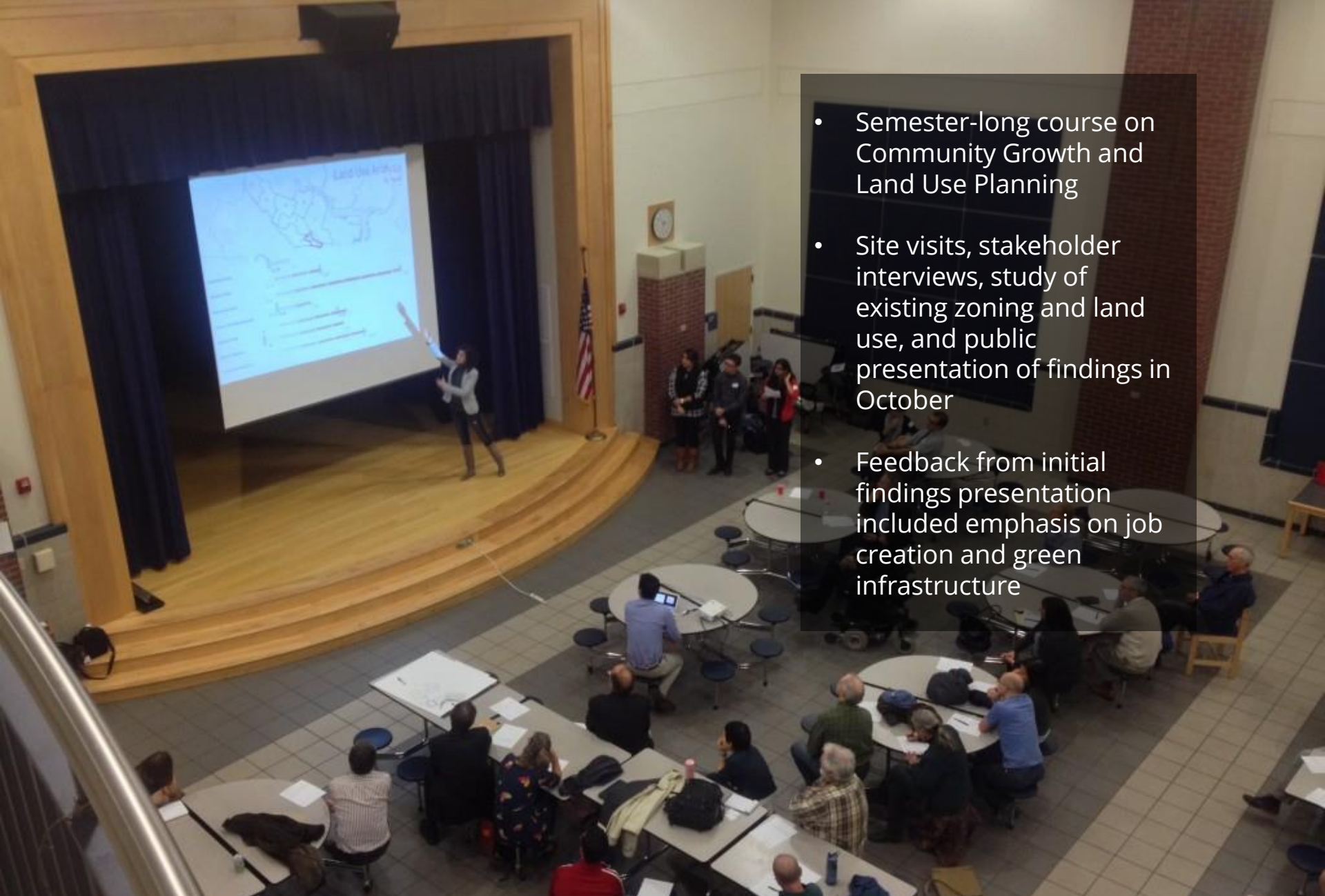


# A VISION AND PLAN FOR THE UNION SQUARE GATEWAY

MIT//DUSP 11.360: Community Growth and Land Use Planning







- Semester-long course on Community Growth and Land Use Planning
- Site visits, stakeholder interviews, study of existing zoning and land use, and public presentation of findings in October
- Feedback from initial findings presentation included emphasis on job creation and green infrastructure

# Our Process



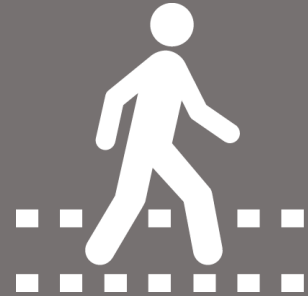
# Summary of Initial Findings



INCREASE DIVERSITY  
AND DENSITY OF  
JOBS



IMPLEMENT OPEN  
SPACE AS GREEN  
INFRASTRUCTURE



PROMOTE  
CONNECTIVITY  
ACROSS TRACKS



SUPPORT ADAPTIVE  
REUSE OF EXISTING  
STRUCTURES



MAINTAIN  
HOUSING  
AFFORDABILITY



CREATE  
DESTINATION  
ATTRACTIVE

# Overall Goals





**THE COMMUNITY CENTER**

**THE GREEN GATEWAY**

**THE CENTRAL GATEWAY**

**NEW INDUSTRY**

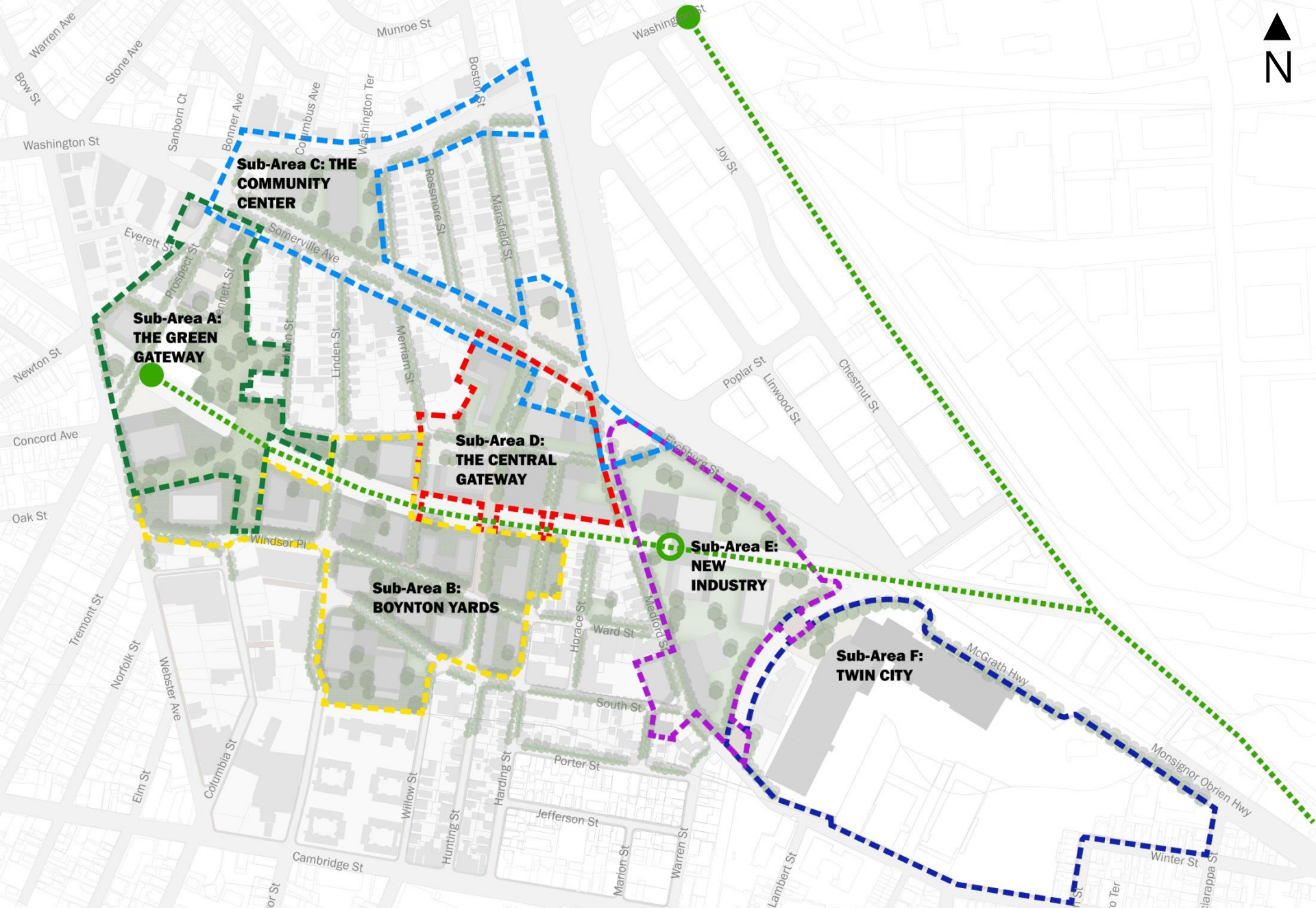
**BOYNTON YARDS**

**TWIN CITY**

# Proposed Site Plan

500' 0' 250'





# Proposed Sub-Areas





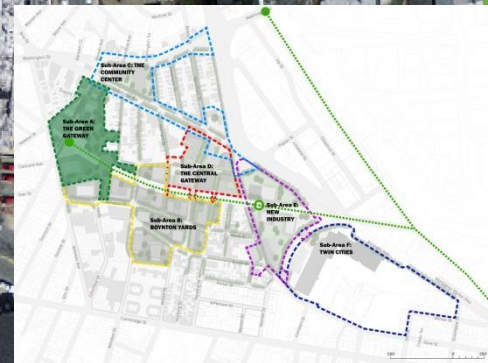
SUB-AREA A:

# THE GREEN GATEWAY



# THE GREEN GATEWAY

NEW GREEN LINE STATION





# THE GREEN GATEWAY

NEW GREEN LINE STATION

RECREATION SPACE

PUBLIC ART

POND

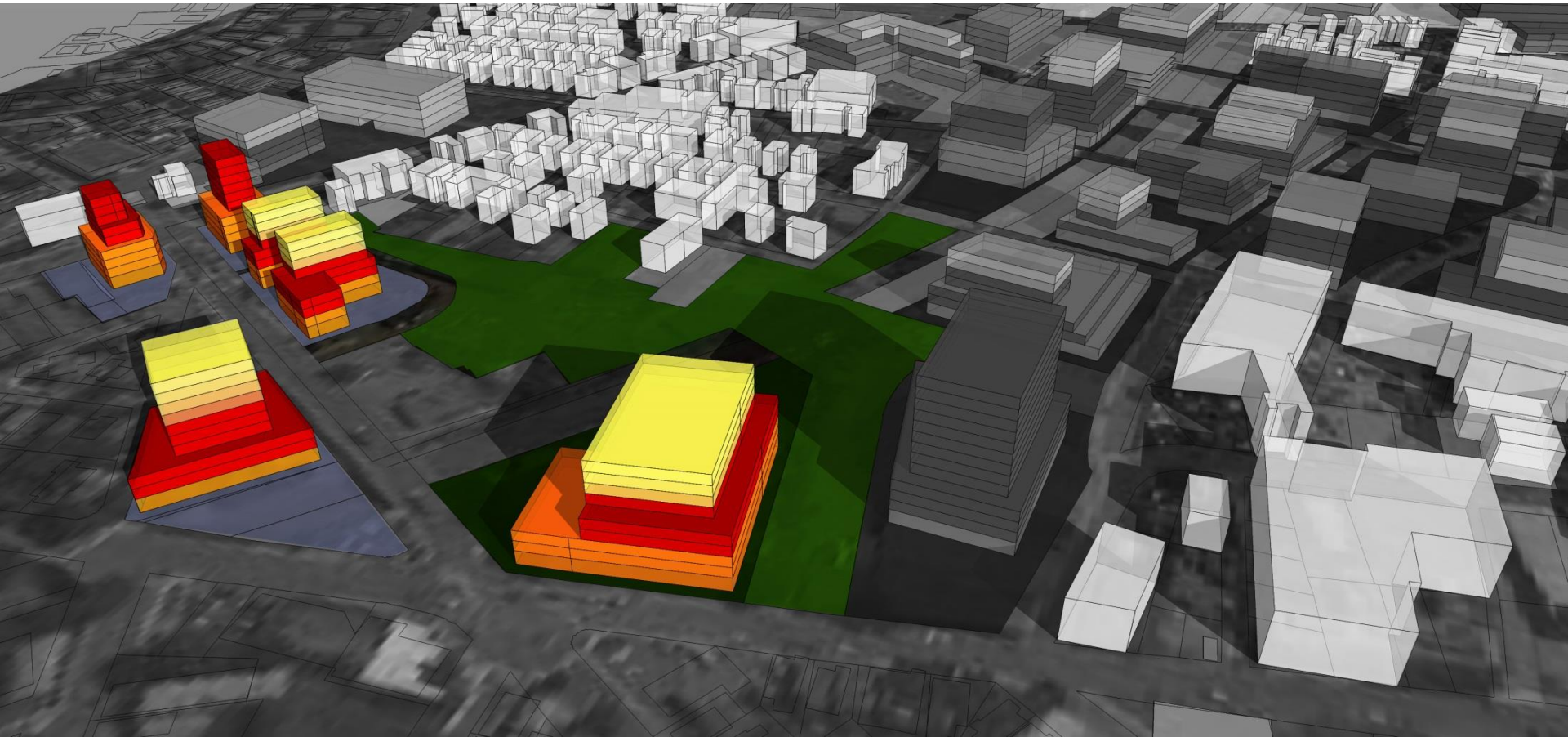
DOG PARK

FITCHBURG RAIL LINE





RESIDENTIAL  
MIXED USE – COMMERCIAL AND RETAIL AND RECREATION  
COMMERCIAL  
GREEN SPACE



The Green Gateway DEVELOPMENT MODEL





## KEY FEATURES

- Stormwater is collected via an underground pipe around the parks circumference
- Cut and fill process creates ponds and mounds, which filter stormwater and create diverse micro-ecosystems
- Multi-level boardwalks allow visitors different, distinct experiences

