 (page 47) is to expand and capitalize on the City's compact development and classic grid system by encouraging further transit-oriented development (TOD) and non-motorized transportation modes. Considering its current wide-reaching regulations for providing off-street parking, however, zoning seems to have a substantial focus on achieving acceptable off-street parking rather than TOD or multimodalism. Moreover, as a way to aid the public realm, Comprehensive Plan Objective 7.4 calls for action to increase the more efficient use and availability of public and private parking resources throughout the City, but especially along the Broadway Corridor.

Zoning: §405-25 RF-R Rondout Creek and RF-H Hudson Riverfront Districts.

Considering the Comprehensive Plan's call for TOD and its Objective 4.4 prescription to increase population density in main street areas and neighborhood centers through zoning for mixed use, the Zoning code appears to have limited standards that provide for the attendant complete streets and walkability, however, some noteworthy existing standards include:

- §405-25, which promotes public access and walkability in waterfront districts, with aspects of its purpose to, paraphrased: "…Afford priority to water dependent uses, achieve public access to the coastal area, create distinct Hudson River and Rondout Creek waterfront districts and to implement the policies and purposes of the City of Kingston Local Waterfront Revitalization Program. Further, it is the purpose of the districts to provide opportunities for permanent public views and access to the Hudson River and Rondout Creek…".
- *§405-27.1 Mixed Use Overlay District & § 405-27.2 Traditional Neighborhood Development District* promotes transit and non-motorized forms of transit by establishing in *§* 405-27.1 that the purpose of the mixed-use overlay district is to "*encourage mixed use, mixed income, pedestrian neighborhoods to the present and future residents…*".

*§*405-27.1 also describes the purpose of this traditional neighborhood development overlay in aiding non-motorized forms of transit by decreeing *"Development of traditional neighborhoods along the riverfront will respect its natural resources and provide attractive, diverse, walkable and culturally vibrant communities with strong linkages to the rest of the City of Kingston."*, "*Create pedestrian-oriented neighborhoods for a diverse population to live, work, learn and play*", and "*Facilitate and enhance meaningful public access to the City's Hudson River waterfront lands*". Yet, this standard had limited geographic applicability and the area where this existing zoning overlay applied has been converted to State parkland.

Still, §405–25.D(2) sets a high bar in it that causes the development of transit structures, like shelters, to require a special permit. Moreover, there are no graphics in the existing code, or other sections of text, that discuss ways to provide for transit shelters integration. Furthermore, there is extremely limited guidance in the existing zoning code on providing for multimodalism or transport amenities in and by frontages. Nor is there an explicit requirement for sidewalks.

Subdivision Law

Subdivision of land for development impacts the built pattern in an area and its aesthetic character as part of creating or amending streets and their attendant landscape design. Subdivision of land in Kingston is regulated by *§350-1, 2*

and 3 of the City's USDO. Overall, its provisions guiding streets design are general and antiquated. They only indirectly touch on completes streets features like sidewalks, so they are not consistent with the City's subsequently adopted Complete Streets Policy. They would benefit from an update that is more in line with the goals of the City of Kingston 2025 Comprehensive Plan., 'Strategy 4.12.2' of Goal 3 encourages that zoning and subdivision regulations are simplified and illustrated. It goes on to say that "definitions should be modernized, and the code should be brought into compliance with recent court decisions. The regulations should be illustrated where doing so promotes greater understanding".

4.8.2 Potential Impacts

Analysis of the potential impacts of the FBC on the transport environment will not utilize the findings of any transportation study generated specifically to inform this analysis. Rather, the analysis relies on existing sources of information.

The transportation components and prescriptions of the FBC will provide for complete streets and multimodal transport with potential for reduced vehicular miles traveled (VMT). This is because the FBC will generate environments which are conducive to greater levels of walking, bicycling, and using transit (while still enabling the continued use of single occupant vehicles). The stated intent of the §405.22 Street Design Standards is to guide the creation of an accessible, interconnected network of streets that accommodates all ages, abilities, and modes of transport, including walking, cycling, driving, and public transit.

In 'Driving Down Emissions: Transportation, Land Use & Climate Change', 2020, by Smart Growth America & Transportation for America, its page 10 notes that according to data in the National Personal Transportation Study, nearly half of all car trips are just three miles or less[59]. As the FBC advances mixed-use, it will generate potential for some residents to live close to where they work, or to where they shop and undertake commercial activities. Having complete streets and proximity of land uses will enable travelers to choose to switch more trips, such as shorter distance journeys, to other modes like walking or bicycling. This can help stimulate lower VMT.

Similarly, with mixed-use densities enabled by the FBC, relatively more residential units will be located close to Broadway where there is bus transit service available. With more people residing ¼ to ½ mile from this corridor, some of them can choose to take up trips whereby they walk or bicycle to transit stops, and use the bus to access services and workplaces, which also aids the potential for these type trips to displace VMT solely involving autos.

The City's Complete Streets approach is a multi-modal approach. The street design components in FBC Article 5 are presented using text, tables and graphics. They provide for creating memorable, enjoyable places. The streets developed and enhanced using the FBC will not just establish conduits for trips involving single occupant autos.

The FBC guides establishes Context Classifications and Functional Classifications. Together they will facilitate transport designs that provide for an organization of streets that fit with land use densities and the features of locations and the surrounding network. These will guide the design of new streets and improvements to existing streets. In line with these classifications and definitions, there is not a sole emphasis on motor vehicles with primacy for autos. Since travel by cars is not so prioritized as a function of the network, there is not as much potential to assign a lower standing to other travelers moving on foot, by bicycle, and by transit.

[59] smartgrowthamerica.org/wp-content/uploads/2020/10/Driving-Down-Emissions-FINAL.pdf

Article 5 standards present requirements for new streets and for retrofitting existing streets in conjunction with development. Applicants can be involved in modernizing frontages and adjacent streets. The varied features of existing streets, and constraints in rights-of-way, will require some flexibility in how a land development may be tasked with implementing complete streets in frontage and nearby within the streets network. There is no one size fit all solution.

Considering how the grid and community transport activity patterns may change with a buildout proceeding according to the Form Based Code's prescriptions, the requirements for local streets and collectors, will generate advantageous block layouts.

- Smaller blocks will help make neighborhoods more walkable with many options for route choice; and
- High levels of linear Frontage Occupancy by facades in T5s and T4s will generate a sense of enclosure, pedestrian scale, and present attractions for pedestrians, which can increase the chances of individuals embarking on short distance walking trips due to the availability of a welcoming pedestrian environment with many available amenities.

In terms of trip generation impacts, the FBC allows for more residential development and mixed-used development. This is likely to influence lower relative (proportionally lower) levels of auto trip demand compared with existing zoning. In more instances, the FBC's mix and density shift will enable greater levels of walking, bicycling and using transit, with lower proportional levels of auto trips per unit of development. There could be up to 35% fewer auto trips made per new housing unit because there is a greater capacity for occupants to more easily and feasibly walk, bicycle or take transit to destinations they would travel to during activities of daily living[60].

Proposed patterns under the FBC stand to positively affect the flow of auto traffic or the movement of people and goods in the City.

- The grid and footprint will evolve so users can rely less on the auto mode and support walking, including because sidewalks are always required.
- Sidewalk widths are correlated with land use intensity. This means that locations with likely high levels of demand for sidewalk service must be provided with wider sidewalks.
- Neighborhood context will guide and inform how future buildings should relate to the layout of streets and public spaces. It determines how infrastructure components like lighting shall be supplied and it will help create a pleasing streetscape design and more generally walkable neighborhoods. The new zoning provides an opportunity for almost all residences citywide to be within ¼ mile walking distance of some increment of mixed use, such as a corner store.
- Green infrastructure and street trees are included as part of future street design. Specifying street designs that are pleasing, walkable and bikeable will induce more of this type of behavior then is currently demonstrated.
- Parking standards that aid active transport-supportive or transit-supportive land use are presented in §405.16. Its part C.2 Bicycle Parking Requirement will aid active transport by ensuring that a sufficient

[60] www.nrdc.org/sites/default/files/cit_07092401a.pdf

amount of bike parking is available at buildings serving residential and non-residential purposes. There are not equivalent standards in existing zoning.

Auto Parking

The purpose of the FBC's Parking Standards is to encourage a balance between pedestrian-oriented development and necessary vehicle storage. The goal is to construct neither more nor less parking than is needed. The FBC provides Automobile Parking Requirements for various building uses in Table §405.16.C.1.

The 405.16.C.1 auto parking requirements in the FBC set parking maximums. This ensures there will not be an oversupply of parking. The parking standards also do not set minimum set amount of parking in the Transect areas. This means that property owners can choose whether or not to provide surface parking, unlike the existing zoning. Giving property owners flexibility supports transit utilization and reduced vehicle miles traveled in the community on a per capita, or per unit, basis and will ensure less space is dedicated to surface parking.

In §405.16.E Parking Location and Access, the FBC prescribes that parking locations are easily navigable, visible, and accessible. Yet, it generally requires buildings to front streets and it establishes parking as subsidiary to the principal use which is the focal building. This way the FBC directs emphasis to the streetscape and the primacy of using a multimodal complete street as the linkage between multiple uses proximate to one another within the City.

§405.16.F Parking Lot Landscape Standards provide a set of standards that reduce the visual impacts of large areas of pavement. It acts to improve the overall environment of parking areas by providing shade and heat reduction, and enhancing the overall aesthetic appeal of parking areas.

Street Design Standards

Street design standards that aid walkability and bikeability are contained in §405.23.A Design Standards Matrix. This matrix identifies appropriate street design elements for each combination of Classifications. A goal is to provide a consistent street and multimodal experience within existing building-to-building widths.

There are also many varied multimodal design standards that aid walkability and bikeability in §405.22.C General Street Standards. For one, it allows small radius curbs at intersections to achieve decreased crossing distances for pedestrians. Tighter turn radii will also contribute to traffic calming. Plus, it will help in managing and slowing motor vehicle speeds to advance safe and walkable community environments.

Part C.6 also includes criteria not contained in existing zoning, but now supplied, pertaining to Target Speed. There is a body of evidence that shows that slowing the speeds of vehicles can reduce crash probability and severity, including in cases involving pedestrians[61]. To achieve a safe and walkable community, managing motor vehicle speed through design is critical. Speed management achieves two primary goals: 1) reduction of crash probability and severity, especially with pedestrians; and, 2) increased economic benefits. When traveling at lower speeds, drivers have a wider cone of vision, allowing the driver to better see and react to pedestrians, bicyclists, or parking maneuvers. Slower motor vehicle speeds also allow motorists to "see" attractions beyond the curb. In most circumstances, accessibility for all users and modes is prioritized over mobility for motorists.

[61] See for instance: www.transportation.gov/mission/health/Traffic-Calming-to-Slow-Vehicle-Speeds & https://safety.fhwa.dot.gov/speedmgt/ref_mats/fhwasa1304/Resources3/08%20-%20The%20Relation%20Between%20Speed%20and%20Crashes.pdf

While intersection design shall accommodate large Design Vehicles (WB 40, minimum), the safety of pedestrians and bicyclists shall be the highest priority. The following FBC guidelines for intersection design/size in Arterial, Compact Arterial, and Collector streets also provide for safe and coherent layouts:

- Intersections with an approximately a 90-degree angle.
- Avoidance of angles of intersection of less than 60 degrees.
- Avoiding offset intersections in close proximity to one another, unless aligned to the left of each other.
- The use of auxiliary turn lanes weighed against the impact to pedestrian and cyclist movement at an intersection, with the use of turn lanes not determined by traffic analysis alone.
- Pedestrian and bike crossing infrastructure shall be provided across intersection approaches in C5, C4, and C3 contexts, including high visibility crosswalks and detectable warnings.
- Traffic signals shall be timed primarily for the convenience and safety of pedestrians and bicyclists.
- The FBC promotes minimizing pedestrian exposure to vehicles by reducing crossing distances through the use of refuge islands, bump outs, and pedestrian signals in C5, C4, and C3 contexts.
- The FBC requires that intersection design shall facilitate eye contact between street users, ensuring that motorists, bicyclists, pedestrians and transit vehicles intuitively construe intersections as shared spaces.

Growth according to the FBC will result in compact and walkable development. Requiring streets that accommodate and provide features supporting non-motorized and transit trips can help stimulate demand for and support greater reliance on these modes. One reason is that residents and visitors will have a range of feasible transport options to choose from close-by.

The increase in total housing units that could occur under the FBC buildout compared with existing zoning can mean that there will be increased levels of transit demand and utilization. The heightened potential for transit use can create a ridership and revenue base to support increased fares and support sustainable operations. Yet, growth probably will not cause excess demand for transit services since none of the Ulster County Area Transit (UCAT) bus service routes appear to be operating at anywhere near full-capacity. In late 2022 the UCAT bus system went fare-free as a means to stimulate ridership.

Adherence to transport standards in Article 4 of the FBC should positively influence changes in the transport safety environment. Most cross sections in 405.22.C.2 call for using/ providing sidewalk and bicycle facility attributes that will accommodate and foster safe overall multimodal operations and which are based on typical best practices.

Tthe FBC will support and reinforce an increase in walkability and bikeability, which is a Sustainable Mobility and Land Use Strategy in the City's most recent adopted Climate Action Plan (page 49). The FBC standards and guidelines extensively support and enable these modes. They will prompt the improvement of the existing sidewalk system and the integration of sidewalks into new areas in conjunction with the advancement of new streets.

Building to Street Relationship

The FBC impacts the interrelationship between onsite development and the street frontage through its Frontage Type Standards in §405.13, which serve the purpose of providing an important transition between the public realm (street and sidewalk) and the private realm (yard or building). It achieves this by detailing the required Frontage

Type applicable to various allowed Building Types in Kingston. The FBC also encourages that Parking shall be accessed from rear alleys or side streets whenever possible. In order to achieve this, minimum setbacks for off-street surface parking from all property lines are provided in the Transect Zone standards. This design guideline essentially gives greater standing to a walkable and pleasant streetscape.

Private Frontages are the components of a building that provide an important transition between the public realm (street and sidewalk) and the private realm (yard or building). The FBC regulates this important component of street design by providing the Allowed Frontage Types as they pertain to different building types in Table §405.13.A of the FBC.

Finally, the FBC's Article 6 Open Space Standards allow for trails to count toward a minimum open space requirement. This will give value to the incorporation of trail facilities within the planned development of sites. If a property has frontage comprising a trail right of way, there is incentive to connect onsite trails access to non-motorized trails and to enhance areas adjacent to trails as open space. It ensures that frontages for right of ways like these that often run behind buildings will be integrated into site designs with accessible connections between these dual transportation/ recreation facilities and the adjacent land uses.

Deliveries

The FBC provides for managed movement and deliveries of freight and goods in all transects. Deliveries in the TxN District(s), such as at corner stores, are mandated to be limited to hours of operation of 7am-11pm daily so as to not create potentially impactful noise. This includes trash pickup from private haulers as prescribed under §405.21 Supplemental Use Standards of the FBC.

Loading areas, which are unobstructed, suitably surfaced area, are not allowed to be located on any street or public right-of-way, which can ensure there is not potential for friction with pedestrians using sidewalks in and by the fronts of buildings along public streets. This provides for general safety. Moreover, loading docks and service entries in T4 and T5 cannot be located facing streets and public open spaces, which will further ensure these service features are available but are isolated from the areas of highest activity in the public street realm.

Transit

Ulster County Transit Systems Integration Plan - Final Report, by TransPro Consulting, 2017, indicates that demand for the Citibus service at the point of that study was not geographically driven (page 48). Its ridership profile (Ibid) goes on to note that aside from Kingston Plaza (the then central bus transfer point), no destinations in the City limits presents notably high demand as indicated by boarding and alighting data. A search of the Long-range Transportation Plan (November 6, 2022), likewise, does not appear to indicate any issues involving the UCAT transit system within the City (no discussion of this topic is identified). These are taken as indicators that more people turning to rely on transit appears be a feasible option. Furthermore, as the highest order transects provide for denser growth in the City's urbanized core. It will be probable that this growth will occur in close proximity, typically within at least a half-mile, and often within a quarter-mile, of a UCAT bus route, such as which plies Broadway. The larger distance threshold is an indicator in the LRTP of a multimodal measure of Transit availability (page 88). It reinforces an ability to expand bus routes and schedules along key corridors, which is also an explicit aim of the Climate Action plan (page 54). The FBC supports the advancement of transit and gains in its utilization within the community.

Considering how the spatial pattern of future growth may influence community transport patterns, growth allowed under the FBC will much more often be close to major corridors and higher density cores. As described in the Appendix of the Zoning Potential Analysis, while the most likely to develop parcels are generally scattered all around the City under existing zoning (Figure "Most likely to Develop – Current Zoning), the growth most likely under the proposed zoning, as discussed on page A6, could more concentrated in places in proximity to the multimodally equipped Broadway spine, near transit routes, and in locations of established commercial activity.

Importantly also, the Streets Types Map (Figure §405.3.E) sets Broadway as a C5 Compact Arterial. It sets Strand Street, Cornell, and portions of Greenkill Avenue as C5 Collectors. Many of the associated street segments correlating with these locations/ corridors have already been prepared and provided with new complete street elements. They can accommodate multimodal growth. For example, infill and density occurring by Broadway means any additional increment of trips can likely be accommodated on existing available, adjacent auto travel lanes, sidewalks, on-street or nearby bicycle facilities, and existing transit routes. The new potential trips associated with growth can relatively easily be distributed along and across these higher-order parts of the network.

4.8.3 Mitigation Measures

By fostering streets that feel safe and comfortable for pedestrians, the FBC prioritizes walkability in its street design standards. The framework also provides for development of streets that are safe, comfortable and easily accessible for cyclists, and transit users, because the standards do not just prioritize the functions and movements of autos. Overall, the FBC supports multiple modes and provides for a balanced transport environment that aids the movement of freight and a continuing role for autos.

