

Process, Scenarios & Future Directions

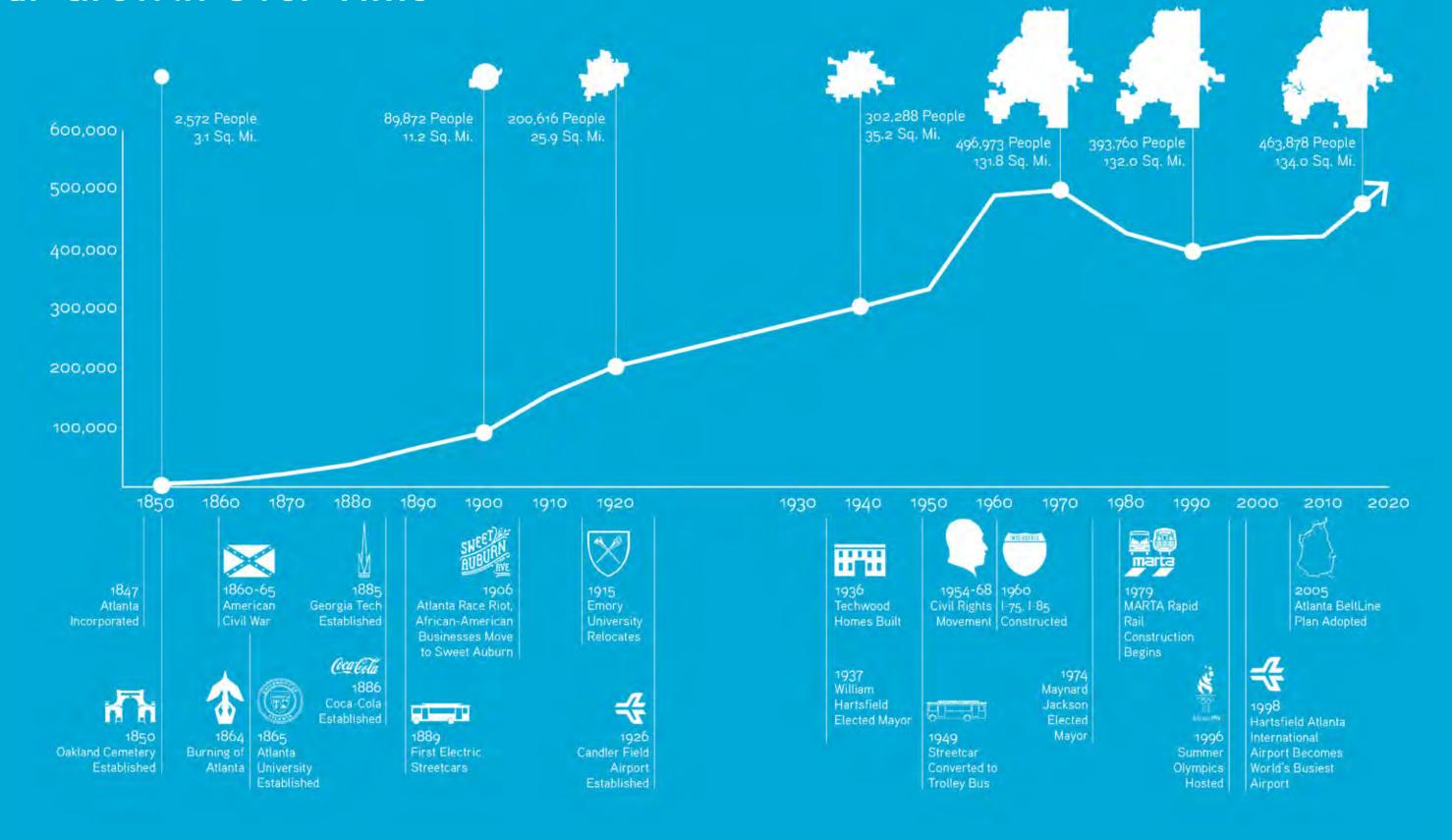
GPA FALL CONFERENCE, OCTOBER 3, 2019

Georgia Institute of Technology

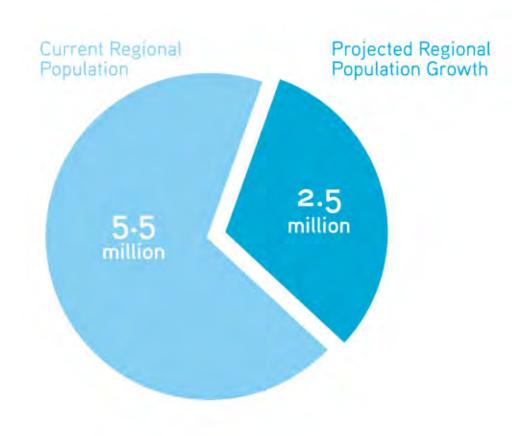


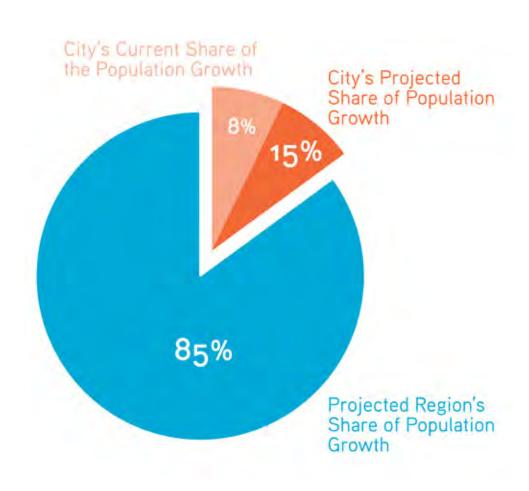
Department of CITY PLANNING

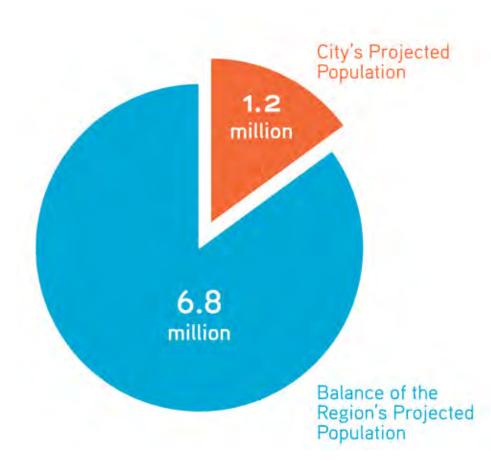
Our Growth Over Time



Urgency







A larger region.

A larger city.

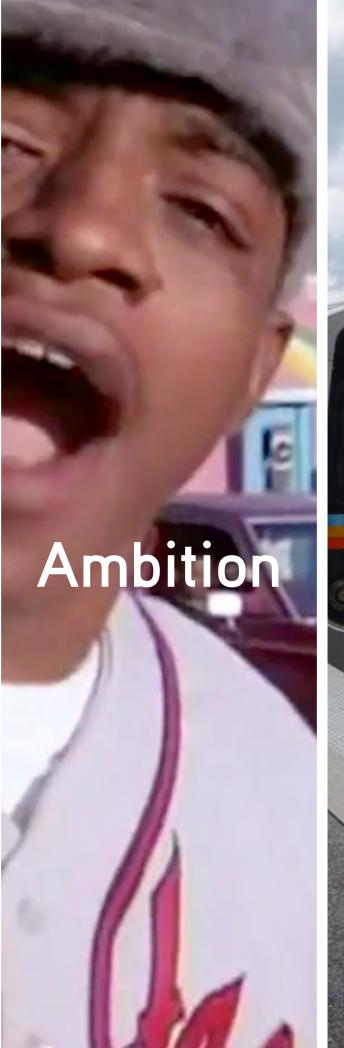
A lot more people.

Not changing is not an option.

The most strategic scenario for growth includes everyone.