Photo: Turensapes

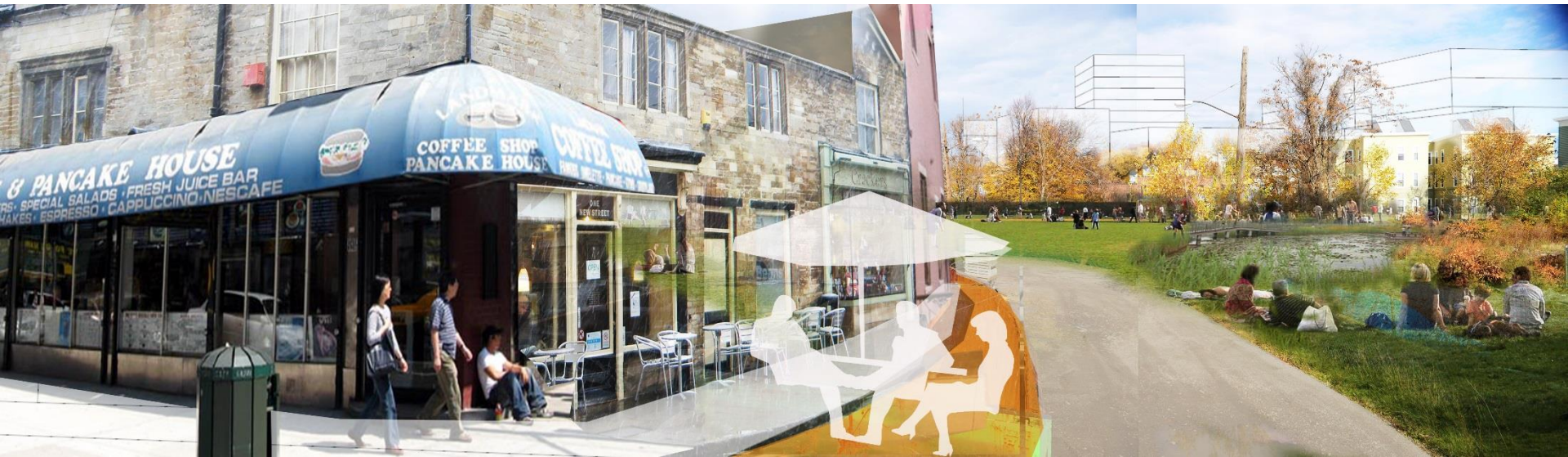
# Case Study: Qunli Stormwater Park





The Green Gateway BEFORE





# The Green Gateway AFTER



## KEY FEATURES

- Park serves dual function as open space and green infrastructure
- Greets passengers exiting train with friendly Somerville vibe
- Buffers residential community from busy station
- Prospect becomes activated extension of Union Square





SUB-AREA B:

# BOYNTON YARDS



# BOYNTON YARDS





# BOYNTON YARDS

Windsor St

PARKING FACILITY

FITCHBURG RAIL LINE

TAZA CHOCOLATE FACTORY

PLANNED UNIT DEVELOPMENT

ROOFTOP GARDENS

Windsor Pl

South St

Earle St

Harding St

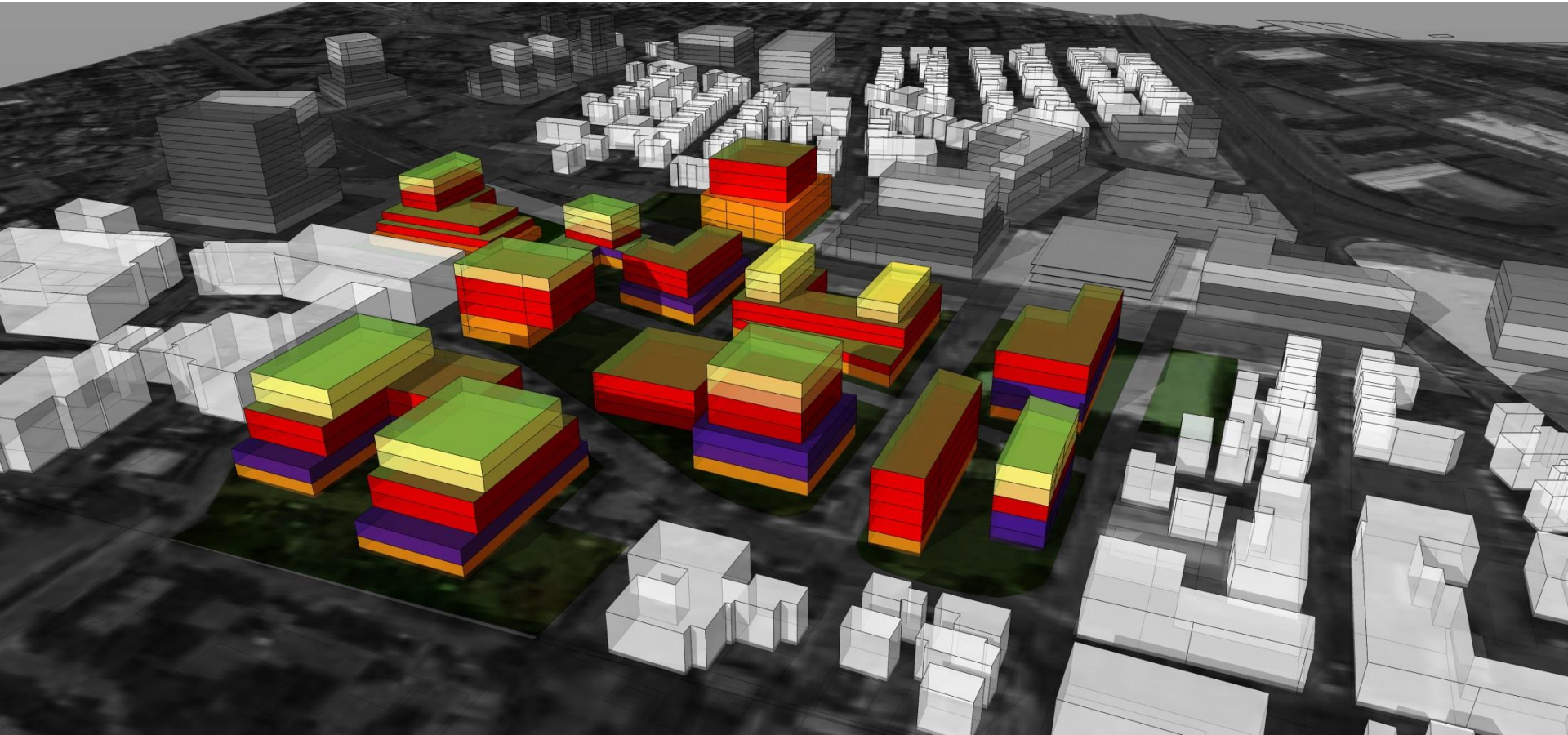
Horace St

PLANNED UNIT DEVELOPMENT





RESIDENTIAL  
MIXED USE – COMMERCIAL AND RETAIL AND RECREATION  
COMMERCIAL  
LIGHT INDUSTRIAL



Boynton Yards DEVELOPMENT MODEL



## *KEY FEATURES*

- Light industry
- More flexible commercial space
- Life-work space for artists and makers
- Affordable office space for new small businesses
- Urban agriculture



**Case Study: Montreal, Quebec**





JamSpot.com  
**JAMSPOT**  
Music Studios

NO PARKING  
ANY TIME

# Boynton Yards BEFORE





# Boynton Yards AFTER





## KEY FEATURES

- Stepping up heights from Union Square
- Industrial-style buildings to serve new businesses, live-work space, light industry
- Urban agriculture district to provide interim activity on vacant sites

Boynton Yards AFTER





# Green Gateway & Boynton Yards EXISTING





Rooftop Garden

Neighborhood Recreation

Pond

Art Bridge

Community Garden

Walk Path

New Green Line Station

# Green Gateway & Boynton Yards PROPOSED

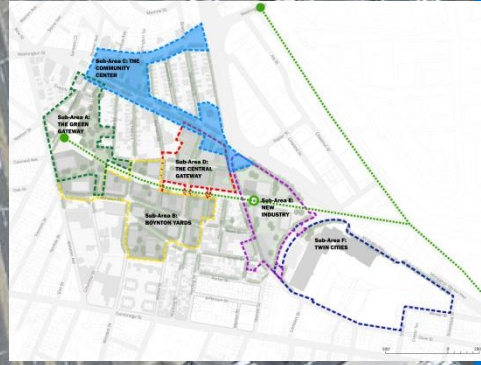


SUB-AREA C:

# THE COMMUNITY CENTER



# THE COMMUNITY CENTER





# THE COMMUNITY CENTER



COMMUNITY CENTER  
(w/GREEN ROOF)

COMMUNITY  
ART/SCULPTURE  
GARDEN

OUTDOOR  
PUBLIC PLAZA  
(w/PUBLIC ART)