This FBC will provide for complete streets development. There is strong linkage between a quality multimodal transport environment and transect-based land use. The FBC facilitates infill and mixed use. It integrates street design and land use density so the complete streets infrastructure that emerges is equipped to handle the adjacent scale and form of building. In Urban Context and Urban General contexts (Table §405.22 – Context Classifications), any new streets will be equipped to service a multimodal mix that will support the higher density. This means there should be improved land use and transport relationships.

Through the process of community-based consultations on earlier FBC drafts, such as public review of FBC Community Review Drafts 1.0 and 2.0, and through direct coordination with City agents, Article 5 Street Design Standards was modified in several ways. For one, the Complete Streets Advisory Council has standing to supply input on design deviations from street design standards (see FBC §405.23). Having this process ensures a record and rationale for proceeding with alternative designs and provides for a formal assessment of what could be the effects, and what may be alternative possible treatments, or mitigation, if a design change is allowed. This also ensures there is publicly accessible analysis available as to the rationale for departures from established standards.

This Code has further evolved since the initial community draft in 2022 through clarification of which street design actions in Article 5 are mandatory, versus those that are more flexible and discretionary. This provides a basis for identifying important standards, and can provide a basis for negotiating mitigation if there ever does need to be an allowance for a waiver, a variance, or another design departure. FBC Article 5 standards are to be used as requirements for new streets and multifaceted guidelines for retrofitting existing streets frontages and impacted facilities during the development review process. While development applicants should be involved in the

continuous modernization of existing streets, this acknowledges that the attributes and features in existing streets, and the constraints in existing rights-of-way, will require some flexibility in implementation.

Overall, the FBC provides for a better transport environment compared with existing zoning (and subdivision standards). There is diminished potential for undesirable transport impacts due to an orientation to multimodalism and the requirements that street designs provide for complete streets which reflect the corresponding land use density and context, including in the highest-order centers and the main arteries, such as along Broadway.

4.9 Consistency with Community Character

4.9.1 Existing Conditions

This subsection summarizes the 2025 Comprehensive Plans' approach to managing community and regional appearance and character. It briefly also covers how existing conditions within the city are managed and made more visually appealing based on guidance contained in the existing zoning law.

City Comprehensive Plan

The Comprehensive Plan, as adopted in 2016, includes the following Goals relating to the conservation and enhancement of community character appearance and sense of place:

- **Goal 2:** Promote maintenance and improvement of existing stable neighborhoods outside the "mixed-use cores;"
- **Goal 3:** Preserve constrained lands as open space, agriculture or very low-density residential clustered development as appropriate;
- **Goal 6:** Promote further preservation of City historic and architectural resources and leverage them for further economic development;
- **Goal 7:** Be proactive rather than reactive in improving public infrastructure including City streets, water and wastewater infrastructure, as well as enhanced park facilities;
- **Goal 10:** Encourage vibrant mixed-use land use patterns in the Rondout centered around waterfront access, restaurants and tourist attractions, and active recreation;
- **Goal 11:** Encourage development of Hudson Landing mixed-use area consistent with the Hudson Landing Design Manual (Note: The goal for this new mixed-use core is no longer relevant since most of this area has been turned into Sojourner Truth State Park.)

City Existing Zoning Regulations

The existing zoning provides the following standards which influence the character and scale of building:

- The existing Bulk Schedule (Zoning Attachment #2).
- Standards for design provided in the Broadway Overlay District (Attachment #5).
- Standards for development in the RF-R District (Attachment #3).
- 405-36 Signs.
- 405-40 Landscaping requirements.
- 405- 46.4 Fences.
- Article IX Historic Landmark Preservation Commission.

Open Space Plan

Protecting local resources like street trees, Hudson uplands, Rondout shoreline, neighborhood parks and greenway trails are examples of aims set out in Kingston's 2019 Open Space Plan and which relate to providing consistency with community character. The plan also provides guidance for protecting and enhancing the public tree canopy and their roles with the streetscape, which is an important component for giving character to streets as well as neighborhoods. The Open Space Plan prompts protecting existing trees appropriately when doing needed construction. Open Space Plan Fig 36, pg. 53 has details on the sidewalks and paved areas with street streets planted, showing how these features give character to the city.

Brownfield Opportunity Area (BOA) Step 3 Final Implementation Plan (Riverport BOA)62

The three zones specified in the BOA document, the resilient Rondout, adaptive edge and eco zone, align with the proposed FBC. For example, the Resilient Rondout zone focuses on existing assets and strengthens the cultural legacy of the waterfront. The zone aims to create a double-sided Broadway and also to draw attention beyond Broadway by creating a charming mixed-use fabric that creates a new standard for Hudson Valley waterfront development. This vision aligns with the vision of the FBC, including its aim to bring forth mixed-use.

Figure 54: BOA Study Boundary

Findings from Public Opinion Research

Input on community appearance and design was generated from the zoning projects Charette week in 2021. The feedback gathered included comments received at the 'Open Design Studio' occurring across multiple days in November 2021. Clearly, people perceive unique sense of place in parts of Kingston, plus they are concerned for

62 https://dos.ny.gov/system/files/documents/2021/05/kingstonboa_part1.pdf

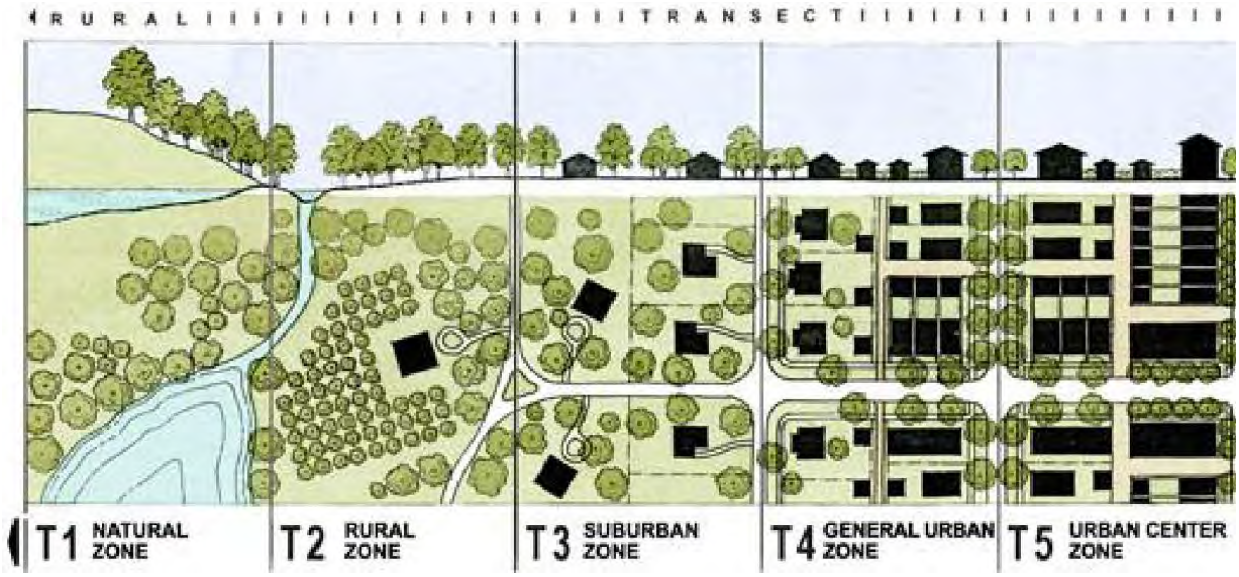
possible incompatibility of growth with existing character. Some other main observations include these major ideas, perceptions, and expressions of interest:

- People seek integration of Historic preservation within future development.
- All aspects of housing are seen as important especially affordable housing.
- There is support for creating walkability and bikeable neighborhoods.
- Encourage "green", sustainable building and renewable energy systems.
- Provide for public art.

Based on this feedback, some objectives identified to sustain Kingston's character, form and appearance are:

- Structures should appear historic but be designed for future resilience.
- Balance space for cars with other uses, thus, creating pedestrian-friendly spaces.
- Promoting mixed uses.
- Providing for compelling architecture.

Figure 55: Example of Transects Across a Gradient



4.9.2 Potential impacts

This section addresses zoning measures in the FBC that are used to provide for place-making and managing the potential character impacts of the substantial new growth that can arise with implementation of the new FBC. The focus is on how the FBC encourages beneficial design and appearance of development and how it minimizes undesirable impacts. It examines how the proposed code may garner a cohesive pattern, form, and appearance for new individual buildings, building modifications, and cohesive neighborhoods as growth is accommodated. There is also examination of new building design, landscaping, street standards and guidelines for character development, as well as the use of green infrastructure, to influence the character of places receiving new development.

Proposed Intent of FBC Buildable Transects

Since an objective of the proposed FBC is to provide for land use patterns that organize the street grid and streets as community focal points within a gradient of edges and centers, there is identification of ways each particular transect zone aids the advancement of an integrated new development pattern and walkable neighborhood character. The following summaries these proposed transect patterns:

T1 Open Space/ Natural Areas include general active and passive recreation uses in natural areas. This transect is often conserved parkland or dedicated open space. It is often part of Priority Conservation Areas (or PCAs) identified in the 2019 Open Space Plan. The developable transects in FBC cores and corridors contrast with T1 Open Space/ Natural Areas.

T2 Conservation features primarily residential style building form, with a portion of the lot areas reserved for conservation of natural resources. These protect the integrity of existing natural lands. They can protect areas with a low density of detached homes. They may also protect areas of steep slopes and natural vegetation. It is often situated by PCAs thereby helping provide contrasts and lower densities compared with the T5 through T3 areas of building growth.

T3 Neighborhood primary uses are residential in a context of smaller, lower scale and moderate density neighborhood areas with supporting commercial buildings, including with stores enabled more often such as through prescriptions for them within corner buildings. To protect the integrity of existing, small-to-medium sized lots, the form is structured to provide for detached buildings which reinforce their role within walkable neighborhoods. An Open Sub-Zone provides the same building form but allows for a more diverse mix of uses. These are arranged in more peripheral parts of the City and adjacent to T1 and T2 and can also frame PCAs, including when there are existing neighborhoods.

T4 Neighborhood/Main Street provides the second highest density. This transect optimizes walkability with plentiful pedestrian attributes to create scale and comfort at the street level, while permitting a mix of uses with building façades close to sidewalks and parking screened from view. Typically, 2.5-3 stories are permitted which also help evoke main street realms, so building scales should be organized to create defining features and establish terminal vistas. A common arrangement in this transect includes either nonresidential (or liner buildings) on the ground floor or multifamily residential structures.

T5 Urban Center Zone has the highest density and provides for urban center form featuring a variety of uses, the largest building sizes and shapes. Commercial uses are prominent in T5, particularly at ground level, serving local and regional residents. Proportionately, more non-residential buildings can arise in T5. It can also include mixed-

use buildings with commercial and residential uses, with housing units likely to be situated above commercial uses. Building heights will be tallest here. The form should contain limited onsite surface parking, as T5 is suitable for more transit and multimodal oriented commercial uses, residential, mixed uses, and light industrial. Blocks are well defined with curbs, street trees, wide sidewalks, and minimal setbacks. Alleys are used in circulation designs and can help in the creation of vital frontages and streetscapes, since appurtenant site features like refuse and recycling systems and load bays ban be provided on the rears (or sides) of buildings accessed via these alleys.

FBC Building Height, Massing & Scale

Included in the 'Transect Standards' are critical 'Building Placement', 'Building Height', and 'Lot and Block' standards. These set building arrangements in and by streets. Related, the Section for each Transect describes its intent and sets out primary characteristics, like whether parking placement is in the side or rear, or otherwise regulated. These and the Building Form and Lot Standards supplied for each transect establish both character and the spatial relationships between buildings and parking to achieve the desired transect form. These same factors influence land use patterns in terms of scale in each transect and how groupings of buildings will cause distinct walkable neighborhood character.. These are major changes from the existing zoning.

In another new approach that will influence facades appearance, building form and arrangements of buildings, each Transect in the FBC has a specific listing of allowed building types. Moreover, 23 pages in the FBC, within §405.12 'Building Type Standards', present graphic, tabular and text standards for 14 types of buildings that are provided within varying mixes across the different transects.

The 4 -to -6 story allowances in T5 transects, with greater height allowed in the Height Overlay, and 3 to 4 stories in T4 enable building-up, as opposed to building-out. Otherwise, buildings could be lower density and could present relatively higher levels of building coverage. It avoids relatively low overall floor area on site. Such sprawl potential in existing zoning is exemplified by low building coverage in relation to whole lots, low building profiles, and large spaces situated in yards and setbacks which people may hardly use and which cause larger, inefficient distances of travel on foot between one building and another.

The FBC Transect Zone Standards, the associated Building Type Standards, Frontage Type Standards, and Architectural Elements provide for blending growth in each transect, in the cores, on Broadway and also citywide. These prescribe development of new building character that fits with the form and appeal of a particular place/ assigned neighborhood transect. The application of these standards will enable smart growth with more efficient and contextually fitting use of land. Architectural Elements will guide and foster more textured and unique building façades in Transect neighborhoods, thereby encouraging new development that will improve the aesthetic makeup of the City when applied using the prescribed treatments.

Height dimensions and proportions in the Transect District Dimensional Standards Summary, Transect District Form Summary, and the Form Overview for each transect, plus FBC Frontage Type Standards, are all intended to assist with integrating new building. The FBC's transect assignments, the Special Districts, Large Site Standards, and continuation of the Rondout Historic District, will synergistically provide a regulatory framework for new growth south and east of Mid-town that is generally the same scale as exists now. When buildings are viewable from the Hudson River, its eastern shoreline, and the Rondout Creek they will blend with existing building patterns. The City landscape and form will not be changed such that the long views from the eastern shores towards the Catskills are diminished (views towards the Catskills and City are referenced on page 167 in the 1993 Scenic Areas

of Statewide Significance, 1993, by the New York State Department of State, in its discussion of 'views' from the Rhinecliff subunit). Meanwhile, the FBC standards will advance general consistency and uniformity in form at the same time that the FBC fosters highly characteristic facades and frontages as viewed from streets and public places.

Compared with existing zoning, the FBC provides less potential for large stand-alone parking lots caused by minimum parking standards (and a lack of parking maximums). Rather, the FBC, per the §405.16.C.1 Auto Parking Requirements table, does not require minimum parking stalls to be supplied. By not fostering opportunity for lost space and potentially large and underused parking lots, it enables walkable scale, character and mixed-use vitality.

In addition, it contrasts with existing zoning by providing for higher Buildable Area and more frequently providing for increased residential density in more locations. This will bring vitality associated with these residents conducting activities of daily living. As generically shown in ZPA, this would generate more building within the associated footprints. For instance, having a standard for 'Frontage Buildouts - Front Street', that ranges from 40% to 100%, will establish buildings with high levels of facades in relation to total distance along a street. These will often match context and the best examples of traditional development. They can replicate the historic pattern of development in Kingston that often appears to predate zoning. The building volume and facades associated with these buildouts will provide urban patterns along streets and establish an emphasis on active, pedestrian friendly frontages.

The Appendix to the Zoning Potential Analysis examines parcels with the "Most Potential" to develop. It focuses on 683 parcels under existing zoning and 1,261 parcels under the where potential redevelopment is at least 75% in relation to existing building, and the additional residential units is at least 50%. While there are twice as many parcels likely to develop under the FBC, and more than twice the Zoning Capacity Built Area with 16,801,364 square feet greater development under this FBC subset than the 12,684313 square feet under the subset parcels isolated for existing zoning, the Footprint under the FBC is only 1,362,139 square feet larger than for the subset under existing zoning. The small relative increase in Footprint under the proposed FBC means there more likely would be substantial portions of lots not dedicated to just buildings. In lower density residential locations, it is construed that the form of low lot coverages can continue to be replicated under the FBC. Using this generic analysis, it is construed that the residential character of lower density residential neighborhoods will not be substantially altered under the FBC.

The 2017 Community Design Manual by the Ulster County Planning Board expresses "Big Ideas" for 'Communities' on page 8. Its objective "Create diversity of housing types", will be advanced under the FBC. Meanwhile the form prescribed under the FBC will be consistent with the Manual's objectives to "Orient buildings to streets", "Promote context sensitive design", "Promote mixed use buildings", and "Promote infill development", all while sustaining the general pattern of building in the more traditionally residential neighborhoods.

Landscaping Standards

FBC §405.16.F sets detailed parking lot landscape standards, applicable across the City, to reduce the visual impacts of large areas of pavement and provide areas for shade and heat reduction. These screening standards will enhance and replicate the aesthetic appeal of streetscapes by requiring parking lot screening. It also contributes to area character and greener ambiance by causing additional onsite landscaped space, whereby 10% of total space in any parking area must be open space in parking areas of six or more spaces. The Section 404.14.K Architecture and Site Design Standards, meanwhile, provide for appealing site development in nonresidential and multifamily land

uses with appropriately landscaped with grass, shrubs, community gardens / pollinator gardens, trees, and other ground cover, in such a manner as to maintain or improve the aesthetics of such development.

Lighting Standards

Lighting regulations in FBC §405.14.J protect against glare and over lighting. These standards aid safety plus character for pedestrians and in outdoor gathering spaces. It supports a sense of place and coherent neighborhood appearance. It addresses factors like street lighting, ambient light levels, and light shielding depending on road classifications. The lighting standards protect against glare, preserve the night sky, and reduce unnecessary energy use from over-lighting.

Role of Streetscape in Achieving Vital Streets & Community Character

The FBC's Street Design Standards, Article 5, promote the development and enhancement of versatile complete streets that are highly characteristic. They will enable strong land use and transport relationships, inclusive of strong building and street relationships and provide for a vital street realm. All Street Types enabled in FBC Table §405.23.A 'Design Standards Matrix' prescribe multifunctional streets that will be intermodal in nature and required to possess sidewalks. Likewise, street trees within or along all street types (except Alleys), will create shade and a quality street-level environment.

