

# Accelerating Prosperity & Resiliency Using Smart Growth & LEED Neighborhood Strategies



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Smart Growth America  
Making Neighborhoods Great Together



# LEED for Neighborhood Development

- What is it?
- Why is it important?
- What issues does it address?
- What are examples of it?
- What do I get out of it?
- What are the options for using it?

# LEED ND – What Is It?

*A neighborhood sustainability rating system that is...*

- An integrative, inclusive planning process.
- A design tool.
- A business approach to land development.
- A community planning & development tool.
- A great place to live, work, play & learn.

# LEED-ND Principles



Location



Design



Construction

**Location** within or connected to existing communities.

**Design** of compact, complete, and connected places.

**Construction** using green technologies and materials.

# Prerequisites & Credits



## Location

5 Prerequisites  
9 Credits  
**27 Points**



## Design

3 Prerequisites  
15 Credits  
**44 Points**



## Construction

4 Prerequisites  
17 Credits  
**29 Points**

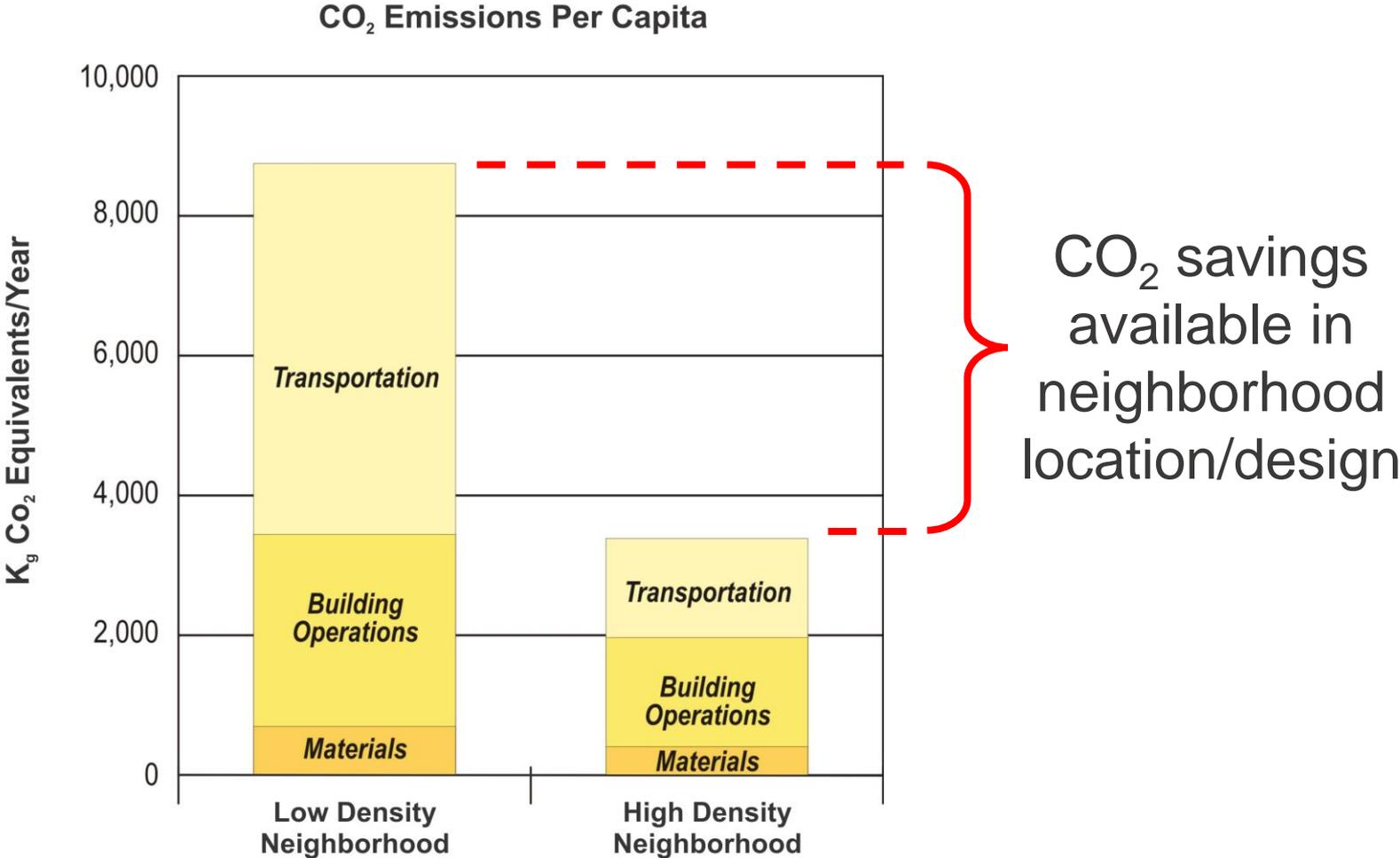
# Why Are LEED ND (& Other Tools) Important?

- Over half of the world's population lives in cities
- Built environment decisions last decades/centuries
- Assess impacts of choices before committing
- Tap into expert knowledge
- Improve objectivity, consistency of decision-making
- Enable monitoring of progress towards goals

# What Issues Does LEED ND Address?

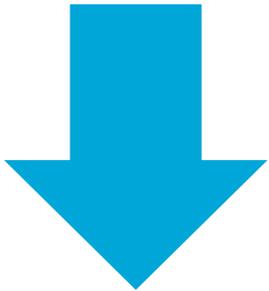
- Growth/infrastructure capacity
- Affordable housing
- Public health – aging in place, safe routes to schools
- Business competitiveness
- Fiscal prudence
- Climate & natural resource protection

# The Neighborhood Scale Matters



# ND - The 30% Neighborhood

At least  
**30% less**



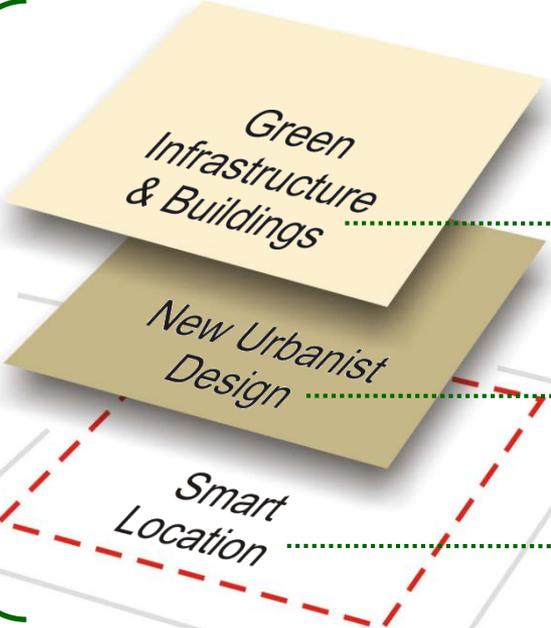
- Energy use & GHG emissions
- Water use
- Wastewater influent
- Stormwater runoff
- Traffic generation
- And more...