WASHINGTON ST

MC GRATH HWY

SOMERVILLE AVE

PROSPECT ST

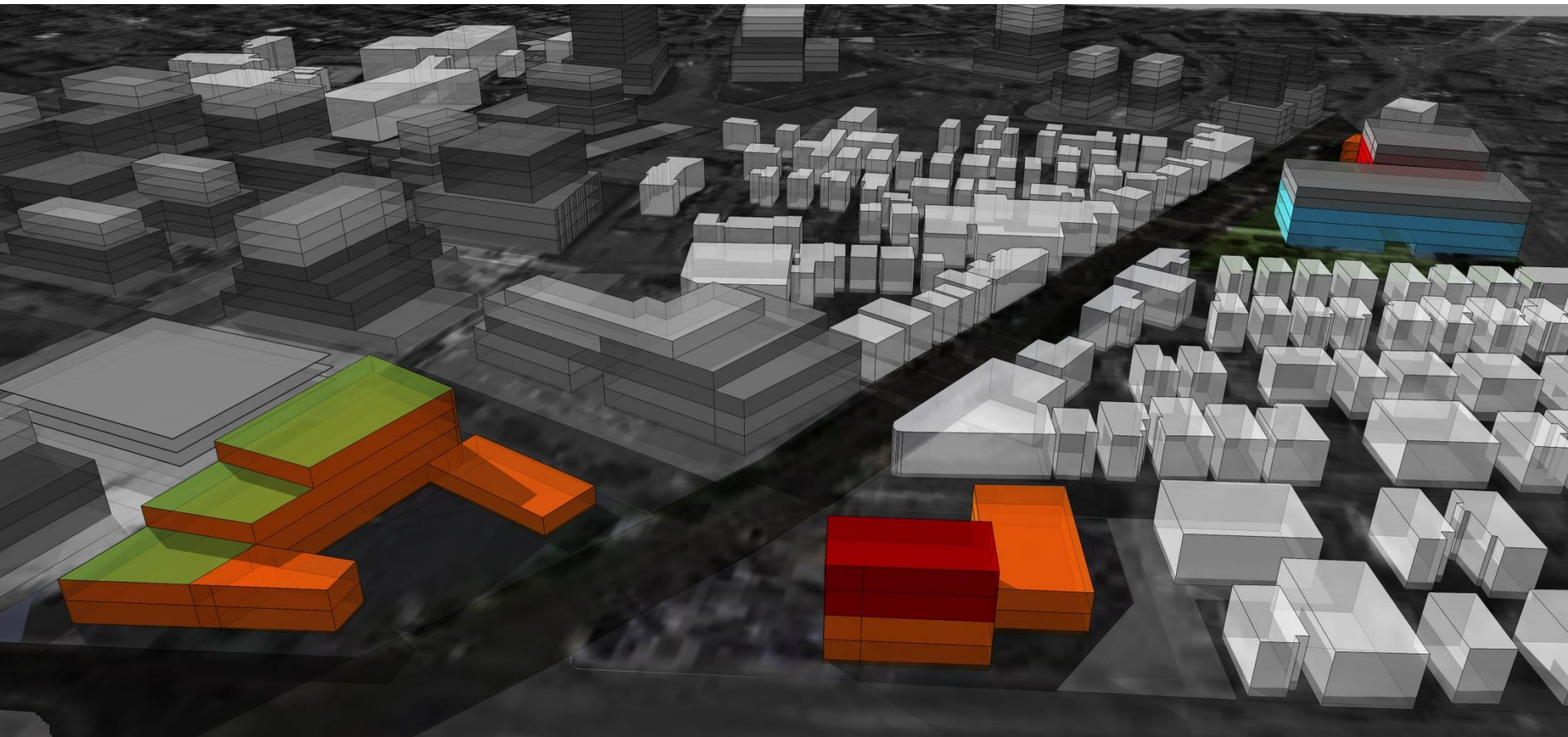
STREETSCAPING

STREETSCAPING





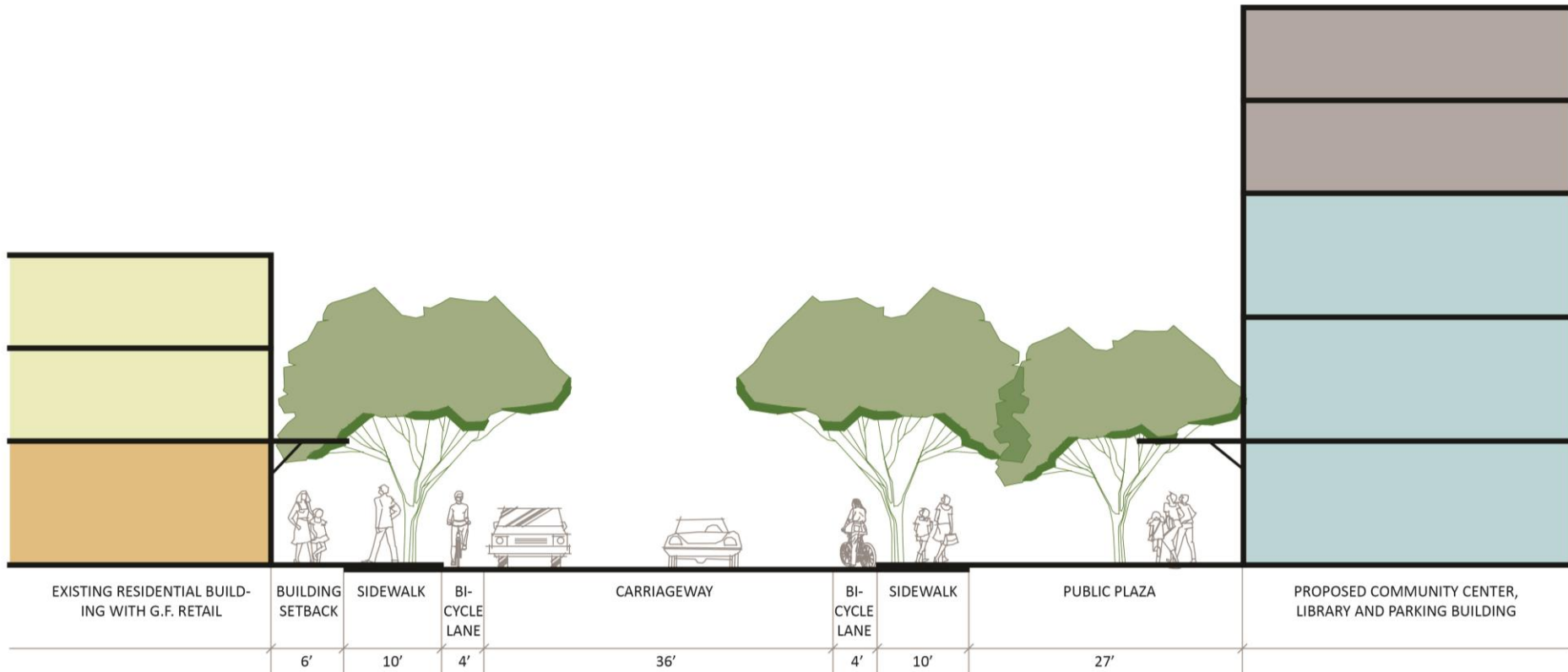
RESIDENTIAL  
MIXED USE – COMMERCIAL AND RETAIL AND RECREATION  
COMMERCIAL  
GREEN SPACE  
INSTITUTIONAL



# The Community Center

DEVELOPMENT MODEL





# The Community Center

SOMERVILLE AVE STREET SECTION





# The Community Center BEFORE





# The Community Center AFTER



## KEY FEATURES

- Replace public safety building with a more public use
- Make Washington and Somerville Ave more like 'Main Streets' with small businesses
- De-elevation of McGrath highway; widen pedestrian sidewalks; bike lanes



The Community Center AFTER

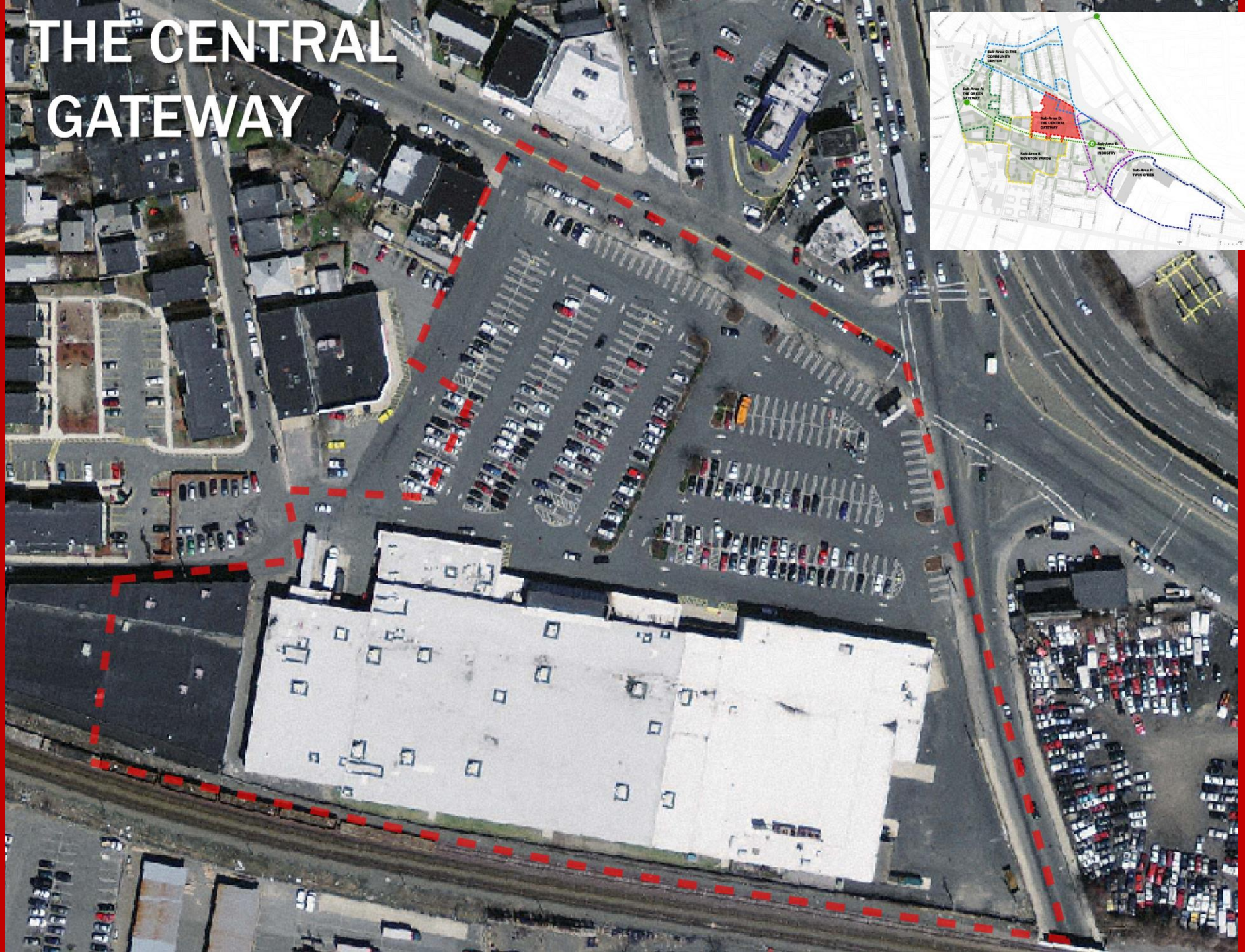
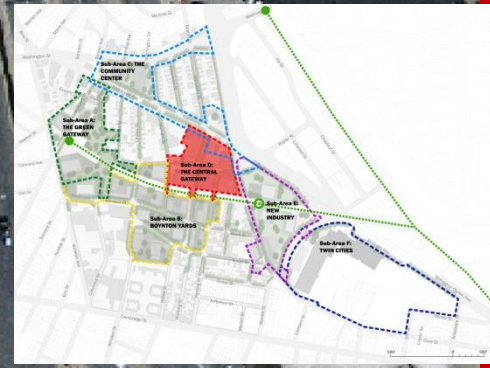


SUB-AREA D:

# THE CENTRAL GATEWAY



# THE CENTRAL GATEWAY





# THE CENTRAL GATEWAY



Merriam St

Somerville Ave

Malloy Ct

Charlestown St

Merriam Ave

DOG PARK

NEW ACCESS STREET

FITCHBURG RAIL LINE

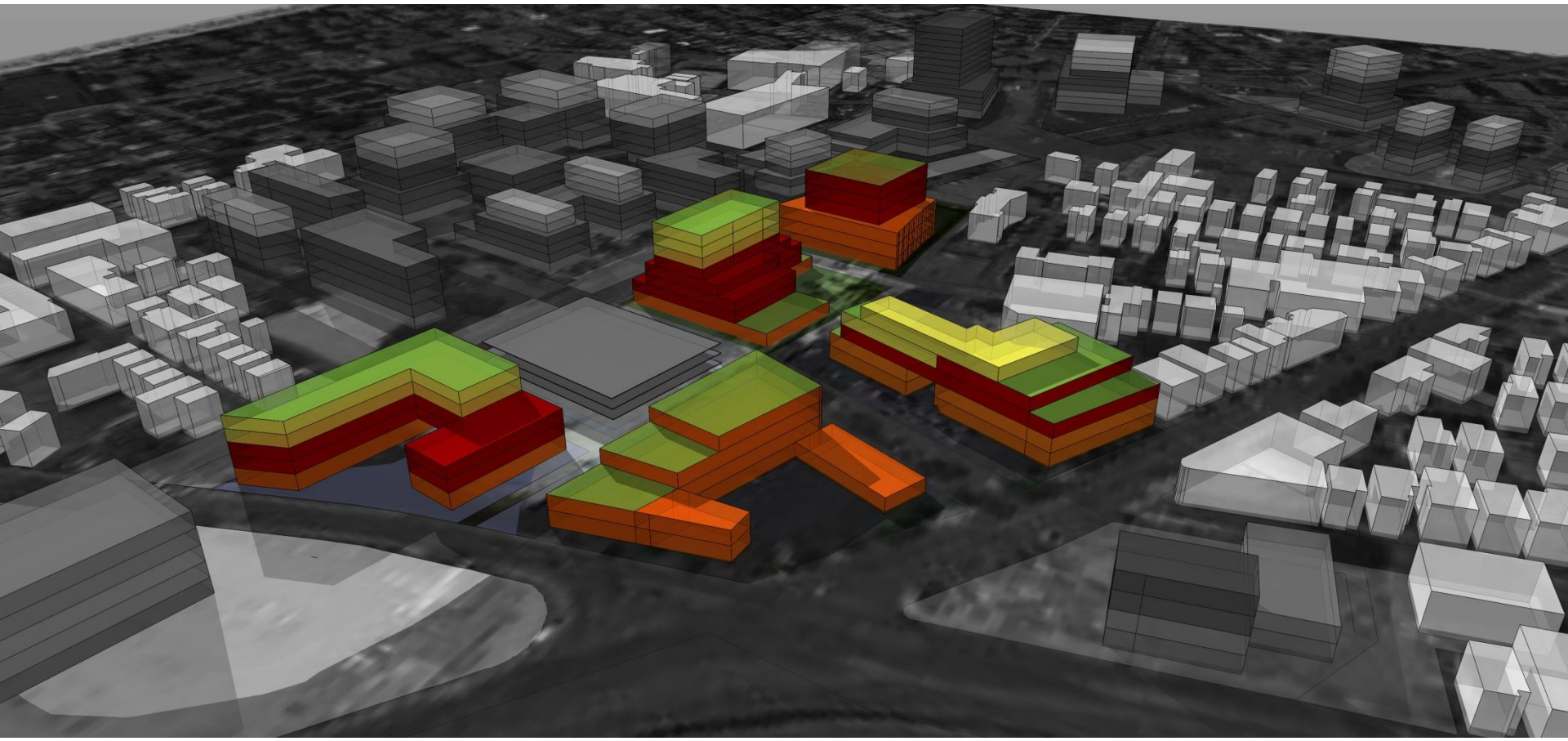
PEDESTRIAN WALKWAYS

STREET CROSSING

OUTDOOR PLAZA SPACE



RESIDENTIAL  
MIXED USE – COMMERCIAL AND RETAIL AND RECREATION  
COMMERCIAL  
GREEN SPACE



# The Central Gateway DEVELOPMENT MODEL



## *KEY FEATURES*

- Multi-story on smaller sized parcel
- Varied facade to mimic nearby buildings
- Human-scale layout which accommodates a pedestrian focus



Photo: Elliot Contracting Company

# Case Study: Nicollet Mall, Minneapolis





# The Central Gateway BEFORE





# The Central Gateway AFTER



## KEY FEATURES

- Extend road grid across tracks, breaking up Target parcel
- Target onto one parcel and taller building
- Turn portion of Target parking lot into public plaza
- Provide district-serving parking garage
- Some additional build-out on Somerville Ave



The Central Gateway AFTER

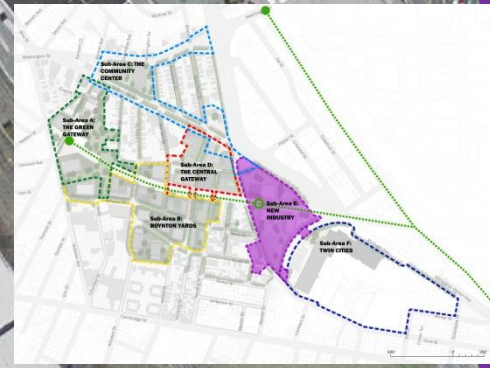


SUB-AREA E:

**NEW INDUSTRY**



# NEW INDUSTRY





# NEW INDUSTRY

OUTDOOR PUBLIC PLAZA (w/PUBLIC ART)

HIGH-RISE BLDGS (w/GREEN ROOF)