The FBC will influence character through its street design standards that support planting and enhancement of street trees and vegetation. There is intent to preserve all mature, healthy trees in the right-of-way. When tree needs to be removed, it calls for replacement with trees with a specified diameter (DBH). This will provide definitive guidance for character development in the streets realm, and in terms of street and building relationships. It is noted there is much less guidance in existing zoning and subdivision codes. The standards in existing zoning, by contrast, are not contextually sensitive and the bulk standards can often cause building massing and configurations on lots that are more suburban in nature, with poor building- ground configurations and less lot coverage than found in the city's historic neighborhoods, and less than ideal street and building dimensional relationships that are not as compact or human-scaled and which are not conducive to placemaking.

Signage

Signage standards in the proposed FBC are updated to include additional guidance to ensure that signage contributes to community character and walkable scale. Staying consistent with existing zoning, the purpose of these standards is to regulate and control the location, size, type and design of existing and proposed signs in order to: i) Eliminate and prevent the erection of signs that cause distractions or obstructions that create hazards to traffic safety; ii) Prevent dangers to public safety from unsafe, improperly constructed or located signs; iii) Enhance and protect City appearance and property values; iv) Encourage the most effective and functional use of signs as directional, informational and advertising devices; v) Preserve the historic and architectural heritage of the City; and vi) Enhance the City's ability to attract sources of economic development and growth (§405.17). Yet, in contrast with existing zoning, the FBC provides greater detail on all signage components and requirements. Within Part E. it provides extensive details including graphics standards for pedestrian-oriented signs in T5-T3 (and as also allowed in SD-3). It also introduces regulations for electronic signs. All of these criteria will collectively provide for more attractive signage that is pedestrian-scale and which blends with and is compatible with the attendant building types and form.

4.9.3 Mitigation Measures

Overall, the character of Kingston will be enhanced under the FBC compared with existing zoning because the FBC creates a predictable and highly characteristic public realm. It will provide for design-based development based on the FBC's criteria in the Transect and Architectural standards and guidelines. The FBC's complete street standards will also influence location and area designs and the realization of coherent and characteristic street design patterns. All across the city, growth will be contextually tied to the density and form prescribed in the corresponding neighborhood/ transect. At the same time, the FBC will rigorously control and guide building and area physical form, while it prompts multifaced and highly contextualized and textured building design.

Further, new land use standards will enhance protection of important natural areas like wetlands and prompt usable open space onsite during the proposed development of properties. Therefore, no potential adverse impact on character is expected and the FBC will provide for placemaking and site development that is consistent with other plans, such as by directing most growth away from the natural and open cores identified in the Open Space Plan, by prompting and directing growth into and around Midtown and along Broadway per the Comprehensive Plan, and by facilitating compatible waterfront area development. Thus, no additional mitigation is needed in order to advance general consistency with the vision, goals and articulated strategies for placemaking and preserving and enhancing community character.

Considering properties with the most potential to develop under proposed zoning per the Zoning Potential Analysis's Appendix, it is likely that a substantial part of the new units arising under the FBC will be concentrated in greater Midtown. Fitting with the Comprehensive Plan's strategies for the Midtown Core Area in its Chapter 8, the FBC's standards will reinforce sense of place and enhance the quality of life in Midtown. There will be changes and additions in the built environment in an area where there have been investments in infrastructure, like the Broadway streetscape, to help equip the area for growth. The FBC will regulate building form in association with residential and overall growth arising in the Broadway/ Cornell Corridor Height Overlay (and to a lesser extent in the Midtown T5s and T4s).

At the same time, the FBC will facilitate a well-functioning public street realm and the enhancement and creation of public spaces that will support revitalization. The complete streets and complimentary site development in Midtown will not generate adverse impacts because compliance with the FBC will evoke the types of built environment character improvements prescribed in the Comprehensive Plan, as it fosters beneficial building and street relationships, while minimizing undesirable effects like potential light spillage, and incompatible form as it minimizes the potential to establish large impervious parking lots or poor quality open spaces during the site development plan review process.

While there is growth in residential units expected in all other parts of the City under the FBC, the FBC's standards and guidelines will also be applied to all other development activity. As incremental residential growth happens, including through the allowance for newly established Accessory Dwelling Units on existing properties, the FBC's sets-up approval for actions that fulfill the purposes and intent of the FBC. The Minor Site Plan Review Process in FBC Article 8 calls for substantial compliance of the FBC standards in Part C. Meanwhile, the applicability of the FBC zoning standards is reinforced by a standard in Part A. indicating that permits shall not be issued in conflict with the FBC provisions and that such permits shall be null and void. This way the whole FBC framework provides for compatible growth that is generally consistent with and which reinforces community character.

4.10 Energy Use, Air Resources & Noise

4.10.1 Existing Conditions for Energy Use, Air Quality, & Noise

The City of Kingston 2025 Comprehensive Plan provides recommendations to guide energy use and manage air resources and noise. As noted in the Plan's Visioning (pages 14 and 15), the City identifies that (selected bullets paraphrased):

- It is preferable to focus development on lands in existing developed areas (in-fill), and in obsolete brownfields than on virgin undeveloped land (greenfields);
- Land use patterns (are preferable) with a mix of uses centered around neighborhoods; and
- Land use and construction practices should promote energy efficiency and sustainability.

The Comprehensive Plan Goal 5, page 43, also promotes an effective and comprehensive transport system that enhances safety, encourages and enables active mobility for all users of the streets including children, families, older adults, and people with disabilities, and which ensures accessibility, minimizes environmental impacts and encourages community connectivity. Yet, looking at general plan implementation as embodied in local zoning, the design and development of complete streets, which can greatly foster non-motorized and active transportation, appears to be an afterthought. For instance, within all of existing zoning, the only prescription for sidewalks is within §405-31.1.B.(5), within RF-R District development standards.

The Comprehensive Plan in discussing Strategy 9.6.4 to provide a trail along the Esopus Creek notes that, paraphrased from page 86, as a policy, the enhancement of public cycling and pedestrian facilities is not likely to result in environmental impacts and is likely to result in significant benefits to public health, air quality and noise, all as a result of decreased automobile reliance. This general plan prescription appears to be advanced under existing zoning, but as the FBC provides multiple standards oriented to advancing complete streets and multimodalism, it will generate disproportionately more of this desired benefit compared with what will arise under existing zoning.

Within its discussion of furthering complete streets (page 45), the Comprehensive Plan (paraphrased), encourages street trees, landscaping, and planting strips, where possible, in order to buffer traffic noise and protect and shade pedestrians and bicyclists. Yet, planting prescriptions in existing zoning are quite limited, and for instance, in part C objectives under §405-30 'Site development plan approval' standards, the objective for planting appears more oriented to preventing the creation of expanses of pavement (the provision of shade through tree planting is considered an essential objective which can aid in the mitigation of urban heat island effects)[63].

The Comprehensive Plan does prescribe reducing Kingston's greenhouse gas emissions through implementation of Kingston's Climate Action Plan 2030[64] (Kingston 2025 Comprehensive Plan page 12). It also calls for advancement of green infrastructure and technologies and architecture. Vegetation provided within the landscaping of green

[63] See for instance: https://www.epa.gov/green-infrastructure/reduce-urban-heat-island-effect

[64] https://ehq-production-us-california.s3.us-west-1.amazonaws.com/7c6ff632c4b3ba0250e5a637e8dff0b3001e359b/original/1643211673/c9cc5f13a705ff656cb94c4ad6dfb8e2_Kingston_2030_Climate_Action_Plan_FINAL_for_posting.pdf?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIA4KKNQAKICO37GBEP%2F20221108%2Fus-west-1%2Fs3%2Faws4_request&X-Amz-Date=20221108T150425Z&X-Amz-Expires=300&X-Amz-SignedHeaders=host&X-Amz-Signature=2660f7f72a01da4de657b261ad747a8fd2848d090ade726951f8144c976d5214

infrastructure, or provided or retained as part of other onsite development, within public streets, or in parks and open spaces, can serve to attenuate noise and aid air quality when it supports shading, defects direct sunlight and helps avoid heat buildup, and as it provides for photosynthesis.

As detailed in the 2025 Comprehensive Plan, page 12, land use objectives in the Climate Action Plan include:

- Adopt goals and policies that promote a compact, transit oriented, bikeable and walkable community.
- Use the authority of the City's Planning Board to assure that new development projects reflect community's desires for a low carbon/low emissions future.
- Develop City government policies that promote the use of transit, carpooling, vanpooling, flex scheduling, and examine telecommuting where appropriate.
- Explore the feasibility of planning, permitting, zoning, and providing infrastructure necessary to accommodate electric vehicles.

The Comprehensive Plan sets a goal (#1 – page 21) to promote a sustainable citywide land use policy. In addition, Objective 7.6, page 60, provides for pursuit of opportunities to enhance the use and distribution of renewable energy. When solar or wind power generating capacity is relied on, these are substitutes for technologies which rely on fossil fuels. One corresponding interest is to provide local incentives for the incorporation of solar panels[65].While the City can use policies like zoning to encourage use of new clean energy technologies community-wide, there is limited guidance in existing zoning on the establishment of solar photovoltaic (PV) technologies.

Although zoning is generally silent, and currently does not have standards regulating placement of PV, or incentives for PV establishment, there have been City actions outside of zoning, like the adoption of the NY State Energy Resource Development Authority (NYSERDA) supported unified solar permitting framework.[66] The City has also now adopted a Stretch Code that specifics the energy performance of buildings.

4.10.2 Potential Impact

In order to support a green and resilient future, per the Section B Purpose under §405.1 Form Based Code Overview, it is the intent of the FBC that:

- Neighborhoods and mixed-use centers are compact and pedestrian-oriented, reducing vehicular miles traveled (VMT) by making more trips possible by walking, biking or transit.
- Green infrastructure and street trees are included as part of future street design.
- The City's carbon footprint is reduced by encouraging the reuse of existing buildings to cut down the waste and energy associated with building demolition and materials for new development.

[65] City Code provides incentive for development of renewable energy sources like solar power within existing §210 'Energize NY Benefit Financing Program' which authorizes the Energy Improvement Corporation (EIC) to "make funds available to qualified property owners that will be repaid by such property owners through charges on the real properties.

[66] https://kingston-ny.gov/filestorage/8463/10792/10798/17792/Kingston_solar_Permit_Vrs3.pdf

- A range of high-quality public open spaces - parks, greens, squares, plazas, playgrounds, trails, community gardens, etc. - be distributed within neighborhoods and mixed-use centers increasing access to light and air as well as fresh and healthy food.
- Landscape design reflects the local climate, and preserves protected trees, tree clusters, and waterways.

Contemplating the above intent, some ways that community-wide, or per capita, energy use, air emissions and general noise conditions may positively change under the FBC rezoning are:

- The Context Classifications for General Street Standards provided in FBC §405.22(C)(1) are established to guide design of new streets and improvements to existing streets. The Context Classifications relate to the Transect Zones on the Kingston Regulating Map in Table §405.22.C of the proposed FBC. These aid in establishing complete streets that are oriented to providing for pedestrian and active transport as well as transit and a land use orientation which can influence lower VMT.
- Public Open Space Standards in §405.24(C) guide Minimum Usable Open Space. They ensure a range of high-quality open space to increase access to light and air. Standards for landscaping within usable open space can generate positive environment impacts by ensuring there is natural cover onsite which can contribute to urban heat island mitigation and support beneficial urban area air quality. Landscaping can also provide for attenuation of noise and buffering from it. It is required for Usable Open space to include at least 20% shade and it certainly would be common for this performance standard to be achieved through tree conservation or tree planting.
- With implementation of a Conservation Village Plan (CVP), or Walkable Neighborhood Plan (WNP), as stipulated in §405.25 Large Site Standards. CVPs and WNPs (see FBC §405.25.C.3) establish walkable-scale settlements /places with a mix of housing, civic, and service uses in a compact, transit-supportive environment. The CVP within its prescribed layout supports reduced vehicular dependency through designs that offer multimodal street grids and clustered parcel layouts that provide proximity to potential transit offering, such as when there is bus service on the adjoining adjacent streets, thereby supporting the benefits that arise from walkable urban environments and transit oriented land use.
- By implementing the Public Open Space Types and Dimensions described in the Table §405.24.D.1, as alluded to above, positive impacts will be made to the air resources in the City of Kingston since there often will be green infrastructure available, either in the form of natural landscaping with woodland in the 'Park' type, or through the more formalized landscaping, such as in the case of a Square, with vegetated shrubs and trees. The implementation of trails and the connections of land uses with adjacent trails can especially support active transport and the reduction of auto trips.
- Generally, FBC Standards can positively support the City's carbon footprint reductions by encouraging the reuse of existing buildings, which may cut down on the use of energy associated with building demolition and fabricating materials for new development.

A potential impact of the energy use provisions of the proposed FBC could be the increase in local participation in the utilization of community and distributed solar photovoltaic power generating apparatus.

For example, §405.21.O is a new permitted use provided for in the FBC that advances the utilization of solar-based and other renewable energy type technologies by-right across the City. These renewable energy uses will generate cleaner and greener energy which will not create GHG harming emissions or other hazardous air pollutants. The later can be a byproduct of combustion in energy production, transport, and building sectors (such as within buildings with fossil fuel powered heating systems).

The FBC does this by clearly defining the allowable renewable energy systems under the FBC. For Small-Scale Renewable Energy Systems this includes ones that comply with application local or regional policies, such as:

- Ground- or roof- mounted solar energy systems with a footprint of not more than 50% of the primary structure footprint, or 600sf, whichever is greater;
- Roof-mounted wind turbines not exceeding 30' above primary structure height; and
- Ground-mounted wind turbines no more than 30' in height.

Large-Scale Renewable Energy Systems per the FBC definition, encompass systems that exceed the above standard. They can be allowed by Special Permit and may include Public Utilities.

Smart Growth

This sub-part examines how the re-zoning integrates Smart Growth principles by considering the principles embodied in the New York State Smart Growth Public Infrastructure Policy Act. New York State Environmental Conservation Law, State Chapter 43, Article 6, Subsections 6-0101 through -0111 lay out the State Smart Growth Public Infrastructure Policy Act. According to §6-0105. 'State smart growth public infrastructure policy'.

> *It is the purpose of this article to augment the state's environmental policy by declaring a fiscally prudent state policy of maximizing the social, economic and environmental benefits from public infrastructure development through minimizing unnecessary costs of sprawl development including environmental degradation, disinvestment in urban and suburban communities and loss of open space induced by sprawl facilitated by the funding or development of new or expanded transportation, sewer and waste water treatment, water, education, housing and other publicly supported infrastructure inconsistent with smart growth public infrastructure criteria.*

In §6-0107(2), the law sets 11 criterion that together comprise State smart growth public infrastructure criteria. The following Table 7 'Analysis of How the Proposed FBC Advances Smart Growth Criteria" shows each respective smart growth policy criterion in the left-hand column, while the right-hand one identifies how it is advanced within the proposed FBC.

Table 7: Proposed FBC Advancement of Smart Growth Criterion

NY Smart Growth Criteria	Description of How Kingston FBC Advances and is Consistent with the Respective NYS Smart Growth Criterion
A. To advance projects for the use, maintenance or improvement of existing infrastructure;	The City demonstrates high-order capital facilities investment in the form of existing water, sewer, stormwater, streets/ roads, and other infrastructural assets. The transect layouts range from higher land use intensity to lower density, with higher density assignments corresponding with the existing pattern of infrastructure, whereby larger investments and higher intensity growth is structured to arise in locations with adjacency to concentrations and mixes of infrastructure on the Broadway spine and in the cores in Mid-Town, Uptown and the downtown around the Rondout. The new growth occurring will rely on this infrastructure and the enhanced economic base will generally provide for broad and sustainable financing to sustain this critical infrastructure.
B. To advance projects located in municipal centers;	This FBC is being instituted in Ulster County's only City.
C. To advance projects in developed areas or areas designated for concentrated infill development in a municipally approved comprehensive land use plan, local waterfront revitalization plan and/or brownfield opportunity area plan;	This FBC adheres to zoning recommendations contained in the Kingston 2025 Comprehensive Plan intended to revitalize commercial areas as well as provide mixed use. It also advances recommendations in the 1992 City of Kingston Local Waterfront Revitalization Program (LWRP) plan by guide development and articulating standards for the City's natural, public, and developed waterfront resources in the LWRP Boundary, plus it guides actions by the coastal edge along the Hudson River and Rondout Creek using the prescriptions and criteria applicable in the Waterfront Overlay.
D. To protect, preserve and enhance the state's resources, including agricultural land, forests, surface and groundwater, air quality, recreation and open space, scenic areas, and significant historic and archeological resources;	There is active, ongoing implementation of the City's 2019 Open Space Plan through the transect assignments. The 2018 City of Kingston, Tree Management Plan provides for sustainability of tree canopy, inclusive of street trees and the Landscaping standards and the Design Standards Matrix provides (the latter at 405.23.A) organizes Street Trees and Planting Areas.
E. To foster mixed land uses and compact development, downtown revitalization, brownfield redevelopment, the enhancement of beauty in public spaces, the diversity and affordability of housing in proximity to places of employment, recreation and commercial development and the integration of all income and age groups;	The City of Kingston FBC addresses many opportunities to facilitate compact mixed land uses and incremental infill within the City's existing development centers and in areas adjacent to developed corridors like by Route 9W where past infrastructure investments have occurred. The FBC prescriptions for mixed-use and compact onsite development in areas of existing infrastructure will support investments that create housing options that meet the needs of varying income levels. The FBC provides numerous criteria that will facilitate nonresidential economic activity, including on the first floors of mixed- use buildings in the cores while it also fosters beneficial building and street relationships the aid overall economic vitality.
F. To provide mobility through transportation choices including improved public transportation and reduced automobile dependency;	The FBC provides for multimodalism so there is transport choice available and existing transport barriers for residents, business owners, workers, and visitors are overcome as future development is required to provide site-level organization that will advance transportation choice through street design. It is widely known that lower income residents in any community can be disproportionately impacted by a lack of transport options and choices. Consistent with the plans of the County, the City is emphasizing a commitment to advancing complete streets through FBC implementation.