# Project Example - Low Carbon Neighborhood



# LEED ND Carbon Credits

## Carbon Reduction Sandwich

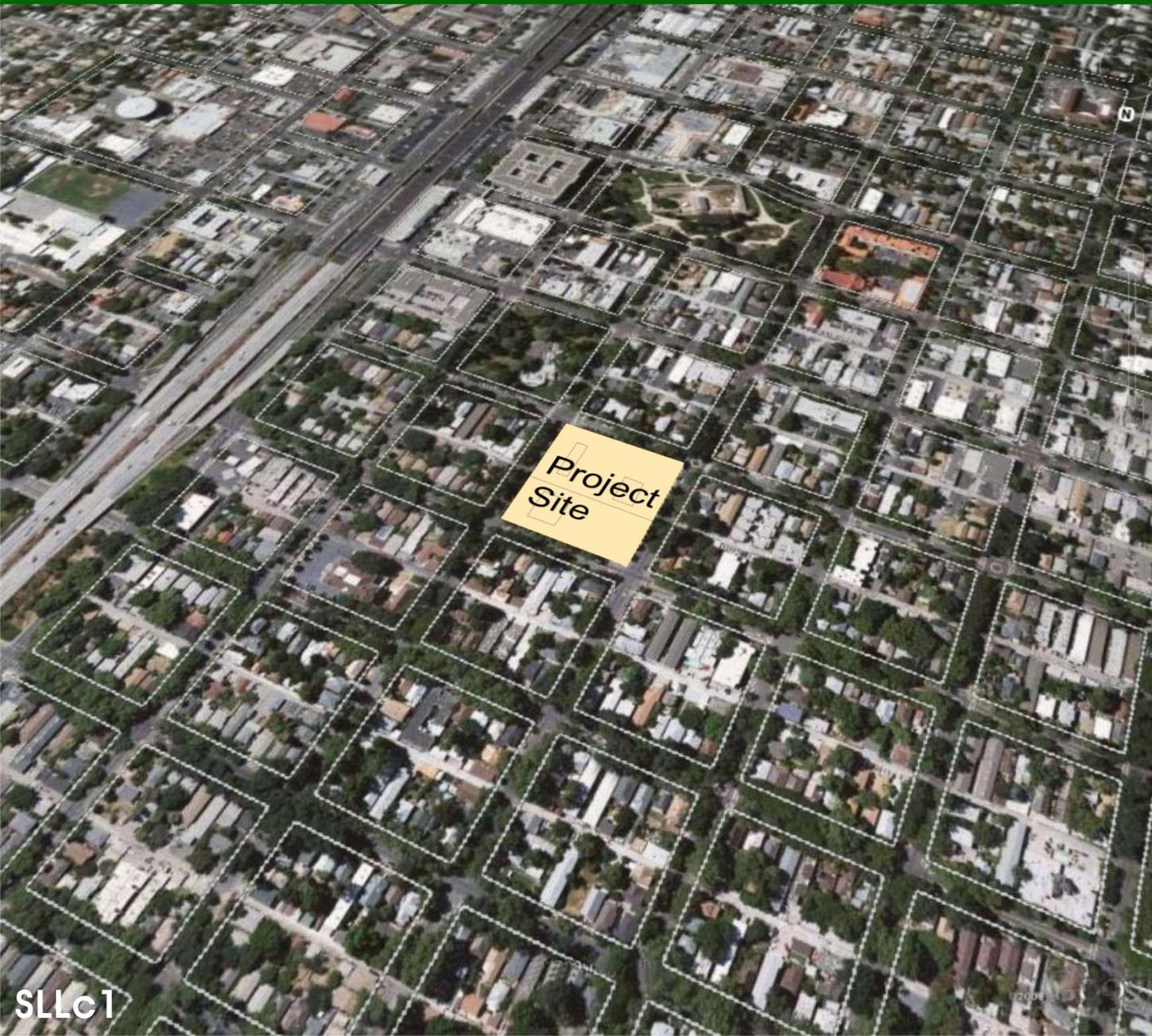


9 credits  
6 credits  
4 credits

## CO<sub>2</sub> Savings

Building & infrastructure energy  
Building & transportation energy  
Transportation energy