OUTDOOR PUBLIC PLAZA

PEDESTRIAN CONNECTION

HARDING ST

WARD ST

SOUTH ST

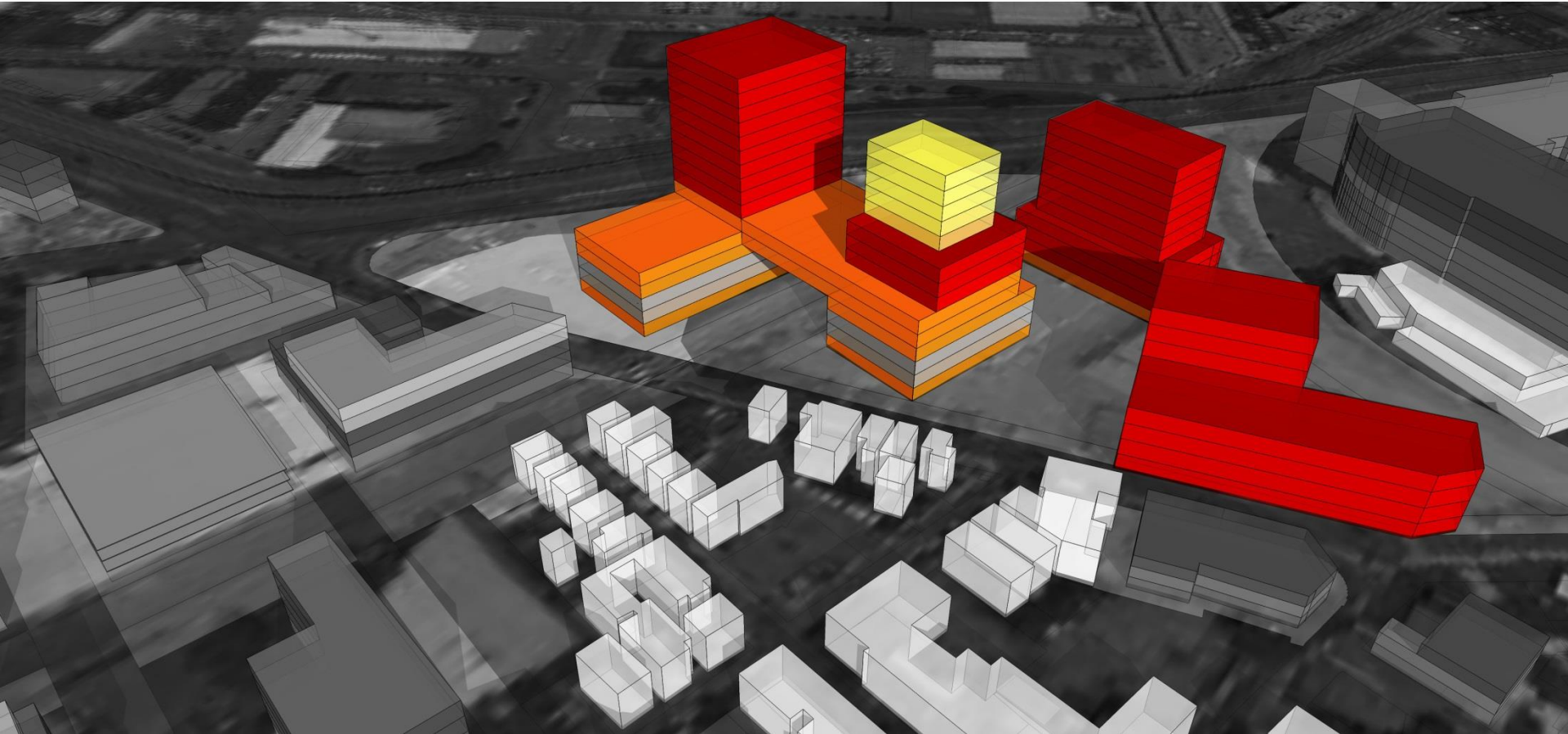
MEDFORD ST

MC GRATH HWY





RESIDENTIAL  
MIXED USE – COMMERCIAL AND RETAIL AND RECREATION  
COMMERCIAL  
GREEN SPACE  
LIGHT INDUSTRIAL

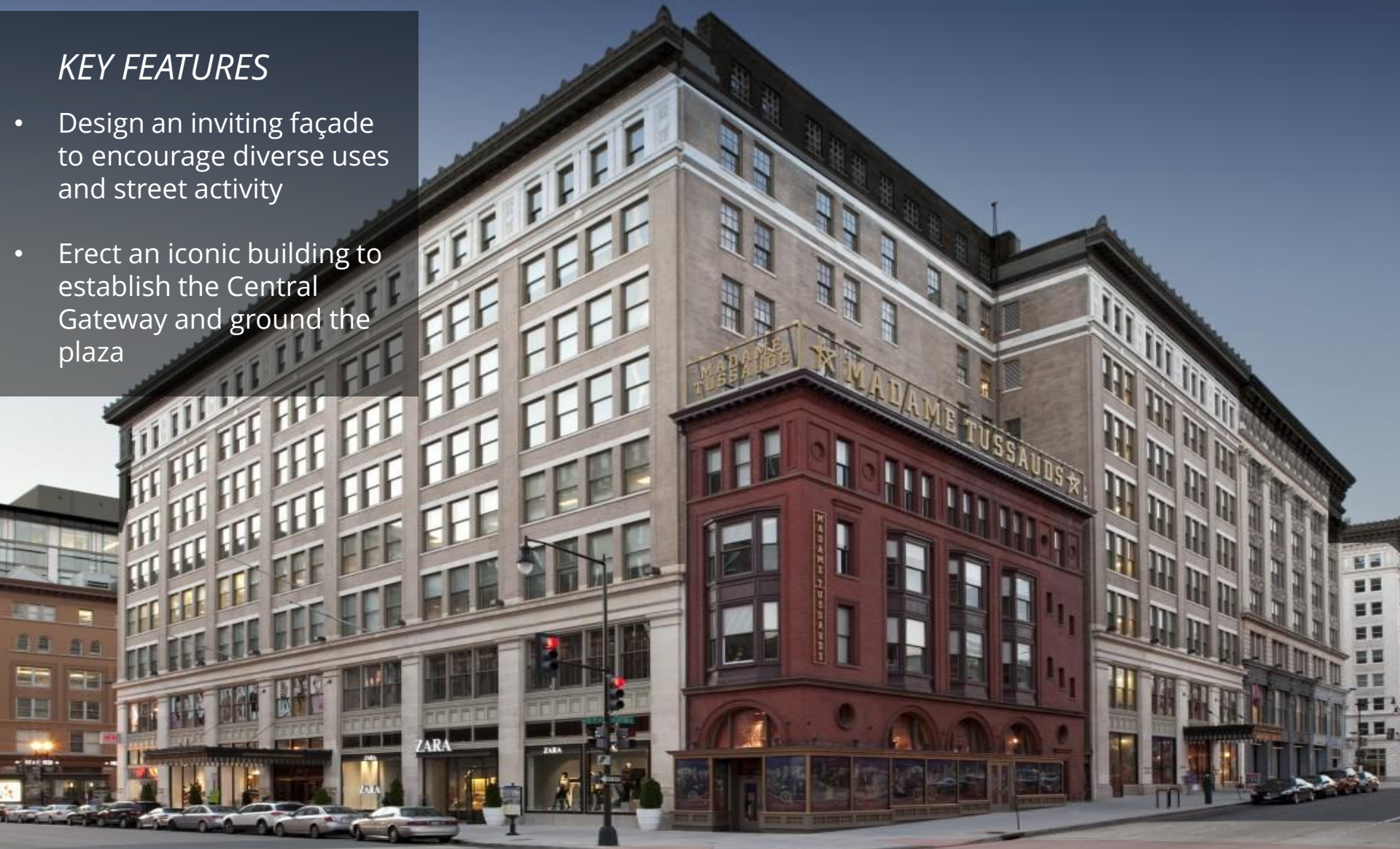


**New Industry** DEVELOPMENT MODEL



## KEY FEATURES

- Design an inviting façade to encourage diverse uses and street activity
- Erect an iconic building to establish the Central Gateway and ground the plaza



# Case Study: Woodies Building, DC



## KEY FEATURES

- Repurposing of old industrial architecture
- Building new developments in congruent styles
- Welcoming diverse uses like offices, housing, retail, entertainment and light manufacturing



# Case Study: Adaptive Re-use



## *KEY FEATURES*

- Encourage small-scale light manufacturing

**Case Study: Urban Manufacturing Jobs**





Case Study: New Uses for Old Buildings





New Industry BEFORE





# New Industry AFTER



## KEY FEATURES

- Pat's Tow site as signature architecture
- Good site for big business and nightlife attractions
- Possible T-Stop
- New building spanning across railroad tracks to Planet Storage side
- Preserve 35 Medford and Planet Storage building



New Industry AFTER

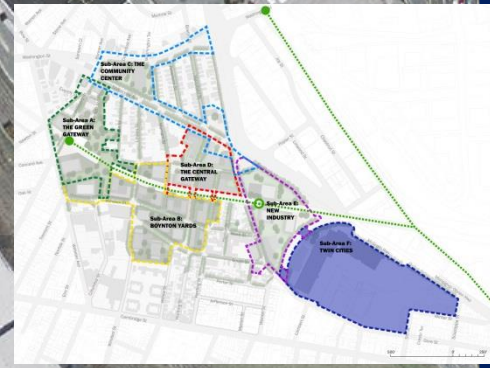


SUB-AREA F:

**TWIN CITY**



# TWIN CITY



WARD ST

MC GRATH HWY

HARDING ST

SOUTH ST

MEDFORD ST





# TWIN CITY

HARDING ST

WARD ST

SOUTH ST

MEDFORD ST

OUTDOOR PUBLIC PLAZA

PEDESTRIAN CONNECTION

GREEN ROOF (w/ART)

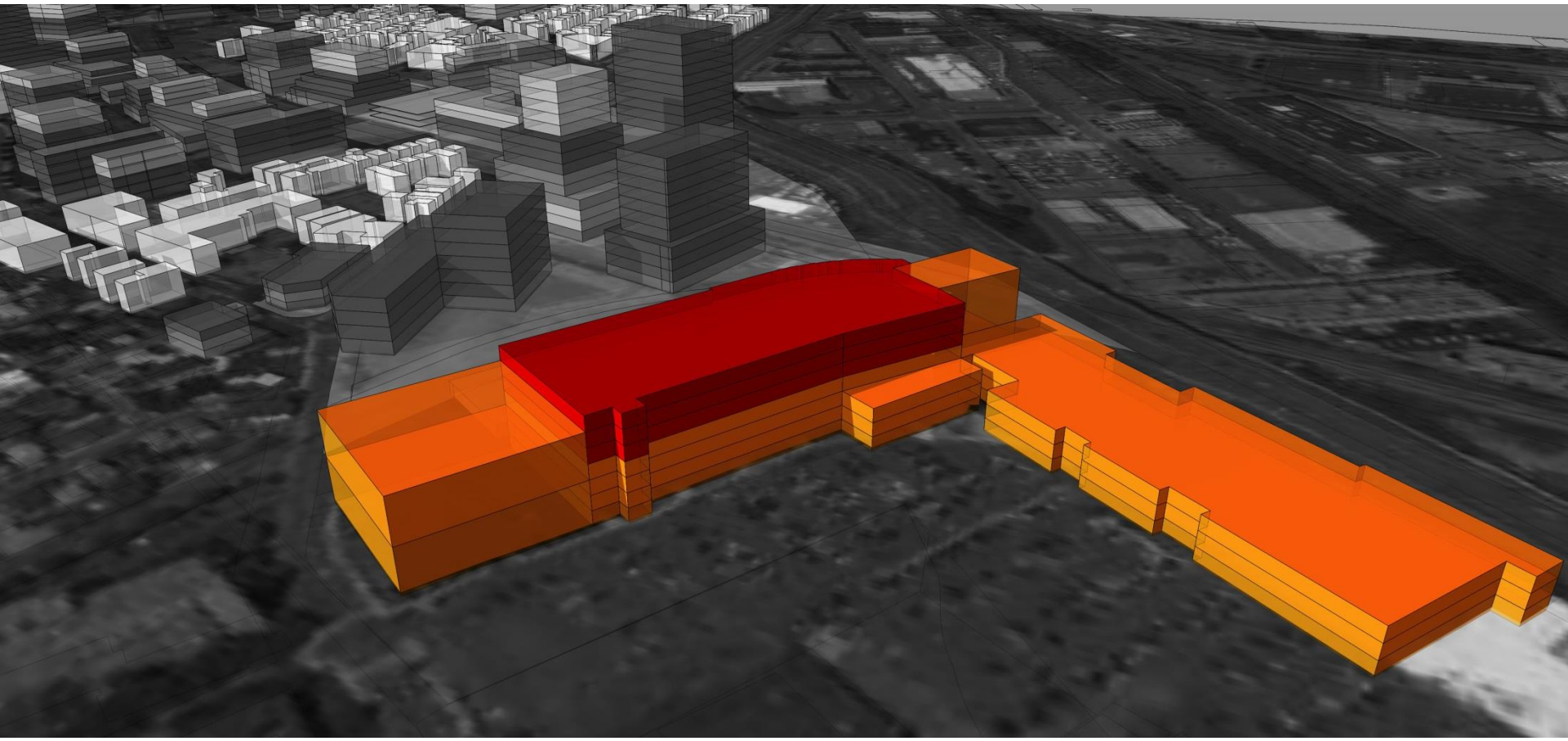
PARKING GARAGE

MC GRATH HWY





MIXED USE – COMMERCIAL AND RETAIL AND RECREATION  
COMMERCIAL  
GREEN SPACE





## KEY FEATURES

- New construction with classic, human scale appeal



Case Study: The Greene, Dayton, OH



## KEY FEATURES

- Modern, functional design for a dense mix of retail and commercial



# Case Study: Seattle, WA





Twin City BEFORE





Twin City AFTER



## KEY FEATURES

- Face businesses to Medford Ave
- Good site for new residential
- Eventually consolidate west wing on top of east wing
- Create parking garage to reduce surface parking
- Extend buildings to meet McGrath highway, creating McGrath streetscape