G. To coordinate between state and local government and intermunicipal and regional planning;	The FBC used workshops and consultations to understand responsibilities, concerns, and obstacles to providing desired land use and structuring the FBC so that it is organized to help bring about strategies in the Comprehensive Plan. This included an examination into how City staff regulates land use and it looked into how to use the FBC in coordinating referrals to the Ulster County Planning Board. The FBC generally aligns with the Action Agenda of the Hudson River Estuary program, County-led transport and transit initiatives, recommendations for NYSDEC Climate Smart Communities, and Hudson Valley Regional Council-led Clean Energy Communities initiatives, as well as Regional Economic Development Council (REDC) strategic initiatives. During stakeholder outreach, County officials were engaged on topics including, provision of a wide range of housing options and increasing opportunities for public transit use.
H. To participate in community-based planning and collaboration;	The FBC includes a robust community outreach and engagement strategy. For any planning effort to be successful, it is imperative that community residents (full and part-time) as well as property and business owners, their employees, and visitors to the City contribute to and support the plan. More specifically, the FBC aimed to have a community visioning and stakeholder process that maximized citizen involvement and maintained momentum in the planning process. As part of the drafting process, thirty separate community meetings were held to solicit public feedback on the FBC. These meetings took place virtually and in-person at locations throughout the City. Spanish translation was provided at select city wide meetings. In addition, City staff maintained a webpage on EngageKingston.com on all aspects of the FBC.
I. To ensure predictability in building and land use codes; and	The FBC provides for coherent land use design guidance by providing graphic and text standards that identify transect allocations as well as building standards. The FBC streamlines development with as-of-right allowances for some types of building. This is much more predictable than having to go through a special permit or discretionary review process.
J. To promote sustainability by strengthening existing and creating new communities which reduce greenhouse gas emissions and do not compromise the needs of future generations, by among other means encouraging broad based public involvement in developing and implementing a community plan and ensuring the governance structure is adequate to sustain its implementation.	Adoption of the FBC will result in efficient land use that will influence reduced VMT and GHG emissions in the transport sector due to a greater ability to walk and bicycle in activities of daily living. This would associate with some undefined but linked decrease in VMT represented by reduced single occupant vehicle trips.
K. To mitigate future physical climate risk due to sea level rise, and/or storm surges and/or flooding, based on available data predicting the likelihood of future extreme weather events, including hazard risk analysis data if applicable.	One purpose of the Waterfront Overlay, FBC §405.15, is to protect future development from flooding and sea level rise, as all properties in this Overlay are subject to requirements of the Flood Hazard Overlay District (§405.27), plus it requires a Design Flood Elevation that utilizes the 500-year floodplain elevation plus 1 foot, thereby establishing the elevation of new buildings in locations where these hazards are likely to be prevalent.

4.10.3 Mitigation Measures

The FBC will generate residential land use and commercial development that is less sprawling. This is evidenced by the relatively small building development footprint that will arise under the FBC, at the same time there is an increase in the total building area under the FBC compared with existing zoning. A potential for more building area in the T5 transect will provide and reinforce urban form and a more compact Mid-Town core. This will provide for intermodalism that is easier to achieve. The use mix and compact form achieved will influence an escalation in the level of personal trips undertaken through walking, bicycling, or transit. This points to lower vehicle miles traveled.

It is also expected that this mode shift and less auto trips per unit of development will influence correspondingly lower transport sector energy use along with better ambient air quality since more "clean" electric power will be substituted for that which is sourced to fuel combustion. Likewise, due to adoption of the FBC, it is expected that a greater portion of the energy powering buildings, transport sources, and infrastructure, will come from locally based renewable energy infrastructure, as enabled by the FBC. Finally, less noise and less harmful air quality is expected with the FBC's implementation, due to lower per unit levels of auto travel and lower VMT, as well as better landscaping, such as due to the more specific prescriptions for street trees in the FBC.

Therefore, the proposed FBC will positively aid the lowering of combustion-based energy use in the City. It will provide for lower relative greenhouse gas emissions. Since it provides for beneficial and more optimal and efficient spatial patterns of building, supports multimodal transportation, and promotes higher efficiency buildings and clean energy infrastructure, the land use and infrastructure resulting will be generally more beneficial than would arise under existing zoning. There is no need to require any additional mitigation in conjunction with adopting the FBC in terms of the subject matter covered in Section 4.10.

4.11 Community Services & Infrastructure

4.11.1 Existing Conditions

Existing Water System Conditions & Water Use

The water supply, water delivery, and this utility's operation is under the purview of the City Board of Water Commissioners. Like is typical with any water supply, regional approvals are required from the New York State Department of Environmental Conservation (DEC), NY State Department of Public Health, and the County Health Department in conjunction with the development and ongoing maintenance of various functions of water supply and delivery. Per the Annual Drinking Water Quality Report for 2021[67] by Kingston Water Department, during 2021 the system did not violate a maximum contaminant level or any other water quality standard (page 1, undated).

City Water Facilities

Cooper Lake serves as the primary water supply for the City, which links with the Mink Hollow watershed. Cooper Lake is set amidst City controlled lands plus Catskill State Parkland and is an 8.6 square mile watershed per the City's website:[68]). According to a Full EAF for "Rehabilitation of Cooper Lake Dam, dated September 11, 2019, Cooper Lake is in the Town of Woodstock, Ulster County. In 2020 capital expenditures were applied in modernizing Cooper Lake Main Dam and its West Dike impoundment. The reliance on Cooper Lake as source waters goes back to the mid-1800's. Per the website, Cooper Lake contains 1.2 billion gallons of water.

Cooper Lake water flows to the Edmund T. Cloonan Water Treatment Plant via cast iron transmission mains. Constructed in 1899, it has a nominal capacity of 8 million gallons per day (MGD)[69]. Treatment consists of Chlorine disinfection, direct-in-line filtration with alum coagulation, and corrosion control via the addition of lime. Improvements provided to the facility sustain its operation as it was designed as it provides for needs of the City. The improvements completed in 2016 to ensure the Plant will continue to serve the 8.0 MGD nominal capacity and the report identifies an aim to sustain the community's system into the next century[70].

For distribution, water is piped from the Treatment Plant to the 12-million-gallon Binnewater Reservoir located in the Town of Ulster. This primary storage facility holds treated water and it stabilizes pressure gradients on conduits entering the City. From this Reservoir, three cast iron transmission mains carry water into the City, where there are approximately 100 miles of water mains and 900 hydrants. Also, per the website, the system has an Insurance Service Office (ISO) of New York Class 4 fire insurance rating. There are some 8,000 service connections and average daily flow is about 4.1 MGD[71].

[67] https://www.kingston-ny.gov/filestorage/8463/8511/10396/Annual_Water_Supply_Statement_2021.pdf

[68] https://www.kingston-ny.gov/water

[69] Annual Drinking Water Quality Report for 2013, Kingston Water Department.

[70] Annual Drinking Water Quality Report for 2016, Kingston Water Department.

[71] Annual Drinking Water Quality Report for 2021, Kingston Water Department.

Water System Yield

According to Kingston Water Department (KWD), the City's water system serves about 24,069 people. Total water produced in 2021 was 1,679,168,000 gallons. The total amount of water delivered to the distribution system was 1,503,714,000 gallons and the average flow into the system was 4.1 million MGD[72].

Per KWD, volume of water registering through customer meters was approximately 814 million gallons. The difference between water entering the distribution system and the amount registering through customer meters is 689 million gallons. For 125 million gallons of water entering the distribution system but not registering through meters, some is used for flushing mains, fighting fires, and maintaining sewers and streets. Some is sourced to leakage, which is reflective of a fact the system contains older lines needing replacement.

Capital improvements serve to keep the system modern. Upgrades underway in 2022 to Cooper Lake Dam have an estimated 2019 cost of $12 Million. Per 'Cooper Lake Dam Rehabilitation Public Presentation', November 18, 2019, by Schnabel Engineering/ CDM Smith, this capital upgrade achieves regulatory compliance, restores operational capabilities, and prepares additional drinking water storage. Specifically, for only the fifth time in over 125 years, the dam height was raised, this time six (6) feet in elevation.

Analysis for dam work in 2019 showed potential for temporary issues with water supply in conjunction with construction, such as if there were drought conditions[73]. In fact, in 2022 KWD implemented emergency water restrictions due to ongoing construction and drought conditions. While there are interim system limitations imposed while Cooper Lake capital improvements are finished, in the long term the water supply will not pose a near term, upper limit on growth.

The general safe yield of the water system for this DGEIS is defined as 6.0 MGD. The figure is cited in 'Preliminary Report - Water Supply & Wastewater Capacity: The Kingstonian, City of Kingston'[74], New York, July 8, 2019 by Brinnier & Larios, P.C. It identifies this watershed/ water system safe yield on page 4. It is reasonable to rely on this 6.0 MGD figure now, assuming the aforementioned recent upgrade and capacity improvements at Cooper Lake are under construction.

For this GIES, using the 6.0 MGD figure is reasonable. This may be a conservative figure, meaning analysis might actually show the figure of available supply to be effectively higher, since capital improvements recently completed or underway are serving to sustain and enhance the whole water supply operation, inclusive of leak reductions, line segment upgrades, and transmission main improvements. This general safe yield of 6.0 MGD is used in generic calculations and the ongoing construction of the Cooper Lake upgrade is at the point of this DGEIS not yet completed capital construction must be completed . It is noted, that relying on a 6.0 MGD seems supported by the fact the Cloonan Water Treatment Plant has an 8.0 MGD effective capacity and it too has been provided with routine capital infusions to maintain plant regulatory compliance and modernize its sustainable operation.[75]

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[72] Ibid.

[73] Cooper Lake Dam Rehabilitation - Public Presentation, November 18, 2019 by Shnabel Engineering.

[74] https://kingston-ny.gov/filestorage/8399/17321/17323/25953/26441/30125/Kingstonian.WaterSewerReport.pdf

[75] https://www.kingston-ny.gov/filestorage/8399/8469/8489/17116/annual_water_supply_statement_2016.pdf

Water Demand Analysis

The 2019 Preliminary Report - Water Supply & Wastewater Capacity: The Kingstonian, by Brinnier & Larios, P.C., identified that that particular Uptown site-specific project could demand 28,320 gallons of drinking water per day (page 2). It also indicated, page 4: "With a safe yield capacity of 6 MGD and an average daily demand of 4.1 MGD, the balance of capacity is approximately 1.9 MGD."

Under the City's current water distribution system operation, this DGEIS analysis assumes that in addition to 28,320 gallons (0.0283 MGD) of public water allocated for consumption by the Kingstonian Project, a generic assumption allocates another 75,000 gallons (0.0750 MDG) for any other undefined commitments for construction recently approved or now underway. Using that conservative current combined existing and permitted demand for drinking water commitment means there is 1.797 MGD of available water from a total 6.0 MGD safe yield, that could as of the end of calendar 2022 be applied to serve new additional demand. In other words, 1.797 MGD of water system safe yield is available which could service undefined future new construction under existing zoning.

The Zoning Potential Analysis, within its Current Zoning District Analysis, identifies that there could be 12,074 new dwelling units (DU) under existing zoning (pg. 20). For any future buildout, it is assumed each 500 square feet of building within residential structures will generate (be associated with) one bedroom. The water demand for each bedroom is set at 110 Gallons Per Day (GPD) which is drawn from NY State standards.

Thus, under existing zoning, there is a generically assigned existing potential to construct an added 8,166 dwelling units under the available safe yield of 1.797 MGD ((8,166 residential units x 2 bedrooms per unit) x 110 gallons per day per bedroom water demand). There appears to be adequate water system capacity available to serve a large proportion of the total expected future residential units under existing zoning.

Per the Zoning Potential Analysis formed for this DGEIS, within its Current/ Proposed Comparison, for the Current (existing) Zoning Capacity Built Area buildout, future growth could result in 74,061,946 sq ft of future building square feet. There appear to be a long-term need for an enhanced water supply and system capacity increases in order to provide water service above the current safe yield. This equates to an ability to safely serve no greater than an equivalent of 8,166 new dwelling units (under existing or proposed zoning) without making water system capital improvements at some undefined point in the future if and when a year greater than this could be needed.

Likewise, it is necessary to apportion some of the future general demand upon the available water safe yield to some portion of undefined nonresidential future building. The Zoning Potential Analysis does not make assumptions on a rate of potential buildout. To keep analysis basic and straightforward, nor does this DGEIS analysis delve into a mix that assigns residential versus nonresidential space. Instead it only looks at the equivalent residential demand as an indicator of total equivalent water supply/ water system service capability and suitability.

Yet, it is reasonable to assume there a significant, undefined amount of time available to plan for capital improvements to the water supply system in order to effectively serve greater than an equivalent of 8,166 new residential dwelling units under existing zoning, or some generally equivalent mix of residential and nonresidential uses. In other words, should greater demand actually arise than would be equivalent to exceed a 1.797 MGD yield, there will be a need to augment the water supply and the associated capital facilities.

In this modeling, potential new growth is shown as equivalent to residential housing units. Clearly, there will also be an undefined proportion of nonresidential growth that will occur and which will demand water under existing

zoning. The use of dwelling units provides for standardized comparisons. The nonresidential demand for water from the generically depicted total available water budget of 1.797 MGD would be tracked as a proportion under existing zoning. Assignments for approved or assumed new nonresidential growth would be subtracted from total yield figures. Since there is substantial water supply available to serve future growth, at least for a reasonably foreseeable future time span, and that will support a mix of residential and nonresidential growth, both under existing or proposed zoning, the analysis below on the Potential Impacts of the FBC on water supply and demand focuses more on the form of growth and where it may occur.

Existing Wastewater Treatment

As detailed in the 2015 'East Strand Street Wastewater Treatment Facility Long-Term Capital Plan[76]', by Barton & Loguidice, the Publicly Owned Treatment Works (POTW), also known as Waste Water Treatment Facility (WWTF), on 91 East Strand Street, provides sanitary treatment for the City and portions of the neighboring Towns of Ulster and Esopus. The treated plant effluent discharges to the Rondout Creek.

Initially constructed in 1946 (page 6), the WWTP was significantly upgraded 1970's. This upgrade involved additions of capital features to treat sewage using a conventional activated sludge process along with aeration and secondary clarification processes.

Water System Yield

The current State Pollution Discharge Elimination System (SPDES) permit - Number 3-5108-00044-0003 - limits average flow to 6.8 MGD on a 12-month rolling average. For this DGEIS, that 6.8 MGD volume of flow is termed as the WWTF treatment capacity.

In considering potential available existing WWTP capacity to accommodate new sewer treatment/ flows that would arise in conjunction with potential future growth in the City, it is necessary to take into account unused allocations of flow capacity that are reserved under contracts for the Port Ewen Sewer District (Town of Esopus) and the Washington Avenue Sewer District (Town of Ulster). Per the 2019 'Preliminary Report - Water Supply & Wastewater Capacity: The Kingstonian', by Brinnier & Larios, P.C., page 3, there is an allotment of 340,000 gallons (0.34 MGD) for those two sewer districts. The Kingstonian Project, was attributed a flow of 0.028 MGD, plus, this DGEIS assigns 0.075 MGD for any other growth that will arise through the end of 2022 for building projects currently in the pipeline. Together this represents 0.443 MGD for growth actively underway.

Taking average daily flows cited in 'Preliminary Report - Water Supply & Wastewater Capacity: The Kingstonian', page 3, at the WWTF of: 4.3 MGD in 2016, 4.83 MGD in 2017, and 5.7 MGD in 2018 translates to an average Annual Daily Flow of 4.94 MGD. Taking this 4.94 MGD, plus the 0.443 MGD for growth actively underway, means there is 5.383 MGD of WWTF capacity committed. Using the 6.8 MGD design flow, minus 5.383 MGD of WWTF capacity committed, leaves a balance of available WWTF capacity of roughly 1.417 MGD (1,417,000 gallons per day).

Using the same residential unit (DU) standards as applied above in discussion of water consumption under existing zoning, each new future 2 BR dwelling unit is expected, on average, to generate 220 gallons (0.00022 MGD) per day of sanitary sewage that will require treatment. Dividing the generically estimated 1.417 MGD of available

[76] https://kingston-ny.gov/filestorage/12791/30198/12517/KingstonWWTP-LongTermCapitalPlanReport-2015.pdf

WWTF capacity by 0.00022 MGD per DU, would mean there would be sewage treatment capacity at the existing plant for 6,440 new housing units.

The City has consistently invested in sewer assets, including the WWTF. For instance, as part of facility compliance measures, the City is undertaking a major upgrade to the outfall from the WWTF into the Rondout (https://engagekingston.com/wwtp-upgrades). This is at 124-134 East Strand Street, where the City will modify this element, which is at the mean high-water mark (MHWM) of the Rondout Creek, by constructing a new outfall discharging at a minimum of 20 feet below the water surface. Also, according to the Long-Term Capital Plan, p.7, in 2008 and 2009 upgrades and rehabilitation to the WWTF included inclusion of odor control equipment. However, some continuing issues of odors persisted associated with plant operation. The City has subsequently conducted capital investments that address this potential problem (Ibid). These show that incremental, but significant capital investment at this facility is providing for smooth operations.

Analysis and public investment actions have contemplated and addressed how the WWTF could be impacted by severe flooding. The Long-Term Capital Plan cites mitigation implemented to prevent equipment flooding onsite through actions to raise critical equipment above 2035 projected flood levels. On page 22, a table shows 2035 Projected Flood Elevation (ft) NGVD29 for a 500-year Flood Frequency would impact to the 10.8 NGVD Feet of Elevation; however, the Plan (ibid) cites a June 2014 Basis of Design Report for Restoration of the Kingston WWTF, done by Arcadis, indicating improvements then underway would only protect against flood elevations of approximately 10.2 feet (NGVD 29) above sea level, which is roughly 2 feet above levels encountered by Superstorm Sandy on October 29, 2012. Prior analysis addresses a probability the plant should be able to sustain operations through 2035. The continuing hardening and introduction of mitigation at this critical facility supports its continued operation, but risks of flooding to the WWTF (and attendant collection system) will require ongoing study and investment to ensure the plant can operate at greater than 100-year flood frequency events. New growth that occurs under existing or proposed zoning could provide fiscal resources which can aid in achieving sustainable WWTF operation.

