
Third Scale

A Quarter More: Exploring Density In Boston

A. Vernon Woodworth FAIA, Devanshi Purohit AICP, Hannah Gibson,
Katie Cressall, Pat Connolly, Rajji Desai and Thiago Lee

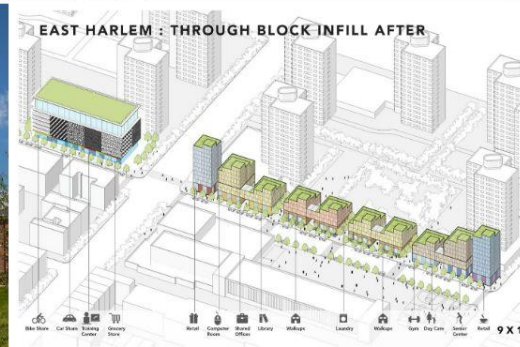
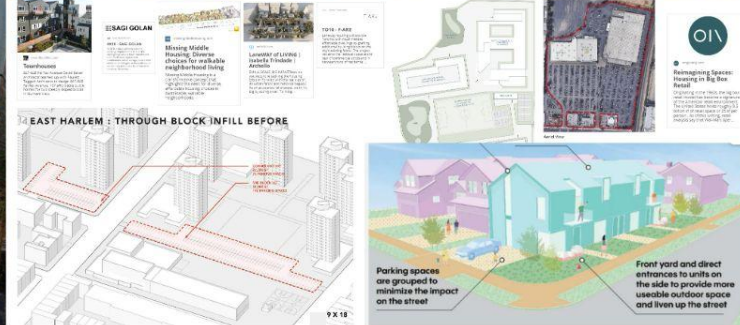
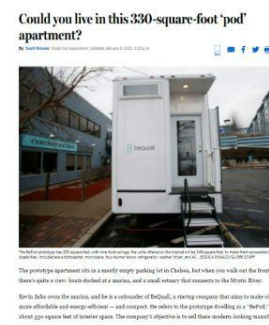
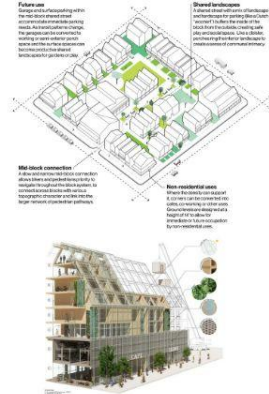
Direction from BPDA

Planning for growth in Boston often happens at the polar ends of a growth continuum.

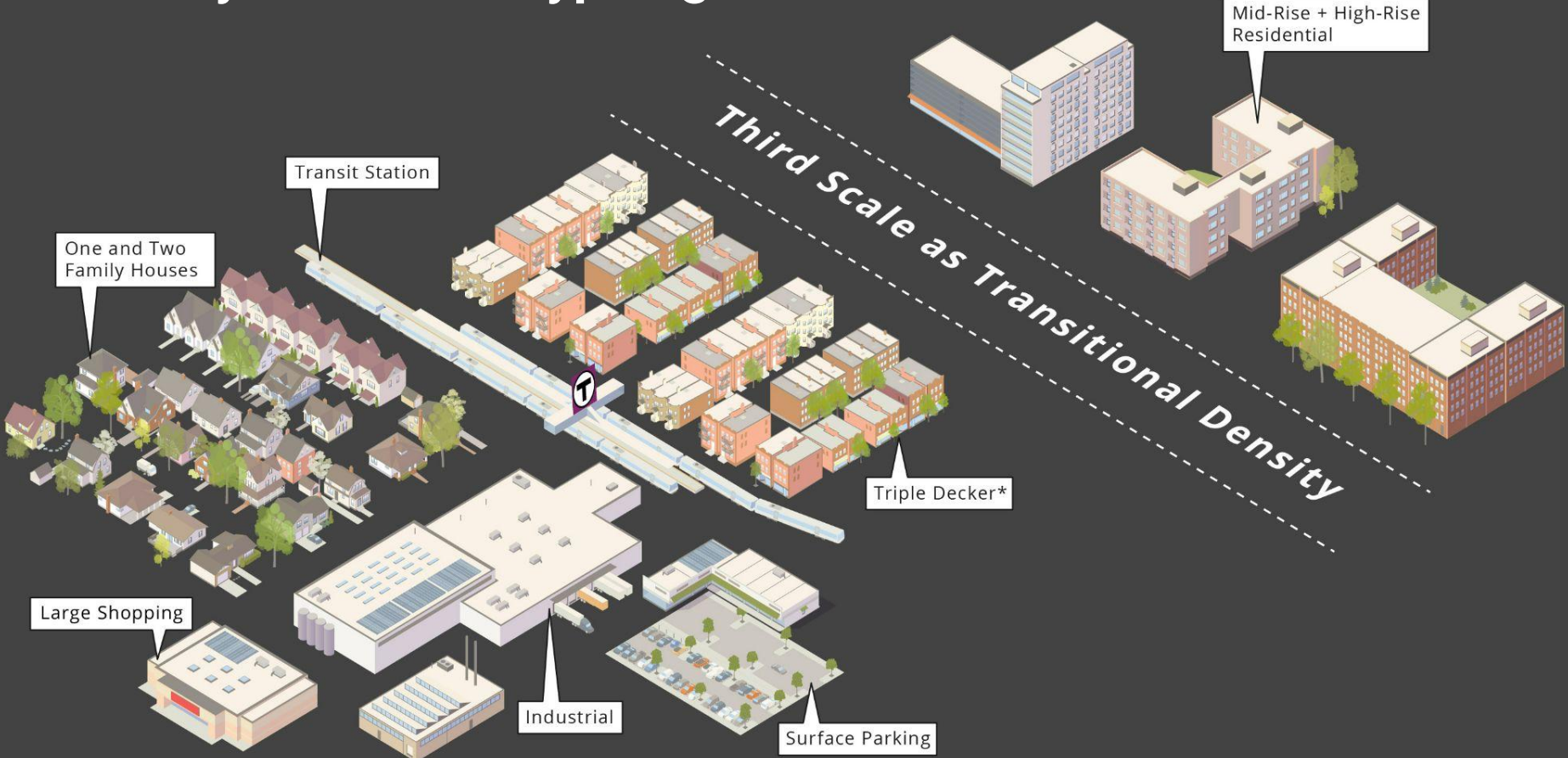
“Transformational” development sites are often immediately adjacent to some of Boston’s lowest density residential neighborhoods.