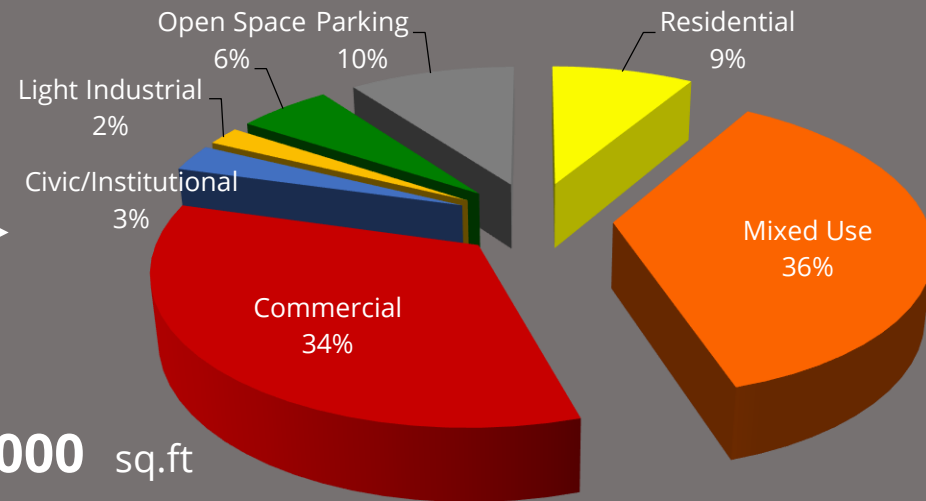
## SomerVision Comprehensive Plan

<b>2,775</b> new Jobs	=	<b>975,000</b> sq.ft
<b>550</b> new housing units	=	<b>602,500</b> sq.ft
<b>total</b>	=	<b>1,577,500</b> sq.ft

## Union Square Gateway Plan

additional sq ft

**3,710,000** sq. ft



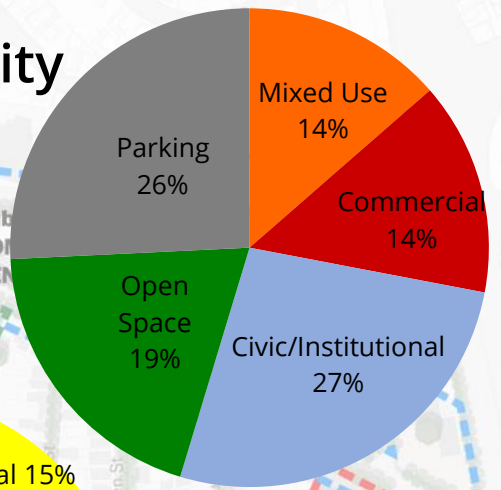
<b>7,700</b> new Jobs	=	<b>2,700,000</b> sq.ft
<b>300</b> new housing units	=	<b>320,000</b> sq.ft
<b>total</b>	=	<b>3,020,000</b> sq.ft

# The Numbers: Build-out Analysis

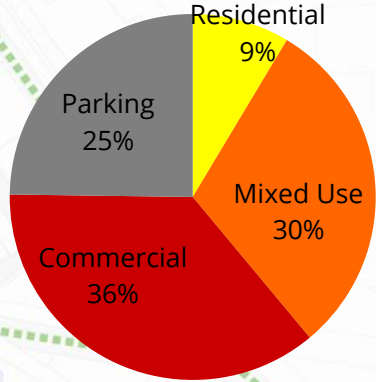
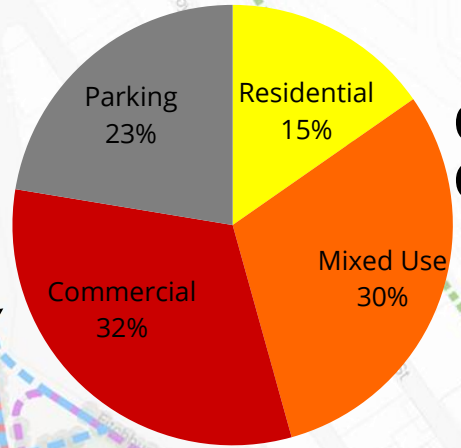


# Land Use Mix

## Community Center

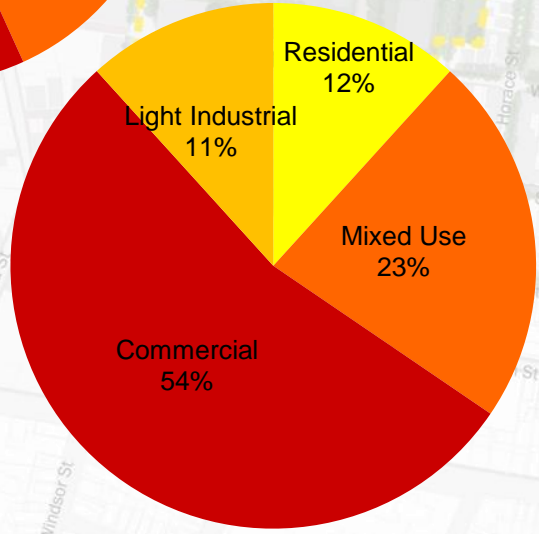
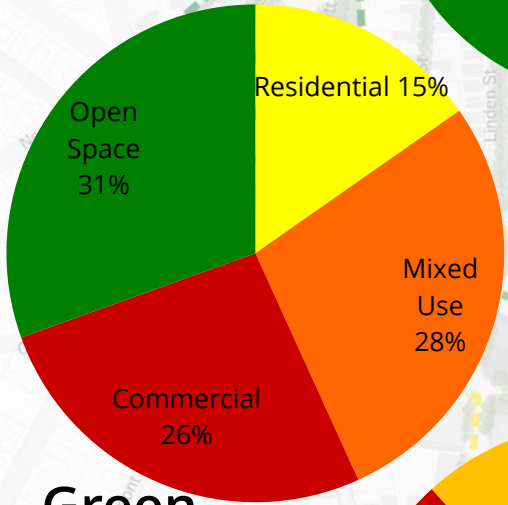


## Central Gateway

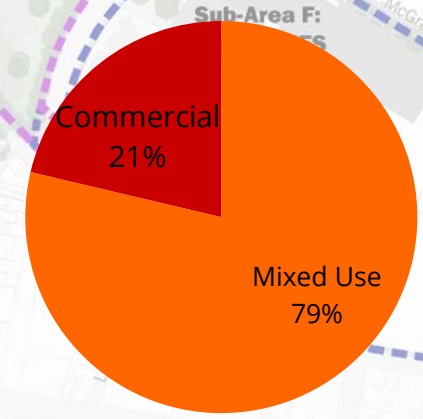


## New Industry

## Green Gateway



## Boynton Yards



## Twin City Plaza

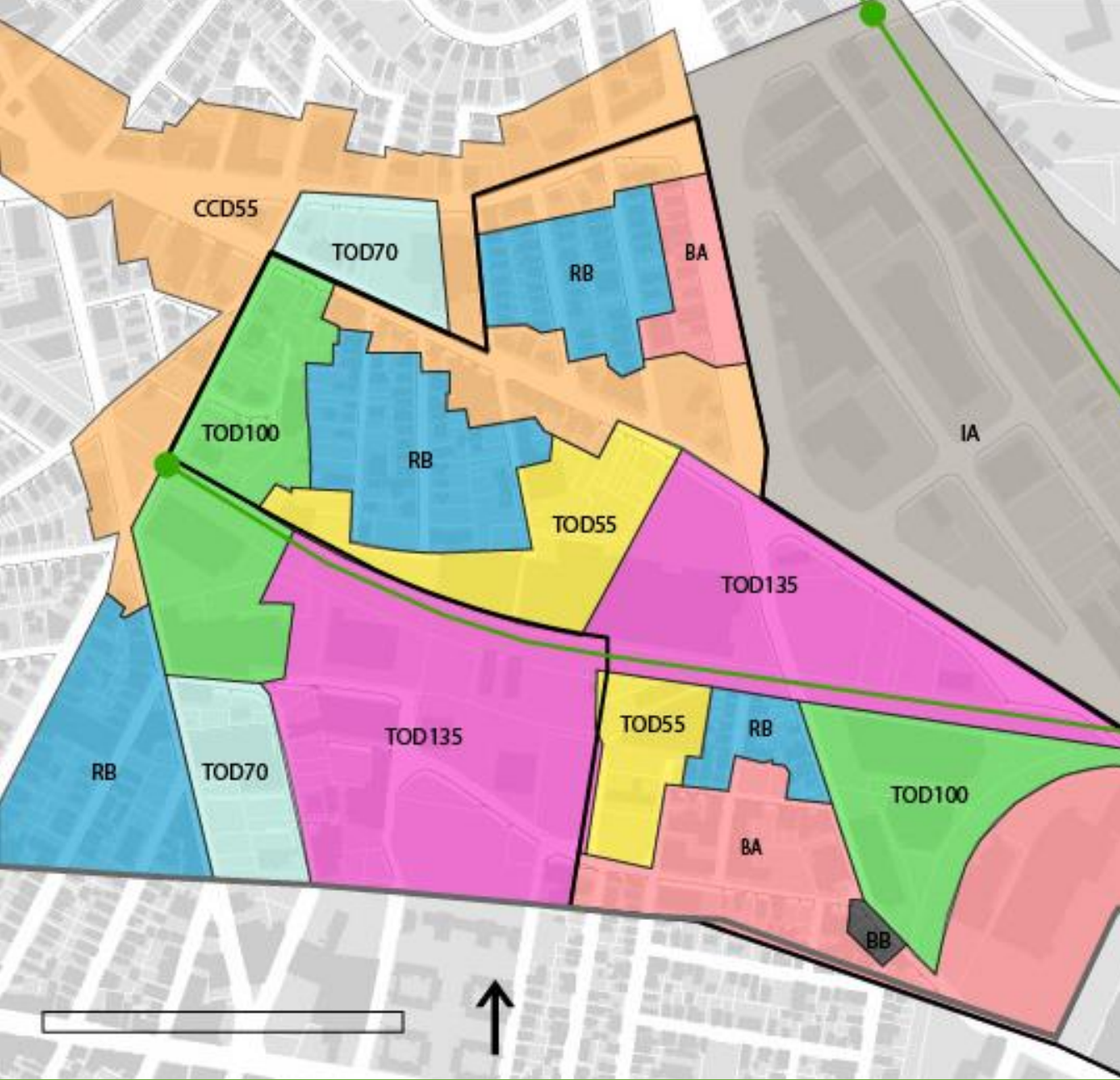
Sub-Area D:  
THE CENTRAL  
GATEWAY

Sub-Area E:  
NEW  
INDUSTRY

Sub-Area F:  
PLAZA



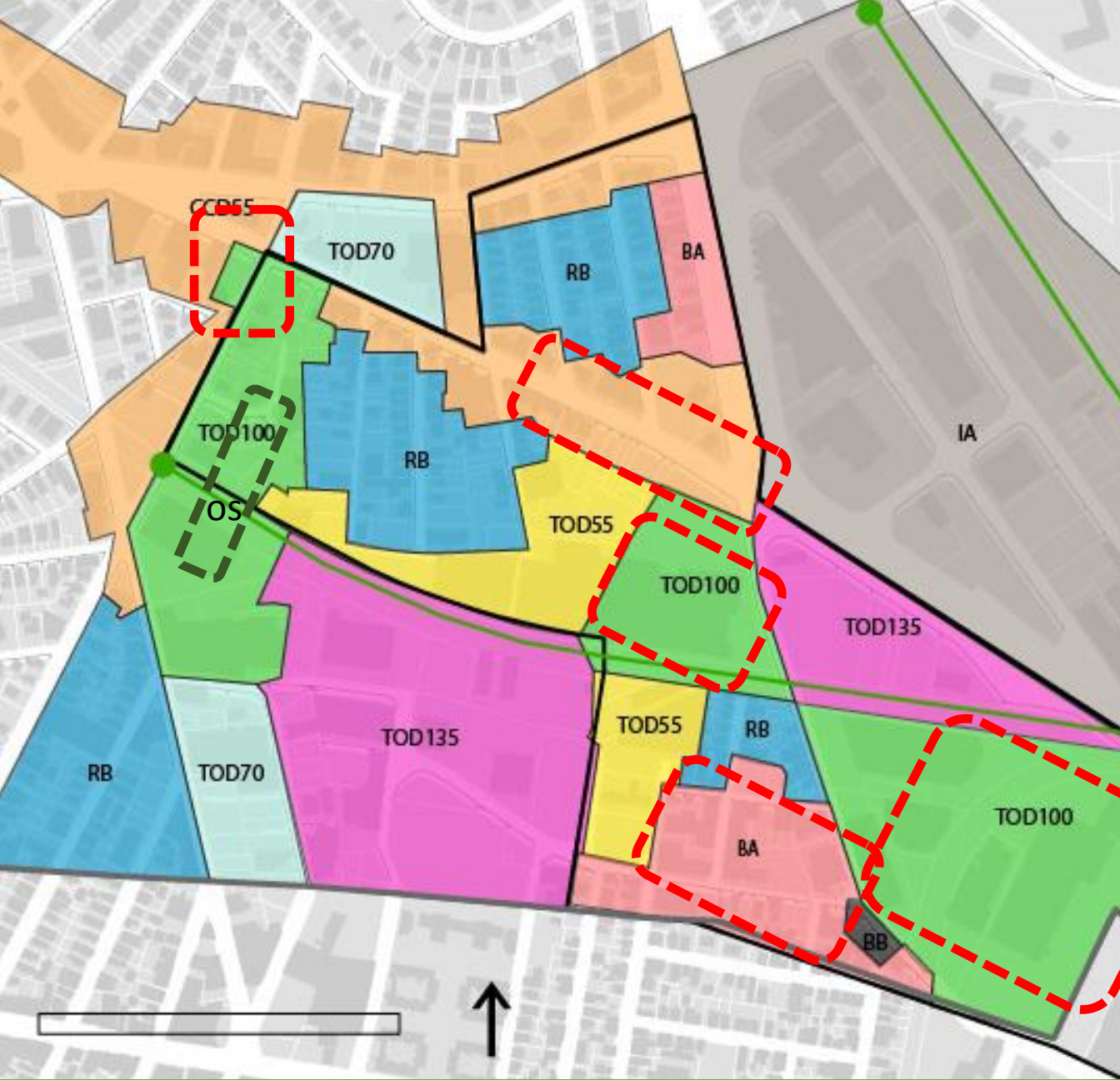




- Zoning reinforces perception of compartmentalized residential, commercial, and industrial pockets
- What are the implication of TOD zoning; how can it be harnessed to support vision?
- What are current limitations of existing zoning within the study area?