Existing Sewer Conveyance

Kingston's sanitary sewage collection system conveys wastewater to the WWTF. It consists of 80 miles of pipe ranging in size from 4 to 60 inches in diameter. Many parts of the City's wastewater collection system were constructed in the 1940's; yet, there are layouts that predate this. Wastewater is conveyed through not only gravity piping systems but also numerous pumping stations associated with pressure force mains. Pump stations are a focus for providing standardized upgrades (see 'City of Kingston: Economic Recovery Plan - 2022'[77], Laberge Group, page 82). Other sewer conveyance system elements include:

1. A 24-inch diameter pressure sewer (Rondout interceptor inverted siphon) conveys stormwater and sanitary sewage from a large area served by combined sewers discharge directly to the entrance chamber at the treatment facility.
2. A 15-inch interceptor sewer conveys sanitary flows from parts of the City served by separate sanitary sewers to a Pump Station at the wastewater treatment plant.
3. A 12-inch forcemain from Sleightsburgh Pump Station serving Port Ewen Sewer Improvement Area in the Town of Esopus, which discharges directly to the entrance chamber at the WWTF.

The City has a combined sanitary and storm sewer system. The City maintains and operates this Combined Sewage Over (CSO) collection system whereby wastewater that may contain stormwater is usually conveyed to the WWTF, but may be diverted in times of very high flows. The designation of the City as CSO is a regulatory compliance status of the NYSDEC. This designation arises since the sewer system has at points in time, surcharged and exceeded its existing permitted wastewater treatment capacity due to stormwater infiltration. Typically, CSO exceedances arise when there are high potential volumes in the sewage collection system that are attributable to infill and inundation (I&I) of stormwater that enters the system and merges with sanitary sewer flow to cause an overflow impact. Often the CSO exceedances occur during and just after severe rain storms.

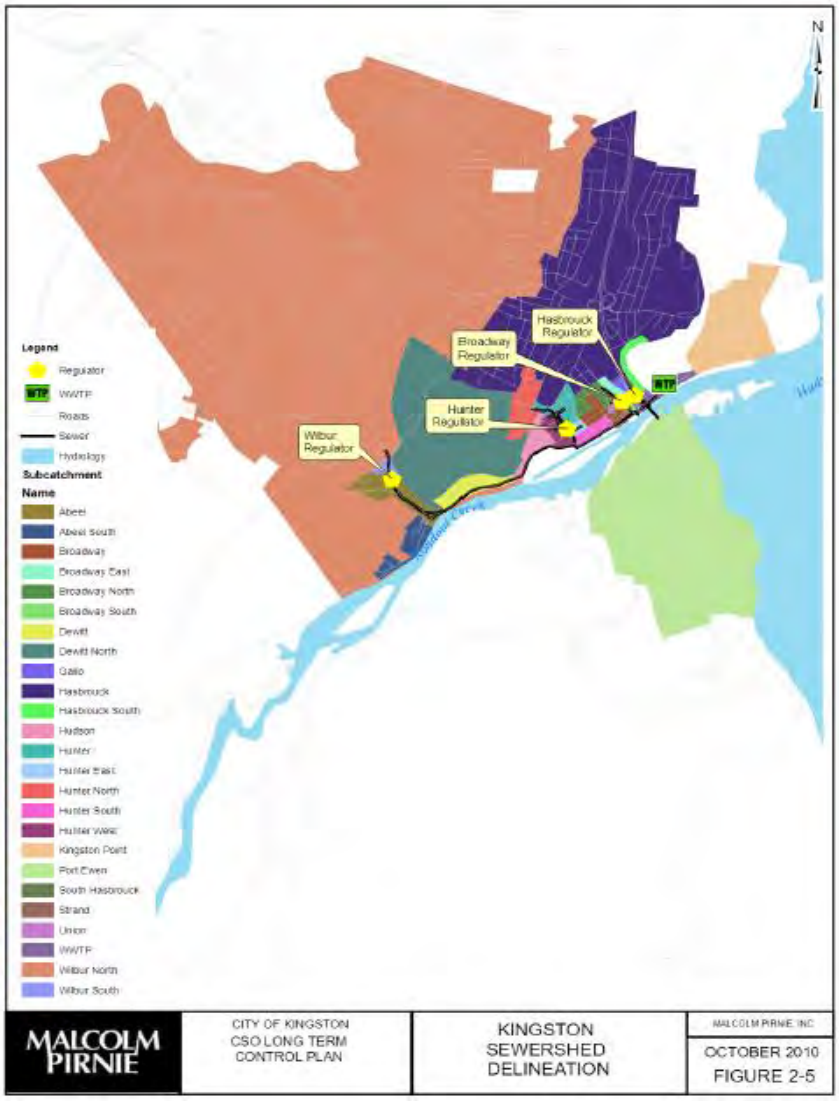
The City has acted to remediate long-standing CSO problems. A detailed 'Combined Sewer Overflow Long-Term Control Plan[78]' by Malcolm Pirnie, October 2010, addresses CSO management. The potential for storm surcharges is regulated at four locations used to direct dry weather flows, and those portions of wet weather flows that are less than approximately 10.25 mgd, to the WWTF through a series of siphons. Figure 56 shows sewersheds and the locations where diverter/ siphon devices are installed:

1. Broadway (Broadway Outfall #006),
2. Hasbrouck Pump House (Hasbrouck Avenue Outfall #005),
3. Hunter Street (Hunter Street Outfall #007), and
4. Wilbur Avenue (Wilbur Avenue Outfall #011).

[77] https://kingston-ny.gov/filestorage/8463/13525/Kingston_Economic_Recovery_Plan_FINAL.pdf

[78] https://kingston-ny.gov/filestorage/12791/30198/12517/CSOLongTermControlPlan-2010.pdf

Figure 56: Kingston Sewersheds Delineation



The City installed four CSO monitoring devices which cover all CSO locations. An information technology application serves to notify City officials and residents of any active overflows at one or more CSO outfalls. The monitoring defines the impact of CSOs and any active efforts underway to initially invest in its management. The CSO Plan on page 5-1 indicates monitoring after modifying the combined sewer system will determine the effect of the CSOs on attainment of Water Quality Standards and future assessment of the size and type of additional CSO control required.

Wet weather flows that exceed the WWTF's capacity are discharged to the Rondout Creek. The CSO study concluded that the City's combined sewer system is a high performing system that captures 89 percent of wet weather flows for full treatment at the WWTF. This exceeds the USEPA CSO Policy criteria of 85 percent capture.

Of the four overflows, only the Hasbrouck overflow chronically discharges to the Rondout Creek (2015 Long-Term Capital Plan for East Strand Waste Water Treatment Facility). This covers areas around Broadway, east of West O'Reilly Street, and Hasbrouck and Delaware Avenues by Rte. 9W. If the City does need to implement physical interventions, there is a Stage 3 Combined A Sewer Overflow Long-Term Control Plan objective for a Hasbrouck Storage Tank (page 5-1). The City subsequently in 2017 produced an Engineering Planning Report, Hasbrouck Avenue CSO Sewershed, by T&B Engineering, to advance a lower-cost, partial capital investment in a Hasbrouck storage option which will achieve necessary CSO mitigation.

Stormwater

The City has a Municipal Separate Storm Sewer System (MS4). It provides regulatory compliance in conjunction with its operation, which includes inventorying of outfalls and the parts of the physical stormwater conveyance system that are not in a CSO. The City's Code, Chapter 353 'Stormwater Management & Erosion & Sediment Control', which is outside the jurisdiction of the zoning code, provides for planning and managing stormwater during and post-construction for threshold Land Developments. It meets best practices and restricts connections of new building development to storm sewers which could introduce any problematic stormwater flows or potential

contaminants that are attributable to stormwater. There are no regulations in existing zoning that control whether a development application may have to proceed in a unique way to avoid generating an impact to a City CSO. The approach under the proposed FBC is no different.

Existing Land Use Policies

There are few existing zoning code standards influencing access, use, and improvement of sewer infrastructure. The City relies on the State Building Code and applies provisions of other City codes in order to regulate sewer connections. The Zoning code's current standards for Site Plan Development Plan Approval, within §405-30.C. Objectives, requires that internal water and sewer systems within development are adequate and that all connections to City systems are in accordance with City standards. The existing site development approval process is retained in the proposed Form Based Code, meaning there is an equivalent standard within the FBC.

4.11.2 Potential Impacts

Contemplating the potential influences of changes in future land use enabled by the FBC will not involve the production of any new primary studies. Rather, a focus is on accessing readily available descriptions of service availability and infrastructure and environmental conditions to generically assess how growth could impact respective public services.

Water under FBC Buildout

This section considers whether adequate drinking water supply and service could be available to serve FBC-attributable growth. The Zoning Potential Analysis identifies there could be greater development intensity/ Proposed Zoning Capacity Built Area for growth and a buildout occurring under the FBC, with 85,077,538 sq ft of building. This is 11,015,592 square feet greater total building under the FBC than under existing zoning.

The ZPA also identifies a greater new Potential Housing Opportunity, over an undefined future period of growth. The total FBC housing buildout possibility is for 16,531 total units, which is 4,457 total new dwelling units greater than under existing zoning.

Consistent with discussion in Existing Conditions, the available safe yield of 1.797 MGD, meaning there is the same generic existing potential enabling service to 8,166 new future dwelling units. For greater than that, there additional capacity would be needed to accommodate any additional growth through long-term actions to prepare an acceptable water supply and make undefined adjustments to the water distribution system in association with the larger level of growth.

The higher level of FBC-influenced growth will generally be directed to occur more within cores, where T5 and T4 are centered (inclusive of the waterfront east of Wurts Avenue). There could be a particular need to provide long-term and site-specific planning to ascertain the feasibility for infrastructure to service growth in these locations. This includes north of Broadway around Oneil and Cornell Streets, on the northeastern part of Albany Avenue, around Rte. 9W and Delaware Ave., and by lower Broadway and the Strand. Importantly, with growth in the FBC having development intensity per the proposed zoning regulations concentrated in higher intensity zones (ZPA), it may be possible to economically provide long-term water infrastructure upgrades that are focused, or concentrated, in certain locations .

Sewer Conveyance & Wastewater Treatment Under FBC

New housing potential enabled by the FBC will create an increased demand for sewer and wastewater infrastructure. Generic estimates provided above show that there is slightly more constrained future available sewer than water service, based on analysis of how the availability of service may influence future development potential. Based on generic analysis, the FBC could generate, over an undefined longer-term period of growth, greater than 6,440 new housing units. This 6,440 figure is a threshold below which there appears to be adequate existing sewage treatment capacity available at the existing WWTF to service either that number of future dwellings, or some alternative mix of residences and nonresidential building area.

For sanitary flows conveyance, there is no generic analysis of system capacity, but the studies cited document comprehensive efforts to modernize sewers plus to provide monitoring and mitigation of potential CSO exceedances. Just like under existing zoning, there should be long-term treatment capacity available at the WWTF to serve growth of up to the predicted 16,531 total new dwelling units predicted in the ZPA, which is 4,457 new units greater than would be realized under existing zoning. Still, just like under existing zoning, measures would be needed to ensure that the conveyance system can accommodate flows transmitted, just like there will need to be adequate treatment capacity at the WWTF. There will be a need to make sure that larger sanitary flows would not displace CSO flows and impact overflow management potential.

Notably, growth under the FBC is generically shown to be more compact than under existing zoning. This could mean there is some undefined potential to generate lower onsite stormwater if there is a greater potential for features like open space provided onsite to host green stormwater infrastructure and onsite stormwater detention. With the development footprint expected to decrease by 4.54% per the FBC (page 20), it is not expected there will be an increase to stormwater flow due to this slight potential decrease to impervious coverage. The FBC provides for open space standards and requirements in every new development, which could keep any potential impacts of stormwater conveyance to a controllable level.

Furthermore, qualitatively, there is per the FBC's Street Design Standards, greater potential for any new, or if applicable, adjusted streets/ street configurations, to provide for some unquantified, but better, mitigation of area stormwater flow curves. These would be less intense because flows are slowed due to the introduction of new street trees above existing levels, or what would be required under existing laws. In addition, in some instances, based on context and case conditions, when there are new or adjusted streets, open drainage designs and/or potential green stormwater infrastructure could be used. Either of these would be more likely to influence lower volumes of stormwater, and better runoff quality, that might otherwise impact the CSO, as well as the conventional MS4.

4.11.3 Mitigation Measures

The need for quality water, sewer, and stormwater connections and services, and onsite development in relation to these factors, exists under current and proposed zoning. Under both scenarios, project sponsors should institute measures to advance building- and site-level water conservation, modern sewer connections, and the design and implementation of onsite measures that will manage and slow (and in instances detain) stormwater flows plus aid onsite stormwater quality and emissions.

Any Major Site Plan for site-specific development should be assessed for its site-specific impact on water and sewer systems, the CSO, and stormwater system. It can be appropriate to require mitigation of impacts. Furthermore, any project receiving development approval involving substantial reconstruction should have to define whether her is a lead service line that currently exists that should be remediated.

As a means to prepare for higher levels of growth over a long-term with FBC implementation, the City commits to examining potential for adjustments to Chapter 353 'Stormwater Management & Erosion & Sediment Control'. Defining whether there should be potential changes and adjustments to Chapter 353 can provide support for possible CSO mitigation, better MS4 operation in conjunction with growth, and lower levels of water use, such as in association with irrigation. Within 3 to 5 years the City should examine whether to make any adjustments to the Chapter 353 Land Development threshold as part of assessing whether to lower the threshold that would trigger production of a Stormwater Pollution Prevention Plan, and/or require other analysis and specifications for utilizing onsite measures and practices to slow and/or infiltrate stormwater. The City should also in this same time frame provide a code assessment to identify additional ways that landscaping, green stormwater infrastructure incentives, and/or other programming or policies can be aligned to generate improved potential for onsite and area stormwater management.

Since the City already contains concentrations of population and infrastructure, growth may provide a means to develop and enhance the infrastructure base and capacity so it efficiently serves population needs and is resilient from natural hazards. The compatible growth the FBC could enable could cause a larger long-term population, employment base, and property tax base. This density could support delivery of cost-effective utility services through lower per capita or per unit infrastructure capital costs. It can provide a larger user base from which to leverage and underwrite long-term and sustainable infrastructure investments to deliver equitable and cost-effective services for a broad base of users.

4.12 Consistency with Community Plans

4.12.1 Existing Conditions:

Discussion of major goals and land use objectives in the 2025 Comprehensive Plan enables consideration of the degree that the proposed FBC furthers its long-term vision for the community and its objectives for overall community and economic development. Key identified goals of the master plan include:

1. Reduce Kingston's greenhouse gas emissions through implementation of Kingston's Climate Action Plan, green infrastructure and green architecture;
2. Ensure zoning designations consider increasing risk and vulnerability from flooding and sea-level rise;
3. Reduce stormwater, upland flooding and combined sewer overflows through green infrastructure and best stormwater management practices;
4. Research, evaluate and implement changes to City building and zoning codes that will increase resiliency and are cost-effective and socially equitable;
5. Evaluate the use of natural buffers and green shoreline infrastructure to reduce flood risk and erosion and conserve natural resource functions; and
6. Ensure opportunities exist for open space and recreation over the long term.

For the same reasons of assessing consistency, an identification of goals in local subject-specific plans provides additional identification of ways the FBC will further planning which may relate to specific topic interests or parts of the city. The following plans are provided with brief descriptions of their major aims to enable consideration of their consistency with the FBC's comprehensive rezoning plan:

2030 Climate Action Plan.

Some main land use and zoning goals of the 2030 Climate Action Plan include:

1. Increase walkability and bikeability;
2. Update zoning regulations to support smart growth and increased housing density;
3. Expand public electric vehicle (EV) charging infrastructure and
4. Adopt EV-ready building and parking requirements in commercial/ multifamily buildings.

1992 Local Waterfront Revitalization Program (LWRP)79 and Implementation Documents

The LWRP promotes economic development and revitalization of the City's designated local waterfront area. It helps assure the protection and beneficial use of coastal resources. Some benefits of the LWRP are:

- The program established (through its various policies) provides a means of protecting and enhancing local coastal resources within the framework of City regulations.
- State and Federal agencies will be required by law to act in a manner consistent with the local program's policies and purposes.
- The LWRP can help attract public and private investment in waterfront projects since it demonstrates a commitment to revitalization and resource protection, and contains projects and policies for waterfront development.

The following goals in the City's 1992 LWRP relate to land use and zoning:

- Policy 1: Restore, Revitalize, and Redevelop deteriorated and under-utilized waterfront areas for commercial and industrial, cultural, recreational, and other compatible uses;
- Policy 6: provides for expediting permit procedures in order to facilitate the siting of development activities at suitable locations. Brownfield Opportunity Area (BOA) Step 3 Final Implementation Plan (Riverport BOA)

The third step in the New York State Brownfield Opportunity Area (BOA) program, this plan focuses on BOA-oriented development implementation. This BOA Step 3 Implementation Plan was created to assist in fostering redevelopment of brownfield properties by:

- Addressing a range of problems posed by multiple brownfield sites;
- Developing locally-driven land use strategies/ revitalization plans;
- Improving neighborhoods and parts of the community affected by multiple brownfields;
- Building consensus on the future uses of strategic or priority brownfield sites;
- Establishing the multi-agency and private-sector partnerships necessary to leverage assistance and investment to revitalize neighborhoods and communities.

The BOA Step 3 was established after most zoning regulations were already in place. Under existing zoning, there was limited guidance for how to achieve character enhancement and complimentary form when properties were restored to productive use. The form and contextual recommendation in the BOA Step 3, therefore, are not well-aligned with and consistent with existing zoning.