# Location & Linkages



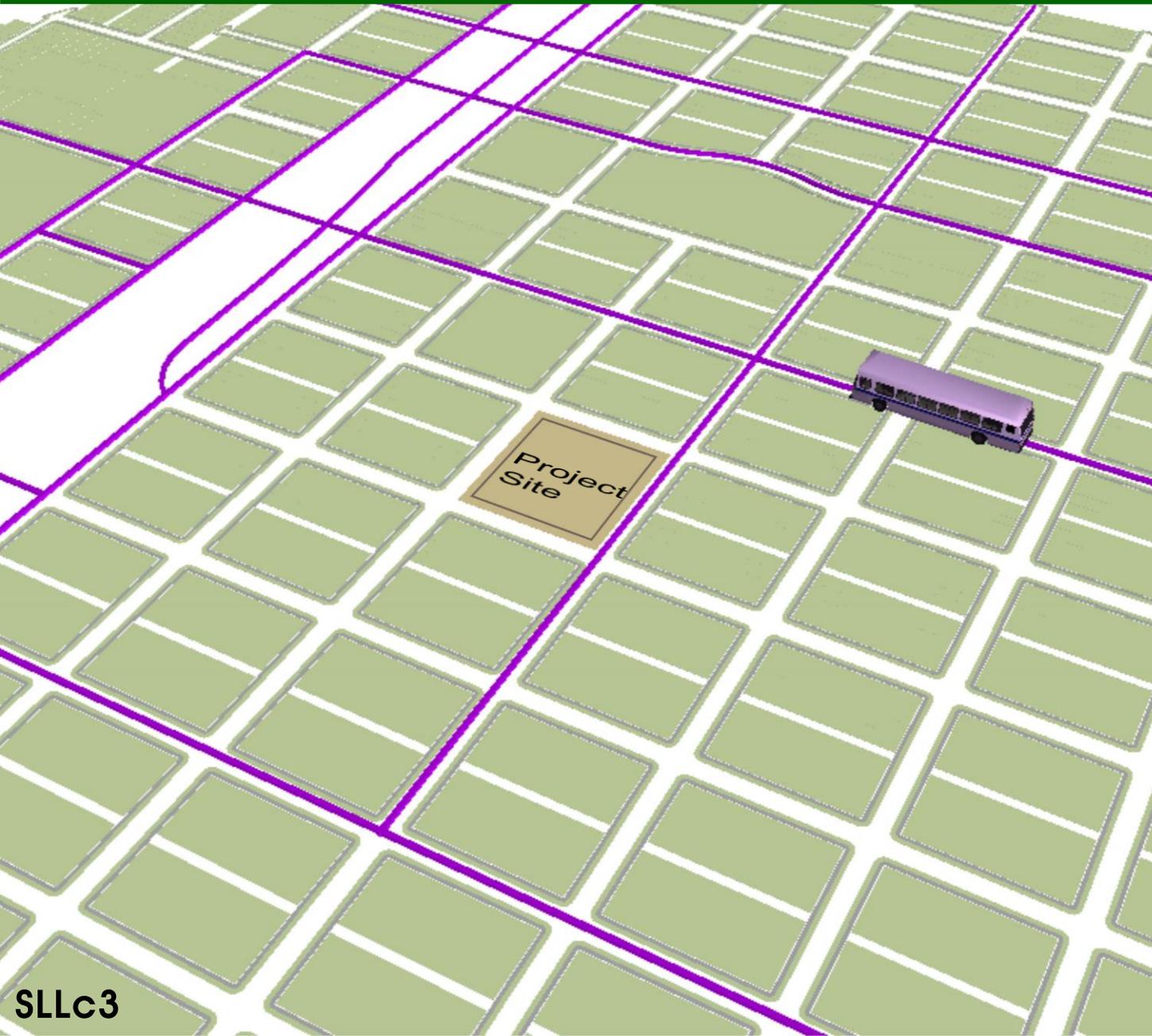
## Infill & Previously Developed Site

- Multi-modal travel location
- Use of existing infrastructure

**5**

Points

# Location & Linkages



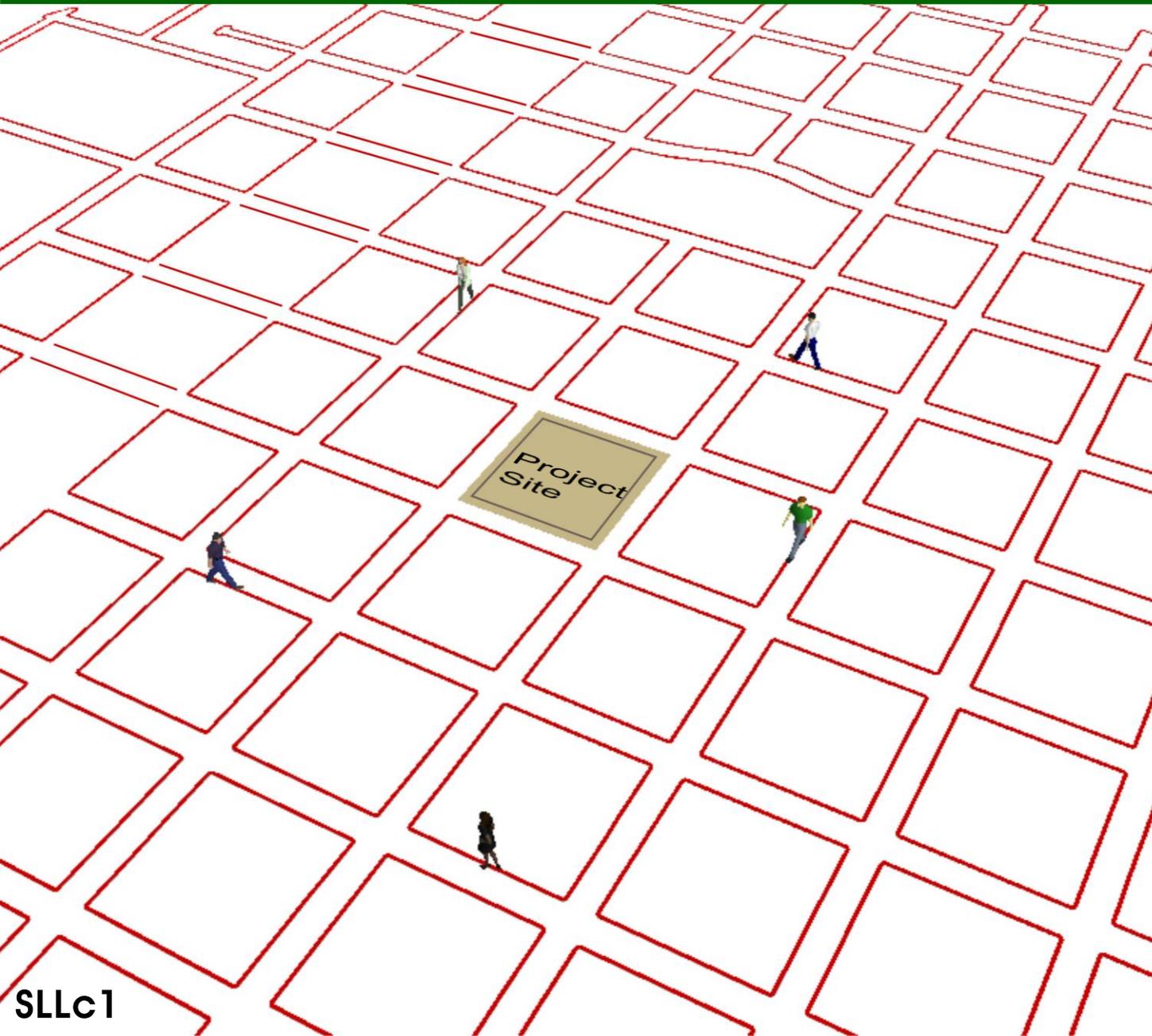
## Transit Served Area

- Superior regional access
- Mode shifting to transit

**7**

Points

# Location & Linkages



## Walkable Vicinity

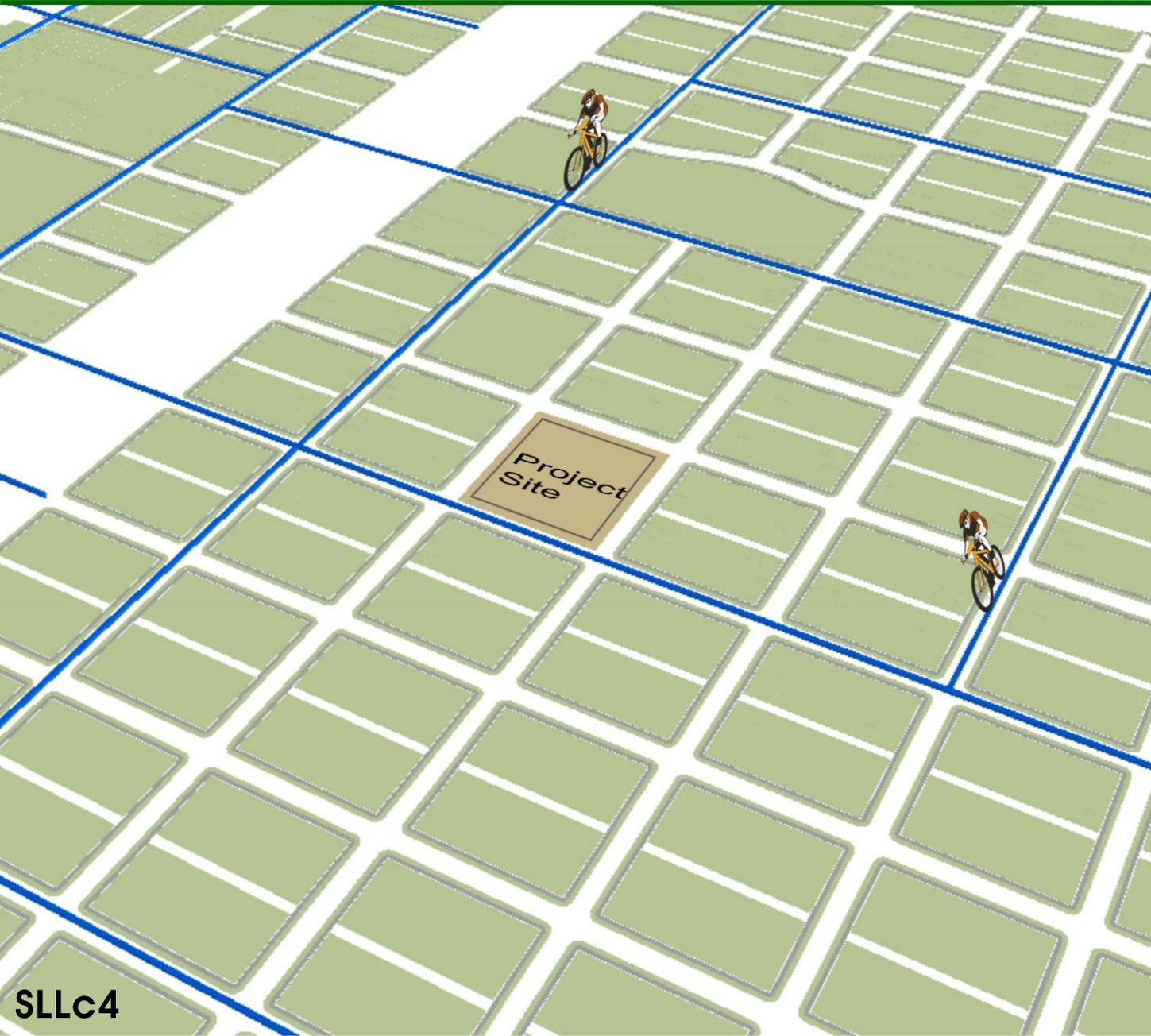
- Superior neighborhood access
- Mode shifting to walking