# Existing Zoning



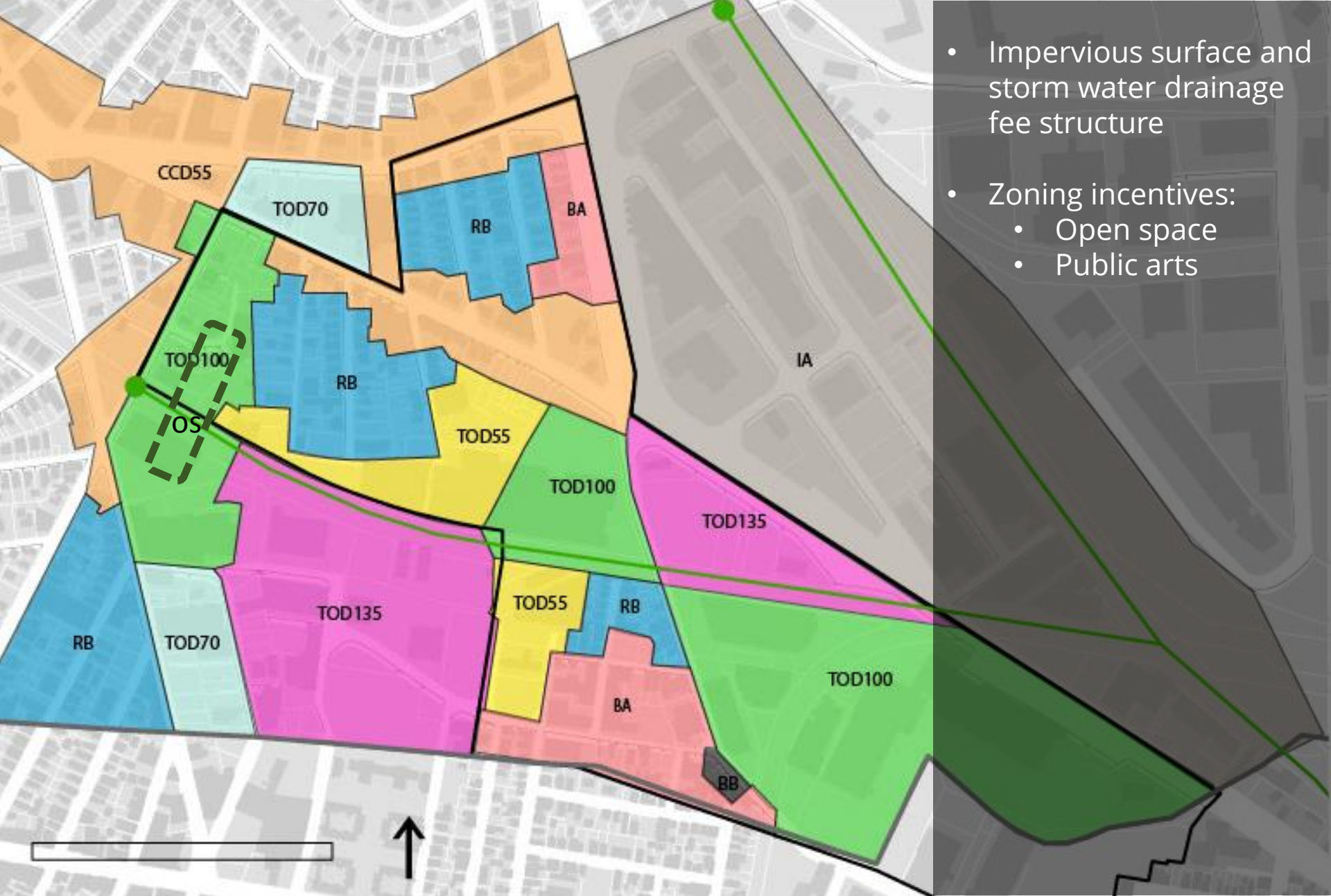


### Key Zoning Changes:

- TOD100 to extend across Prospect Street at intersection with Somerville Avenue
- Extension of CCD along Somerville Avenue
- TOD135 reduced to TOD100 within The Gateway to allow for graduated density scale-up
- Twin City to be rezoned from BA to TOD 100
- Revisit BA and BB zoning guidelines

**Proposed Zoning**

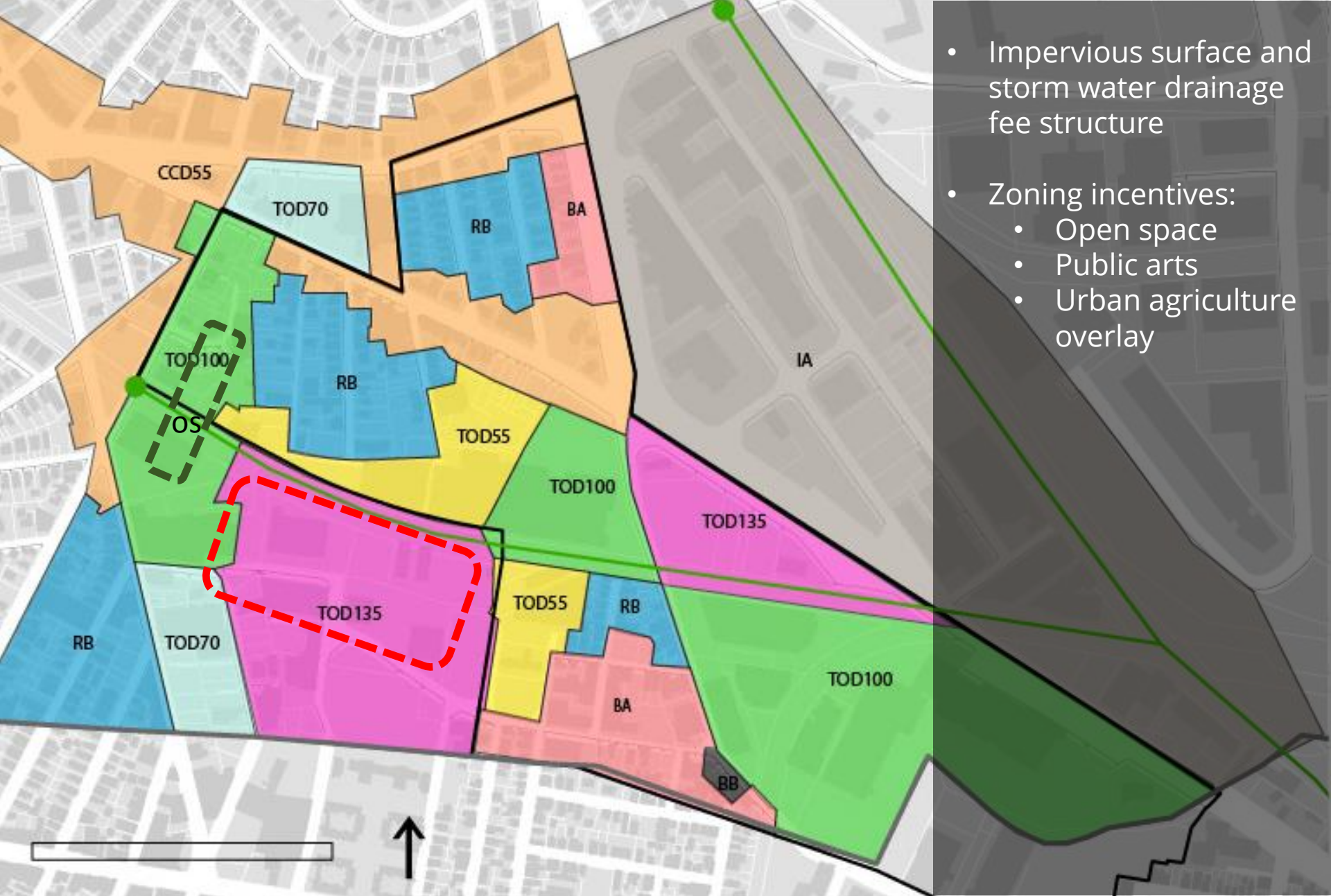




- Impervious surface and storm water drainage fee structure
- Zoning incentives:
  - Open space
  - Public arts

# Incentive and Implementation Tools

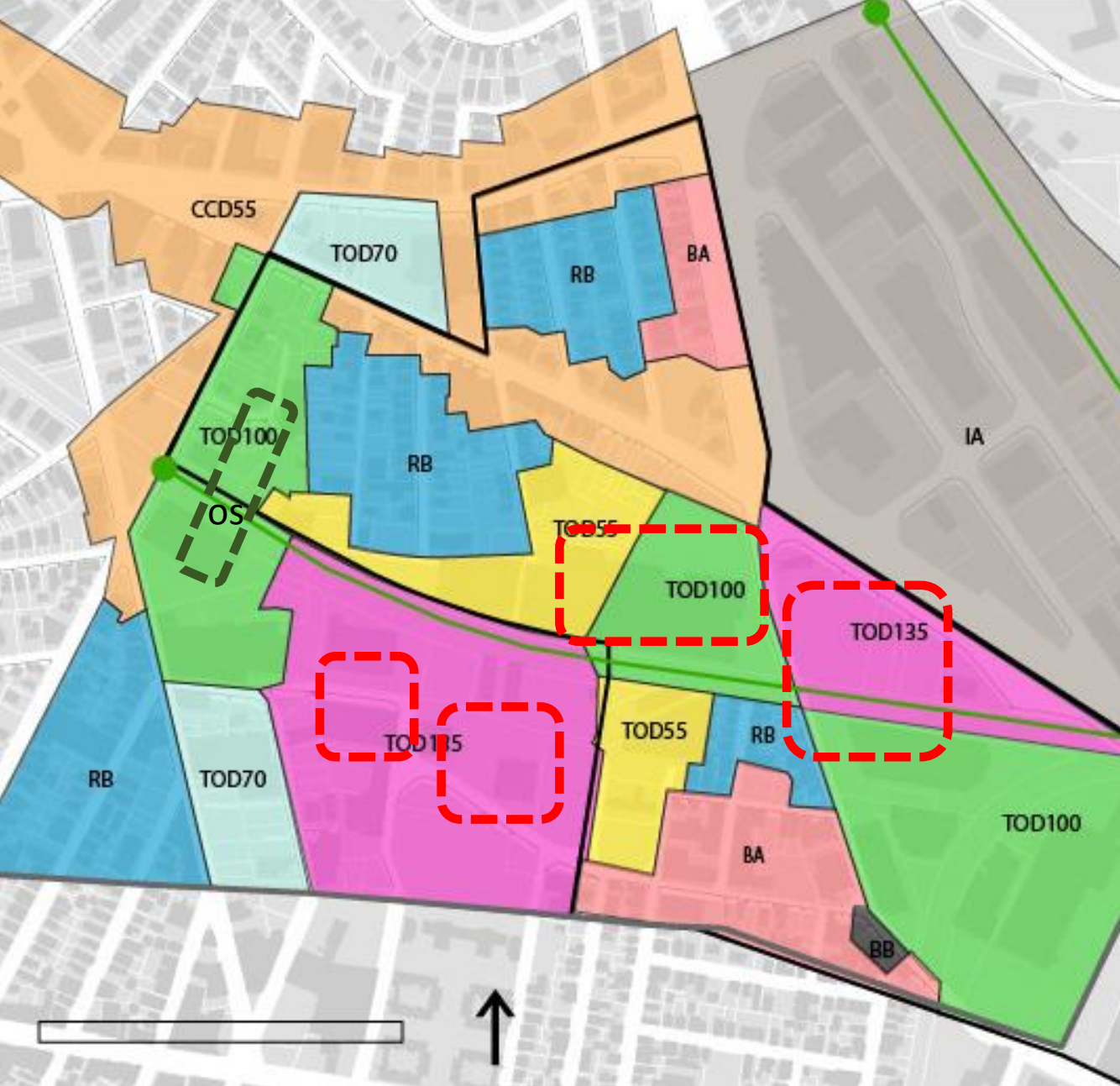




- Impervious surface and storm water drainage fee structure
- Zoning incentives:
  - Open space
  - Public arts
  - Urban agriculture overlay