Downtown Revitalization Plan

Spearheading the City of Kingston DRI initiative is the 2018 City of Kingston Uptown Stockade Business District (SBD) *New York State Downtown Revitalization Initiative Strategic Investment Plan*[80]. Guided by input from City

[79] https://dos.ny.gov/system/files/documents/2019/05/city-kingston-1992.pdf

[80] https://www.kingston-ny.gov/filestorage/8399/8469/26768/19587/Kingston_DRI_Plan.pdf

officials, Kingston residents, and a Local Planning Committee, the City of Kingston crafted and refined a vision for its Uptown Stockade Business District, the selected DRI area of focus. Based on an assessment of the Stockade Business District, and building on past planning efforts by the City of Kingston, the Local Planning Committee advanced eleven projects within the DRI area to be submitted to New York State for funding through the DRI program. The goals of the Kingston SBD DRI Strategic Plan related to land use and zoning include:

- Promote mixed-use growth and environmentally regenerative principles to support equitable and sustained activity in the SBD for current and future merchants, residents of all ages, workers, and visitors;
- Improve access and mobility for pedestrians, bicyclists, and other modes of transportation to better connect the SBD with adjacent neighborhoods and the region; and
- Support new development and rehabilitation of existing buildings to provide for additional affordable housing opportunities and housing accessibility for all residents in the SBD.

All of these plans promote efficient and sustainable development. In some instances, the existing zoning hampers the objectives in subject-specific plans, like described above.

4.12.2 Potential Impacts

2025 Comprehensive Plan

Based upon a presentation of the intent and purposes in its Article 1, the FBC is well-suited to advancing multiple aims in the Comprehensive Plan. It will:

- Regulate the location, design, construction, alteration, occupancy, and use of structures and of land.
- Provide a detailed set of development standards and procedures that will result in a compact and walkable development.
- Offer development regulations and criteria that pay particular attention to the intended form and character of places. Its organization is based on providing a hierarchy of places from most urban to the most rural. Each “Transect” zone is defined by the type of place being maintained, evolved or transformed and then by the form and intensity of development.
- Be applied to reinforce existing or to create new walkable, mixed-use environments.
- Regulate uses and a mix which are carefully chosen to maximize compatibility between uses, and the envisioned physical form of each Transect Zone.
- Create a well-functioning public realm across Kingston’s diverse neighborhoods.
- Allow for and encourage by-right, incremental infill per the vision for growth and preservation and improve predictability in outcomes of future development in the City via a streamlined process of development application review
- Use neighborhood context to guide how buildings should relate to community structure, streets and public spaces.
- Encourage a variety of housing types to support a range of income levels, age groups, family units, and newcomers.

- Support a green resilient future.
- Specify complete streets design which are walkable and bikeable.
- Reduce parking requirements so as to not inhibit incremental development, small businesses, housing development, or reuse of existing buildings .
- Provide clear graphic standards that are easy to understand and straightforward to enforce.
- Integrate civic and institutional activity into the fabric of the existing community, and walkable neighborhoods, and mixed-use centers.

The regulations in the FBC, including all supplements and attachments, shall be deemed effective amendments to the Kingston 2025 Comprehensive Plan. Contained in the FBC are multiple policies and standards that focus on natural and man-made resiliency capabilities of Kingston. Achieving a reduction in Kingston's greenhouse gas emissions and improving its resilient nature is supported by the following purposes of the FBC:

- Neighborhoods and mixed-use centers are compact and pedestrian-oriented, prompting reducing vehicular miles traveled (VMT) by making more trips possible by walking, biking or transit;
- Green infrastructure and street trees are included as part of future street design;
- Landscape design will reflect the local climate and topography, and prompt greater conservation of constrained lands than existing zoning, at the same time that is prescribes protection of trees, tree clusters, and waterways; and
- Prompts architecture that reflects the local climate, topography, history, and good building practice.
- Create opportunities for open space and recreation by supporting a green and resilient future and a range of high-quality public open spaces — parks, greens, squares, plazas, playgrounds, trails, community gardens, etc. —distributed within neighborhoods and mixed-use centers which will serve to increase access to light and air as well as fresh and healthy food (Article 6/§405.24 Open Space Standards). This section of the FBC promotes a sense of identity, image and value creation that can result from the provision of high-quality open spaces and trails that are integrated into new development which provide for neighborhood gathering and recreation in a safe, comfortable, walkable environment; and natural resource protection, including the preservation of steep slopes and use of green infrastructure to manage stormwater and reduce flooding concerns.

2030 Climate Action Plan

The following goals in the City of Kingston 2030 Climate Action Plan relate to land use and zoning and will be furthered by FBC standards

1. Increase walkability and bikeability;
2. Update zoning regulations to support smart growth and increased housing density;
3. Expand bus routes and schedules;
4. Expand public electric vehicle (EV) charging infrastructure; and
5. Adopt EV-ready building codes and parking requirements in commercial and multifamily buildings.

The FBC uses Transect Zones in place of traditional zoning based on a hierarchy of places from urban to the most rural, with its main goal to reinforce existing or create new walkable, mixed-use environments. The FBC also contains policies that focus on multimodal forms of transportation. These include the provision of complete streets to aid safe and efficient pedestrian travel.

In its Purpose, Article 1, in §405.1.B.2.d.iv.3, the City's carbon footprint is reduced by encouraging reuse of existing buildings to cut down on waste and energy associated with building demolition and the deployment of materials for new construction. Considering area planning, the FBC, guides how future building should relate to community streets and public spaces. Also per Article 1, it intends that: (i) Walkable neighborhoods and mixed-use centers be the preferred pattern of development; and, (ii) Ordinary activities of daily living be able to occur within walking distance of most dwellings, providing independence and accessibility to those who do not drive.

The FBC supports green and resilient future, with intent expressed in Article 1 for: (i) Neighborhoods and mixed-use centers that are compact and pedestrian-oriented and which promote reduced vehicular miles traveled (VMT) by enabling more of the total trips made to be possible by walking, biking or transit.

The FBC in *Article 4: General Standards* defines small-scale renewable energy systems and large-scale renewable energy systems that could be permitted under the FBD. Electric vehicle charging infrastructure is permitted and encouraged by the FBC under the applicable Transect Zones standards of the code. Various standards encourage the provision and utilization of electric vehicles (EV) and other renewable energy systems.

Local Waterfront Revitalization Program

Multiple policy objectives in the LWRP relating to land use and zoning will be furthered through FBC standards.

- Policy 1: Restore, Revitalize, and Redevelop deteriorated and under-utilized waterfront areas for commercial and industrial, cultural, recreational, and other compatible uses. The FBC's Waterfront Mixed-Use (SD-WMU) Special District allows a greater variety of activities than existing zoning;
- Policy 6: Provides for expediting permit procedures to facilitate the siting of development activities at suitable locations. The following specific aspects of the FBC are examples of alignment with this aim:
    - §405.1.B.2.a: The FBC offers development regulations that pay particular attention to the intended form and character of places in Kingston;
    - §405.1.B.2.d.i.1: A streamlined process for administrative review and approval is available, such as to expedite Minor Site Plan proposals that fulfill FBC standards; and
    - §405.1.B.2.d.i.2: A durable quality of buildings and public spaces will be fostered that emulates cherished, historic patterns in Kingston, invites reinvestment, and accommodate flexibility of use in response to evolving markets.
- Policy 11: Buildings and Other structures will be sited in coastal area so as to minimize damage to property and endangering of human lives caused by flooding and erosion.
    - As per §405.11.2(c), Waterfront Mixed-Use criteria require applications to document that site conditions support proposed development, with analysis of environmental constraints and bulkhead conditions. Moreover, there are standards promoting hazard avoidance and long-term resiliency not only including the standards in §405.11 that require a waiver to document as to whether it is practicably possible to avoid development impacts in floodplain.

- Policy 17: Whenever possible, use nonstructural measures to minimize damage to natural resources and property from flooding and erosion. Such measures shall include: (1) The setback of buildings and structures; (2) The planting of vegetation and the installation of sand fencing and drainage; (3) The reshaping of bluffs; and (4) The flood-proofing of buildings or their elevation above base flood level.
    - While it is not the only criterion in the FBC, the Transect Zone Allocations in §405.25.C.1 stipulate that any portion of a site immediately adjacent to the Hudson River or Rondout Creek (within 100' of the waterfront) shall be limited to T1 or SD-WMU.

Considering the aims of the LWRP to provide for public access to the waterfront and a distinct waterfront environment, the FBC will rely on context to guide how future buildings should relate to community structure, streets and public spaces, and there are public access standards that assure direct mobility for the public to and from the tideline. At the same time, per §405.1.B.2.d.viii.3, the FBC prompts that civic buildings and public gathering places be provided at high-image locations to reinforce community identity and encourage their use.

There is compilation of a SEQRA Coastal Assessment Form as per existing City Code Chapter 398 (DGEIS Appendix 5). Contemplating this action to adopt the FBC, there is not direct development and there are not physical impacts that will arise with the Code's initial adoption, but there will be identification of this action and transmittal of reference information providing a link to associated generic analysis for use and consideration by the local body performing consistency reviews, and by the NY State Dept. of State Office of Coastal, Local Government and Community Sustainability.

As the FBC is implemented, it will guide and reinforce and enhance land use in the City's Waterfront Revitalization Area. The institution of the FBC will better ensure, compared with the process and standards now in place under existing zoning, there is ecological sustainability of coastal natural resources, along with improved potential for public direct access to the coastline and tidal areas.

Site-specific growth should be regulated to ensure consistency with Coastal Policies that are in effect for the City. Project sponsors should provide narratives that describe how each threshold site-specific application will provide for comprehensive compliance with applicable coastal policies. As part of this, when development applications are submitted, there should be references to and citations on ways that the FBC is being applied in the case of that particular site-specific application. There should also be application information supplied to identify whether there is required compliance with the New York State Risk & Resiliency Act. It can inform how potential risks for sea level rise and the flooding, as well as the mitigation of potential flood risks, are being contemplated and responded to in a particular site-specific application.

It is encouraged for this discussion to be instituted during pre-submission meetings with the City and other agencies. The recommendations and outcomes forged at the pre-submission stage can be codified on permit checklists maintained online and made part of the publicly accessible information on development applications.

BOA Step 3 Final Implementation Plan

The goals of Kingston's BOA Step 3 Plan will be furthered through FBC implementation. This is because compared with existing zoning, the FBC better enables suitable redevelopment of properties, including with the establishment of housing when it is determined as feasible and safe option. The properties examined in the Step 3 BOA may have inherent challenges is attaining redevelopment and reuse due to the legacies from prior uses; yet, there should be attention as to how to practicably help advance the type of form and streetscape that the FBC calls for even if there

are external governmental restrictions stipulated which provide for a limited reuse of property. As part of advancing growth that fits with form standards and guidelines, it is recommended for City agents and reviewing bodies to promote landscaping designs that aid the appearance of the property and blend it with its surroundings.

Downtown Revitalization Plan (DRI)

There are multiple goals in the Uptown Stockade Business District NY *State Downtown Revitalization Initiative Strategic Plan* that relate to land use and zoning and which will be furthered as a result of consistency with the policies in the FBC. This is because the FBC will:

- Promote mixed-use growth and environmentally regenerative principles to support equitable and sustained activity in the SBD for merchants, residents of all ages, workers, and visitors;
- Improve access and mobility for pedestrians, bicyclists, and other modes, to better connect the SBD with adjacent neighborhoods and the region; and
- Support compatible new development and rehabilitation of existing buildings to provide affordable housing opportunities and housing accessibility for SBC residents .

Using neighborhood context to guide how future buildings should relate to community structure, streets and public spaces, the FBC will be used to guide compatible Uptown Stockade area growth because the neighborhood context will inform and determine how far buildings are located in relation to the sidewalk, how building façades are designed, and how each buildings interacts with the street. This walkable neighborhood and mixed-use center's mix and density and patterns will be replicated.

4.12.3 Mitigation Measures

The FBC will substantially advance the City's Comprehensive Plan and will advance the aims of various subject-specific plans. In particular, the FBC aids multi-modalism reinforces sense of place, fosters housing choices, and prompts overall community and economic development.

As described, the FBC's policies and standards will significantly aid and foster the provision of suitable housing types for residents of all backgrounds and socio-economic statuses. It establishes detailed standards that will substantially influence a larger and altered supply of adequate housing options across the entire city. Encouraging a variety of housing types to support a range of income levels, age groups, family units, and newcomers using the FBC will aid in structuring meaningful choices in living arrangements in distinct walkable neighborhoods and mixed-use centers.

Thus, there is not a further need to facilitate additional consistency with existing community plans in relation to the prospective and anticipated beneficial changes in the community's housing environment.

Also as discussed, FBC policies and standards will foster desired community and economic development, with waterfront consistency, and compatible physical form, and potential new mixed development. The criteria guiding the development and reinforcement of walkable neighborhoods and mixed-use centers as the preferred pattern of development will bolster local trade markets, it will aid job creation, and in the process bring forth community health and prompt sustainable and ecologically beneficial long-term development. There is no need for additional mitigation, although certainly it is encouraged for City agents and officials to annually review development conditions and to consider if there may be refinements contemplated and drafted which can aid in the advancement

of community comprehensive plan goals and the specific and measurable achievement of community economic development objectives.

As part of future FBC performance assessment it is suggested to record and contemplate the average time frames that are required to review and approve by-right incremental development (as is called for and facilitated by the FBC, and which types inherently would be expected to fit with and be compatible with the FBC form requirements). It can also likely aid future access to information for decision-making and planning if there are routine qualitative assessments of the extent that implementation of the FBC and by-right growth matches expectations for growth. As part of this, there could be examination of the extent that there is review and consideration and action on waivers, such as involving minor site plan proposals, and how these may these influence both the resulting form and context and land use objectives, but also the flow of development applications and the overall level of annual building permits, both for new units, as well as for rehabilitated buildings space.

As part of supporting a green and resilient future, when there are annual FBC performance assessments, it is suggested to also characterize and describe the range of public open spaces --parks, greens, squares, plazas, playgrounds, trails, community gardens, etc. – that are developed. As part of this there can be descriptions of their attributes, including the features of their distribution within different parts of the City. This can provide for assessment of how placemaking is proceeding under the implementation of the FBC.

Finally, to assist a shift to multi-modalism and the balancing and right-sizing of the parking supply it is recommended to monitor and assess how the form and layout of new development is proceeding in terms of the number of parking spaces provided onsite. For one, this can provide insight into the degree T5s and T4s are performing as expected as mixed use and multimodal hubs. It might help inform on the future possible Code calibrations that can help in right-sizing parking supplies and aiding incremental development, and the reuse of existing buildings. It can also provide insight on ways to refine text or graphic standards so they are easy to understand and straightforward to use.

5.0 PROJECT ALTERNATIVES

5.1 No Action Alternative

This DGEIS analyzes the potential effects of future growth that are attributable to different plausible scenarios as per the adopted Final Scoping Document for the Kingston Form Based Code rezoning. One Alternative, which must be analyzed, is taking 'No Action'. In such a case, land use laws and development policies remain unchanged from current existing arrangements, as does the resulting land use pattern.

Kingston is experiencing slow and steady growth in population. No Action will hamper the form and direction of this growth. The FBC was drafted specifically to address identified community concerns within the existing zoning; if the code is not implemented, these concerns and deficiencies in the existing zoning will remain.

The core of the current zoning code in Kingston is over 40 years old and does not fit the current community vision and priorities. It is not aligned with current best practices for smart growth and sustainable planning. One of the chief shortcomings of the existing code are limited use districts, which could continue to result in inefficient land use patterns oriented to single uses, and which produce a need for special use permits for new development and building reuse for land uses that have historically been allowed in city neighborhoods. This creates an administrative burden for the City and uncertainty about what will be allowed for applicants and the community. The proposed Transect Districts allow a greater mix of uses, particularly in the T4 and T5 zones, focusing on building form rather than land use to bring about compatibility between existing development and potential future improvements.

Housing availability and affordability has been identified as a primary concern for City leaders and community participants in the rezoning process. There are high levels of housing demand and tight housing markets with low local vacancy levels. There have been consistently escalating average prices of housing year over year. Without the FBC, zoning policies will not be specifically organized to add diversity and growth in the housing supply. Nor will there be more substantial encouragement and specific uniform requirements for affordable housing.

There are specific code provisions that were crafted and presented in the FBC to improve housing access and affordability, that are not included in the existing code, such as:

- Allowing diverse "Missing Middle" (https://missingmiddlehousing.com/) building types prevalent throughout Kingston by right;
- Removing minimum parking requirements;
- Setting no upper limit on the number of units on a lot for certain building types (the limit is instead defined by building massing/height);
- Allowing accessory dwelling units (ADUs);
- Introducing requirements for affordable and workforce housing for all developments of 7 or more units, which increased requirements for developments with more than 20 or 50 units; and
- Offering incentives for additional affordable units such as potential bonus height, expedited review, and discount of required site plan application fees.

If housing development options are limited, it could cause sprawl as supply limitations cause prospective residents to look outside of the urban cores for housing opportunities.

An additional factor that potentially limits the production of new housing, as well as development of new business and further economic development throughout the city, is a complicated land use approvals process. The proposed FBC introduces a new Minor Site Plan review board / approval process to streamline the compliance process for smaller, incremental infill that fits standards of the FBC. This process applies to developments that are deemed to be SEQRA Type II; development of land less than 2 acres in size and consisting of one to two lots; and development that does not require any variance or waiver requests. The No Action Alternative does not provide for this new streamlined process.

Another issue to contend with is overcoming the effects of the COVID-19 pandemic and potential for a lingering negative economic impact. The lack of modernized zoning could constrain City-scale growth and development. If the pandemic is prolonged, or there is a sustained economic downturn, it may not be feasible to achieve desired growth without contemporary zoning strategies. In that case, the City may not be able to create positive economic and social outcomes to the same extent as it could through a more proactive approach brought about by the FBC. Continuing with existing zoning could inhibit investment and change in the economic mix. The FBC removes barriers and encourages building reuse and infill of underutilized sites in existing urban neighborhoods.