What does “contextually appropriate” development mean for infill sites between two contexts?

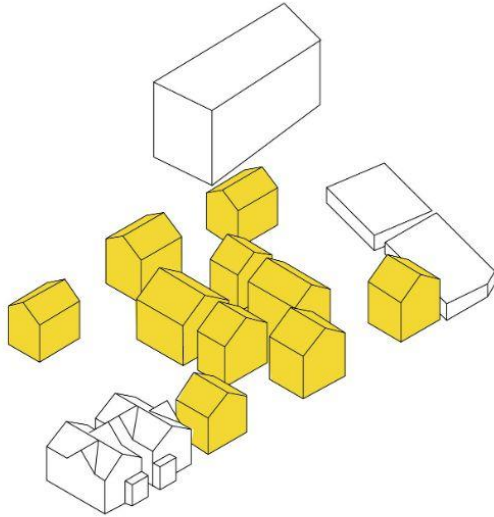
Once complete, these transformational development sites become new destinations. Where neighborhoods once intentionally turned away from the site, they may desire to turn towards them.



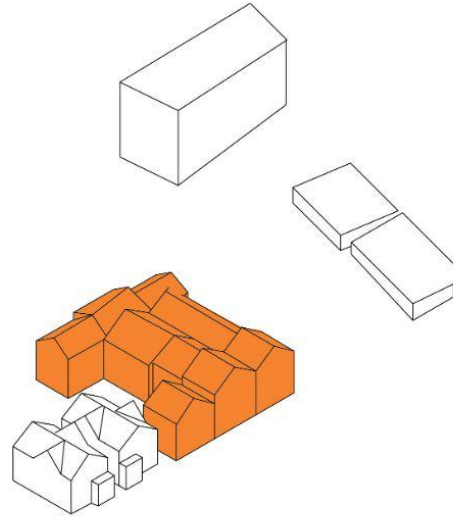
Anatomy of Current Typologies



Creating a Third Scale by clustering existing typologies to increase density incrementally and responsibly



Single Family housing spread out



Middle housing allows units to be condensed and creates opportunity for more units or open space

Co-Benefits of the Third Scale



**Prevent Displacement
of Housing**



Affordable Housing



**Carbon Neutral / Net Zero
Options**



**Simpler Construction |
Modular / Mass Timber**



**Transit Focussed | Less
Dependence on Cars**



**Preserve Neighborhood
Character**



**Pedestrian
Friendly**



**Improved Light and
Ventilation**



**Sense of Place and
Identity**



**Private / Public
Open Spaces**

Readville

1% Annual
Chance Flood
Hazard

Readville

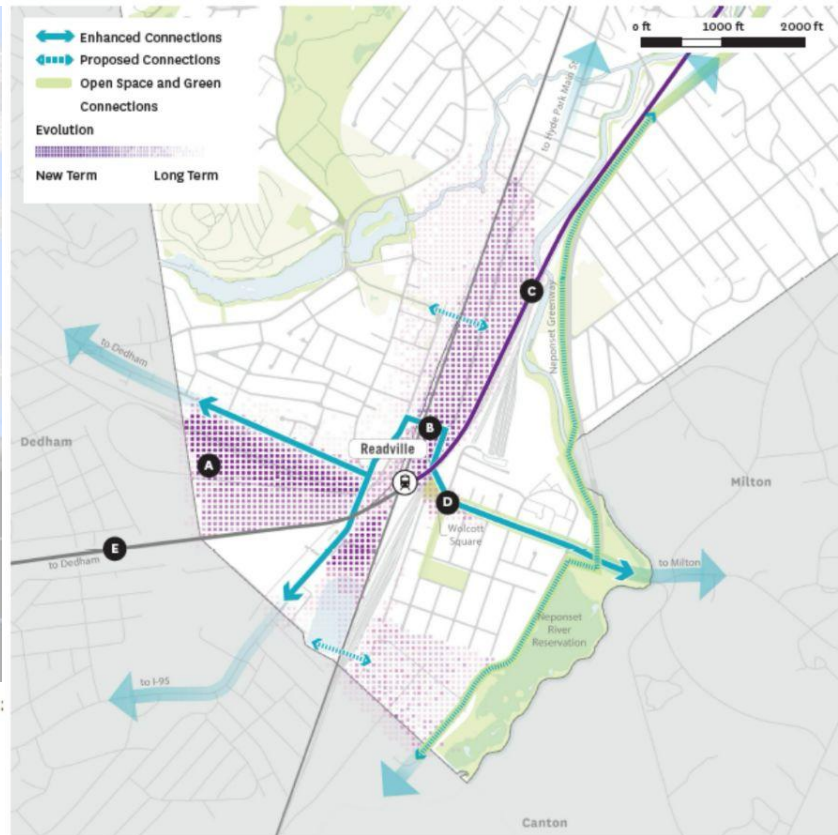
0.2% Annual
Chance Flood
Hazard

Green Space



IB2030

Readville's existing industrial uses and transit access provide an opportunity to enhance manufacturing uses, create quality jobs, and encourage mixed-use, transit-oriented development.



Readville in Hyde Park is an industrial center surrounded by stable residential areas. The neighborhood sits at the nexus of multiple rail lines and highway routes and is directly connected to Downtown and other job centers via the Fairmount Line. A wealth of existing industrial uses along with several large parcels present an opportunity for the area to be strengthened as an anchor for the city's industrial economy. Investment

in local businesses, circulation improvements, improved connections along the Fairmount corridor, and public realm enhancements can increase job density and make this area more accessible to Dorchester, Mattapan, and Downtown. Sensitive mixed-use growth, particularly near the train station, and investment in Wolcott Square that embraces the square's history can meet the needs of residents and workers.