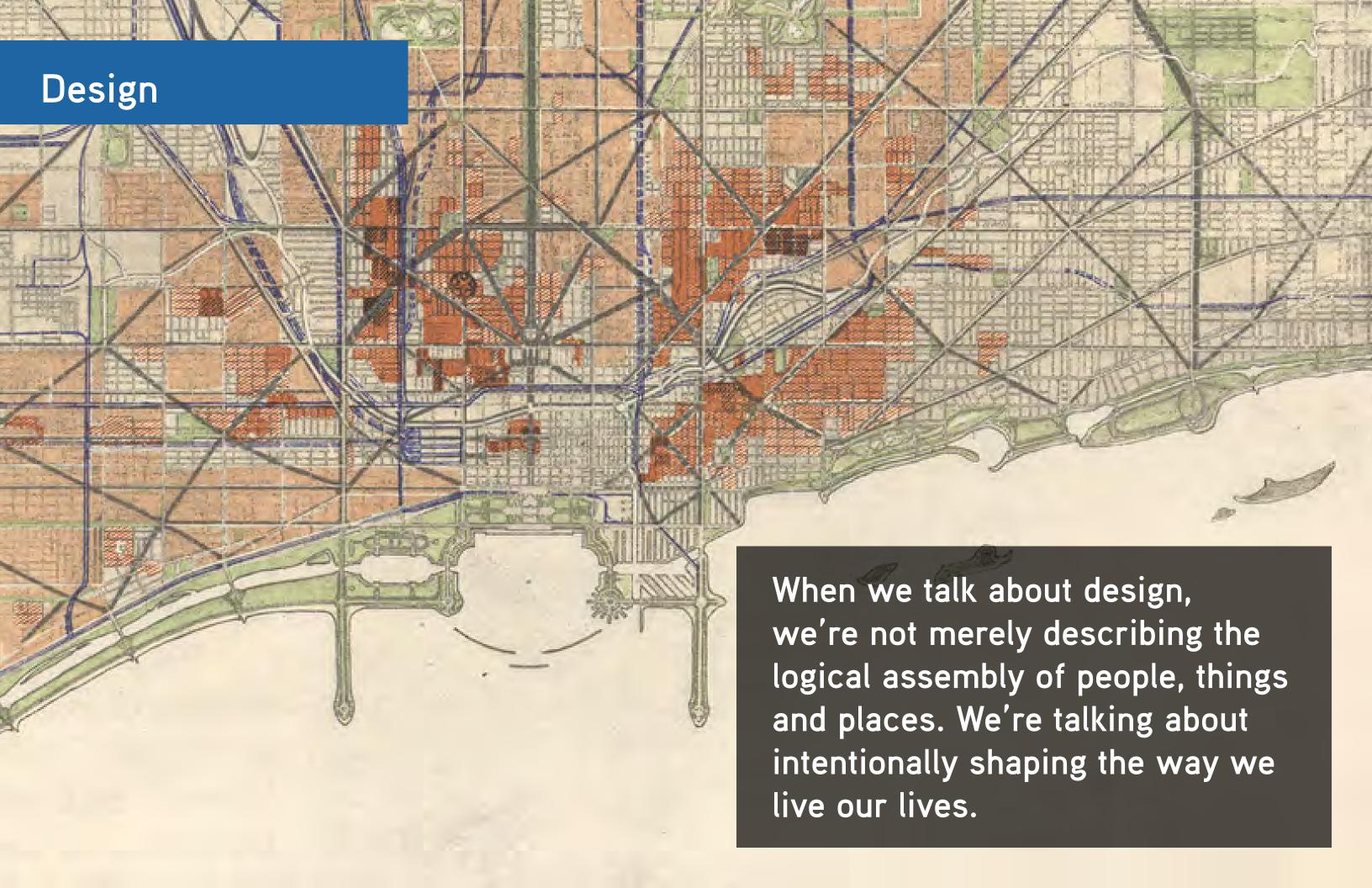


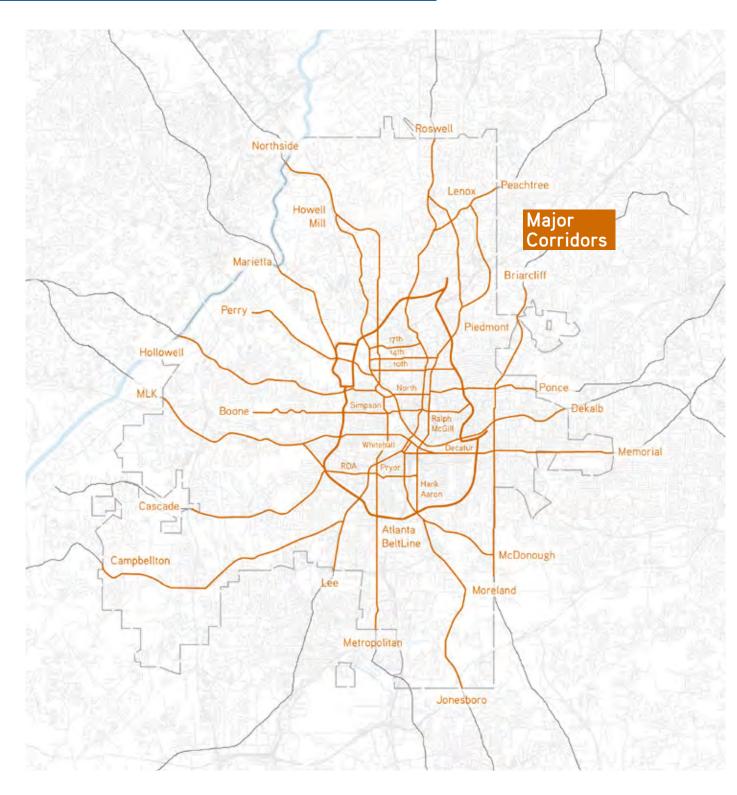




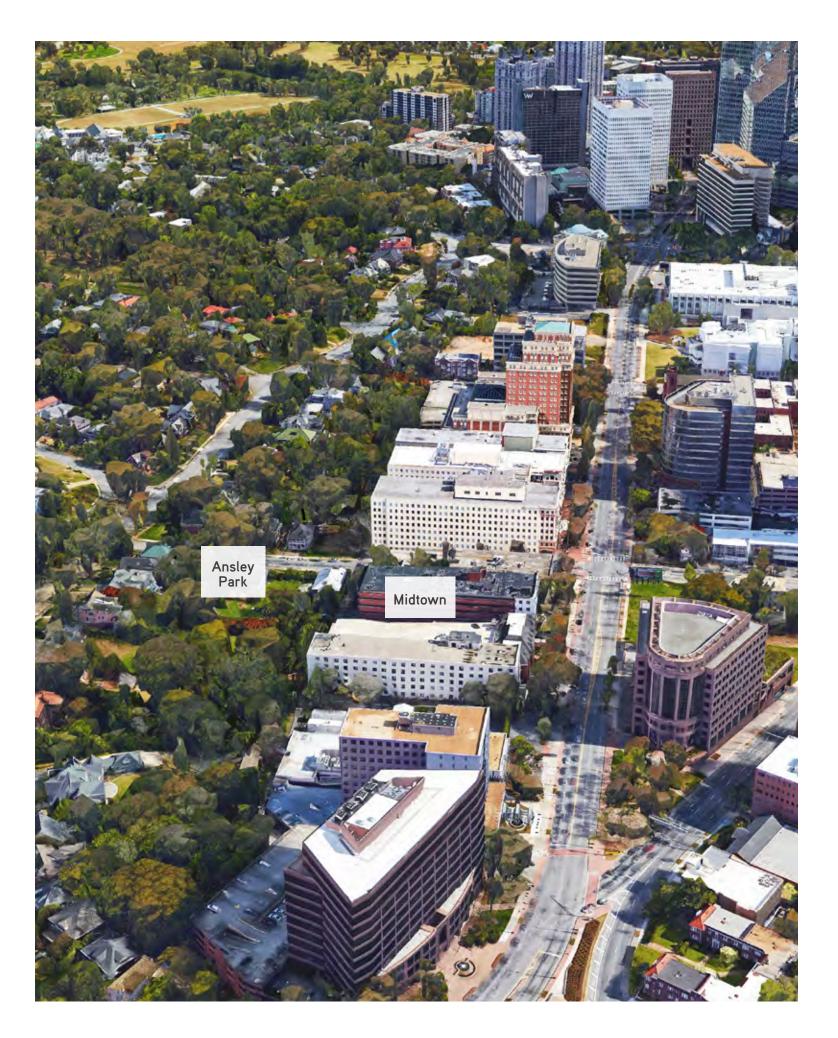


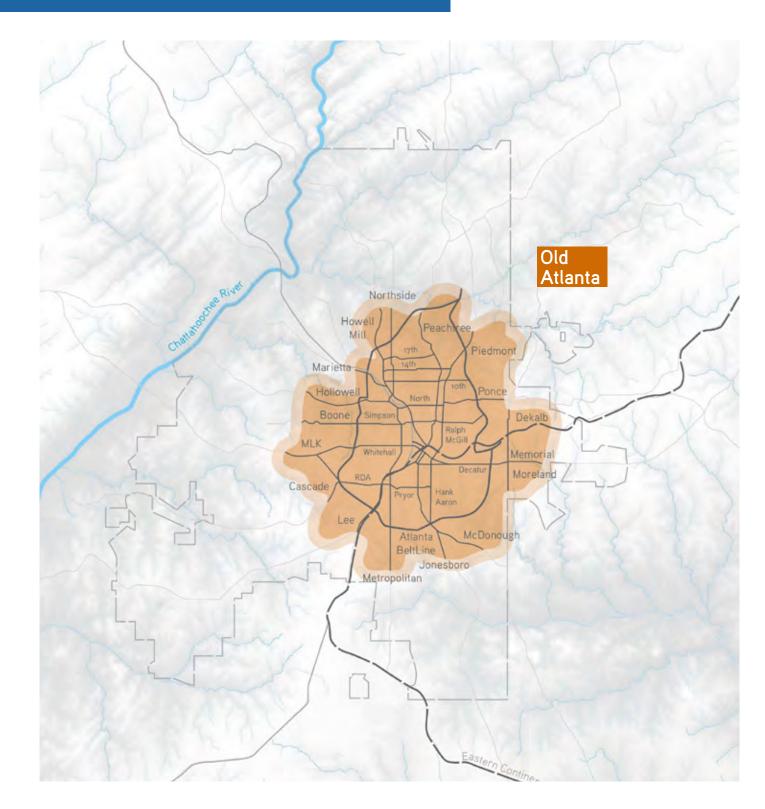






The conditions that framed growth in the City of Atlanta so far, have delivered a beautiful form.





Old Atlanta was built on a hill, a ridgeline far from the Chattahoochee River.



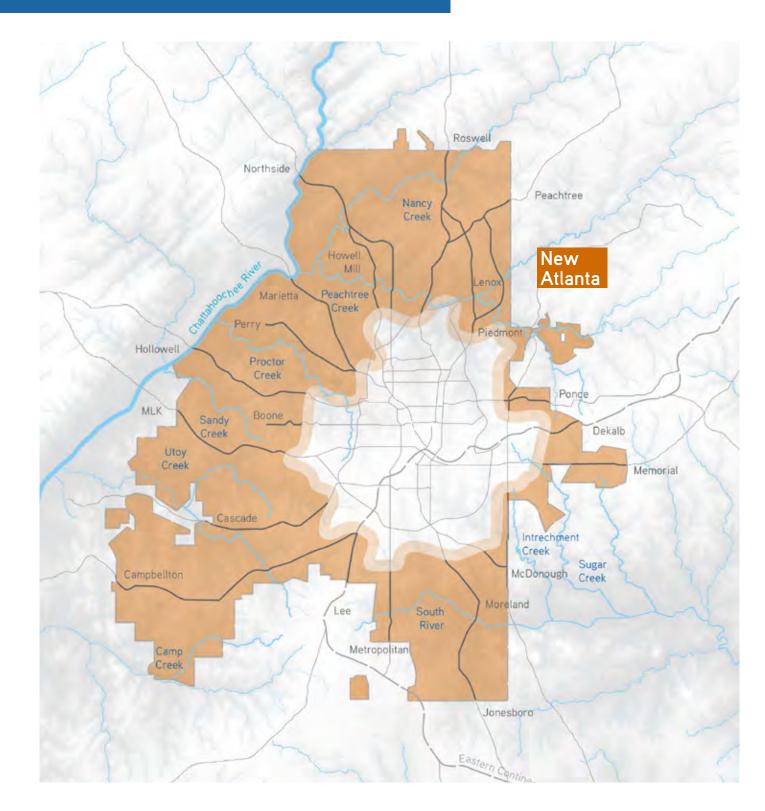












New Atlanta flows from the city's ridgeline like water along streets in every direction.