**5**

Points

SLLc1

# Location & Linkages



## Bikeable Vicinity

- Superior community access
- Mode shifting to biking

**1**

Point

# Location & Linkages



## Jobs – Housing Balance

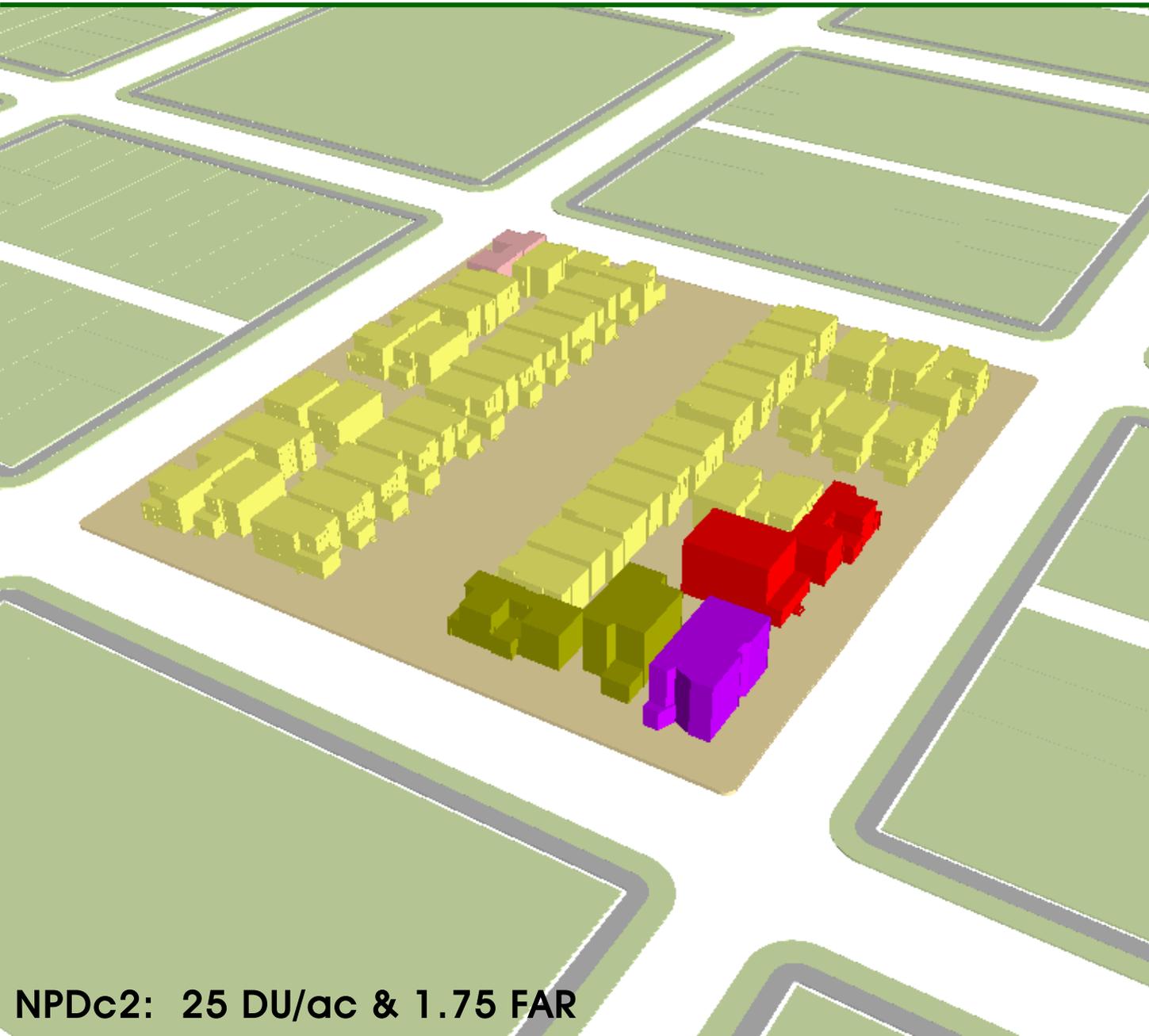


- Mode shifting to walk/bike/transit
- Shorter auto trips

**3**

Points

# Pattern & Design



## Compact Development

- Building energy savings from common walls/floors/ceilings
- Travel savings
- Infrastructure savings