Minimum on-site parking requirements were identified as being one of the primary factors limiting potential for existing building reuse and infill development. The new code removes minimum parking requirements in most districts, allowing individual property owners to determine how much off-street parking is needed based on their proposed use of the land, rather than the City having a one-size fits all requirement that is often found to be excessive in practice. The code also introduces parking maximums to ensure parking areas are not so large that they negatively impact walkability and environmental conditions. Finally, the FBC includes a requirement for a Parking Demand Reduction Strategy for developments of a certain size to ensure not only that there is a strategy to meet demand for parking, but that strategies to promote walking, cycling, ridesharing and transit are also included. All of these desired elements are not included in the No Action Alternative.

With no action, there may be less sense of place and character since there will be a lack of standards that attend to and guide the relationship between building facades and the public street realm, the form and mass of buildings in relation to one another, and the scale and types of streets and blocks. The FBC has guidelines in a language that can be understood easily by everyone. Without active placemaking prescribed by the code, there could be weakening of the arts, tourism, recreation and the service sectors, all sectors that are important to the City's economic base.

No Action can also inhibit the protection and conservation of natural assets, like steep slopes and surface and ground water. One reason is because there will not be as much performance-based planning. There will be less guidance to avoid development on hillsides. Moreover, continuing the existing zoning district arrangements will not do as much to curtail sprawl potential on the edges of the City because it will not reinforce lower densities and contiguous open landscapes outside of the higher and more moderate density assignments within the T5 through T3 Transects and Special Districts. Additionally, the new code introduces requirements for Usable Open Space to accompany all residential development of 4 or more units.

A primary difference between the FBC and existing zoning is that the FBC includes street standards to ensure that street design is coordinated with adjacent land uses. Street trees, and facilities for pedestrians and cyclists are to be included, tailored to the context of surrounding land uses. Under the No Action Alternative, new or improved streets

could be relatively incomplete, compared with the high level of walking and multimodal infrastructure and connectivity that the new code seeks to stimulate and facilitate.

Overall, under No Action, land use, community services, environmental, social, and economic conditions will remain generally the same as now, with poorly aligned zoning that does not support City and community goals.

5.2 Higher Densities in T4 & T5 Transects

A second alternative outlined for evaluation in the Final Scoping Document for Kingston's Form Based Code rezoning is a potential allowance of higher densities in T4 and T5 Transects. The FBC does not include density limits. Rather, the total amount of units/ density on a lot is limited by what will fit within the allowed building form (footprint and height). This alternative evaluates the impacts of allowing one (1) additional story in T4 and T5 areas.

Permitted building heights in T4 and T5 areas are defined by the Transect Standards (Article 3):

- In T5, the FBC allows for a maximum of 4 stories (T5MS and T5F) and 3.5 stories (T5N); plus potential for 2 additional stories if provisions for affordable housing are met (per Sec 405.20).
- In FBC Draft 3.0, a new Broadway/Cornell Height Overlay was introduced within a footprint corresponding with portions of T5s in Midtown. This Height Overlay is marked specifically on the Special Requirements map. The Height Overlay will allow for up to 6 stories (T5MS and T5F) and 4.5 stories (T5N), plus the potential for 2 bonus stories for affordable housing. This was in response to comments on previous drafts indicating that the 4 story maximum was too limiting in this location, which is identified in the City Comprehensive Plan as a place that is more suitable for growth. For one, in the area corresponding with this Height Overlay, there is substantial potential for infill, such as in surface parking lots or underutilized lands, and where there already are existing taller buildings. There was concern that if the option for affordable housing bonus stories was not exercised, new development would be effectively limited to 4 stories, which could be an underutilization of property and result in less housing overall in the City.
- In T4, the FBC allows for a maximum of 3 stories (T4MS and T4N-O) and 2.5 stories (T4N); plus potential for one additional story if provisions for affordable housing are met (per Sec 405.20).

This alternative for one additional story in T4 and T5 areas (in addition to what is described above) could provide for more overall building square feet in core locations. This would include along and around Broadway broadly in Midtown, along the northern edge of Albany Avenue and south of Delaware Ave. The approach could be used to achieve buildings that accommodate future housing and job opportunities, and aid mixed-use infill and placemaking goals. Enabling taller buildings can result in higher residential density and a larger housing supply, since it is not expected for there to be significant non-residential spaces on upper floors. Infill and greater intensity in T5 and T4 areas establishes stronger land use /transportation relationships and provides beneficial housing and jobs proximity. The housing needs of this community and the region are discussed in the section on Socioeconomics. The allowance for one additional incremental story higher in these transects could enable a larger overall supply of housing.

The ability for a developer to have a greater floor area from building higher could enable economies of scale of building that could stimulate desirable residential investment. If a builder uses a permissible extra story, there could be a smaller proportion of the total cost of a unit going to land costs. Likewise, the cost for infrastructure connections, like sewer hook-ups, should be lower on a per unit basis. An economy of scale may also come about

because the unit price for materials may be less if the owner is building a larger building. This could result in lower cost on average per unit and, if the allowance for a potential greater residential yield exists for a property, this may induce an owner to build sooner. Faster paced development could provide for community needs by generating more diversity of housing and more housing choices. With a larger overall supply of housing, such as would be enabled by this alternative, there should also be less market demand and lower competition for access to any one particular generic unit, thereby easing pressure which otherwise may induce higher rents and sale prices.

Considering the Broadway/Cornell Corridor Height Overlay in the context of this Alternative, the allowance for added height will reinforce the geographic center of the community in the Broadway/ Midtown core. Additional growth in this urbanized location will be centered around the Broadway corridor. Broadway is developed as, and is poised to further evolve as, the community's multimodal transport spine.

The context of this Height Overlay also strongly relates to and fits with the transversal, intersecting Cornell Street/ Greenkill Avenue corridor. This area has a highly functional street grid and a beneficial existing concentration and mix of infrastructure, with community and civic services available, including potential for transit. In that area, there are many surface parking lots, some quite large, concentrated in this location, which detract from sense of place and may relate to a historical loss of buildings during urban renewal. The varied building form contributes to a somewhat unpredictable pattern consisting of medium-to-high density building types intermixed with some lower-profile commercial and industrial buildings. This area has great potential for infill buildings which would continue a more complete sequence of walkable building frontages, a more consistent form, and increased housing and job opportunities.

However, there is a limit to the amount of height that will be seen as desirable by the community, as well as increased development costs associated with even taller construction types; and thus even greater height beyond what is contemplated in the height overlay may not be utilized or desired for this area.

Greater height beyond what is already contemplated in Historic Districts and properties where there are standards for landmark(s) preservation could bring negative impacts to the built environment. Historic Preservation is addressed is in §405.26.L. 'Historic Landmarks Preservation Commission', in FBC Art. 8 Administration & Enforcement. It is suggested the alternative for increased height/density should not apply to Historic Districts; the form and scale of buildings in these areas should remain contextually defined by and tied to the salient features that are the focus of preservation.

Greater height in the T4 Neighborhood District (T4N) beyond what is already contemplated for 'Potential Bonus Height' is also not recommended. The intent of the T4 district is to support the conservation of existing primarily residential areas where there is intent to provide for buildings within a form of small-to-medium footprints. It will prevent departures from consistently evident patterns of building in T4Ns and around C4 Local streets where there are very distinct and observable existing patterns of building massing, patterns of existing setbacks, and where increased scale changes could cause noticeable differences.

To achieve appropriately-scaled, well-designed form to accompany larger scale and higher buildings, there should be an emphasis in site plan review on applying Architecture Standards and potentially requiring additional analysis of impacts. This will help mesh new growth with adjacent structures, and help blend any scale transitions that arise from one building to the next. It can support allowing select increases in the scale and height of buildings in the

highest density areas without causing a detrimental impact on Kingston's urban design and scenic qualities. Considerations to advance one story additional height include:

- There should be attention to designs of the building base, body and cap during the review of infill and reconstruction proposals. Per FBC Sec 405.14.C, an expression line is required to differentiate the ground floor from those above, reinforcing the pedestrian scale. Dividing the façade into layers also helps to break down the scale. An additional expression line to define the cap/ upper floors is desirable. The top of each building is required to include a projecting cornice.

- It could be encouraged or required for applicants to supply view analysis and renderings to analyze how structures, or parts of them, may be viewed from streets, and/or may impact views from adjacent public spaces. It can also be encouraged or required to perform shadow studies. Depending on analytical results, a step-back of the additional upper stories of 10 to 25 feet from the building façade could reduce the visual impacts of upper floors.

- While it appears feasible to blend new larger-scale buildings, any allowed rooftop structures on buildings which are allowed extra height should be diagrammed on site plans with identification of their setback from roof edges. The site plan reviewing body may request visual analysis to identify whether rooftop structures may be visible from streets or nearby buildings to help ensure there is management of potential roof activity . Towers/cupolas above the height limit could be discouraged on buildings with allowed additional height unless analysis demonstrates that such elements will provide architectural appeal and be compatible with surroundings.

Allowing one additional story in the City's cores means that any views of the City, such as from Kingston-Rhinecliff Bridge, would not substantially change because it will simply reinforce existing physical form. The pattern of higher density building and well-defined cores will not be altered. The scale of change of one more added story added onto the permitted building heights in T5 and T4 per the Article 3 Transect Standards viewed from distances, 3.5 or more miles away at the Bridge midpoint, towards viewable lower elevations of the City, such as in the Rondout waterfront, seemingly would not be perceptible at those distances. Viewers' eyes would be drawn rather to already discordant existing large structures like remnants of industry at Hutton Brickyard, or petroleum storage tanks on Kingston Point (which is outside these transects).

Overall, allowing for one story of additional height in T5 districts as well as in T4N-O and T4MS, according to the recommendations herein, would produce minimal impacts.

6.0 SUMMARY OF IMPACTS & MITIGATION

6.1 Overview

This section of the DGEIS will reiterate findings from each above subject element/ category of analysis. It will also discuss other types of potential effects that must be considered and addressed when preparing an environmental impact statement.

The following discussion on impacts that could arise and potential significance of actions is based on the preparation and public review of a DGEIS Scope. The Scope produced for this project was generated using a formal SEQRA Scoping process as per NYCRR 617.8.

The DGEIS' framework for considering the potential impacts from implementing the FBC is also informed by public meetings convened, along with public input gathering. This includes survey opinion research and efforts to engage stakeholders in order to define important features of the community, as well as diagnose factors influencing community context which may be affected by this rezoning.

Such contextualization and diagnoses are undertaken in an attempt to identify possible issues and concerns related to future land use and development. The crafting of project goals and the FBC's policy prescriptions was based in-part on this practical identification of ways to consistently implement the FBC so that it was structured to be responsive to public input and more likely to be consistent with the community's comprehensive plan.

Overall, this DGEIS provides a broad and general analysis of the potential for impacts to arise with a potential future program of building that could be expected to arise over multiple years, and as compared with existing zoning. Ultimately, the FBC will be comprised of a series of subsequent actual site-specific developments. Therefore, in the discussion that follows, there is some additional time spent further delving into and exploring the rationale around the analysis of impacts. There is also some contemplation of the scenarios and effects that may be associated with future growth. All of this provides for consideration of how impacts attributed to future land use, building, and infrastructure growth and change may arise under implementation of the FBC.

6.2 Growth Inducing Impacts

The Proposed Action is the adoption of a Form Based Code that will regulate development, with new Transect Zones assignments, which will replace the existing zoning code and zoning map in the Citywide study area. The Code adoption will not result in any immediate physical, community or environmental impacts.

The Proposed Action will establish a detailed set of development standards and procedures that will result in compact and walkable development across Transect Zones. The regulations in the Form Based Code (FBC), including all its supplements and attachments, shall be deemed effective amendments to the Kingston 2025 Comprehensive Plan.

A maximum Buildout Scenario has been provided within this DGEIS to analyze potential impacts of the growth anticipated with implementation of the Proposed Code. It uses certain assumptions as described per the 2015 City of Kingston Brownfield Opportunity Area (BOA) Step 3 Final Implementation Plan.

Long-term impacts associated with the adoption of the Form Based Code include the achievement of Comprehensive Plan goals to:

- Provide substantially more housing and business development potential,
- Maintain the historic context of the City,
- Encourage the proliferation of open spaces for climate benefits,
- Provide complete streets, and stimulate walkability and non-motorized modes, and encourage multimodal forms of transport.

Long-term impacts associated with the base existing buildout as generically depicted in the Zoning Potential Analysis cannot be determined on any specific site. Yet, if development occurs as per the generic buildout, overall impacts could include (but may not be not limited to):

- Increased Walkability and non-motorized forms of transport;
- Increased residential population, and
- With increased population, there could be growth in the absolute number or proportion of the community that comprises school children.
- With increased population, there could be elevated levels of demands for various public services.
- Increased business and commercial opportunities and growth to establish a larger and more complex local market.
- Increase in parks and recreational demand.
- Increases in demand for community services and facilities, with a portion attributable to nonresidential sectors of the economy.
- Increase in conserved land and open (green) spaces for climatic and ecological benefits.
- New and/or improved public water and sewer infrastructure to support increased demand from added population, housing and business developments.
- Promotion and proliferation of energy efficient buildings and structures.

6.3 Cumulative Impact

This part considers potential for undesirable impacts to be experienced due to additive or synergistic growth effects. In cases where the FBC could cause development that is not reflected in the Buildout Analysis, such as due to market inducement, the FBC is structured so that growth will be adequately managed.

For instance, if there is enhancement and revitalization of streetscapes and provision of walkable streets, this may stimulate larger than forecast demand for retail business space. Yet, it is reasonable to expect that growth like this can be accommodated because the FBC would enable establishment of greater floor space to accommodate retailers. Still, while the FBC could aid attractiveness of this community, which could stimulate tourism growth, there are substantial limitations within the FBC influencing the ability of non-occupant landlords to establish short-term rentals, so there is not potential disruption of overall housing supplies.

The ability to establish a higher increment of retail space based on high market demand would in part be attributable to the way the FBC enables flexible programming of buildings occupancy compared with more rigorously use-centered existing zoning regulations. Comparatively, regulation under existing zoning could more likely fetter business development in response to market demand because there would be more discretion available to reviewers for the approval of retail uses. The FBC provides more flexibility in the buildout that will occur, plus more certainty about what must be done to obtain approval.

The FBC also enables better management of growth in background traffic than existing zoning. It supports many modes, not the dominance of one. As gleaned from intent in FBC Article 5, §405.22 Street Design Standards, C. General Street Standards, 2. Functional Classifications, the FBC is emphasizes multimodal, pedestrian, and bicycle transportation design. If there are synergistic and cumulative growth impacts, the FBC will support complete streets and multimodal approaches that can be applied to encourage a broad distribution of trip type and better address issues that arise within existing and new streets.

With fuller and better potential to support and use all modes, it should be easier to remediate congestion, or mitigate other traffic and safety effects under the FBC, compared with existing zoning (and the subdivision code) which has a greater orientation to automobile travel and limited attention to development and management of complete streets. In terms of public service demand, higher density and an easier ability to walk, bicycle and use transit, should translate into the availability of greater transport choices and a more supportive environment with elevated levels of transit utilization.

New buildings under the FBC should be more energy efficient, consuming comparatively less distributed electricity, since there would be proportionately more building occurring in larger, more energy efficient structures in T5 and T4 cores. For instance, as anecdotally assumed based on the FBC's smaller footprint and greater level of building, the buildout will result in a higher floor area ratio, with more building space constructed in these locations than may occur under existing zoning.

By focusing on compact growth and character rich development centering-on the FBC's higher density transects, the effects of future development that could exceed levels expected under existing zoning in Kingston will primarily be in the core rather than on to the City's periphery and in its lower density edges.

One example is on and by Ulster Avenue. T4 allocations on the northeast side of this corridor by the Town border support infill and new allowances for some residential mix. The new occupants could easily access public transit already present in this corridor. The form will blend and be compatible with, and even enhance, the existing retail in this area.

The infrastructure that will be constructed under the FBC will be higher-performance than what is built following existing zoning prescriptions. For instance, new streets are specified to generate higher tree fenestration that will contribute to lower ambient temperatures. This will mitigate any synergistic building effects as streets will better support street shading, mitigation of urban heat island effects and air quality. The higher density of planting of street trees will slow and infiltrate stormwater, as well as aid evapotranspiration of stormwater and mitigate the potential concentration of contaminants. The FBC's tree planting pattern will also aid lower energy consumption in adjacent/ nearby buildings. Likewise, more complete streets will better attenuate potential for cumulative growth effects because they are intentionally provided multimodal designs and will contribute to a sense of place and appealing community character.

The compact form achieved in walkable neighborhoods will establish low per capita energy use and release of climate harming GHG emissions because there will be land use efficiency and less synergistic harm from latently encouraged auto trips. Also, patterns set in the FBC will enable integrating electric vehicle charging infrastructure into development, which can influence lower relative rates of energy use through lower reliance on carbon intensive fuels to power vehicles.

Even if there is more cumulative growth under the FBC than existing zoning, its land and building arrangements will aid mixed-use and walkable neighborhood designs which will contribute to decreased automobile congestion. Following guidance in the City of Kingston Form Based Code is not anticipated to contribute significantly to issues attributable to cumulative growth.

6.4 Irreversible & Irretrievable Resource Commitments

This section addresses resource commitments due to the Action which cannot be avoided.

On some occasions, the proposed action will result in removal of vegetation and development of vacant lands, but the proposed zoning would not generate more of these type impacts than existing zoning. The future growth can also involve modification and substantial reconstruction of existing utilized land and buildings during redevelopment. Once constructed, the development of vacant lands cannot be reversed. It would not be available for future uses. The same is the case with redevelopment. Although future buildings could be demolished, and land reclaimed for alternative uses, or returned to natural states, development is practically speaking, an irreversible and irretrievable commitment of resources. Yet, the FBC is organized so there will be a more compact form of growth than would occur under existing zoning, so potential for natural edge, urban fringe effects, and sprawl generally will be mitigated more under the FBC.

The FBC is guided by the Brownfield Opportunity Area (BOA) Implementation Strategy's Land Use Implementation Techniques. It promotes "smart" land use and provides for economic growth and waterfront area development that is balanced and relates to preexisting conditions. Consistent with the BOA Phase III study, the FBC stimulates compatible development while protecting public, recreational, historic and waterfront resources.