Key Actions

- › Preservation and enhancement of Industrial land to increase Job density
- › New mixed-use development around Readville Station and Wolcott Square
- › Fairmount/Indigo Line train connections, frequency, equitable fares, and user experience
- › Traffic pattern, streets, sidewalks, and public-realm improvements to facilitate circulation and encourage walking and biking

Actions and Investments

- A** Preservation and enhancement of Industrial land
- B** New mixed-use development
- C** Improved Fairmount/Indigo Line connections, frequency, and user experience
- D** Improved circulation via walking and biking infrastructure and other public-realm improvements
- E** Connect Fairmount/Indigo Line to additional destinations, such as Dedham

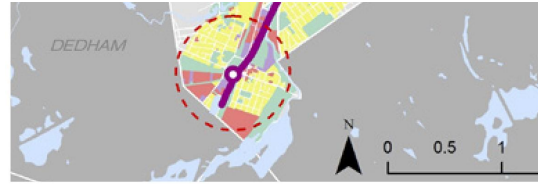
Existing Conditions

Mix of primarily residential areas and primarily commercial areas

Mostly low-rise buildings that rarely exceed two stories

Low-density housing including surrounding the transit station

Mostly single-family houses with some two or three-family houses interspersed throughout



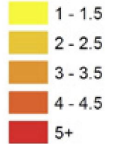
Land Use

By Parcel



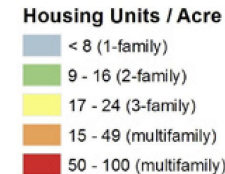
Building Height

Number of Floors



Housing Density

By Census Block

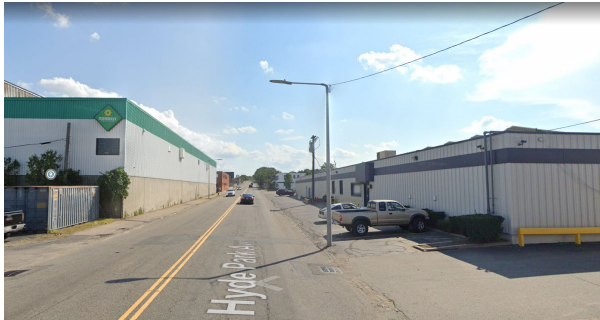


Housing Type

By Parcel



Neighborhood Character



Fairmount-Indigo Corridor Priorities

Create Catalyst Investments; Grow Job Center Bookends

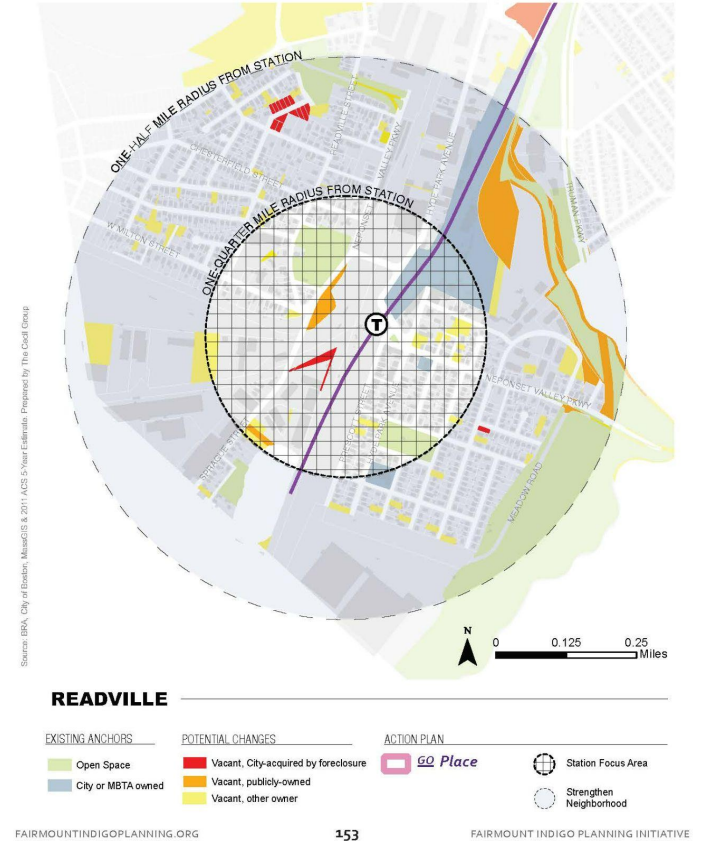
Prevent Displacement; Create ToD Housing; Grow Infill Opportunities

Reinforce Culture, Art and History; Reorient Activity to Station

Improve Walkability and Public Realm; Integrate Bus and Shuttle
Connections; Manage Parking

Connect Open Space Networks; Continue Streetscape
Improvements; Create Station Plazas

Build Neighborhood Safety and Community; Enhance Neighborhood
Health; Add Core Amenities and Services