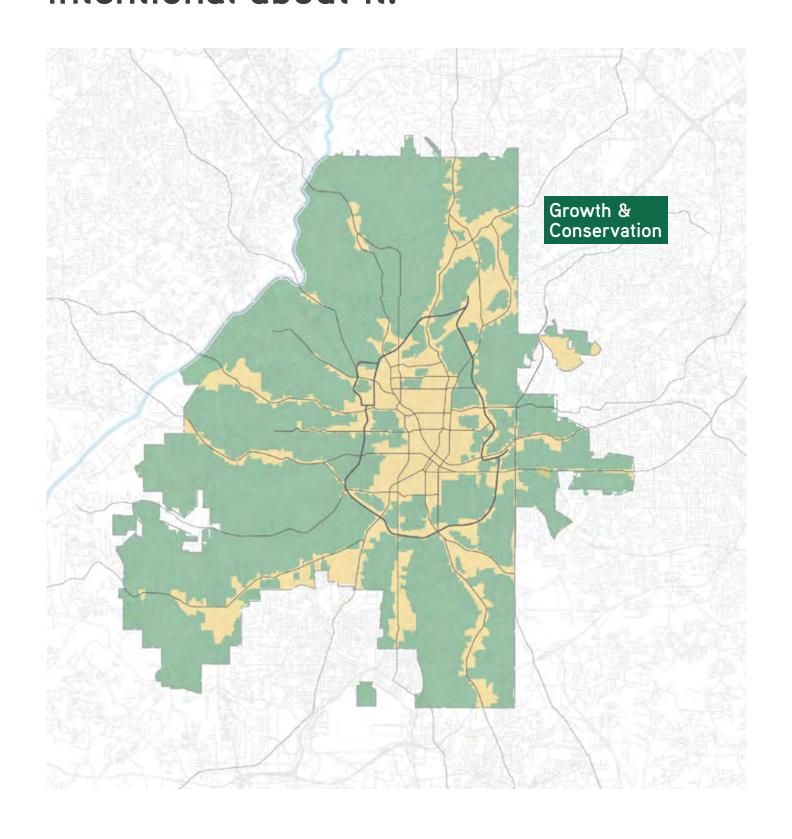


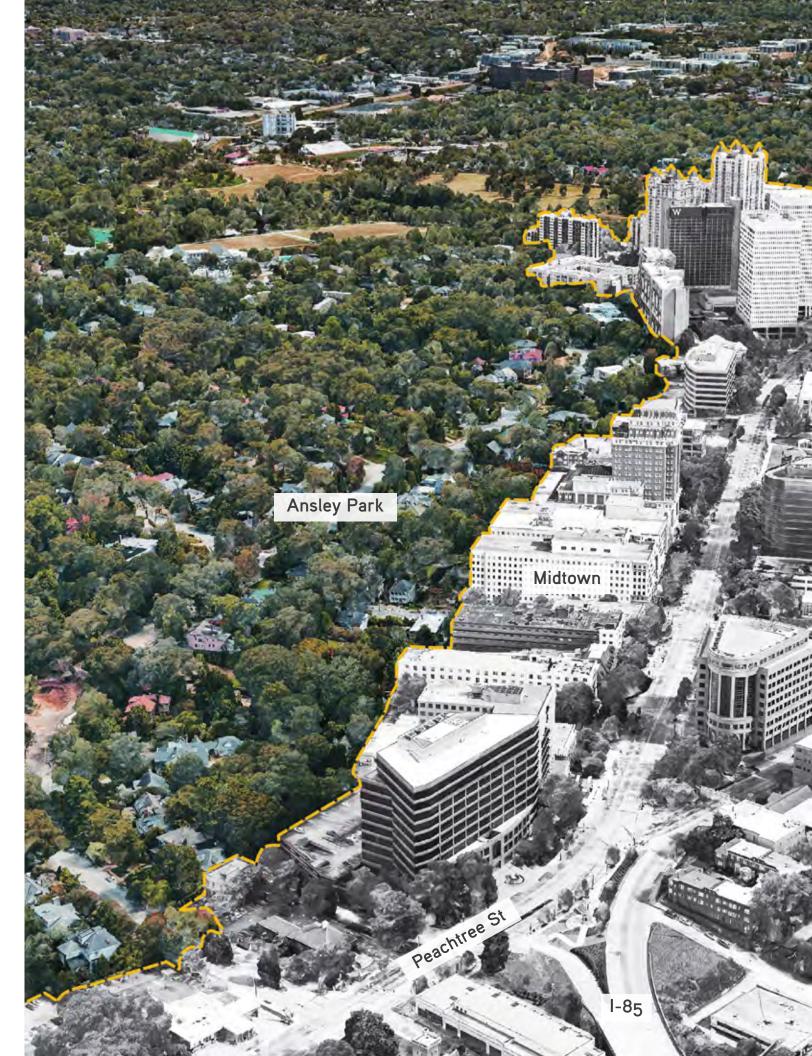


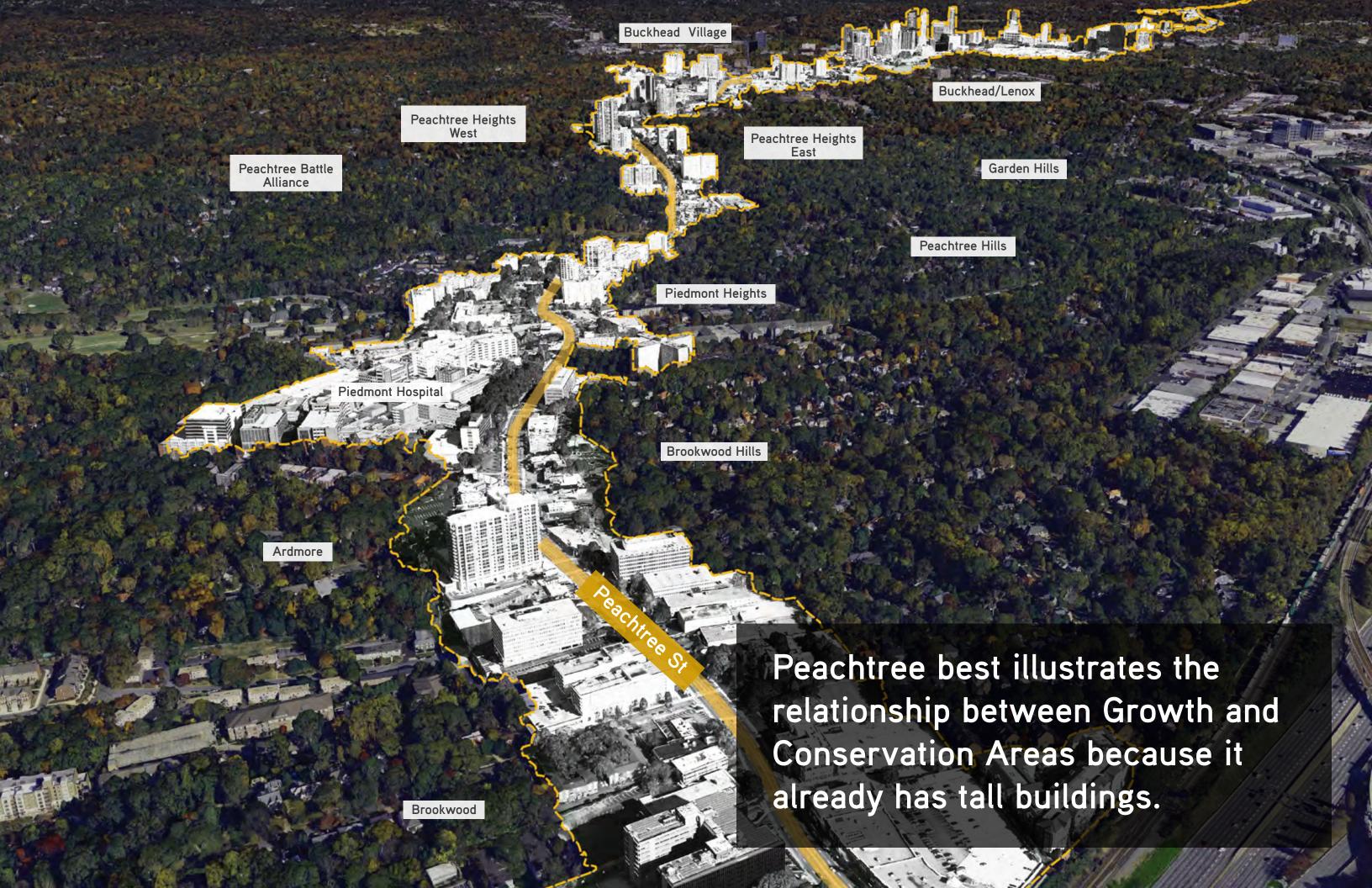


This is how Atlanta grows anyway.

We're just going to be more intentional about it.

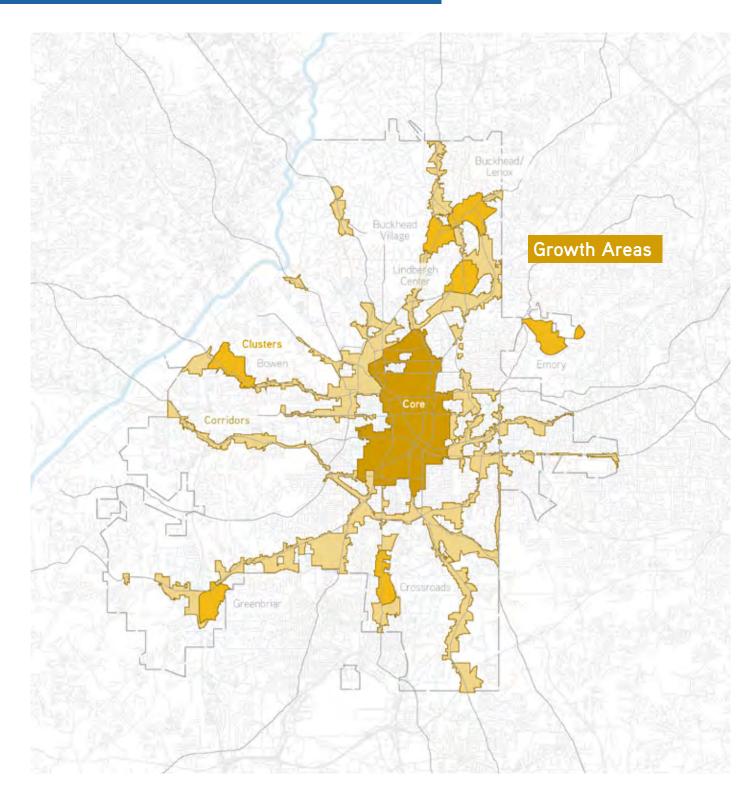




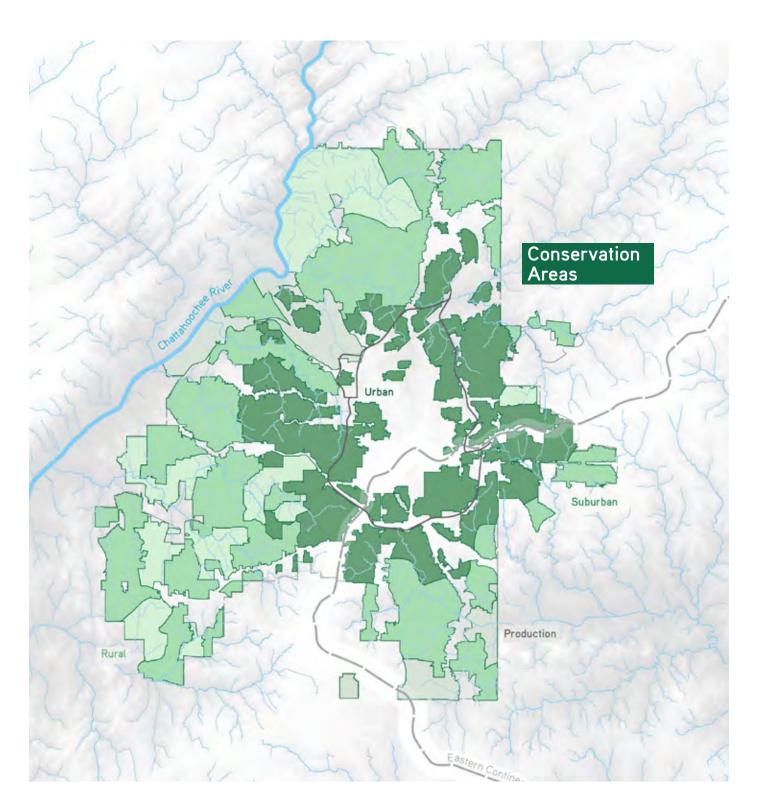








Growth Areas will be designed to connect people and accommodate growth.



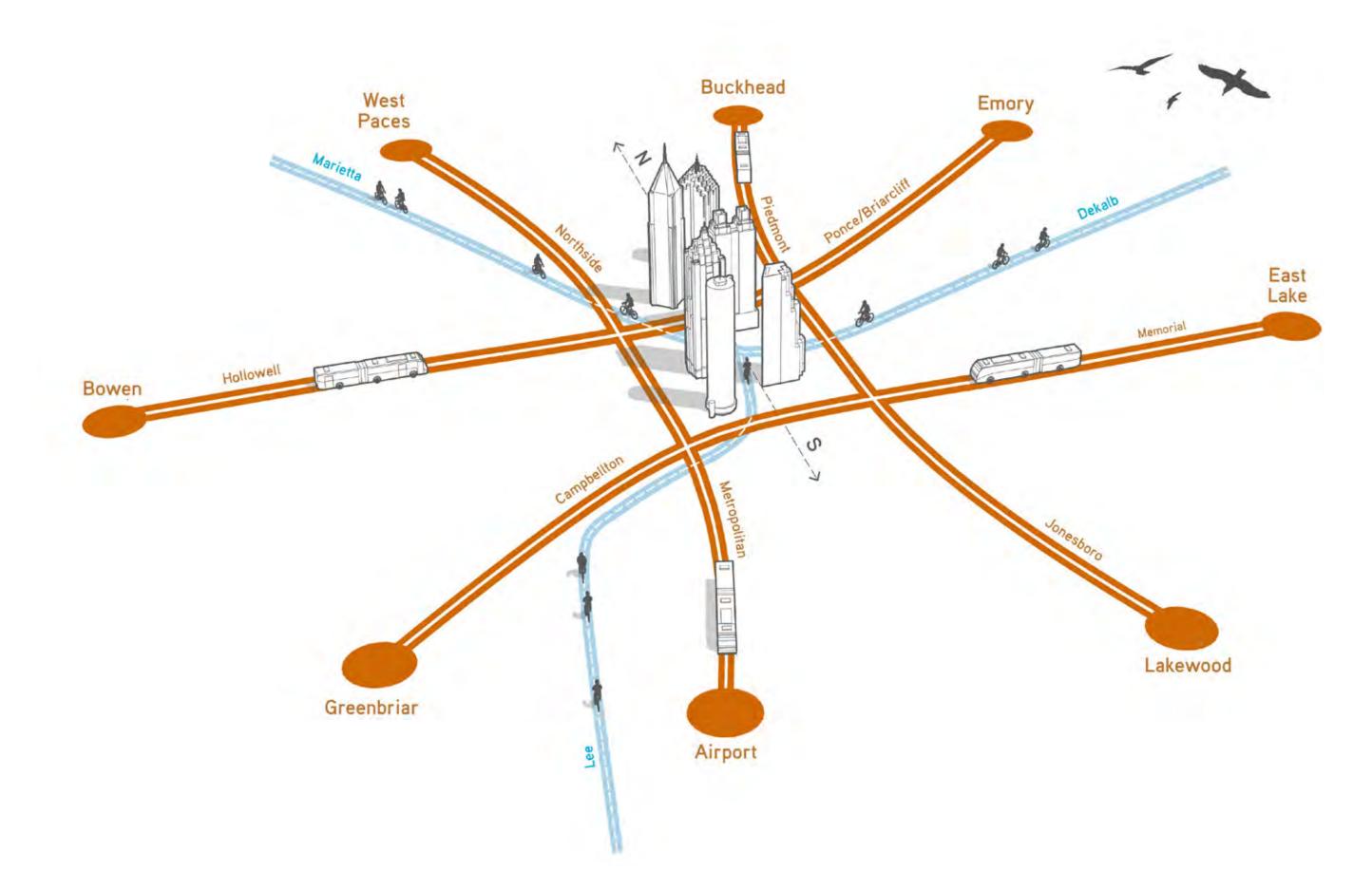
Conservation Areas will be designed to connect nature and protect other things that we value.