# Incentive and Implementation Tools

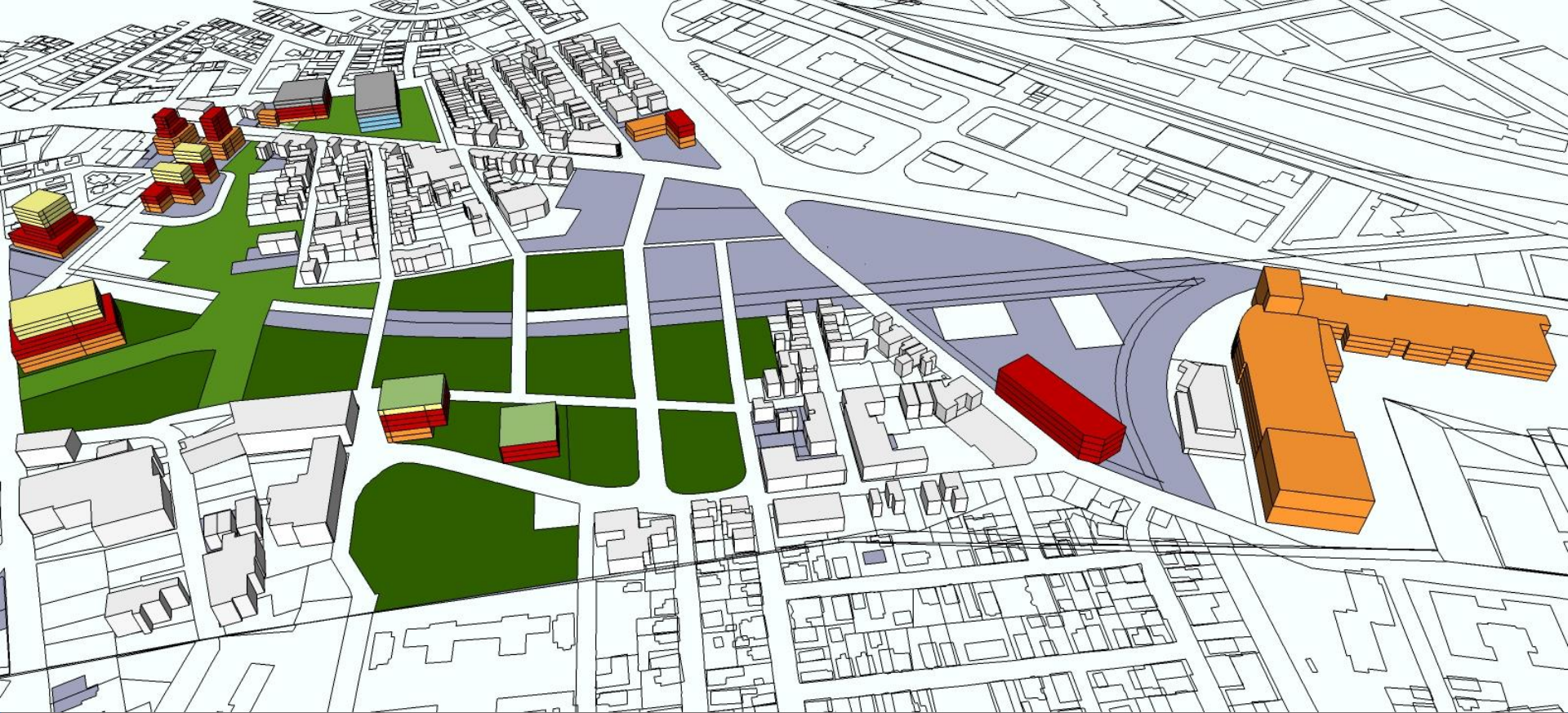




- Impervious surface and storm water drainage fee structure
- Zoning incentives:
  - Open space
  - Public arts
  - Urban Agriculture
- Proposed parcels can be grouped and developed as part of planned unit developments districts (e.g. Boynton Yards, The Gateway, New Industry)

# Incentive and Implementation Tools





- Focused infrastructure interventions
- Street grid improvements within Boynton Yards and Central Gateway sub-area
- Redevelopment concentrated within Green Gateway and Community Center sub-area
- Essential demolition and remediation tied to development incentives within Boynton Yards sub-area

## Phase 1 – Short-Term (0-4 Years)





- Continuation of infrastructure interventions
- Continued redevelopment along Prospect Street and completion of green space
- Further mixed use development in Boynton Yards and Central Gateway
- Large-scale development within New Industry sub-area
- Retrofitting and reorientation of Twin City

## Phase 2 – Medium-Term (4-10 Years)



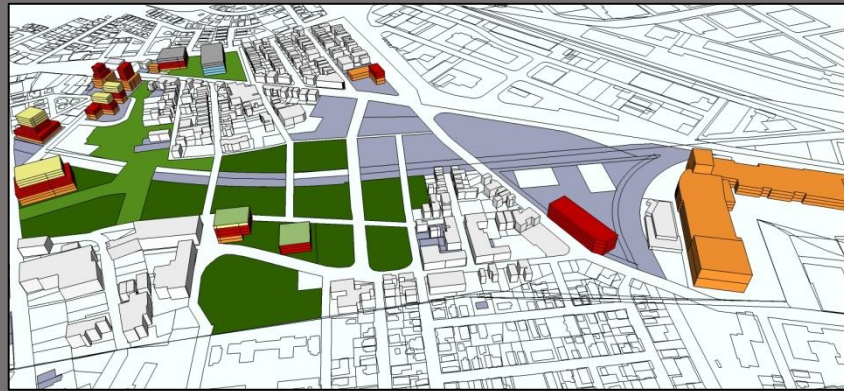


- Completion of infrastructure interventions
- Continuation of long-term redevelopment projects within Boynton Yards, Central Gateway, New Industry, and Twin City
- Potential expansion of Green Line infrastructure to include station within redevelopment parcels at existing Pat's Tow site

## Phase 3 – Long-Term (10-25 Years)



Phase 1  
Short Term (0-4 Years)



- 900,000 Sq. Feet
- Focus on mixed use development and open space

Phase 2  
Medium-Term (4-10)



- 1,500,000 Sq. Feet
- Focus on commercial and light industry density

Phase 3  
Long-Term (10-25)



- 400,000 Sq. Feet
- Focus on large-scale commercial, continue mixed use development

# Phasing - Estimates

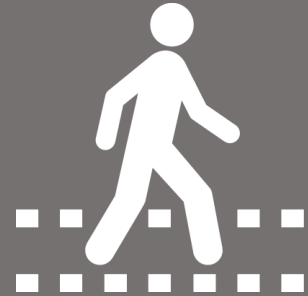




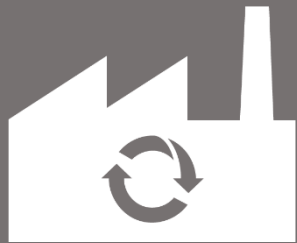
INCREASE DIVERSITY  
AND DENSITY OF  
JOBS