4

Points

NPDc2: 25 DU/ac & 1.75 FAR

# Pattern & Design



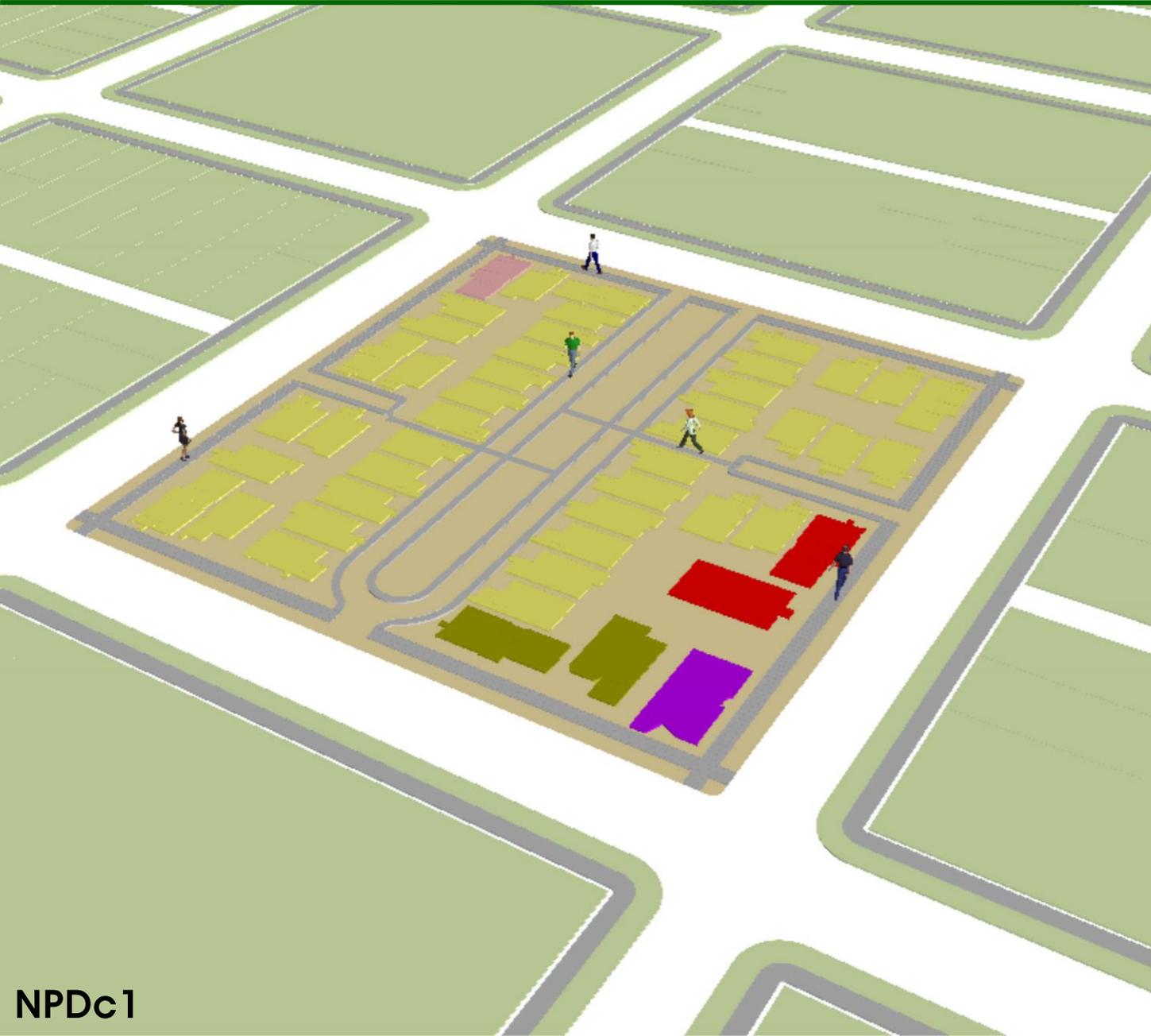
## Diverse Neighborhood Assets

- Mode shifting to walk/bike
- Shorter auto trips

4

Points

# Pattern & Design



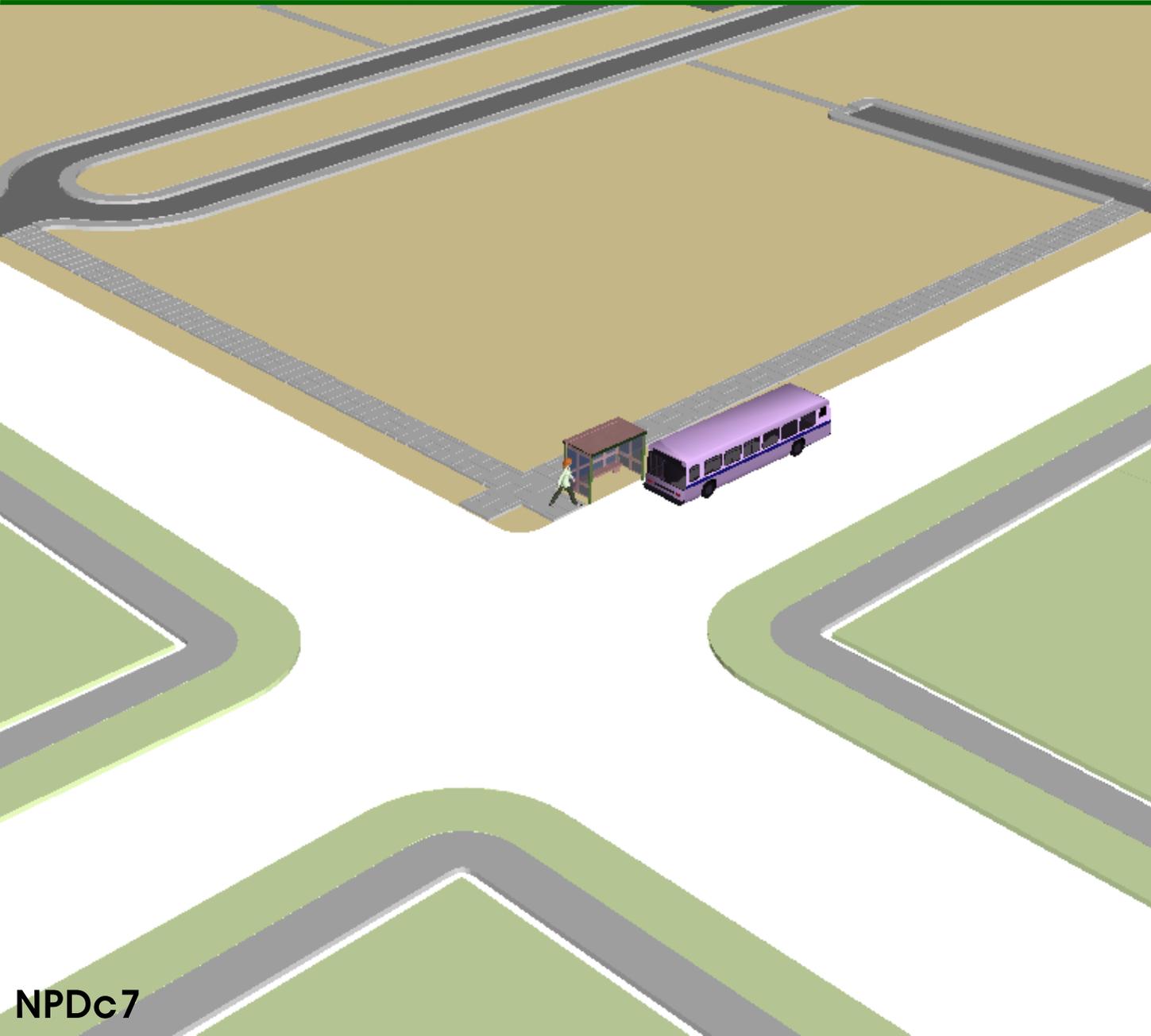
## Walkable Site

- Sidewalks
- Bldg. entries facing sidewalks
- Minimum bldg. setbacks
- Limited driveway conflicts