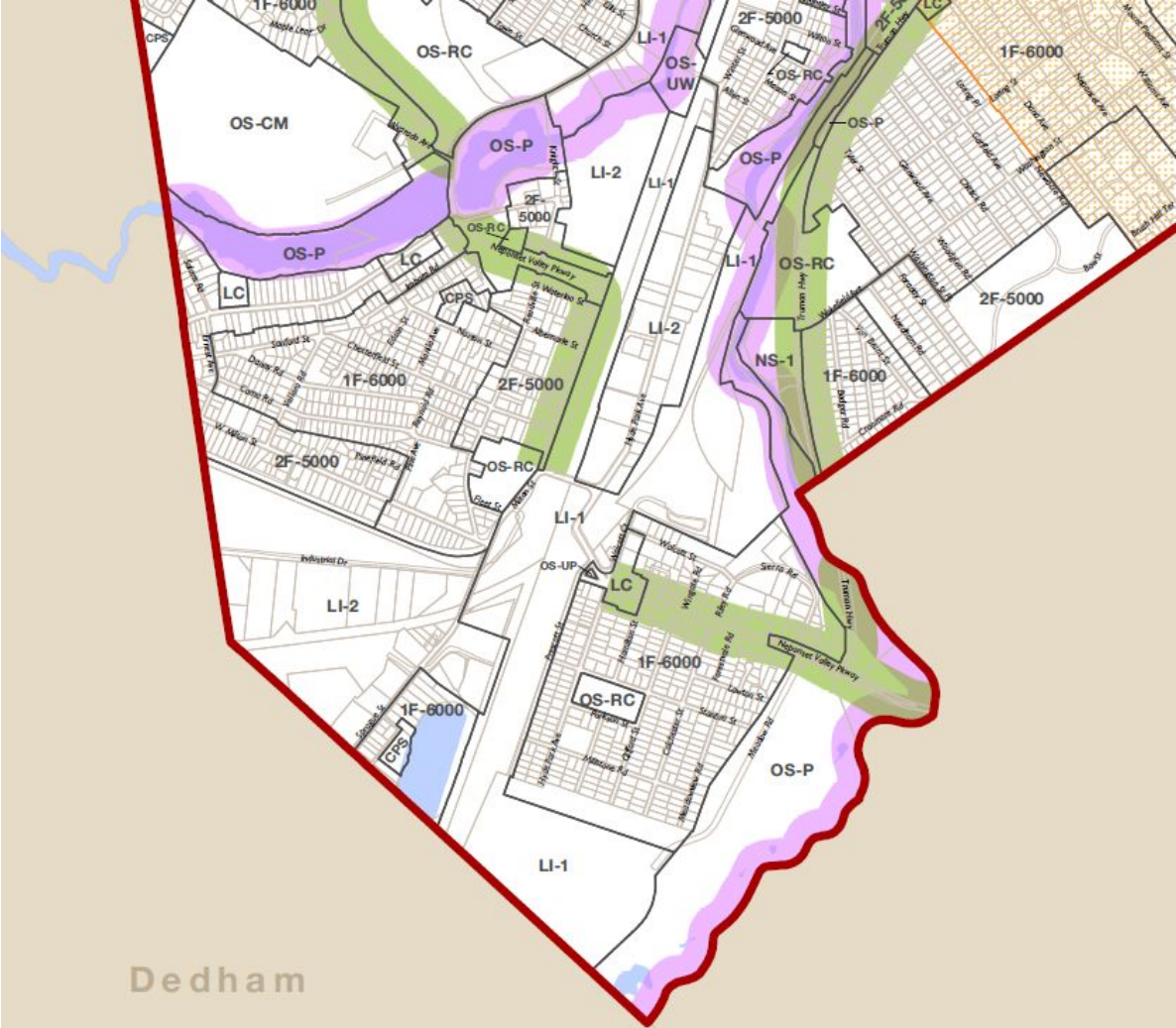


Current Zoning

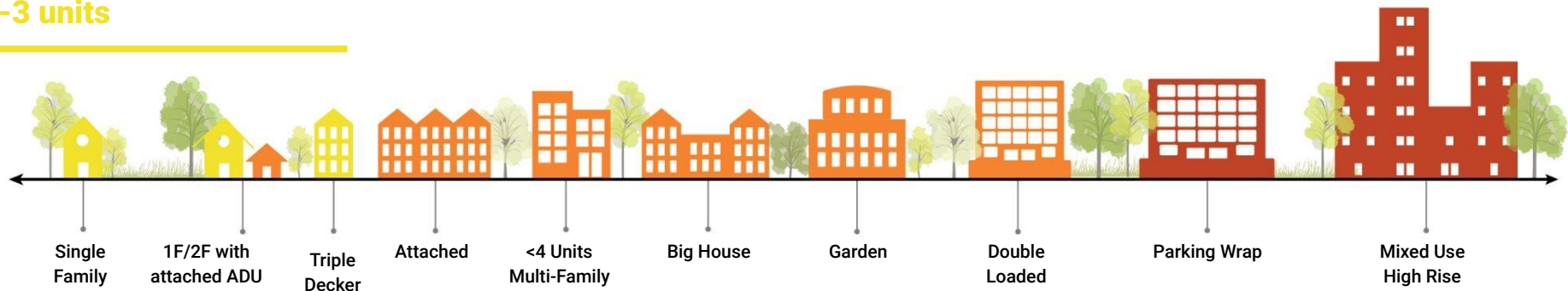


Residential Subdistricts	
1F	One-Family Residential Subdistrict
2F	Two-Family Residential Subdistrict
3F	Three-Family Residential Subdistrict
MFR	Multifamily Residential Subdistrict
CPS	
CPS	Conservation Protection Subdistrict
Open Space Subdistricts	
OS-CM	Cemetery Open Space Subdistrict
OS-P	Parkland Open Space Subdistrict
OS-RC	Recreation Open Space Subdistrict
OS-UP	Urban Plaza Open Space Subdistrict
OS-UW	Urban Wild Open Space Subdistrict
Neighborhood Business Subdistricts	
LC	Local Convenience
NS	Neighborhood Shopping
LI	
LI	Local Industrial Subdistrict

For maximum allowed height, FAR, and other provisions, see Article 69.



1-3 units



One-Family Residential Subdistrict

	Lot Area, Minimum For Dwell. Unit(s) Specified (Sq. Ft.)	Additional Lot Area for Ea. Addit'l Dwell. Unit (Sq. Ft.)	Lot Width (Feet)	Lot Frontage (Feet)	Floor Area Ratio Maximum	Building Height Maximum	Usable Open Space Minimum (Sq. Ft. Per Dwelling Unit ⁽³⁾)	Front Yard Min. (feet)	Side Yard Min. (feet)	Rear Yard Min. (feet)	Rear Yard Maximum Occupancy	
*1F-9,000⁽¹⁾												
1 Family Detached	9,000	N/A	70	70	.3	2½	35	1,800	25	10	40	25
Other Use	9,000	N/A	70	70	.3	2½	35	1,800	25	10	40	25
1F-6,000⁽¹⁾												
1 Family Detached	6,000	N/A	60	60	.5	2½	35	1,800	25	10	40	25
Other Use	6,000	N/A	60	60	.5	2½	35	1,800	25	10	40	25