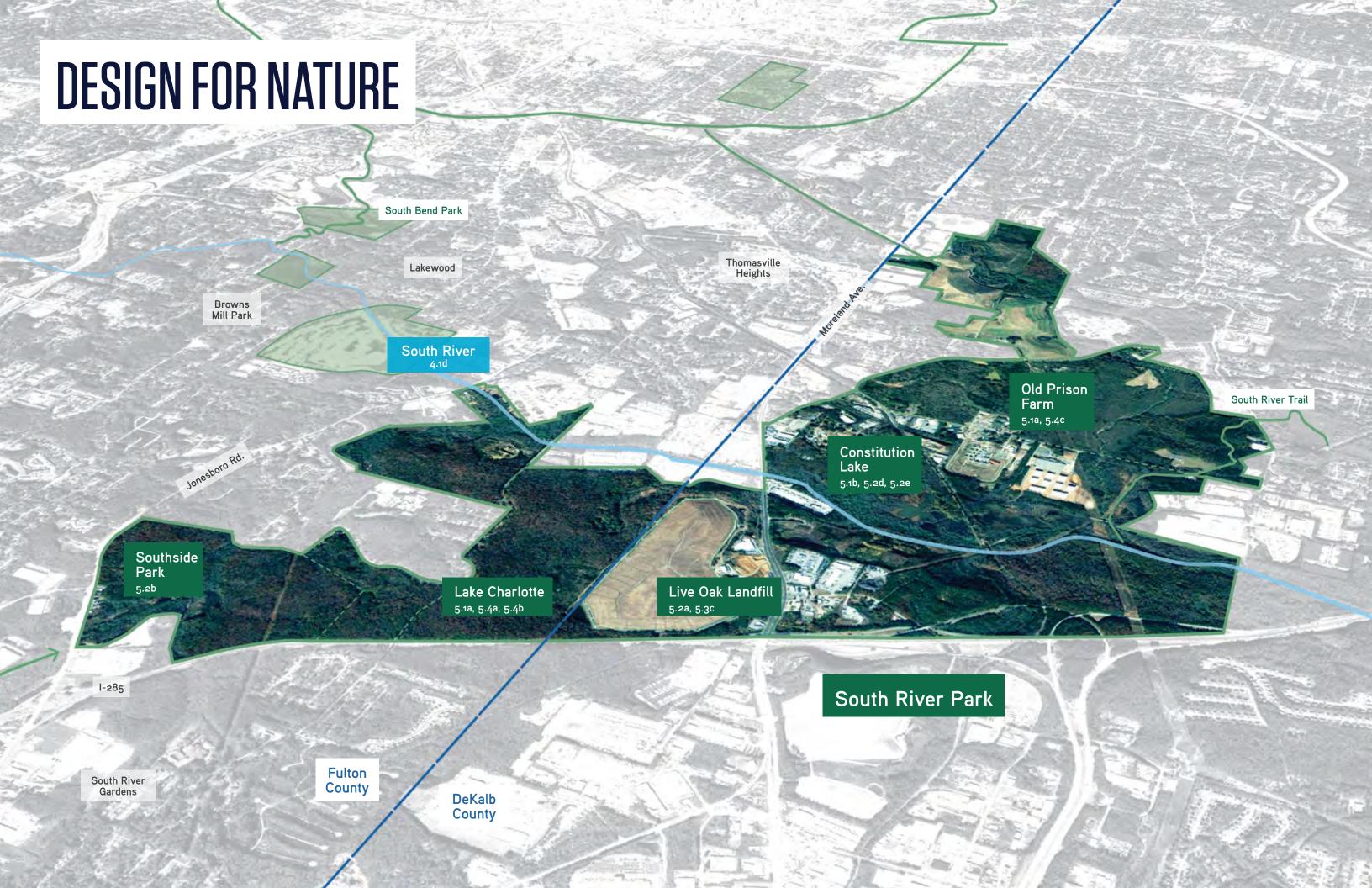
We're going to design for people.

We're going to design for nature.

We're going to design for people in nature.

DESIGN FOR PEOPLE

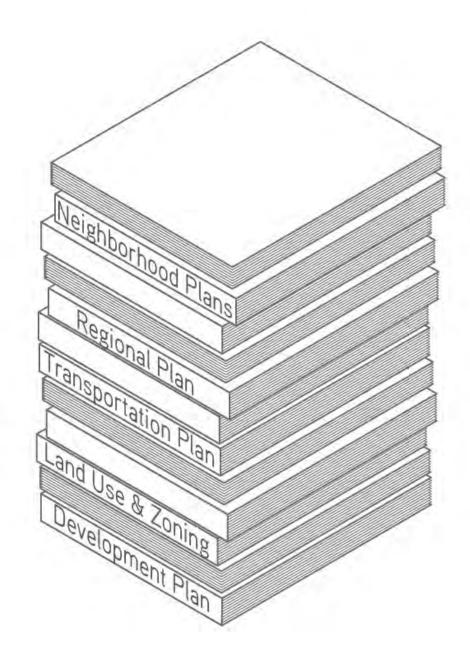








Implementation



Detailed Plans

Following through on this aspiration is the next phase of the City Design. Over the next generation, we will operationalize its actions and ideas. This will require the work of the Department of City Planning, the Mayor and City Council as partners, other divisions of City Hall, and many external partners, including everyday community members.

Modeling Atlanta's Growth: Smart Design Through Advanced Planning

MODELING ATLANTA'S GROWTH

SMART DESIGN THROUGH ADVANCED PLANNING

ATLANTA CITY DESIGN

TONY GIARRUSSO

ASSOCIATE DIRECTOR

CENTER FOR SPATIAL PLANNING ANALYTICS AND VISUALIZATION

CREATING THE NEXT



PROJECT BEGINNINGS

The collaboration between the City of Atlanta and Georgia Tech was borne out of desire for novel planning tools that facilitate the urban design process. The result of this partnership is a set of interactive applications that extend the utility of geospatial data and incorporate advanced modeling techniques — allowing for dynamic visualization of build-out scenarios in a browser-based 3D environment

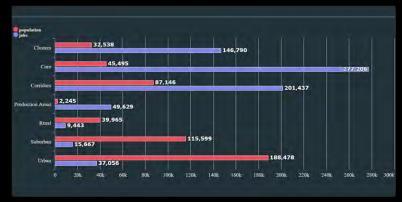


ATLANTA INTERACTIVE 3D DESIGN TOOL

HTTP://GEOSPATIAL.GATECH.EDU/ATLANTACITYDESIGN/

Designed to explore different growth scenarios and build-out possibilities in 3D and view resulting statistics







BASELINE ESTIMATES AND INPUTS

All future scenarios begin with baseline estimates of population and job capacity given the current building stock. These estimates are based on four inputs.

Building Square Footage



Building Footprints

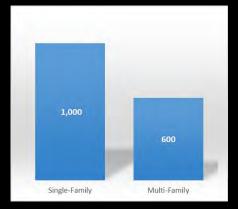
Building Height (Floors)



LIDAR - 3D Models

Population Capacity 511,469
Employment Capacity 737,230

Square Footage Per Person



Provided by the City

Square Footage Per Employee

Sq Ft	LU Code	Land Use
600	312	Hotel Full Service
567	321	Restaurant
567	327	Bar/Lounge
500	331	Auto Dealer
920	342	Community Shopping Center
600	349	Medical Office Building
400	350	Telecommunications Office Bldg
400	351	Bank
400	352	Savings Institution

Based on Land Use – Various Sources

DEVELOPMENT OF ALTERNATIVES AND FUTURE SCENARIOS

Scenarios focusing on various aspects of development and conservation are designed. Scenarios are focused on altering zoning parameters, targeting of specific areas for development, and promoting infill.



Conservation Area Build-Out

- Scenario 1 -

Vacant land and buildings in the Conservation areas (Urban, Suburban, Rural, and Production) are built out and totals added to the baseline estimates.



Growth Area Build-Out

- Scenario 2 -

Vacant land and buildings in both Growth (Core, Corridor, Clusters) and Conservation areas are built out and population and job totals are added to the baseline estimates.



Align Density with Transit

- Scenario 3 -

Scenario two, with increased transit-driven densities in Growth Areas (Core, Corridor, Clusters).

MODEL ASSUMPTIONS FOR FUTURE SCENARIOS

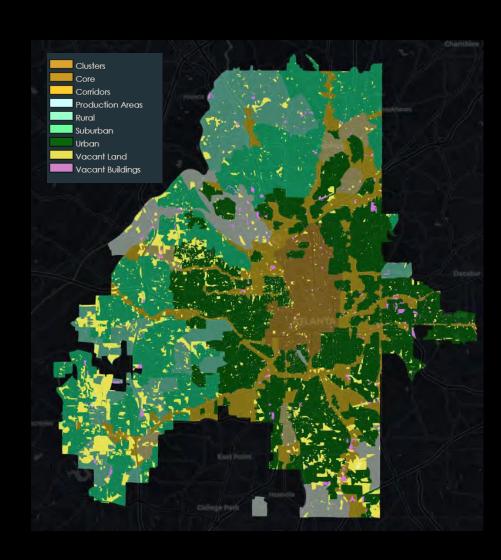
1. Residential: Non-Residential Ratio

Design Area	Residential	Non-Residential
Cluster	10%	90%
Core	20%	80%
Corridor	30%	70%
Production Area	10%	90%
Rural	100%	0%
Suburban	80%	20%
Urban	80%	20%

2. Vacant Land and Vacant Buildings

Land Use Code	Land Use
100	Residential vacant
200	Low Income Housing Tax Credit Apts
300	Vacant Commercial Land
400	Vacant Industrial Land
600	Vacant Exempt Land
700	Utility Vacant Land

9,754 Vacant Land Parcels – 7,000 acres 3,275 Vacant Parcels with Buildings – 2,800 acres



MODEL ASSUMPTIONS FOR FUTURE SCENARIOS

3. Lot Coverage by Design Area

Design Area	Max. Lot Coverage
Cluster	70%
Core	53%
Corridor	72%
Production Area	75%
Rural	88%
Suburban	86%
Urban	76%

5. Square Footage by Population and Employee

Design Area	Sq. Ft per Person	Sq Ft Employee	Scenario
Cluster	555**	250**	2,3
Core	555**	250**	2,3
Corridor	555**	250**	2,3
Production Area	920	350	2,3
Rural	920	350	1,2,3
Suburban	590	300	1,2,3
Urban	590	250	1,2,3
** Does not inclu			

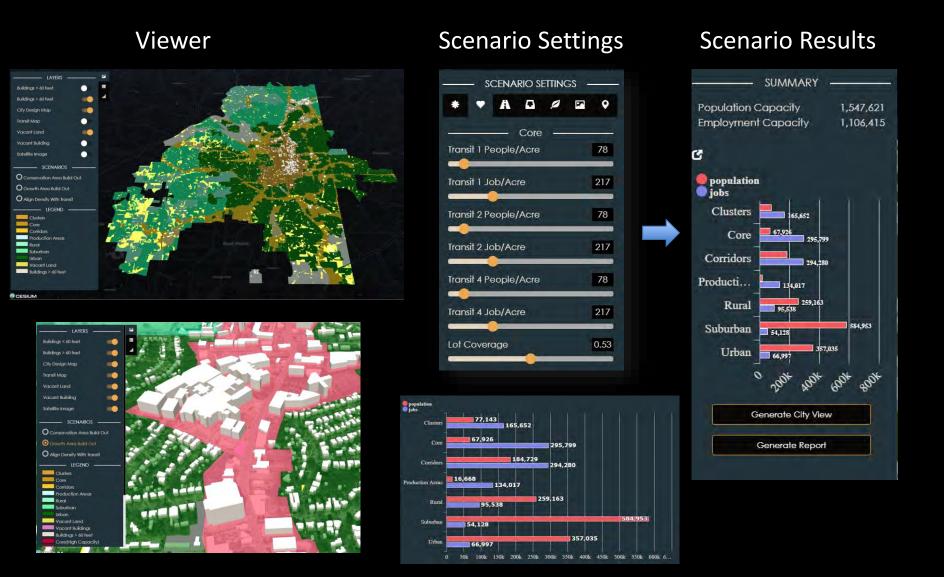
4. Number of Stories per Building Estimate future building heights