**12**

Points

# Pattern & Design



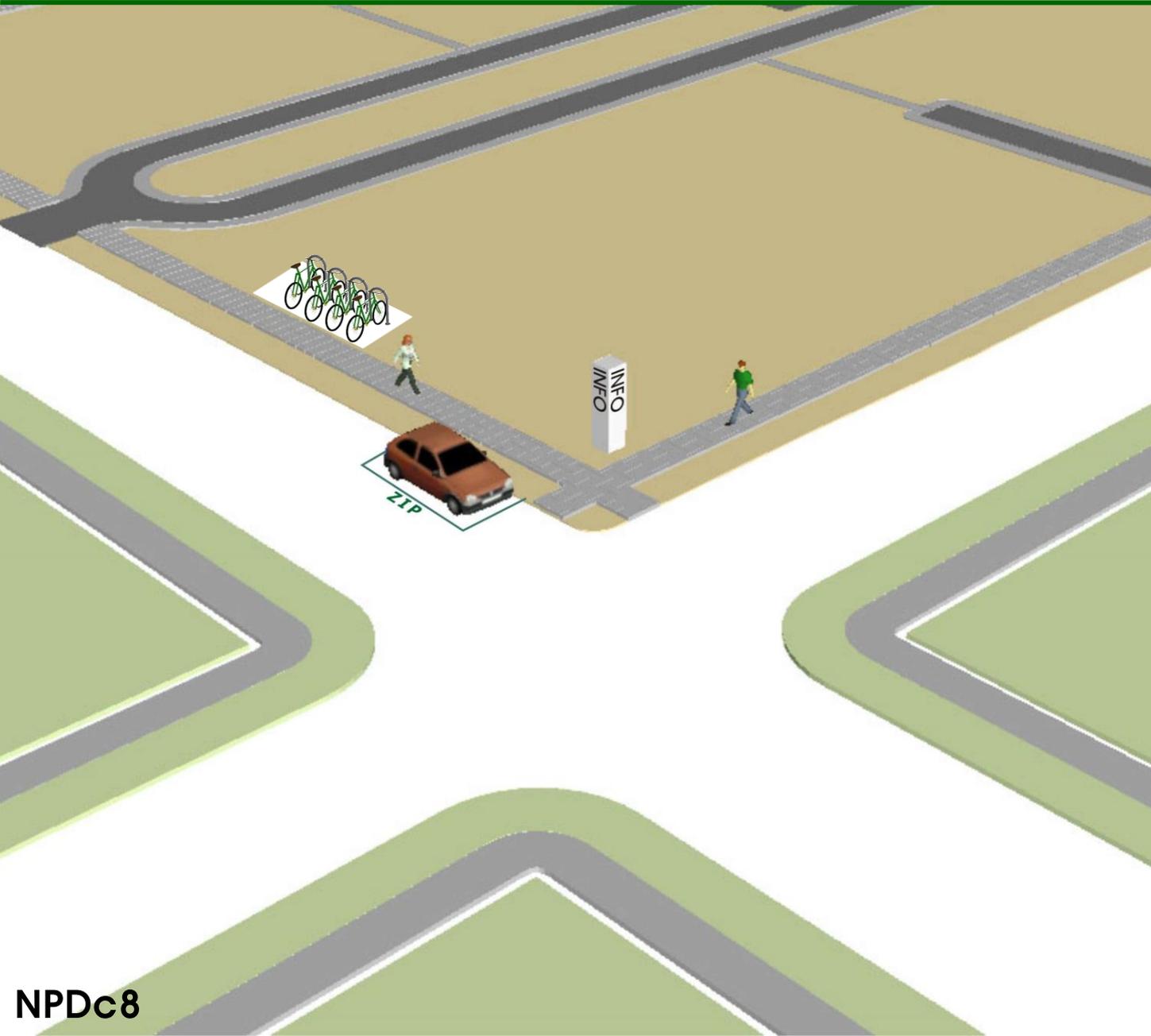
## Transit Stops

- Transit stop amenities
- Mode shifting to transit

**1**

Point

# Pattern & Design



## Transportation Demand Management

Auto trip reduction:

- Transit passes
- Parking management
- Telecommuting
- Bike parking
- Car sharing