Two-Family Residential Subdistrict

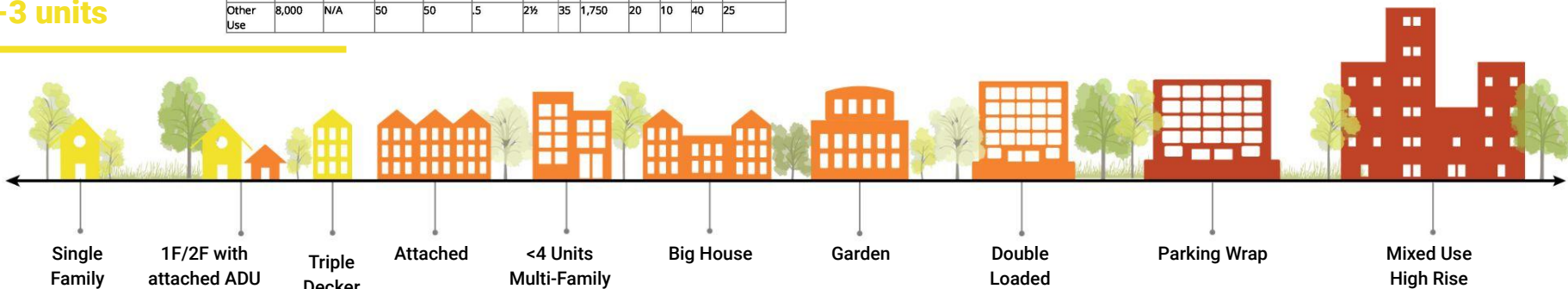
	Lot Area, Minimum For Dwell. Unit(s) Specified (Sq. Ft.)	Additional Lot Area for Ea. Addit'l Dwell. Unit (Sq. Ft.)	Lot Width (Feet)	Lot Frontage (Feet)	Floor Area Ratio Maximum	Building Height Maximum	Usable Open Space Minimum (Sq. Ft. Per Dwelling Unit ⁽³⁾)	Front Yard Min. (feet)	Side Yard Min. (feet)	Rear Yard Min. (feet)	Rear Yard Maximum Occupancy	
2F-5,000⁽¹⁾												
1 Family Detached or Semi-Attached or 2 Family Detached	5,000 for 3,000	3,000	50	50	.5	2½	35	1,750	20	10	40	25
Other Use	8,000	N/A	50	50	.5	2½	35	1,750	20	10	40	25

	Lot Area, Minimum For Dwell. Unit(s) Specified (Sq. Ft.)	Additional Lot Area for Ea. Addit'l Dwell. Unit (Sq. Ft.)	Lot Width (Feet)	Lot Frontage (Feet)	Floor Area Ratio Maximum	Building Height Maximum	Usable Open Space Minimum (Sq. Ft. Per Dwelling Unit ⁽³⁾)	Front Yard Min. (feet)	Side Yard Min. (feet)	Rear Yard Min. (feet)	Rear Yard Maximum Occupancy	
3F-4,000⁽¹⁾												
Row House Building or Town House Building	4,000 for 1 unit	2,000	40	40	.8	3	35	800 s.f. per unit	20	10	40	25
Semi-Attached or Detached Dwelling	4,000 for 1 unit	2,000	40	40	.8	3	35	800 s.f. per unit	20	10	40	25
Any Other Use	8,000	N/A	45	45	.8	3	35	800 s.f. per Lot	20	10	40	25

Multifamily Residential Subdistrict

	Lot Area, Minimum For Dwell. Unit(s) Specified (Sq. Ft.)	Additional Lot Area for Ea. Addit'l Dwell. Unit (Sq. Ft.)	Lot Width (Feet)	Lot Frontage (Feet)	Floor Area Ratio Maximum	Building Height Maximum	Usable Open Space Minimum (Sq. Ft. Per Dwelling Unit ⁽³⁾)	Front Yard Min. (feet)	Side Yard Min. (feet)	Rear Yard Min. (feet)	Rear Yard Maximum Occupancy	
MFR	5,000	2,500	none	none	2	3	35	400 s.f. per Unit	20	10	40	25

1-3 units







The following table provides additional detail regarding use and dimensional zoning requirements for the Project Site.

Table 2-1. 1717-1725 Hyde Park Avenue - Local Industrial (LI-2) Subdistrict: Dimensional Requirements

Use / Dimensional Element	LI-2 District Requirement	Proposed	Relief Required
Multifamily Use	Forbidden	Approx. 300 units	Variance
Local Retail Business Use	Allowed, except conditional if open to public overnight - 6:00AM or if merchandise sold or displayed out of doors.	Up to 4,200 SF	No
Restaurant Use	Allowed, except forbidden if open to public 1:00 - 6:00AM	Up to 4,200 SF	No
Max. Floor Area Ratio	2.0	2.91	Variance
Max. Building Height	25 feet	60.4 feet	Variance
Minimum Front Yard	5 feet	5 feet	No
Minimum Side Yard	None	10 feet	No

1717-1725 Hyde Park Avenue

Use / Dimensional Element	LI-2 District Requirement	Proposed	Relief Required
Minimum Rear Yard	10 feet	10 feet	No
Minimum Parking	Determined Through Large Project Review	221 spaces	No
Minimum Loading	Determined Through Large Project Review	1 Loading Dock	No