IMPLEMENT OPEN  
SPACE AS GREEN  
INFRASTRUCTURE



PROMOTE  
CONNECTIVITY  
ACROSS TRACKS



SUPPORT ADAPTIVE  
REUSE OF EXISTING  
STRUCTURES



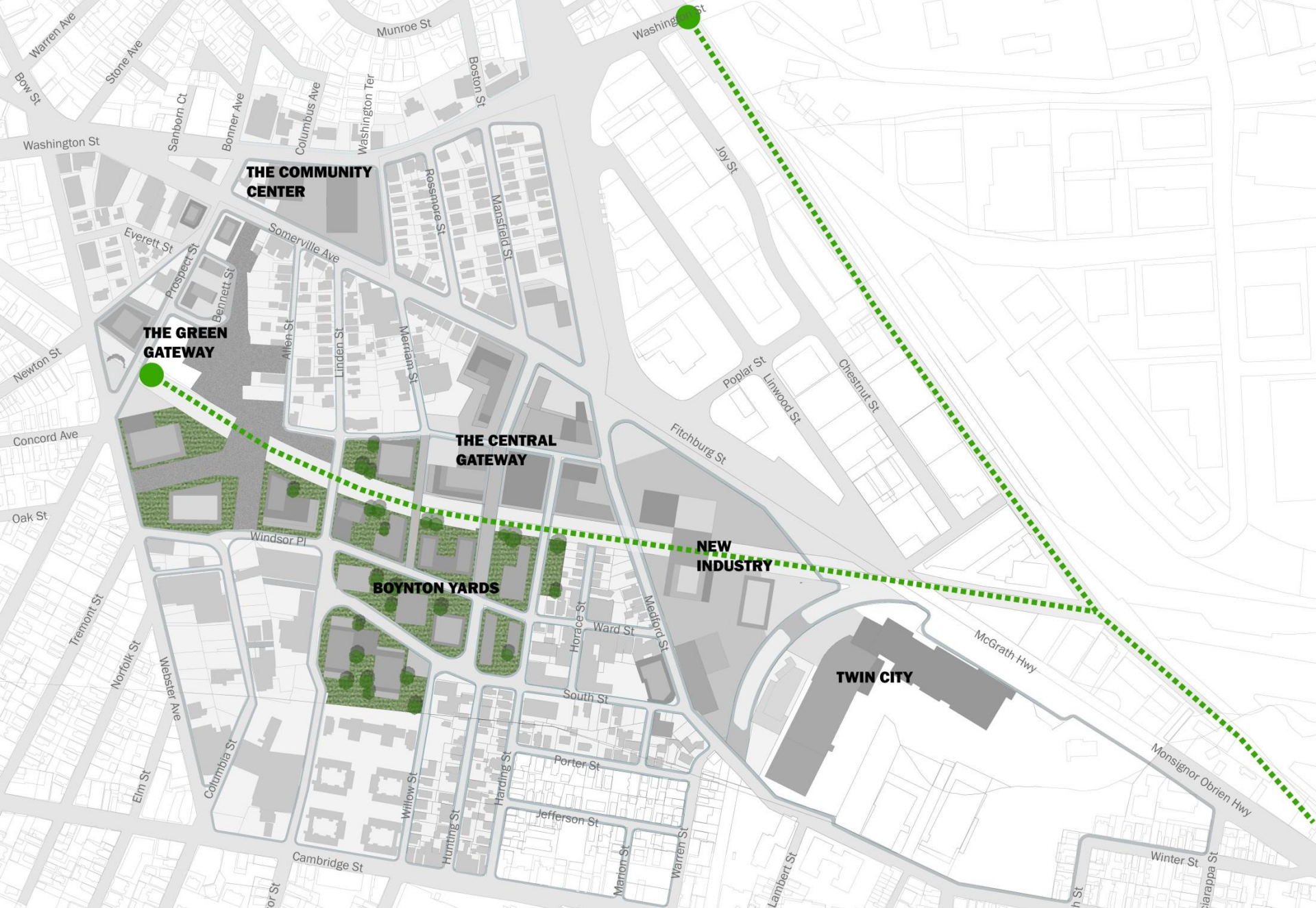
MAINTAIN  
HOUSING  
AFFORDABILITY



CREATE  
DESTINATION  
ATTRACTIVE

# Overall Goals





**THE COMMUNITY CENTER**

**THE GREEN GATEWAY**

**THE CENTRAL GATEWAY**

**BOYNTON YARDS**

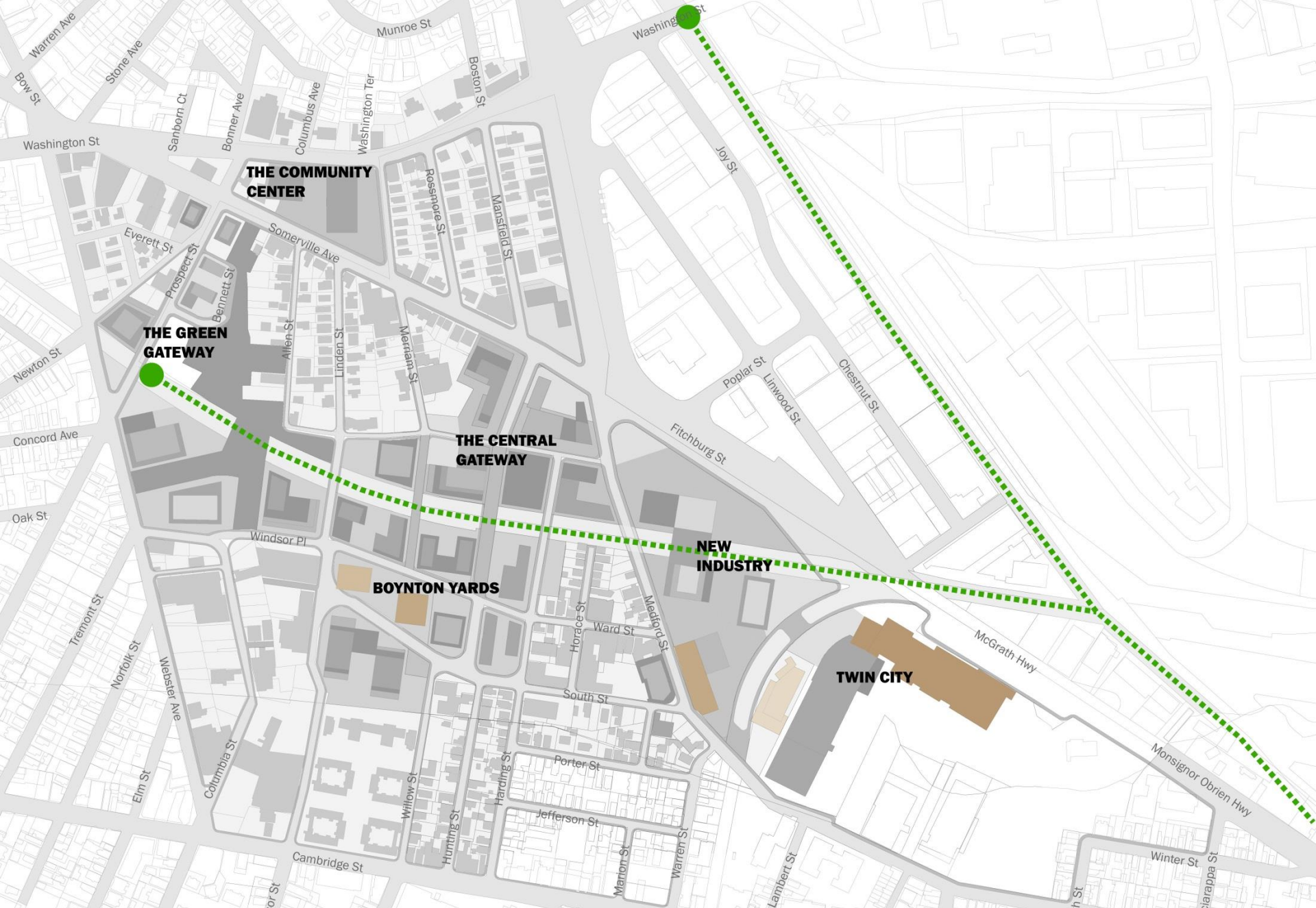
**NEW INDUSTRY**

**TWIN CITY**

**Build open space & green infrastructure**







**THE COMMUNITY CENTER**

**THE GREEN GATEWAY**

**THE CENTRAL GATEWAY**

**BOYNTON YARDS**

**NEW INDUSTRY**

**TWIN CITY**

# Adaptive re-use of existing buildings

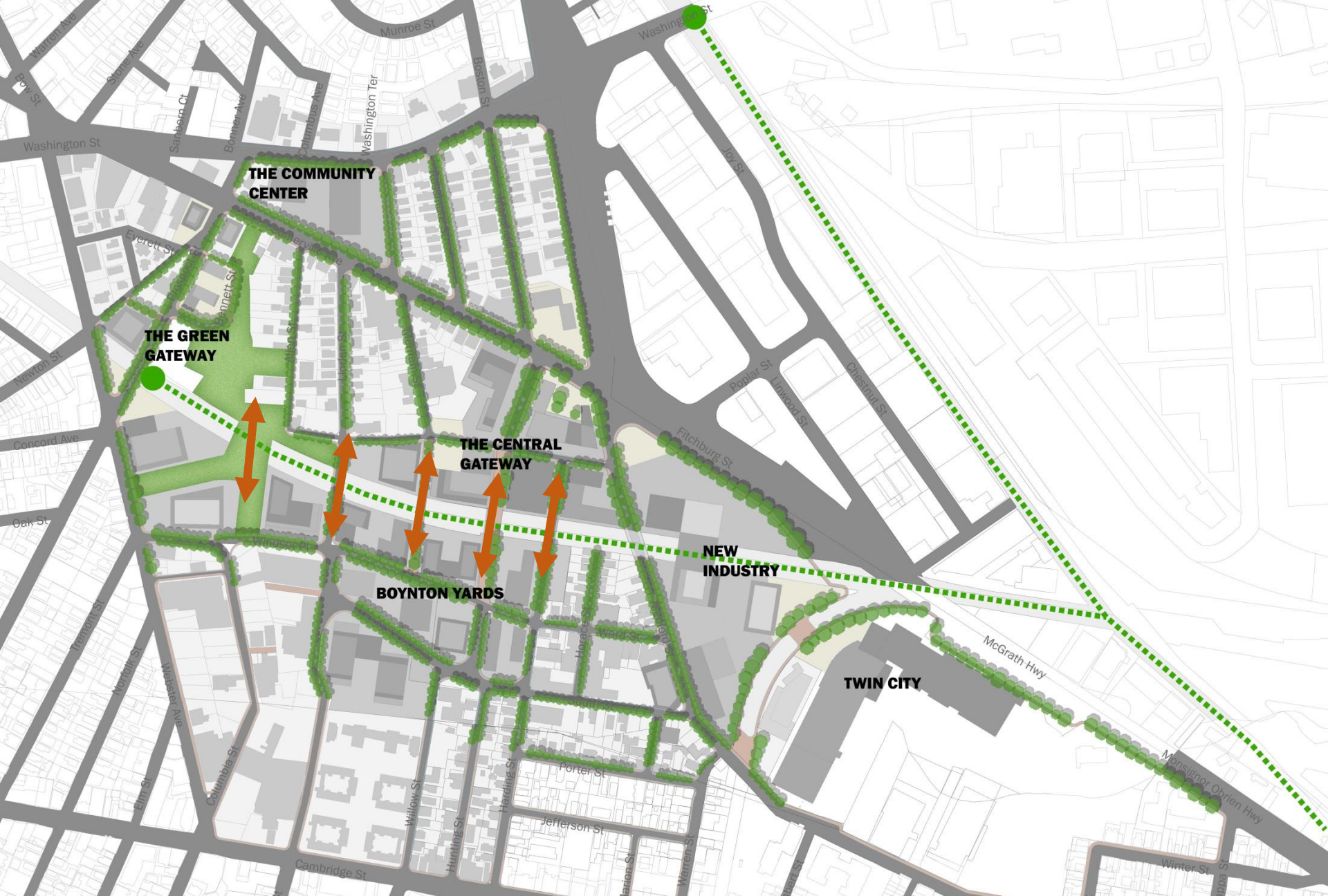




Create destination spaces







**THE COMMUNITY CENTER**

**THE GREEN GATEWAY**

**THE CENTRAL GATEWAY**

**BOYNTON YARDS**

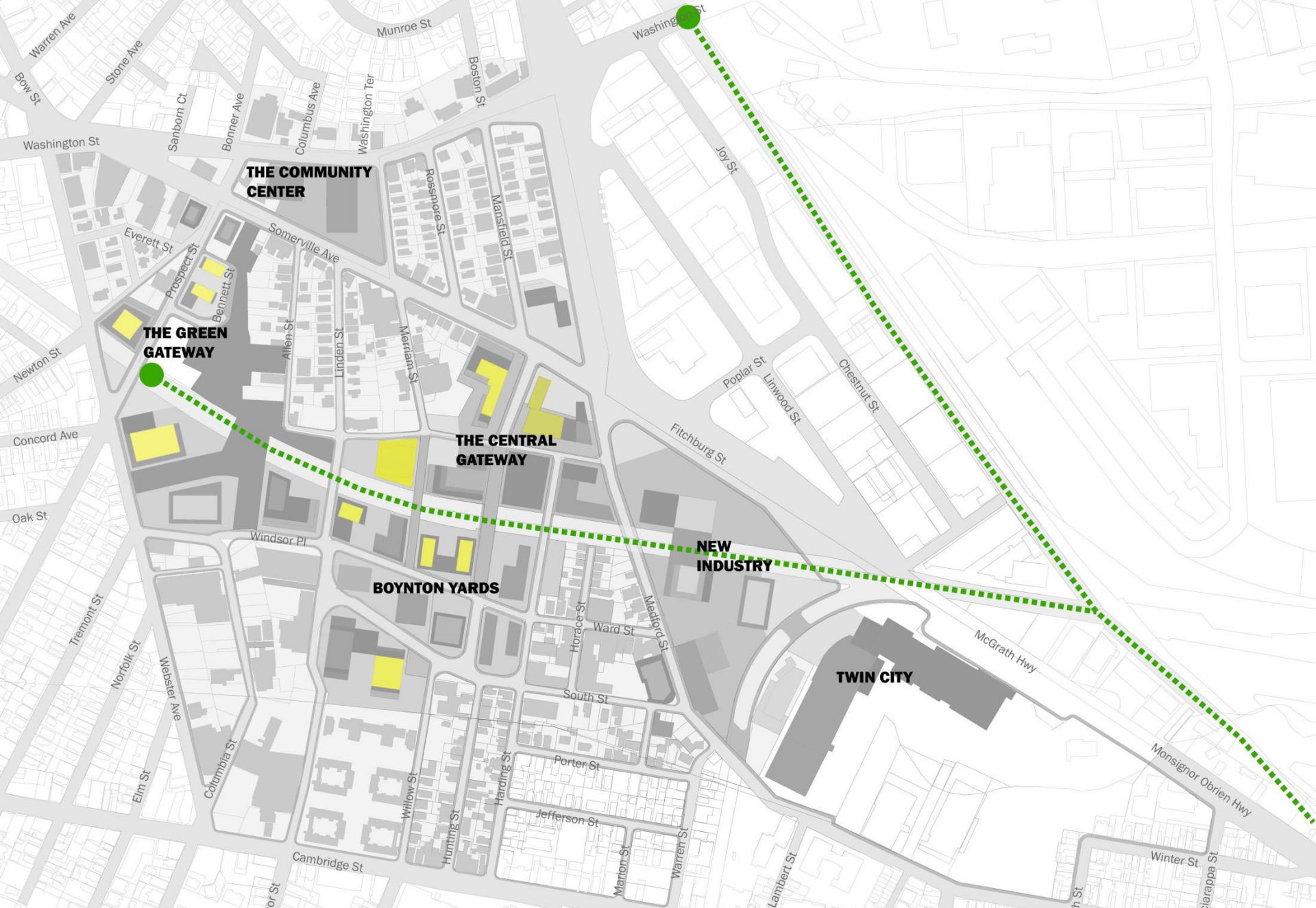
**NEW INDUSTRY**

**TWIN CITY**

Promote connectivity and accessibility

500' 250'

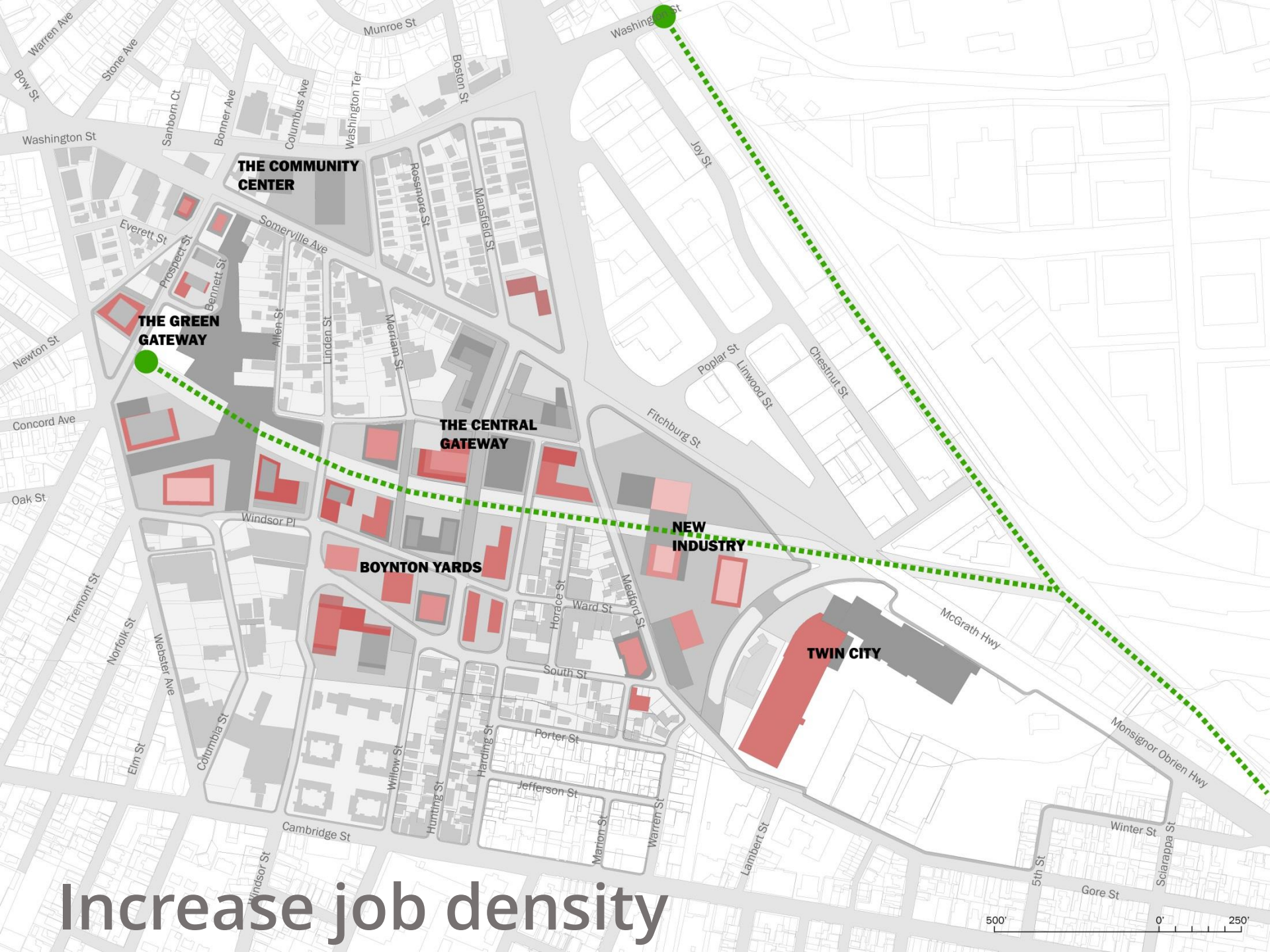




Maintain housing affordability







**THE COMMUNITY CENTER**

**THE GREEN GATEWAY**

**THE CENTRAL GATEWAY**

**BOYNTON YARDS**

**NEW INDUSTRY**

**TWIN CITY**

**Increase job density**

500' 0' 250'





**THE COMMUNITY CENTER**

**THE GREEN GATEWAY**

**THE CENTRAL GATEWAY**

**BOYNTON YARDS**

**NEW INDUSTRY**

**TWIN CITY**

**THANK YOU!**

500' 0' 250'