**2**

Points

# Infrastructure & Buildings



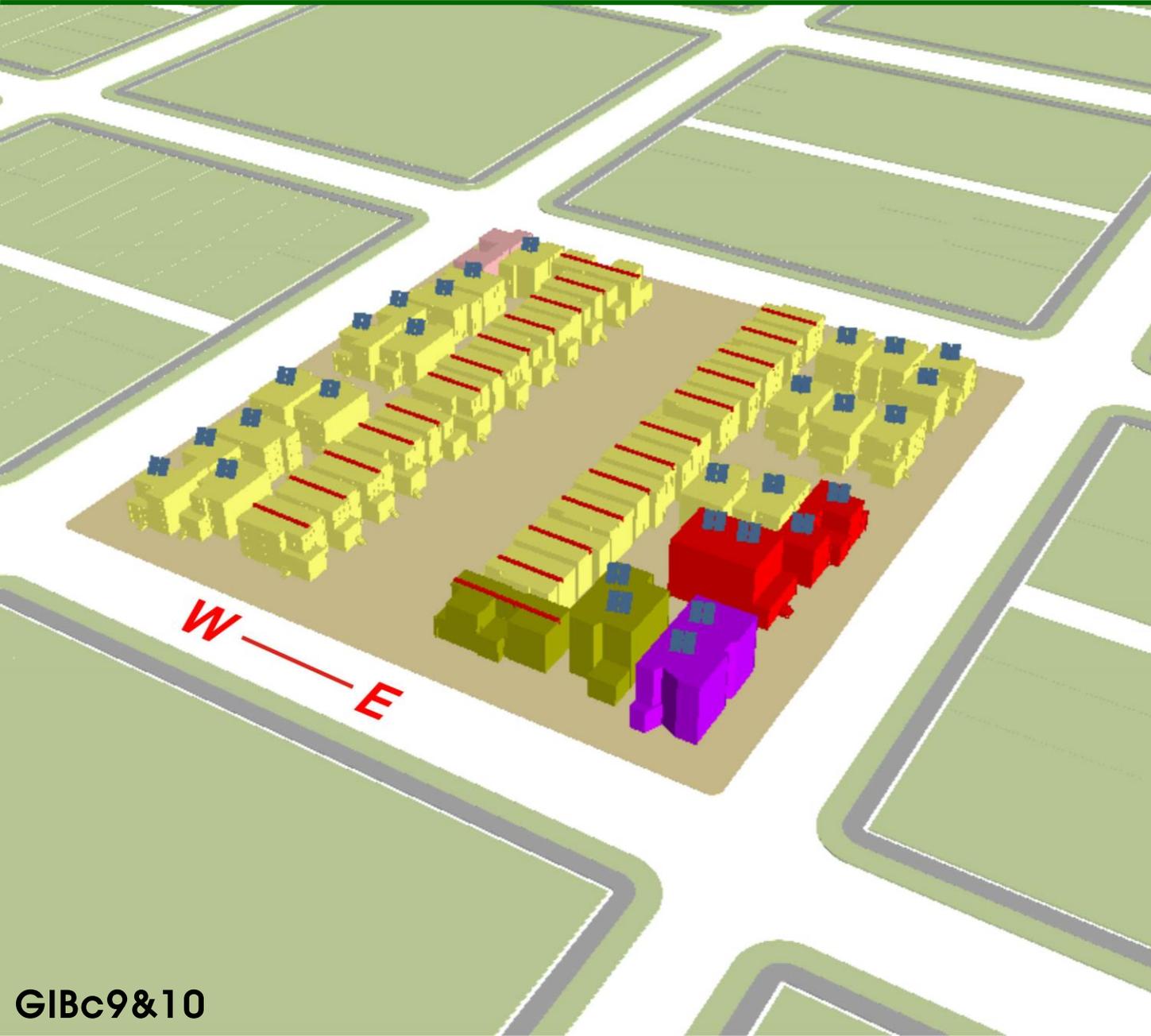
## Building Energy Efficiency & Reuse

- Shell, HVAC, lighting savings
- Materials-embodied savings
- Water efficiency

8

Points

# Infrastructure & Buildings



## Solar Orientation & Power

- Passive savings
- PV power

4

Points

# Infrastructure & Buildings



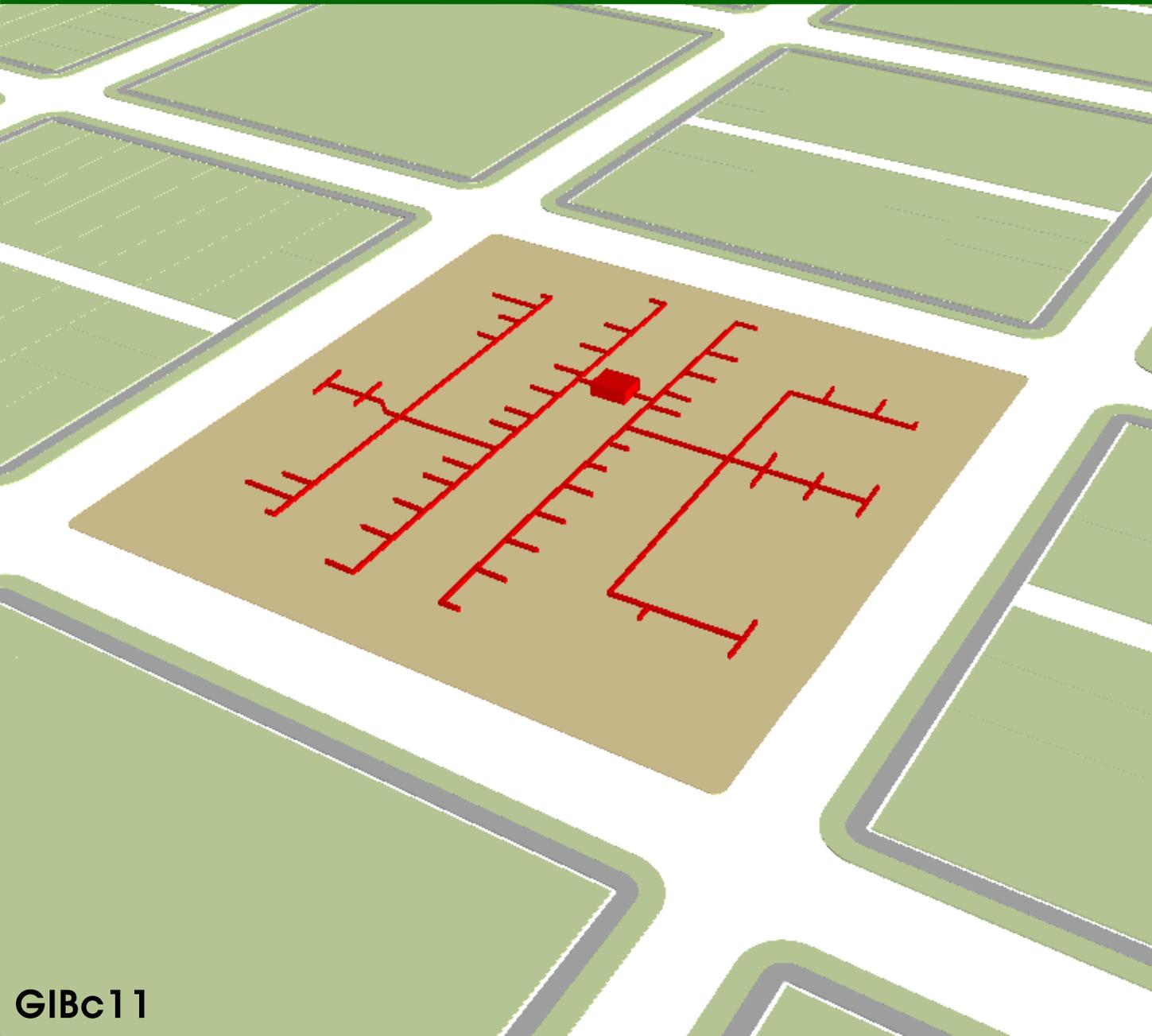
## Heat Island Reduction

- High-reflectance materials
- Green roofs
- Tree shading

**3**

Points

# Infrastructure & Buildings



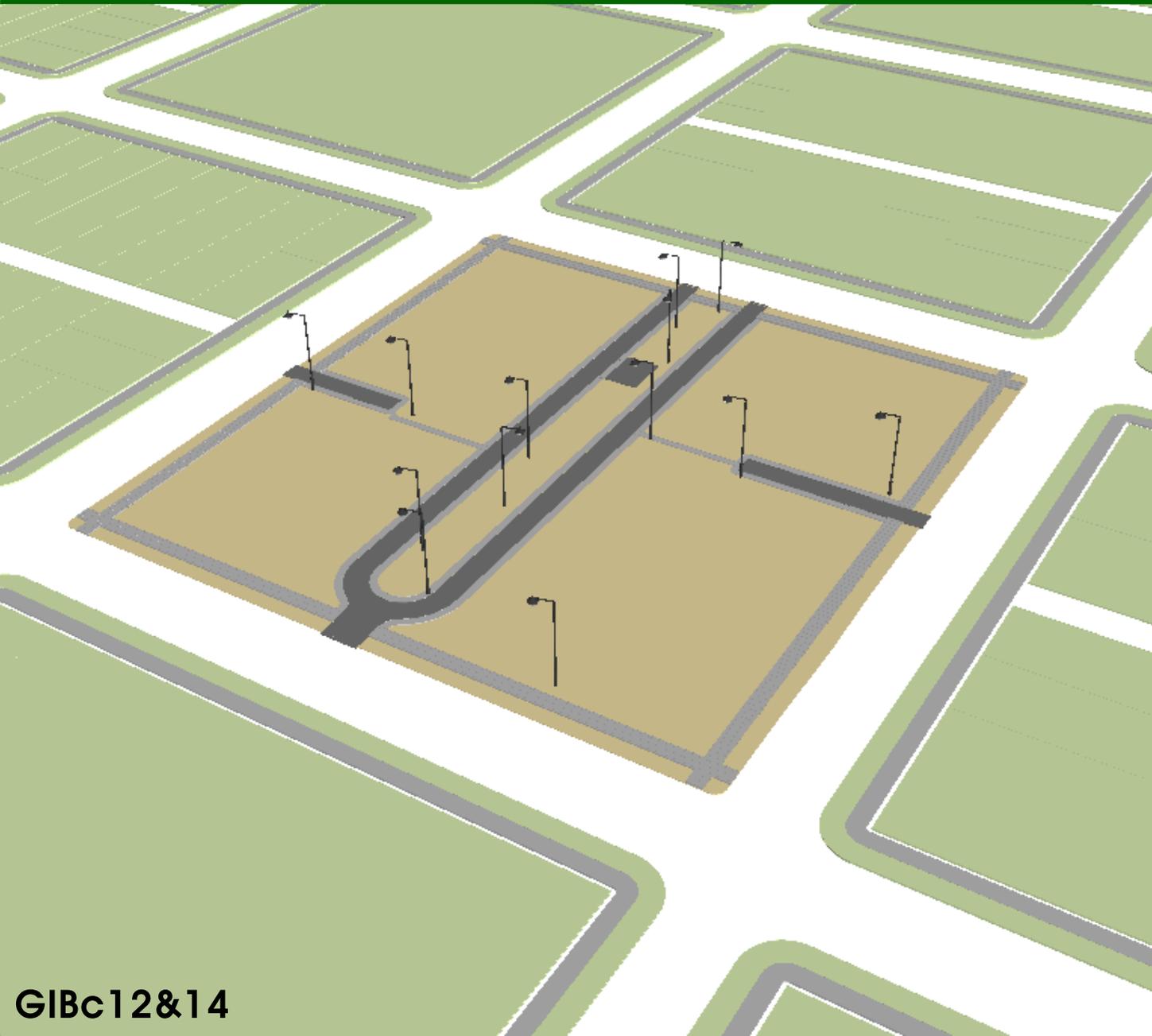
## District Heating & Cooling

- Central plant efficiencies
- Peak load diversity

**2**

Points

# Infrastructure & Buildings



## Infrastructure Energy Efficiency & Recycled Content

- High-efficiency fixtures
- Materials-embodied savings

**2**

Points

# LEED-ND GHG Totals



**63**

ND Points

**Gold  
Certification  
&  
32% GHC  
Reduction**

**12,000**

CO<sub>2</sub> lbs/capita/year  
avoided

# Real World Examples

## USGBC PROJECT PROFILE

LEED-ND  
GOLD

TWINBROOK STATION  
ROCKVILLE, MARYLAND

**80%** of the buildings will pursue LEED certification

**15%** affordable housing

**30%** projected water use reduction

## LEED<sup>®</sup> Facts

Twinbrook Station  
Rockville, Maryland

LEED for Neighborhood Development (Pilot)  
Certification date November 19, 2008

**Gold** **66\***

Smart Location & Linkage 20/30

Neighborhood Pattern & Design 30/39

Green Construction & Technology 10/31

Innovation & Design Process 6/6

Certification Type/Stage Certified Plan, Stage 2

*\*Out of a possible 106 points*

# Downtown Doral – ND Certified



## Downtown Doral MASTER SITE PLAN

- 1 Main Street
- 2 Paseo Doral
- 3 City Park
- 4 Vista Blanca Tower
- 5 Cordoba
- 6 Elementary School
- 7 7950 Professional Center

# Ft Lauderdale NW Gardens - ND Gold



# What Do We Get Out of It?

- Designers
- Developers
- Business owners
- Households
- The community

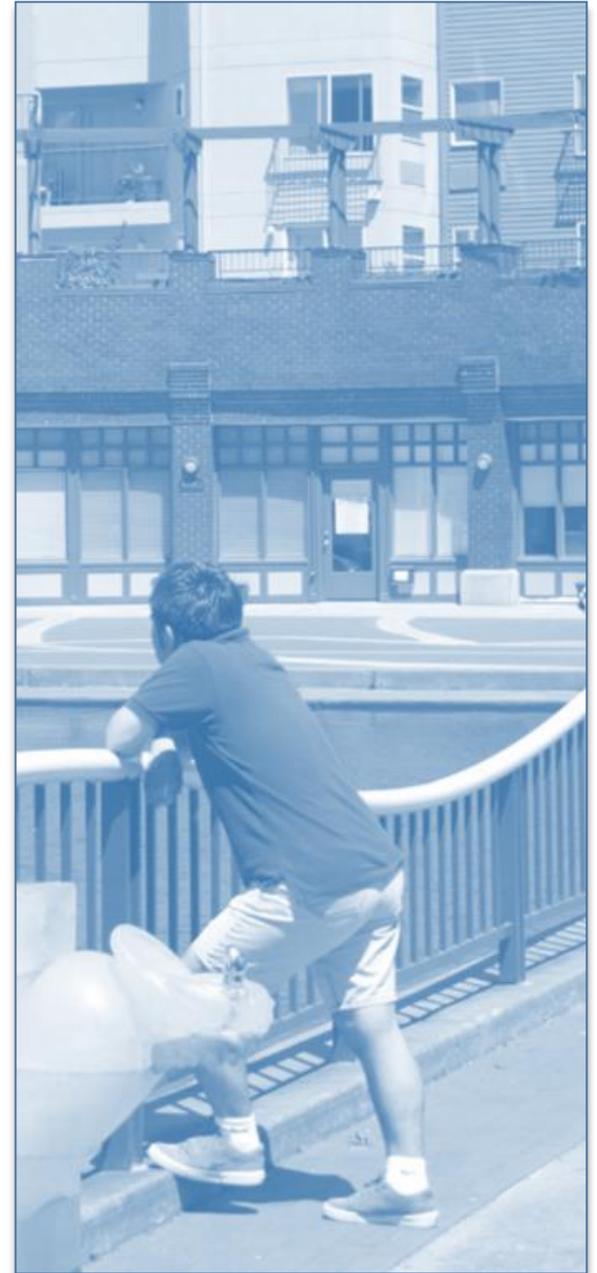
# Designers

- Design tool: compendium of best practices
- New professional opportunities, broader interdisciplinary palette
- Recognition of design excellence & green leadership