1. The dimensions described in this table may change as the Proposed Project undergoes design review with the City.

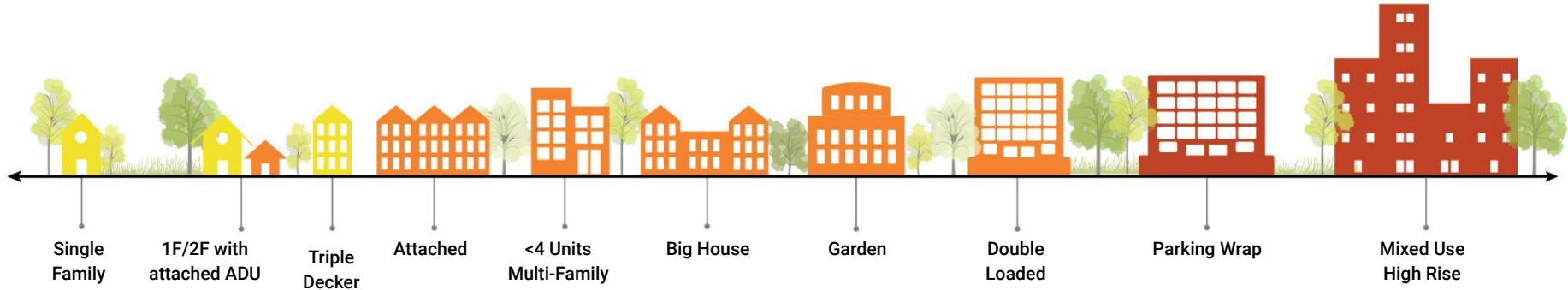
Building Program Comparison

Original Program vs. Reduced 36-40 Sprague Only Program

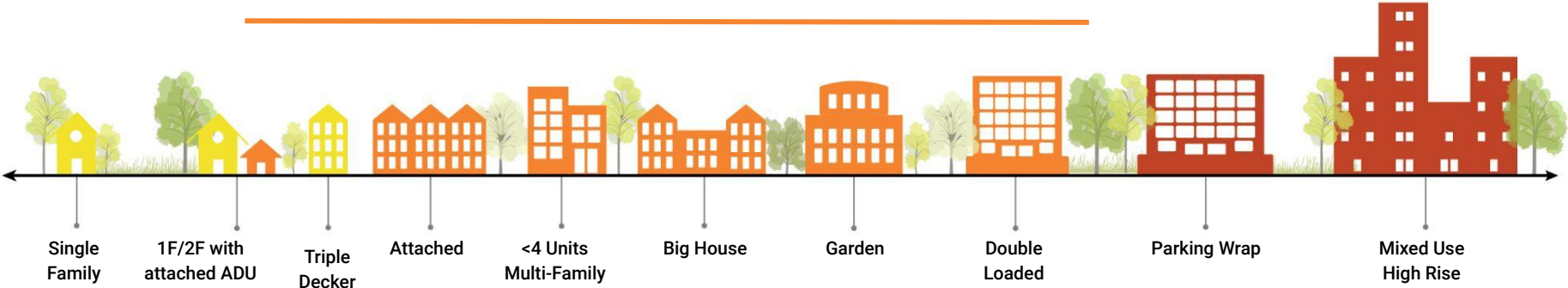
	Original Plan	Reduced 36-40 Sprague Only
Total Project Square Footage	575,009 sf	396,105 sf
Total Residential Unit Square Footage	543,000 sf	205,000 sf
Number of Apartments	521	247
Number of Buildings	4	2
Building Heights (# of Stories, Skys 1, 2, 3, 4)	5, 7, 8, 7	5, 5



100+ units

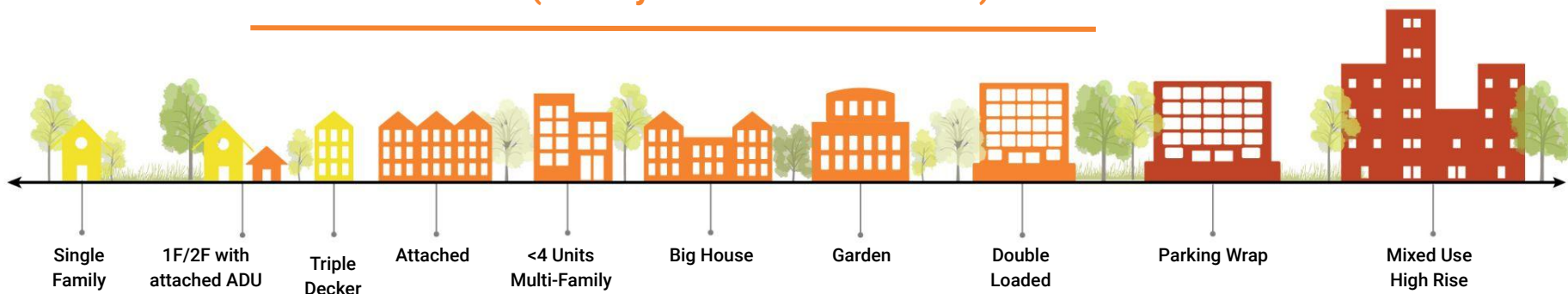


4 - 50 units (Density Bonus: 50-100 units)**





4 - 50 units (Density Bonus: 50-100 units)**



ToD (Transit-Oriented Development) with NoD (Neighborhood-Oriented Density)

Lot Area, Minimum For Dwell. Unit(s) Specified (Sq. Ft.)	Additional Lot Area for Ea. Addit'l Dwell. Unit (Sq. Ft.)	Lot Width Minimum (Feet)	Lot Frontage Minimum (Feet)	Floor Area Ratio Maximum	Building (2) Height Maximum		Usable Open Space Minimum Sq. Ft. Per Dwelling	Front Yard Min. Depth (Feet) (4)	Side Yard Min. Depth (Feet) (5)	Rear Yard Min. Depth (Feet) (4)	Rear Yard Maximum Occupancy by Accessory Buildings (Percentage)	Lot coverage (Percentage)	Max floorplate (Sq. Ft.)	Maximum Width of the façade (Feet)	Inclusionary / affordable housing (Percentage)
					Stories	Feet									

TS1 - Modified 3f																
Semi Attached townhome, row house (3-8 units)	2000-6000				1	4	45		10-20	5-10	10-20		60		50	