DESIGN TOOL IN ACTION



SCENARIO RESULTS

1. Conservation Area Build Out

Population Capacity 1,383,001
Employment Capacity 976,116

2. Growth Area Build Out

Population Capacity 1,547,621
Employment Capacity 1,106,415

3. Align Density with Transit

Population Capacity 1,586,651
Employment Capacity 1,130,239

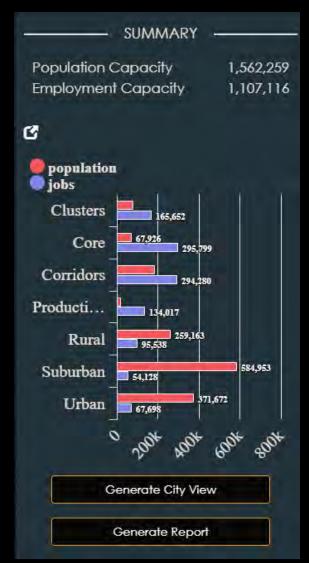
DYNAMIC SCENARIO BUILDING



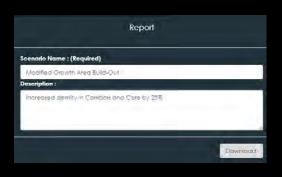
Growth Area Build Out



GENERATE CITY VIEW AND REPORT



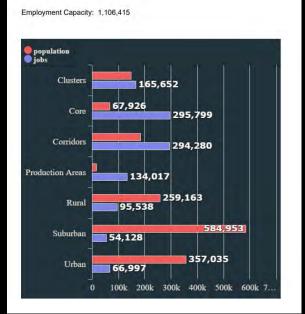




Scenario Summary:

Population Capacity: 1,618,578

Scenario Name: I	Modified G	Growth	Area Build	-Out			
Description: Increased density in Corridors and Core by 25% Scenario Setting:							
Parameters	Clusters	Core	Corridors	Production	Rural	Suburban	Urban
Transit 1 People/Acre	78	78	78	N/A	N/A	N/A	N/A
Transit 1 Job/Acre	174	217	174	N/A	N/A	N/A	N/A
Transit 2 People/Acre	235	78	78	N/A	N/A	N/A	N/A
Transit 2 Job/Acre	174	217	174	N/A	N/A	N/A	N/A
Transit 4 People/Acre	62	78	78	N/A	N/A	N/A	N/A
Transit 4 Job/Acre	174	217	174	N/A	N/A	N/A	N/A
Lot Coverage	0.7	0.53	0.72	0.75	0.88	0.86	0.76
Square Feet/Population	N/A	N/A	N/A	920	920	590	590
Square Feet/job	NI/A	N/A	N/A	350	350	300	250



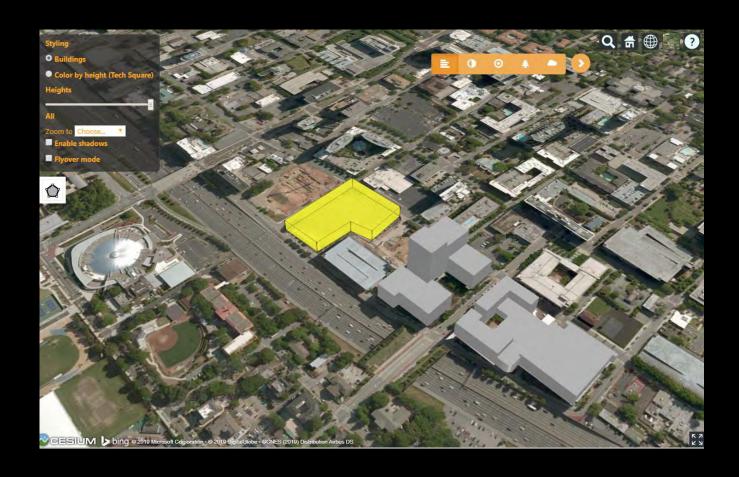
ADDITIONAL TOOLS: ATLANTA CITY VIEWER

Visualize Atlanta's buildings based on height, volume, growth type, and texture.



ADDITIONAL TOOLS: ATLANTA CITY EDITOR

Editing tool for creation, change, and visualization of potential buildings in Atlanta.



TRY IT FOR YOURSELF

http://geospatial.gatech.edu/AtlantaCityDesign/

GETTING STARTED

DOCUMENTATION

- · Quick Start: Atlanta Interactive Design (AID) App
- · Quick Start, Atlanta City Viewer App
- · Quick Start Atlanta City Editor App
- Growth Forecast Model Input Parameters
- Conservation Area Built-Out Summary Report
- Growth Area Built-Out Summary Report
- Align Density with Transit Summary Report
- All Scenarios Summary Reports

TUTORIAL VIDEO



essible version de la minoria son este parovia

What's next for City Design?

We are focused on the aggregate effect of creating a narrative and corresponding outcomes that lean more into the design, development, and growth of a future City of Atlanta. This work is iterative and collaborative.



OFFICE OF BUILDINGS DASHBOARD FY 2019



CONSTRUCTION VALUATION*



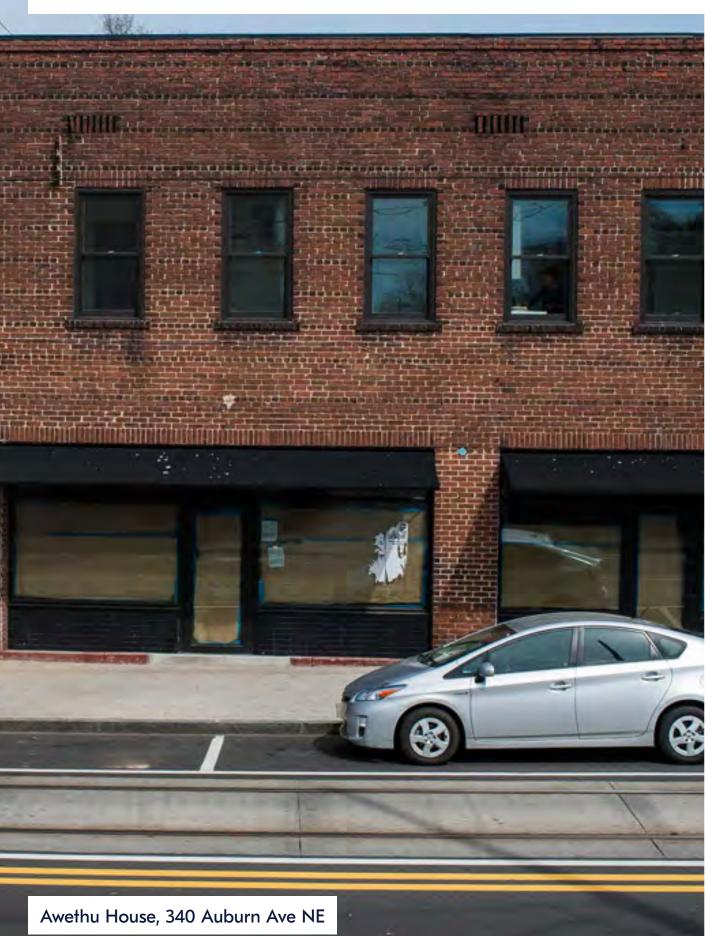
*All values for the first 8 months of the fiscal year.

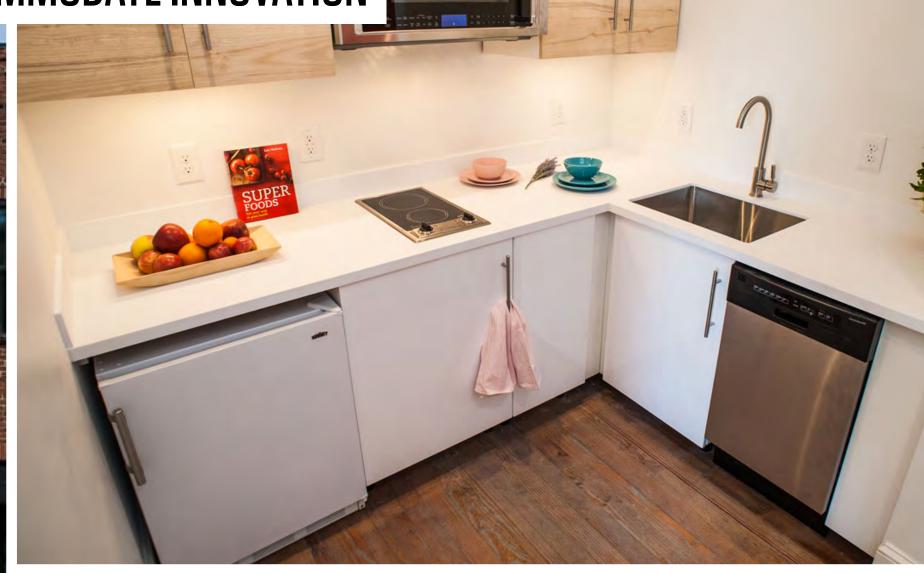
TOTAL PERMITS

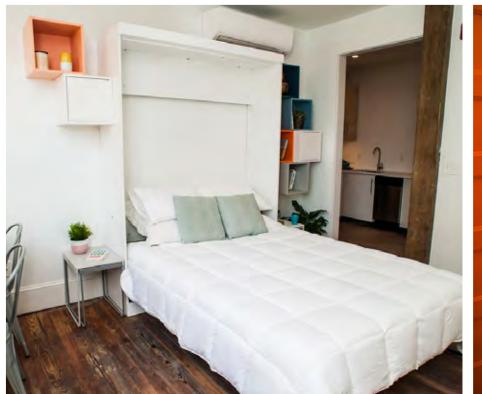




WE'RE REFORMING OUR CODES TO ACCOMMODATE INNOVATION









WE'VE ALSO BEEN REFORMING OUR ZONING CODE...

- Accessory Dwellings
- Definitions Update
- Historic Lot Patterns
- Industrial Districts Uses
- I-Mix District
- Loading Requirements
- MRC (Mixed-Residential Commercial)
- Residential Density Increase
- Missing Middle Zoning District
- Parking (on-street, shared, old buildings)
- Neighborhood Design Standards
- Telecommunications Updates
- Transitional Height Plane Updates
- Quality of Life Districts

Phase 1 and 2 passes, RFP for rewrite in progress

FACT SHEET

ZONING ORDINANCE REFORM

What is Zoning Reform?

In 2015, the City of Atlanta commissioned a team of consultants to conduct a comprehensive assessment of the City's Zoning Ordinance. Upon completion of the assessment, the consultant prepared recommendations for consideration to the Office of Zoning & Development's consideration about how the Zoning Ordinance could be improved. These recommendations and the technical review of the Ordinance are found in the Zoning Ordinance Diagnostic report.

The diagnostic, performed over one year, resulted in the Atlanta Zoning Ordinance Assessment that made a series of recommendations for future changes to the Zoning Ordinance, including amendments to the regulations.

Through reform, we sought to expand transportation options, ensure housing diversity, create user-friendly regulations, protect neighborhood character, and create vibrant corridors and districts

What are the two phases?

The Diagnostic categorized the recommendations into those that could be



completed in a relatively short period of time as "Quick Fixes" or "Medium Fixes" and those that would require a comprehensive overhaul of the current Zoning Ordinance and would likely require a period of two to four years to complete.

The proposed recommendations seek to clarify and improve certain provisions of the Atlanta Zoning Ordinance and Subdivision Ordinance and provide consistency with the Atlanta City Design project; as well as update consistency with state and federal law, and advance the public health, safety and welfare of citizens. The recommendations topics were broken down into two Phases: Phase I - "Quick Fixes" and Phase II - "Medium Fixes."

What issues are addressed?

Phase 1 addressed these topics:

- Accessory structure heights
- · Accessory structure size definition
- · Accessory uses in R District
- Bicycle parking standards
- · Deletion of unused zoning districts
- Independent driveways requirements
- Multi-family zoning, single-family minimum lot sizes
- MRC District building placement
- Master plan provisions
- · Minimum building height non-conformity
- · Replats of non-conforming lots
- Special Use Permit transfers
- Sidewalk standards
- Storefront streets curb cuts
- · Storage pods on residential property
- Traditional Neighborhood Development (TND) street standards

Phase 2 included topics such as:

- Accessory Dwellings
- Definitions
- I District Uses
- Loading RequirementsMRC-2 Residential Density
- Missing Middle Housing
- Parking



- Neighborhood Design Standards
- Telecommunications
- Transitional Height Plane
- Quality of Life Variations

Where are we now?

Phase I Quick Fix proposed amendments were adopted and approved in May 2018.

Phase II Medium Fix proposed amendments were adopted and approved in January 2019.