# Developers

- Market differentiation, competitive advantage
- Attract investment
- Lower life-cycle costs
- Strengthen corporate responsibility commitments
- Partner in achieving community goals



# Developers & Business Owners

<b>ND Strategy</b>	<i>Benefits to Real Estate Developers/ Investors</i>	<i>Benefits to Businesses</i>
<b>Compact redev with existing infrastructure</b>	✓ Reduced land & infrastructure costs	✓ Increased productivity, investment attraction
<b>Walkable places</b>	✓ Increased sales & sale prices	✓ Increased economic activity
<b>Diverse housing, stores, workplaces, transportation</b>	✓ Increased sales & investment value	✓ Increased employee & customer attraction

# Households

- Reduced living expenses
- Convenient service and amenities
- Choices: aging in place, youth-friendly
- Help achieve community goals



# The Community

- Reduced environmental footprint
- Improved business competitiveness
- Extended infrastructure capacity – streets, water, energy
- Greater property tax revenue/acre



# The Dollars & Cents of Sustainable Neighborhoods

EPA United States Environmental Protection Agency December 2012 www.epa.gov/smartgrowth



SMART GROWTH AND ECONOMIC SUCCESS:  
BENEFITS FOR REAL ESTATE DEVELOPERS, INVESTORS,  
BUSINESSES, AND LOCAL GOVERNMENTS

Office of Sustainable Communities  
Smart Growth Program

Smart Growth America  
Making Neighborhoods Great Together



Building Better Budgets  
A National Examination of the Fiscal Benefits of  
Smart Growth Development

May 2013

Smart Growth America  
Making Neighborhoods Great Together

RCLCO



The Fiscal Implications of  
Development Patterns  
A MODEL FOR MUNICIPAL ANALYSIS

April 2015

# What are the Options for Using IND?

- Lead by example – designers/developers/City
- Remove barriers – City code
- Pave the way – City plans, policies, incentives

# ND Local Leveraging Examples



# LEED ND – A Recap

- An integrative, inclusive planning process.
- A design tool.
- A business approach to development.
- A community planning & development tool.
- A great place to live, work, play & learn.





Questions?

# Thanks

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