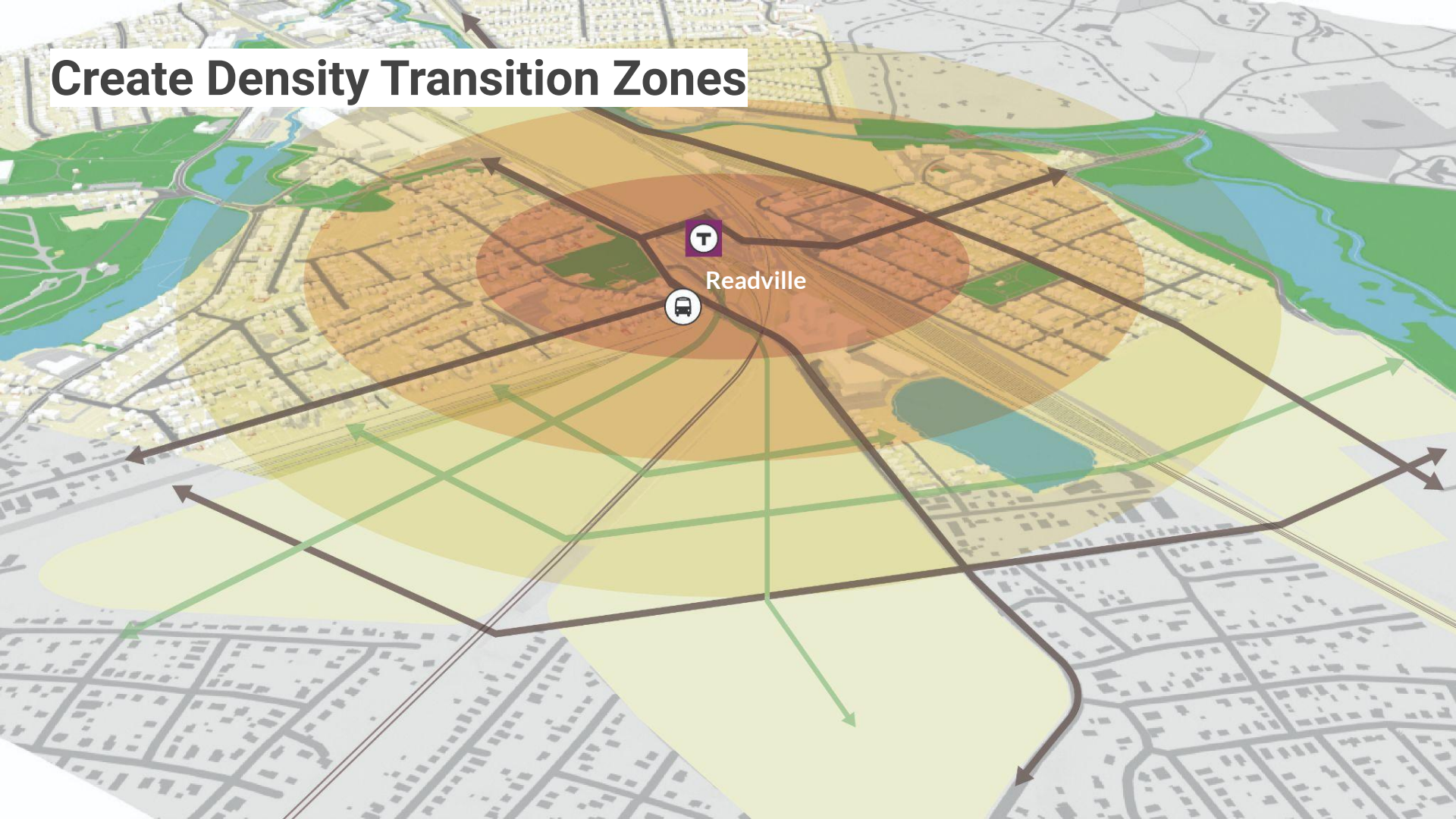
TS2																
Semi Attached townhome, row house (8-12 units)	2000-6000				1.3	4	45		10-20	5-10	10-20		65		100	13

TS3																
Semi Attached townhome, row house (12-25 units)					1.8	4	45		10-20	5-10	10-20		80	15000	150	15

TS4																
Semi Attached townhome, row house (25-50 units)					2	5	55	20% of the site area	10-20	5-10	10-20		90	20,000	200	20

TS4A - density bonus for additional open space, more affordable units, carbon neutral, passive house, artist program, civic program ?																
Multi-family (50-100 units) - opportunity for ground floor commercial					upto 2.5	6	65	25% of the site area	10-20	5-10	10-20		90		250	20

Create Density Transition Zones





MIXED USE



GREEN SPINE

MIXED USE

GREEN SPINE

INDUSTRIAL

INDUSTRIAL

MIXED USE

HIGH DENSITY

LOW DENSITY

GREEN SPINE

MEDIUM DENSITY

MEDIUM DENSITY

GREEN SPINE

MEDIUM DENSITY

INDUSTRIAL

INDUSTRIAL

LOW DENSITY

LOW DENSITY



MIXED USE

MIXED USE

MIXED USE

MIXED USE

MIXED USE

MIXED USE

MIXED USE

MIXED USE

MIXED USE

INDUSTRIAL

INDUSTRIAL

INDUSTRIAL

INDUSTRIAL

LOW DENSITY

HIGH DENSITY

MEDIUM DENSITY

MEDIUM DENSITY

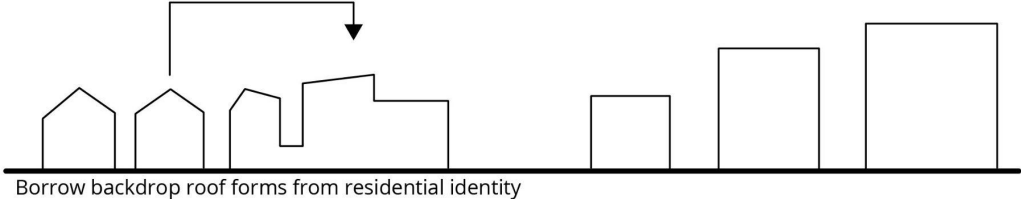
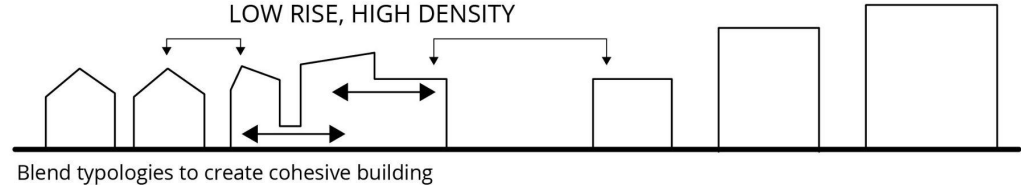
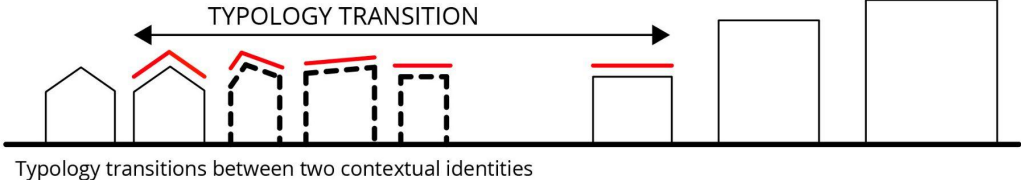
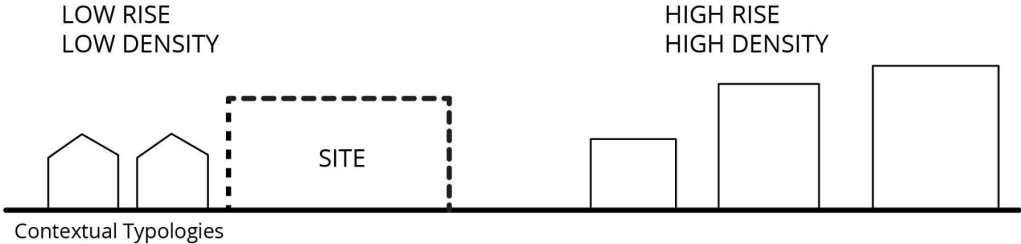
MEDIUM DENSITY