A Request for Proposal (RFP) went out on December 14, 2018 and the City will evaluate entries to determine proponents for providing an update or rewrite of the City of Atlanta Zoning Ordinance in the coming months.

Who should I contact?

Contact Sushmita Arjyal by email at sarjyal@AtlantaGa.gov or call 404-330-6145.

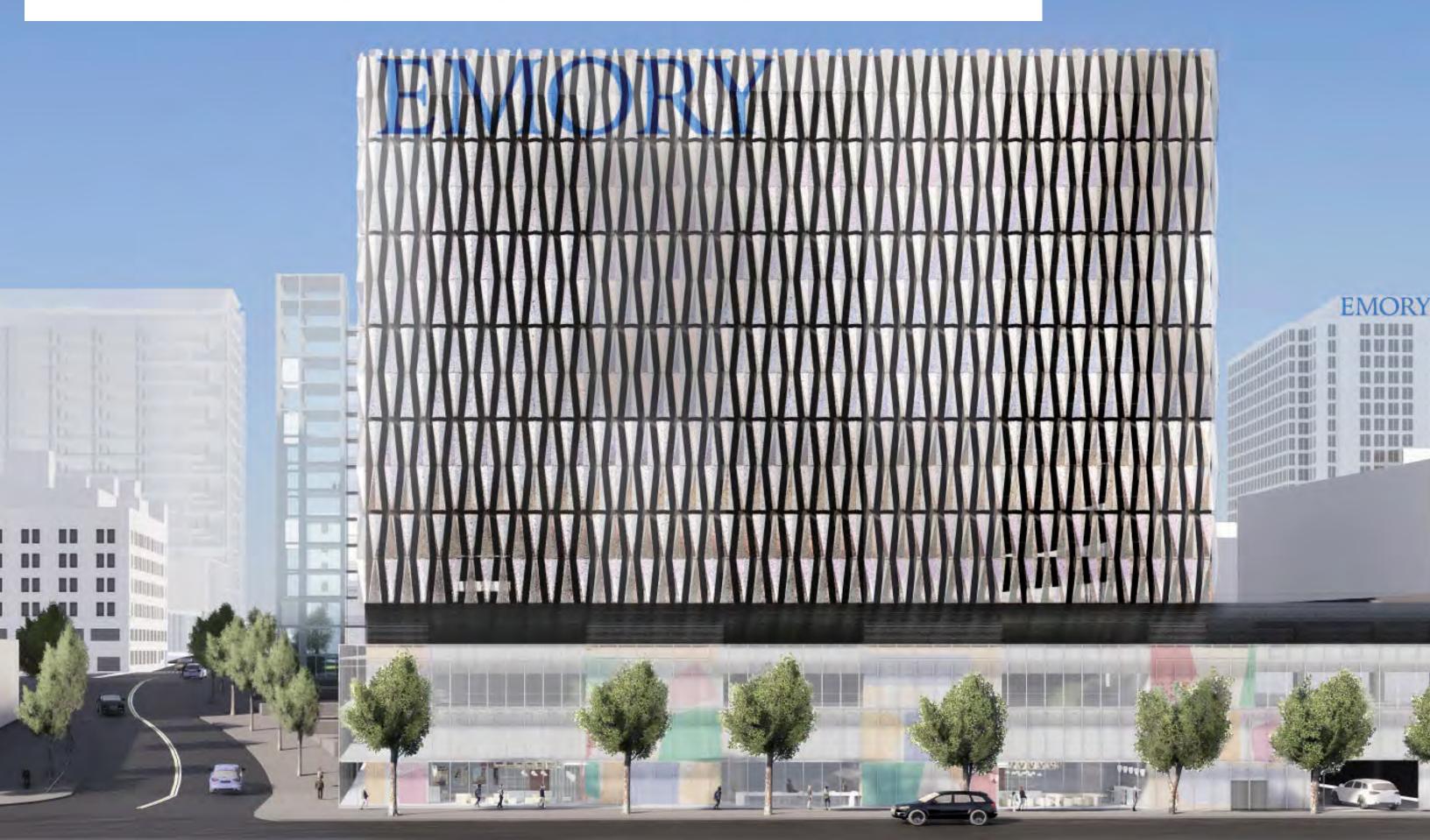






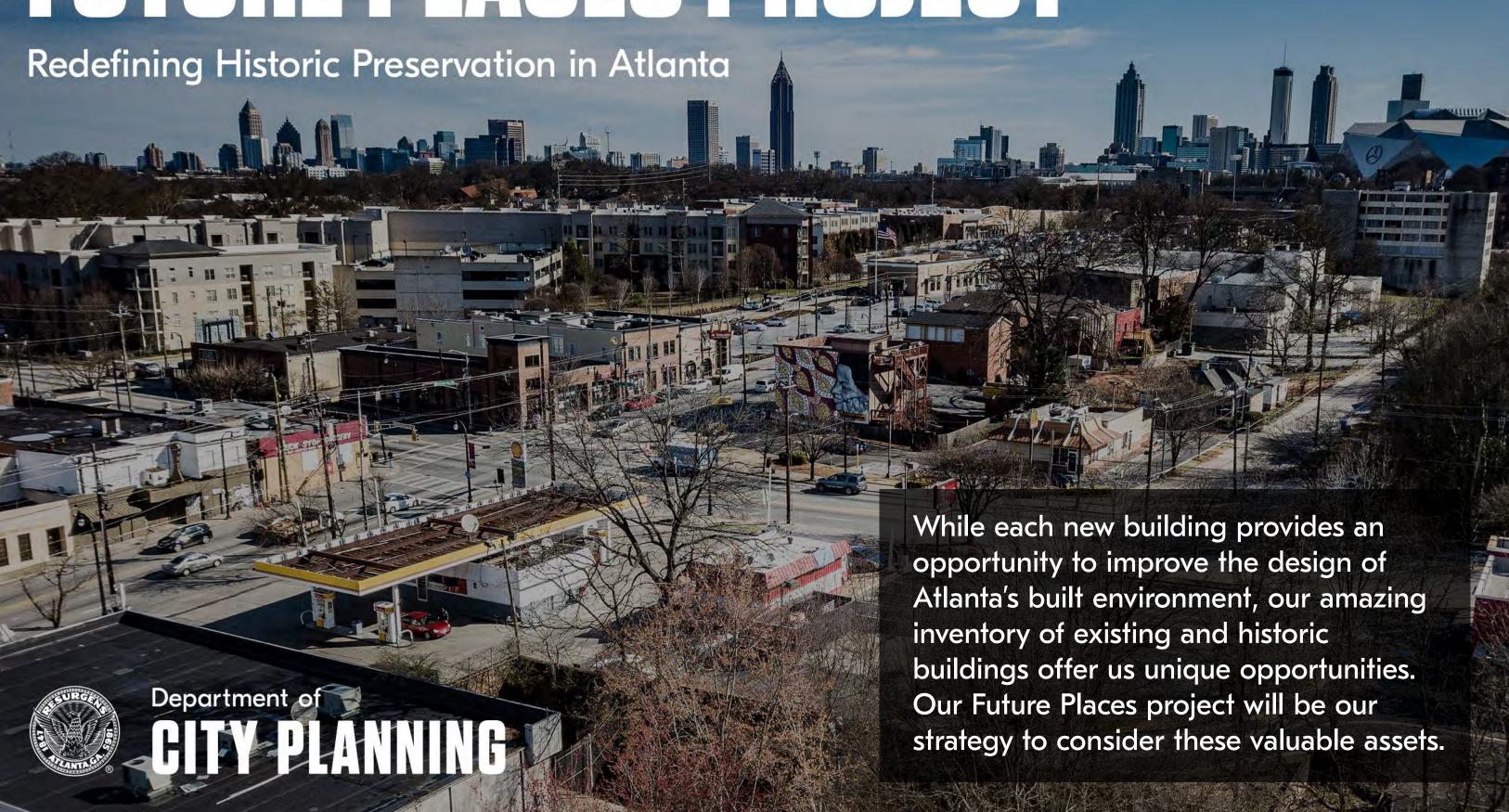


WE'VE BEEN WORKING WITH EMORY ON A PARKING DECK IN MIDTOWN



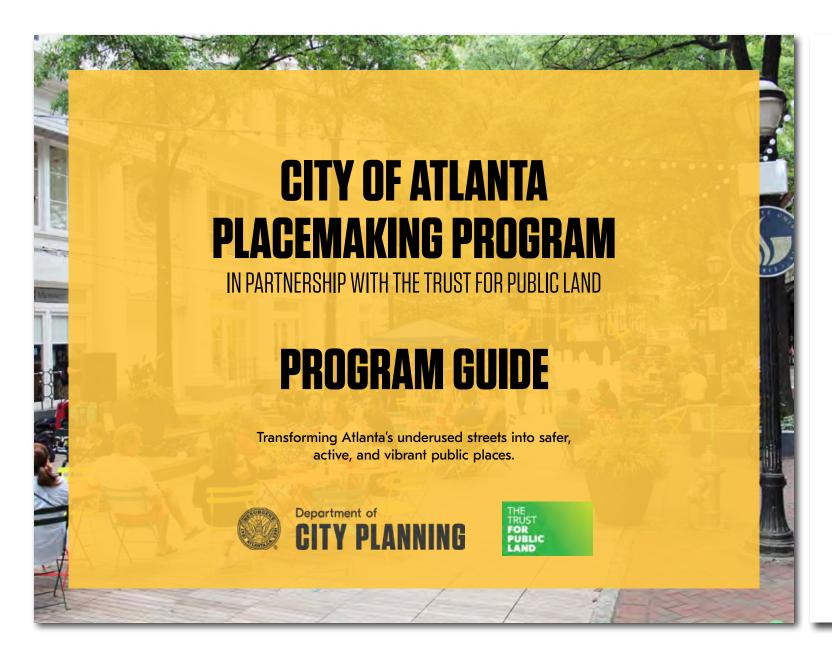








OUR PLACEMAKING PROGRAM CONTINUES TO BE POPULAR & IMPACTFUL



PROPOSAL SCORING & EVALUATION

The following set of criteria will be used evaluate all eligible proposals and to select the winning projects. Projects with higher scores will be prioritized.



Transportation Safety

Up to 10 points

Your project must address a transportation safety concern. In particular, your proposal should work to make the street safer for people who walk, bike, or use transit, not just for cars.

Safety improvements can come from changes such as slower speeds, increased visibility, better street crossings safer intersections, safer street organization or signage, or safer pedestrian features.



Community Suppor

Up to 5 points

Your project should have strong community support. Letters of support from a broad range of stakeholders especially those who would be directly impacted by your project, is highly preferable.

Projects that connect to existing community efforts or larger plans make a strong case for support.