All future potential development is not anticipated to occur across all transects simultaneously. Yet, under the buildout, various goods will be committed to construction. Such use of building materials represents a long-term commitment of resources. Those building resource commitments will not be available for other projects. However, some or most construction elements should be feasibly recovered and recycled construction and demolition waste if in the future a building constructed under this FBC is demolished. Ulster County's Zero Waste Policy[81], as adopted in 2020, prompts such recycling of construction materials.

During construction, machinery will consume energy and once buildings are occupied, they will use energy as part of powering building systems that make interior spaces habitable. This use of energy from a practical perspective represents an irreversible and irretrievable commitment of resources. The FBC could stimulate a reduced carbon footprint of the City by encouraging infill in an urban core and promoting reuse of existing buildings. This could cut down on waste and energy associated with building demolition. Also, to an extent greater than in existing zoning, there are provisions in the FBC enabling utilization of renewable energy systems of varying scales that generate

[81] https://legislature.ulstercountyny.gov/sites/default/files/Res.%20No.%20265%20-%20Backup%20-%20Draft%20Zero%20Waste%20Implementation%20Plan%20with%20edits.pdf

clean onsite power and contribute to sustainable energy use, production, and distribution. These could supply renewable energy to neighborhoods, as well as support energy efficient Electric Vehicle (EV) utilization in the City.

As residents and visitors move around the City, there will be use of energy, including fossil fuels burning, to power motorized vehicles. Over time, the FBC objective to create complete streets will help reduce vehicular miles traveled (VMT) and commit less irretrievable harmful carbon emissions. Overall, the Form Based Code will facilitate lower VMT per capita than under existing zoning as there is accepted evidence that compact, denser, and mixed-use growth is more land use efficient and it prompts fewer auto trips overall since some people will substitute-in more walking and transit enabled trips.

Good health is also a cherished resource. Considering the overall role of the City's form in influencing environmental health, implementing the FBC will stimulate a quality public realm that positively and cumulatively supports and enables community wellness. The FBC's prompting of environments supporting less carbon intensive walking and its establishment of safer places to achieve physical activity through transportation could also contribute to long-term public health and acute health effects and even reduce death rates. One study found 43% of people reporting a quality place to walk were significantly more likely to meet current recommendations for regular physical activity than those reporting no place to walk (Powell, Martin, Chowdhury, 2003).

6.5 Identified Unavoidable Adverse Impacts

This part evaluates whether the proposed action may cause the permanent loss of one or more natural or manmade environmental resources that could be consumed, converted, or made unavailable for further use due to construction, operation, or use in relation to the FBC's proposed program of building development. This would include whether those losses could occur in the immediate near-term, or over a longer time frame.

The proposed action is organized such that adverse temporary and permanent environmental impacts will be minimized, avoided, or mitigated to the degree possible in accordance with local, state and federal guidelines and regulations. Specific impacts and mitigation are detailed in Section 6.6.

There may be the use of fossil fuels as part of the buildout of future land use that will arise under the generic program of growth identified under the FBC. Other temporary impacts due to construction activities are anticipated. These impacts may include but are not limited to construction noise, vibrations, and smells. These activities are unavoidable; however, they are anticipated to be temporary in nature. Specific mitigation for these activities is detailed in Section 6.1.

Adverse impacts identified that cannot be minimized, avoided, or mitigated include the following:

- The conversion of vacant land to developed land.
- Removal of existing vegetation as a result of development.

While these impacts are unavoidable, the proposed action will help meet the demand of additional housing while creating quality community form, character, and mixed-use development. The proposed action is anticipated to maintain the existing community character by focusing on key areas of growth while limiting suburban sprawl. The future growth in the urbanized transects will create a more walkable community with expanded access to public and retail services to meet the needs of a growing population. The existing zoning has the same or greater potential for

conversion of vacant to development and removal of vegetation; thus, it does not seem that the rezoning creates or exacerbates these existing potential adverse impacts.

6.6 Program Implementation

The Zoning Potential Analysis (DGEIS Appendix 3) provides a generic comparison of potential growth impacts of the current and proposed zoning:

- For the FBC case, the potential Dwelling Units could increase by 4,457 units, or 36.9%.
- Using all potential built area, under proposed zoning there is 11,015,592 greater square feet than the potential of 74,061,946 sq. ft. under existing zoning. Under the FBC, this is a 14.9% increase.
- For Footprint Area, under the FBC, for all growth combined, a 1,520,604 sq. ft. smaller, cumulative combined total area is 4.5% less (or smaller) than the 33,493,751 footprint under existing zoning.

Table 8: Summary of Proposed Mitigation Measures

Topic	Proposed Mitigation
Geology, Soils & Topography	• A Major Waiver is needed for construction on slopes between 10 and 25%. • Development on slopes greater than 25% is not allowed. • There are low-density Transect and Special District assignments in areas of thin soils and limestone. The FBC siting criteria also allows for flexible structure and/or building positioning to help optimize site arrangements and minimize potential for onsite physical risks to groundwater. • Compliance with §405.24.C.1.f for receipt of a Minor Waiver is needed when developing Usable Open Space and over 1/2 of the total required Usable Open Space proportion is constrained, such as because it uses steep slopes of 25% or more. • Compliance with Article 6 Open Spaces Standards for designing and achieving minimum open space will aid groundwater protection and conservation. • Compliance with FBC standards for minimizing Lot Coverage will aid onsite stormwater management by at least indirectly managing impervious cover.
Plants & Animal Resources	• Flexible siting of buildings/ structures to provide compatibility with identified natural character/ natural resources. • Minor waiver available to allow beneficial street block design, such as to practicably avoid impacting wetlands. • Minor waiver available to construct common driveway rather than a street to avoid sensitive natural resources. • Documentation supplied for future site-specific development will assess the potential presence of significant habitats, threatened and/or endangered species (not including development applications that are SEQRA Type II). • SEQRA Coastal Assessment Form submitted for actions in City's Waterfront Revitalization Area to aid in contemplating potential habitat impacts. • A generically estimated 34.9 acres fewer of developed land will arise due to the more compact design and development resulting from the FBC transect standards. • Low density T1 and T2C assignments in areas/ contexts identified as priorities for conservation in the City's Open Space Plan. • Required tree planting in large parking lots (heat island mitigation; habitat creation). • Prohibition on counting parking lot as required Open Space. • Suggestion to use native species and pollinator-friendly landscaping in Landscape Standards; use of any non-native plantings shall require a written justification for the selection. • Per DGEIS, site-specific development of land underwater shall consider water depth and habitat features, like of the Rondout Significant Fish & Wildlife Habitat, as well as the potential presence of other habitat occurring on the bottom of waters. • For future site-specific development, NYSDEC or USACOE joint coordination of permits will be used to assess the need for mitigation for temporary or permanent disturbance to wetlands, watercourses or linked regulated habitats.

Water Resources	● Coordination with NYSDEC or USACOE to confirm boundaries and jurisdiction of regulated waterbodies and wetlands. ● Compliance with FBC §405.15 Waterfront Overlay Standards (and existing SWPPP and NYSDEC SPDES General Permit for Construction Activity standards) to promote stormwater management that mimics the off-site discharge from existing conditions, which is an evident potential since the proposed zoning has a smaller building footprint. ● Additional mitigation in T1N, T2C, T3N, T4N, T5F & SD Transect Zones will: o Compliance with design standards and guidelines described in DGEIS, such as to require setbacks of larger parking lots from the features. o Development of sites to be carried out in a manner to avoid the discharge of dredged or fill material into delineated waters. o Stream crossings subject to approval by USACOE to minimize or prevent impacts to regulated waters. o Site design will include maintenance or enhancement of vegetative buffers near waterbodies, streams, and wetlands, where feasible.
Open Space & Recreation	● T1 & T2 assignments enhance open space by reinforcing the three Priority Conservation Area (PCA) in the City. ● Incorporate onsite open space and recreation as called for to enhance the associated Transect or Special Districts (and by providing appealing designs and layouts of such spaces using the FBC's criteria). ● The Waterfront Overlay Standards require public access to the shoreline. ● Prompt natural resource environment conservation, including in- and on- the water through Waterfront Overlay Standards. ● Forming City Open Space and Recreation Plans updates to assist with continued enhancement of existing parks, trails, and open spaces, plus the creation of additional assets, facilities, and open space and recreation levels of service that will help serve expected growth in the residential sector. ● Promotion of new supplies of recreation opportunity, such as through creation of pocket parks, and possibly through development of indoor recreation options in Midtown, including as part of new growth, the latter consistent with the comprehensive plan. ● Applying the FBC will improve pedestrian and linear trails connections and design so as to support overall increases in walking and bicycling. ● Adherence to Local Waterfront Revitalization Plan management, development, and design requirements and guidelines and associated FBC standards will achieve open space and recreation resource protection and incorporation. ● Adherence to existing BOA Step 3 DGEIS management guidelines will further open space and recreation resource protection and incorporation in site programs. ● Establish significant proportions of open space when development is proposed on large areas. ● Support a green, resilient future by creating open space, parks, and trail amenities. ● The FBC will facilitate streamlined incremental development.

Land Use & Zoning	● The FBC is supported by and conforms with the City's Comprehensive Plan and the FBC has been refined and adjusted using the extensive body of public input obtained from the community during two prior stages of FBC drafting. ● The FBC will mitigate existing sprawl and poor transport form. It facilitates land use that links with complete streets and supports multi-modalism. ● The FBC standards will foster new physical growth that positively contributes to the desired development pattern of distinct neighborhoods and improves upon City's existing historic context. ● Future development will adhere to multiple required standards as well as generally follow guidelines in the FBC. ● New incremental development will be streamlined, with other development advancing through appropriate application processes for Site Plans and Special Use Permits. Minor and Major developments which do not require waivers or variances will have shorter reviews than ones needing relief. ● Site-specific environmental review will be used to regulate bonus height allocations in order to manage the potential for impacts from additional scale. ● Compliance with Waterfront Revitalization Area policies and development guidelines will be required for site-specific development proposals using the applicable process of environmental review. The FBC standards will be applied to assist with modernizing bulkheads, adding new waterfront public access, and enhancing existing public access and publicly available spaces. ● The FBC's bulk regulations treatments and architectural standards will be applied to ensure that new building aids placemaking and blends and fits with and appears compatible with general existing form.
Historic & Archaeological Resources	● Development of a City-wide Preservation Plan as a mechanism to catalog historic resources, gaps in protection, ID any added resources to organize to protect, plus ID any more techniques to consider applying for preservation. ● Compliance with FBC §405.26.L for development in a Landmark (L) District, whereby additional planting or visual buffers may be required. ● Future redevelopment or site disturbance will be evaluated using site plan review to define whether an action is subject to SEQRA and investigation is warranted due to potential for impacts to building or archeological resources. This can help identify whether a particular application may warrant a specific level and type of assessment or impact analysis, inclusive of a Phase IA (and possibly a Phase IB) Archaeological Survey, or other review by the City's LPC, and/or a consultation with the New York State Historic Preservation Office ("SHPO"). ● When a historic property or potential historic property is provided written analysis on existing, adjacent, or area historic and cultural resources, this shall be performed by a qualified professional as part of a site-specific review. The analysis should identify and discuss potential resources, areas, and pertinent studies and inventories, as well as standards to use to assist in screening and mitigating potential impacts to historic and pre-historic sites and buffers. ● In Rondout environs west of Broadway by Broadway/ West Strand, proponents should identify how their building fits and is compatible with and enhances established character, which exemplifies the architecture and life of the 19th century. Given history there, regulators can promote the use of bricks (or appearance) and bluestone in development, cast iron and stamped metal to reinforce historic building materials and appearance. ● For any project in the Waterfront Overlay, or LWRP boundary, as part of any development review, there will be review of actions regarding their consistency with LWRP program policy standards and conditions, with a referral to the Urban Cultural Park Commission, at the point of application, in order to elicit comments on the impact of the proposed action on the site or area character. ● Compliance with Waterfront Revitalization Area development guidelines will with be integrated within site-specific environmental review and the attendant waterfront consistency review.

	● Design-based placemaking will be fostered and is a mitigation measure that will prevent negative impacts to arise due to alteration in the scale of building, or the patterns of building and massing that may accompany FBC adoption.
Socioeconomics including Housing	● Given that the FBC increases flexibility to establish many types and sizes of housing units in diverse price ranges, use of the FBC should have positive economic and social impacts
Multimodal Transportation & Parking	● Coordination with jurisdictional agencies including NYSDOT, Ulster County and the City for improvements to transportation infrastructure. ● Compliance with ADA guidelines for developing infrastructure. ● Complete Streets Advisory Council will provide input during the review of waivers that would allow for departures from the Street Design Standards.
Consistency with Community Character	● Make practicable attempts to preserve mature, healthy trees in rights of ways and provide for suitable replacements as needed, with other plantings in alignment with street specifications. ● Provide for compliance with lighting standards in Article 4 Visual impacts mitigated through site plan review and building architecture.
Energy Use, Air Resources & Noise	● City participation in NY Climate Smart Communities Program. ● It is suggested to monitor or estimate VMT in the City. This can analysis of how land use and transportation patterns may change due to the mix and spatial arrangements of building arising under the FBC. It may also assist with calculating City energy expenditures and alignment with NY State goals for greenhouse gas reductions. It may also aid understanding of ways the local noise environment and air quality may change. ● It is recommended to annually report on the level of new building, plus the resulting land use density in each transect and special district in order to aid in understanding of ways the form of the City is changing over time. ● It is advised to annually consider potential for making practicable refinements to the FBC so as to advance more energy efficient and smart patterns of growth.
Community Services & Infrastructure	● Improvements to municipal water and sewer systems will be completed in coordination with local agents, as needed. For the time being, a focus is on assessing the impacts associated with Major Site Plans. ● Absent generic or specific engineering analysis by or acceptable to the City, and provided no other regulatory compliance standard is established that is more restrictive, there should be a limit on granting Certificates of Occupancy for any rehabilitated or new building unless it is determined that there is adequate access available to water and sewer service. This generic limit is established by using a factor of 75% of 6,440 equivalent new housing units for which it is generically estimated under that level there is sewer service capacity available at the WWTF. ● Promote building- and site-level water conservation. ● Provide for modern sewer connections, through a focus on Major Applications. An engineer's assessment of need should be supplied at the site-specific stage which identifies the age and condition of these attributes. ● Going beyond local definition of Land Development in Chapter 353, promote the design and implementation of onsite measures to manage and slow (and in instances detain) stormwater flows in the CSO storm sewer shed, if the City at such point is a regulated CSO.

Consistency with Community Plans	● Require Coastal Assessment Form as part of SEQRA review within the LWRP Boundary. ● Require narratives on how threshold site-specific applications within the LWRP Boundary will comply with applicable coastal policies, with references to and citations on ways the FBC is being consistently applied in a particular case. ● Applications for site-specific development should identify whether there is required compliance with NY State Risk & Resiliency Act to help inform on how potential risks for sea level rise and flooding, as well as mitigation of potential risks, are being treated in a particular case. ● Encourage Pre-submission meetings with City and other agencies. Document these consultations in site-specific applications with recommendations/ outcomes from pre-submission stage coded on permit checklists maintained online that are part of publicly accessible development applications. ● As practicable, promote landscaping designs on properties in BOA Step 3, to aid their appearance and blend development on them with surroundings. ● As part of future FBC performance assessment, it is suggested to undertake routine data collection to aid in monitoring and assessment of the code performance. This could include topics like: o Average times used to review and approve by-right incremental growth. o Qualitative assessments of different development approval types. o Examination of extent there is review and action on waivers. o Flow of applications and relationship to overall level of annual building permits, for new units, and rehabilitated buildings. o Characterize types of public open spaces developed, describing attributes and distribution around City. o Define number of parking spaces provided/ created onsite.

All review items included in the FBC for Site Plan Review and Special Use Permitting and any related City codes shall still be considered within future site-specific reviews. There is a general expectation that smaller-scale, by-right development that rises just above a SEQRA Type II threshold (Type II means an application is generally not subject to SEQRA review), would receive more limited development review, if the application:

- Does not require waivers, or variances;
- Is proposed outside a Special Requirement Area; and
- Is situated in a T5 or T4, which are general areas which are identified as particularly well-equipped locations with potential to receive and integrate new growth based on the general level of infrastructure typically evident in those Transects.

At the site-specific stage of development, correctly completed Long or Full Environmental Assessment Forms will be required as a typical method for presenting data on the environmental features of a proposed application. Reviewing agents and bodies would rely on and use these and the data and descriptions within them in considering the potential effects of proposed new growth on the area environment. The specific requests for dimensions or aspects of analysis may vary by location, and according to the particular types and attributes of a land use application. Yet, generally, a Full EAF will be constitute the document that will be utilized rather than a Short Environmental Assessment Form. Moreover, for non-Type II SEQRA actions within the LWRP Boundary (within the Waterfront Revitalization Area) these will be required to develop and submit a completed Coastal Assessment Form.

There may also be, depending on an application's characteristics, requests for completion of visual assessment analysis, using a SEQRA Visual Assessment Form, such as when there is a proposal structure that is five (5) or more stories, as permissible within T4 and T5 Transect Zones. Using the Visual Assessment Form as a starting point, it can be reasonable for a lead or involved agency to request additional sub-area, locational, or existing or proposed site development analytical analysis that can aid in assessment or analysis, of the potential for impacts of new proposed building on the form, character, appearance and positioning and arrangement of the buildings and structures and other appurtenant features as part of integrating and blending new development with existing context.

Finally, the above consideration of impacts and procedural and analytical guidance are all oriented to minimize the potential of undesirable effects from new city scale growth that otherwise may benefit the community and the region. Applicants should consult the NYSDEC EAF Mapper and source information available in the City as part of an effort to provide clear and well sourced data and descriptions in environmental documentation as part of site-specific development applications. Applicants should pay particular attention to describe the features of potential hazards, such as the dynamics of natural risks, like from flood or sea level rise, in order to aid in facilitating new growth that is sustainable as well as resilient to future hazards that may arise.