LOW DENSITY

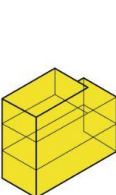
LOW DENSITY



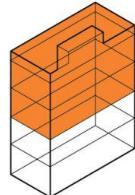
Break the Mold



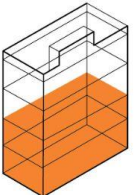
Diversify Living Options



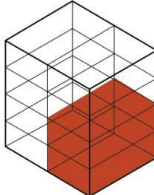
SINGLE FAMILY



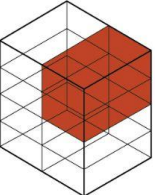
DUPLEX BI-LEVEL HIGH



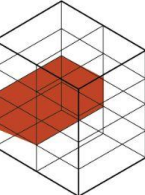
DUPLEX BI-LEVEL LOW



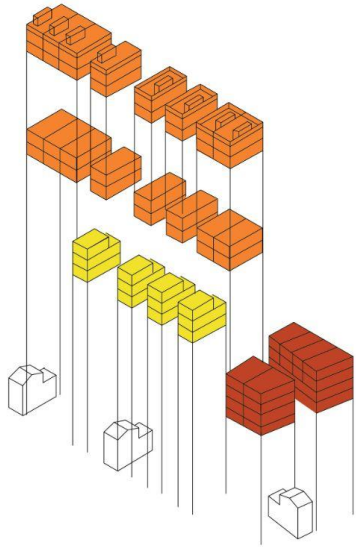
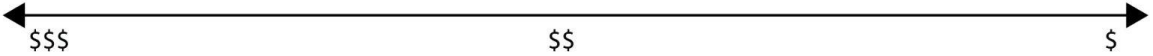
APT BI-LEVEL LIVE WORK



APT BI-LEVEL HIGH



APT FLAT LOW



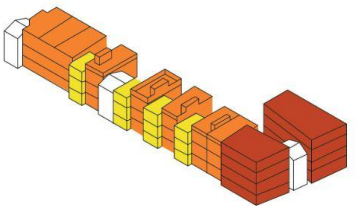
DUPLEX

DUPLEX

SINGLE FAMILY

APT

EXISTING



Hybridize Land Use



1F, 2F and 3F Housing Typologies

+

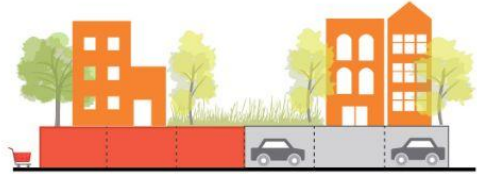


Neighborhood Shopping



Surface Parking

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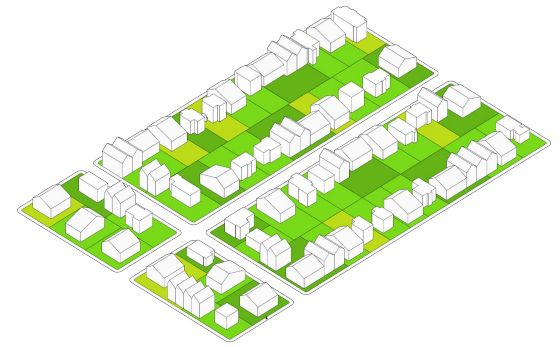


Layering/ Hybridizing Land Use

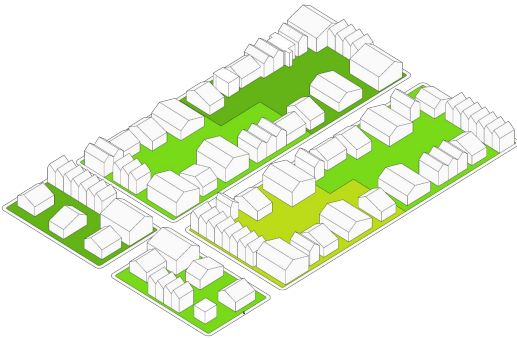
Density Transitions



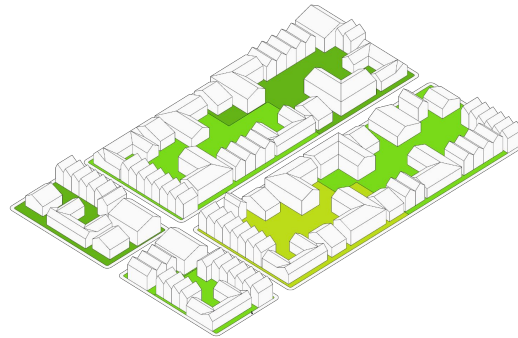
Single Family - approx. 7 DU/acre
Detached single-family residences
Individualised open spaces
1-2 stories



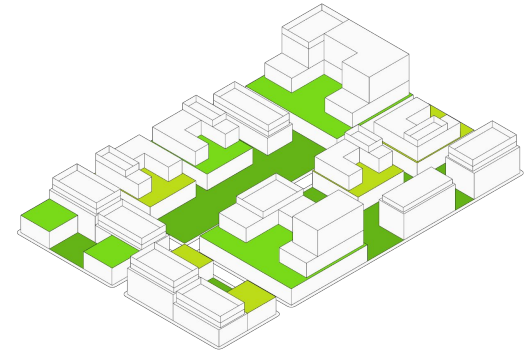
TS1 + TS2 - approx. 14 DU/acre
Detached SFR + Duplex (side-by-side) +
Duplex (stacked) + Triplex (stacked)
Individualised open spaces
2-3 stories



TS2 + TS3 - approx. 18-20 DU/acre
Duplex, Triplex + Multiplex (four to six units)
+Townhouses
Shared open spaces
2-3 stories



TS2 + TS3 - approx. 24-26 DU/acre
Duplex, Triplex, Townhouses
Courtyard buildings + Multiplex (medium)
Shared open spaces
2-4 stories



Podium double-loaded mid- to high-rise approx. 80 DU/acre
Shared and elevated open spaces
4-8 stories

Third Scale

A Quarter More: Exploring Density In Boston

A. Vernon Woodworth FAIA, Devanshi Purohit AICP, Hannah Gibson,
Katie Cressall, Pat Connolly, Rajji Desai and Thiago Lee