Street Activation

Up to 5 points

Your project should include an element that draws people to it and activates the street with people Ideas that encourage people to interact with the space are preferable.



dditional Consideration

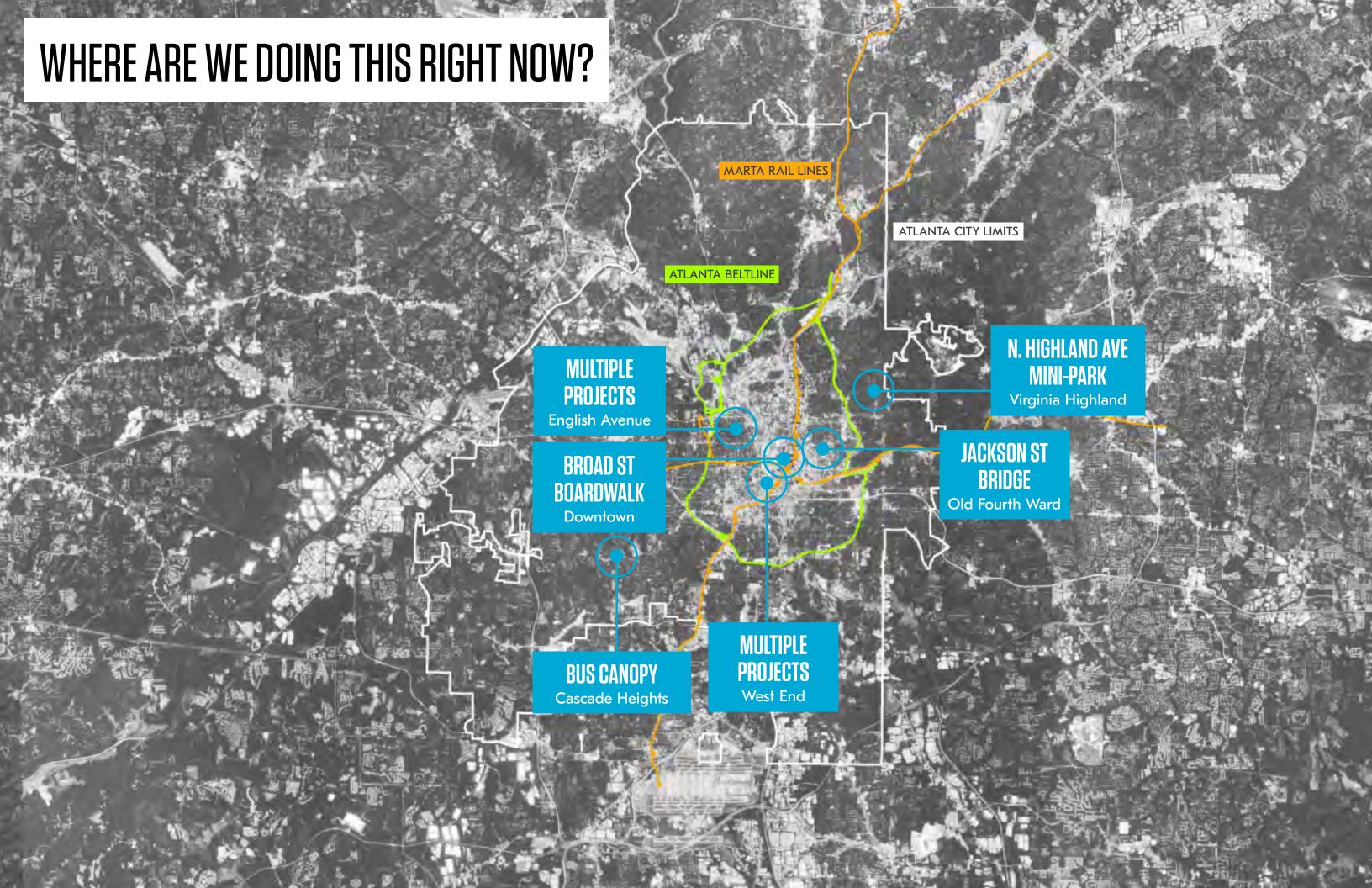
- Sites or projects with special conditions will receive additional consideration. Such conditions include:
- Located within an <u>Equitable Target Area</u>
- Located within a historic district or corridor
- Increases park or school access
- Existing active ground floor retail or other pedestrian use
- Incorporates multi-modal access
- Improvements upon applications that were submitted in the 2018 call for projects but were not awarded. (Note: Projects previously accepted to the program may not be re-submitted for additional funding.)
- Project is located in a geographic area unserved by previous placemaking projects



Placemaking Program Guide



12



OUR BUILT WORK IS ABOUT DOING THE SMALL THINGS EXCEPTIONALLY WELL







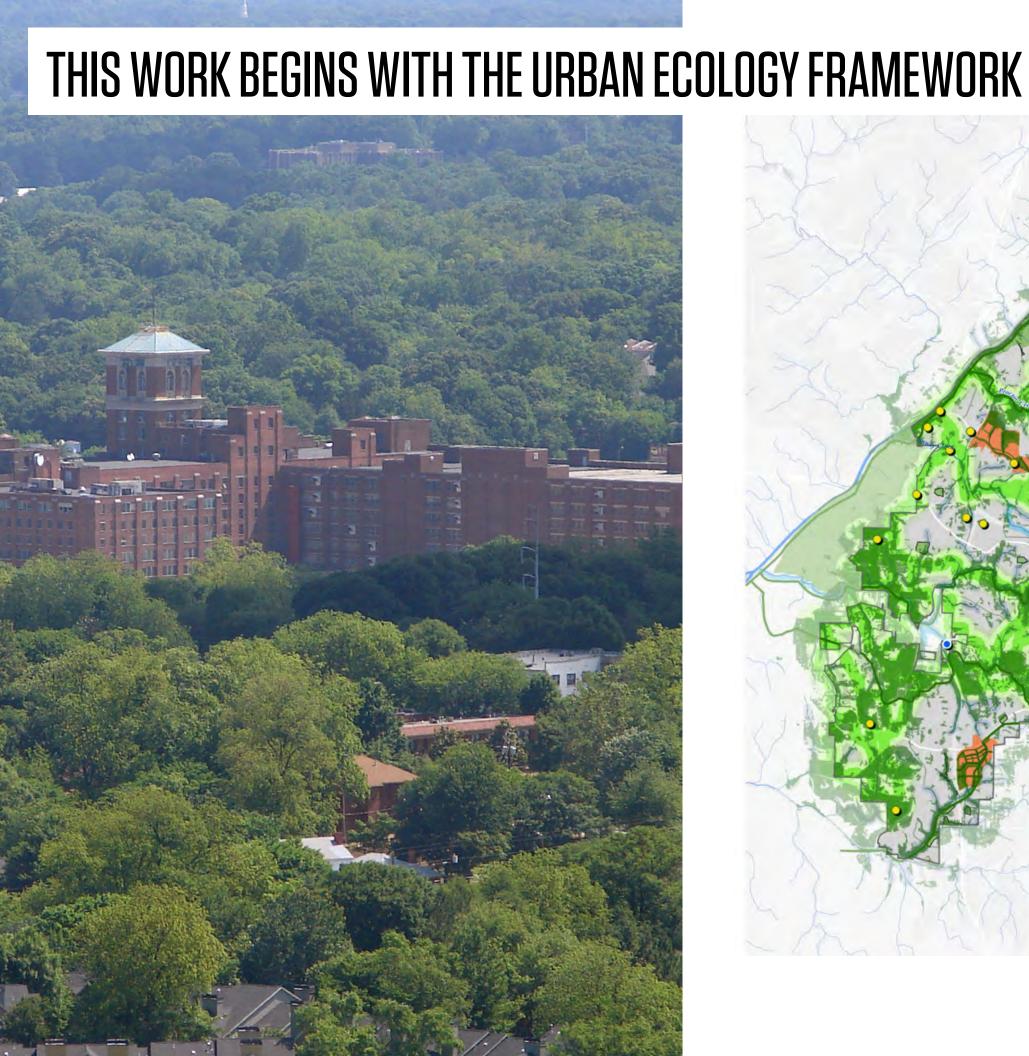
Broad Street Pedestrian Plaza

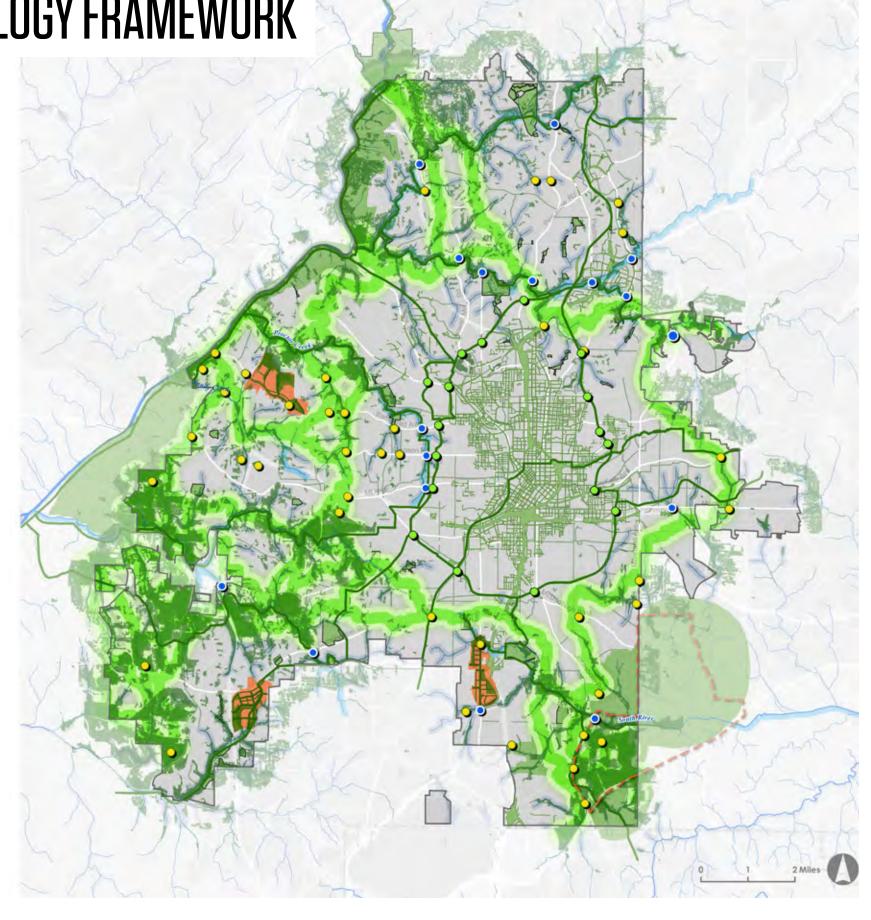
Cascade Heights Bus Canopy

Virginia Highlands Mini-Park











TREE ORDINANCE RE-WRITE

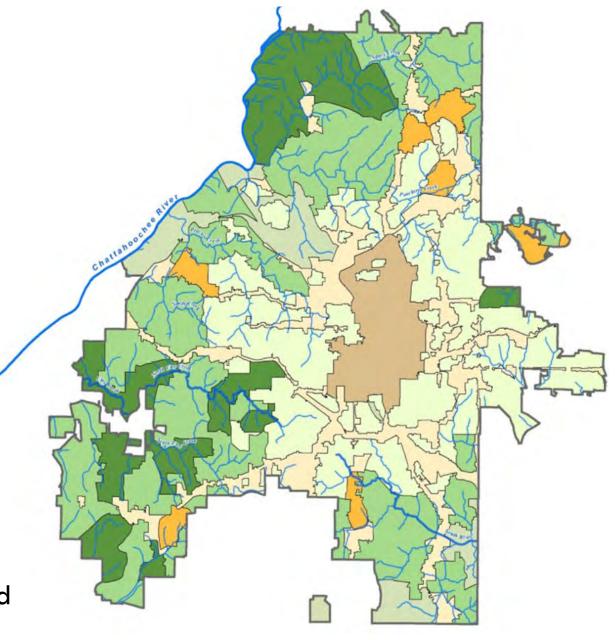
How do we get to 50%

City Design Category		2008	2014	Change	Goal	Change needed	Major Initiative*	Protect & Plant^
	Core	7 %	11%	+ 4 %	15 %	+ 4 %	Х	
	Clusters	26.5%	26%	-0.5%	35 %	+9%	Х	
	Corridors	25%	27 %	+2%	30%	+3%	Х	
	Production Areas	28%	27 %	-1 %	27 %	0%		Х
	Urban	48%	<i>5</i> 0%	+2%	<i>55</i> %	+ 5 %	Х	
	Suburban	59 %	<i>5</i> 8%	-1 %	60%	+ 2 %		Х
	Rural	70%	65%	-5%	67 %	+2%		Х

^{*}Major public realm tree planting of diverse tree species, soil volume, tree management and replacement initiative

Key Actions

- Protection of existing tree canopy using the previously identified protection zones
- Major young forest initiative to plant 3,600 new acres of trees and manage to maturity
- Annual replacement of dead trees outside forests.
- · City wide public realm tree inventory to inform new planting and management
- Assessment of tree mortality and demographics to track trajectory of forest and planted public realm trees.





[^] Protection of tree canopy and new planting of diverse species

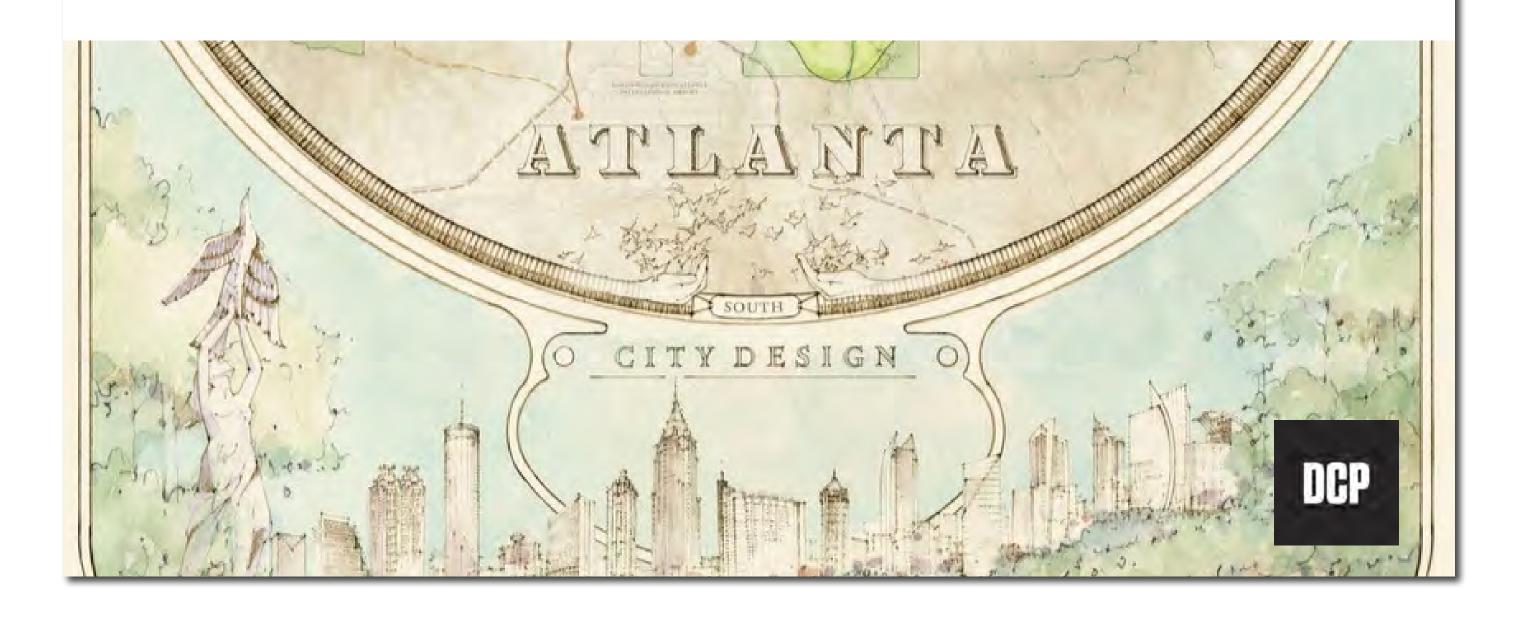
CHATTAHOOCHEE RIVER GREENWAY STUDY The construction of Buford Dam in the 1950s created cold water conditions capable of supporting the most southern trout fishery in the United States. Rainbow RAINBOW AND BROWN TROUT RANGE WATER QUALITY trout are regularly stocked in the upper enough to support trout habitat in the upper reaches portion of the river, while brown trout of the Chattahoochee. As the river flows Water quality has significantly improved in stocking efforts have been so successful, downstream, it becomes increasingly warm, which confines the cold water fish to Sub Area 1 and 2. they now have a self-sustaining population. recent years but the health of the Cooling of the river, combined with water Chattahoochee is largely dependent on the quality issues, once devastated the native health of its tributaries. Water quality fish population. Water quality has since remains impaired by the impacts of upstream greatly improved in recent years and native urbanization, including flows and species like shoal bass are being sedimentation. reintroduced through breeding and restocking programs. **ECOLOGY** Watershed Boundary Supporting Streams Impaired Streams Water Flow Monitoring Locations Water Quality Monitoring Locations Forest Cover Agriculture Land Cover SHOAL BASS RANGE An endemic species, shoal bass were once present throughout the Chattahoochee but now only found in its tributaries. Recent restoration efforts have been made to bring the fish back to the river. As a warm water species, the barrier of Morgan Falls Dam combined with cooler water upstream, Water Access Points Combined Sewer Overflows confines its reintroduction to Sub Area 2 and 3 Water Intakes Waster Water Outfalls Shoals Dams **ECOLOGY CONNECTIVITY** Sub Area-3 has large tracts of intact forests Chattahoochee River and national parks scattered along the river. Parks Along the River The area provides an ecological corridor and connectivity along the river that extends to **County Lines** an even larger regional network. This area Expressways also contains some of the healthiest supporting tributaries of the Chattahoochee 1 Mile Buffer WATER USE including Sweetwater Creek and Dog River. Tributary health is important to the overall Atlanta City Limits health of the river and important The Chattahoochee is a valuable resource, supplying 70% of considerations as the region's population 10 Miles Atlanta's drinking water from a single intake. A relatively continues to expand. small river supporting a large population, the river is controlled, confined, and consumed by metro Atlanta. During periods of drought 30% of the river's waters downstream of Atlanta is treated wastewater effluent.



OUR WORK IN AFFORDABILITY STARTS BY UNDERSTANDING OUR SPECIFIC NEEDS

A CITY BY DESIGN:HOUSING

THE EQUITABLE NEEDS ASSESSMENT REMIX





THIS ASSESSMENT HELPS US BUILD A MORE TARGETED STRATEGY

DATA

CURRENT HOUSING NEEDS | MARKET TRENDS

Atlanta's population has grown significantly since 2010, adding mostly higher income, better educated, and renter households. In response, Atlanta's supply of housing – particularly multifamily – expanded and shifted toward higher-cost rental housing. Rents have increased faster than income. As a result, Atlanta's affordability challenges are growing as both renters and homeowners are increasingly strained to afford housing.

MARKET TRENDS



+11,000

Atlanta has experienced strong population growth in **educated and** racially diverse households.



3 in 4

Toron and toron

Renter households are driving the city's growth, while homeownership rates have declined.



~95%

Of new households >\$50K

Gentrification pressures are strong. The vast majority of newcomers earn more than \$50,000 annually.



27%

Of all units were built post-2000

Atlanta has experienced rapid housing development.



86%

Multifamily share of new units

Multifamily development has driven most of this increase in housing.



+74%

Growth in average rent for new units

Rents for newly developed units are rising throughout the city.

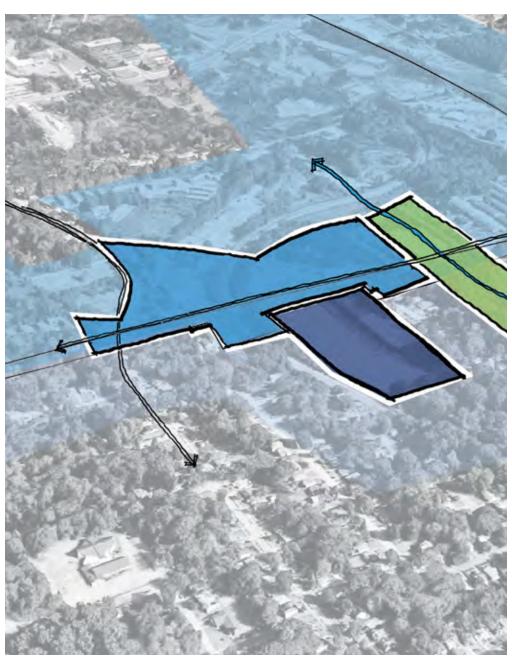
Source: ACS 2016,2010 5-year survey



OUR NEW **HOUSING INNOVATION LAB**



CitywideEnable the private market



Master Plan
Partner on major development sites



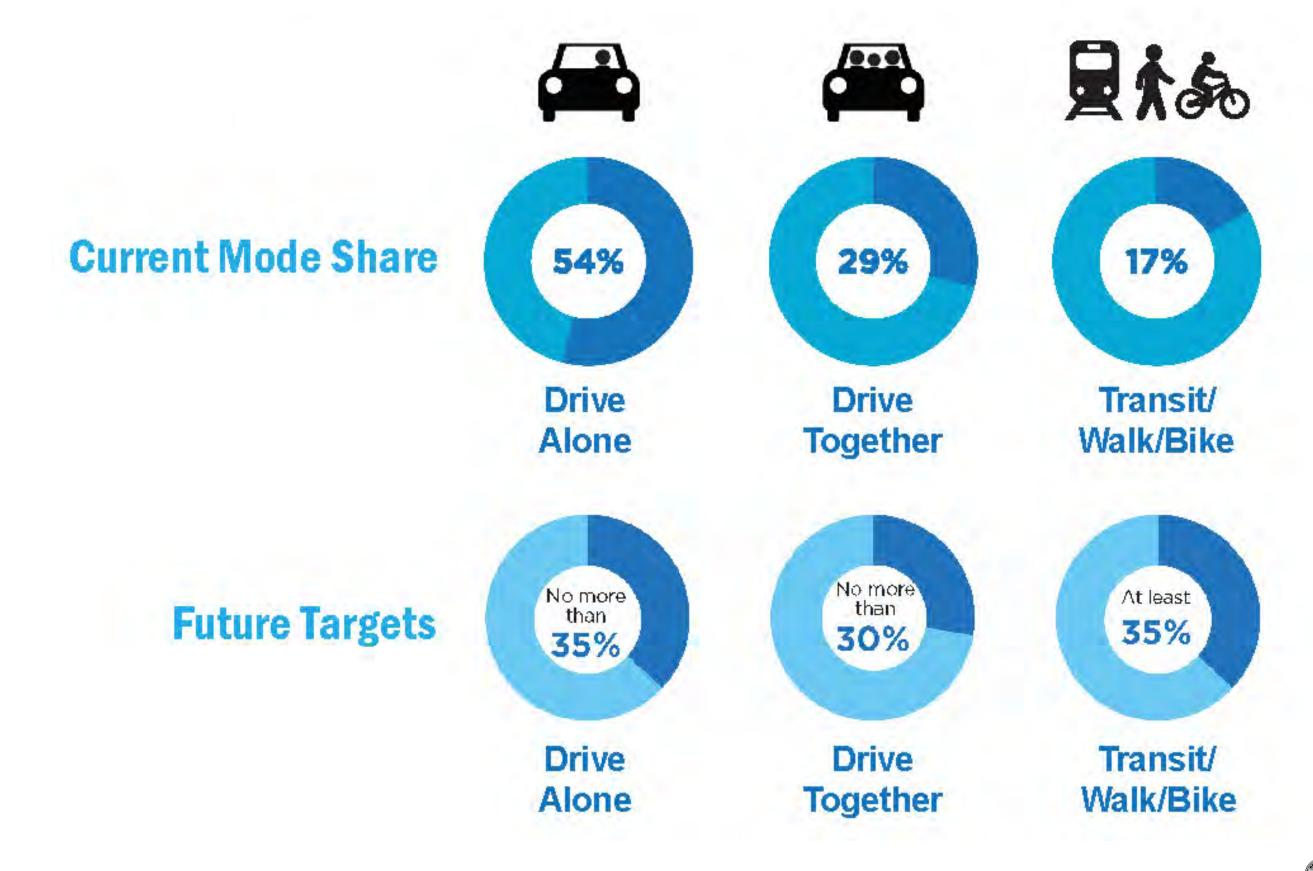
Building
Leverage & develop city assets







THIS INCLUDES AN AMBITIOUS NEW VISION FOR THE WAY WE MOVE AROUND THE CITY





OUR SUPPORT OF MICRO-MOBILITY HELPS US ACHIEVE THIS VISION

Average Day for Micro-Mobility in Atlanta



Average Trips/Day: 11,534

Average Miles/Trip: 1.0 miles

Average Trips/Device: 2.9 Trips

Source: Monthly Operator Reports, Office of Mobility Planning



Average Minutes per Trip: 15.4 minutes

Source: Monthly Operator Reports, Office of Mobility Planning



Average Cost per Trip: \$3.06

Average Cost per MARTA Trip: \$2.50 or less

Source: Monthly Operator Reports, Office of Mobility Planning



OUR SUPPORT OF MICRO-MOBILITY HELPS US ACHIEVE THIS VISION

#ScootSmart Campaign

Follow the Department of City Planning's social media this summer to see information on scooters and e-bikes and tips for how to park and ride safely.

Check out our kick off video to get started!











...SHOWED EXACTLY HOW THIS WORK CAN BE APPROACHABLE & COLLABORATIVE











Questions?



Subhro
Guhathakurta
Director, Center for
Spatial Planning Analytics
& Visualization,
Georgia Institute of
Technology
(Moderator)



Kevin
Bacon
Director, Atlanta City
Studio, City of Atlanta
Department of City
Planning



Giarusso
Associate Director,
Center for Spatial
Planning Analytics &
Visualization,
Georgia Institute of
Technology

Tony



Gordon
Zhang
Research Scientist, Center
for Spatial Planning
Analytics & Visualization,
Georgia Institute of
Technology

www.atlcitydesign.com

Atlanta City Studio @ATLCityStudio #designATL









