

# Sanford Neighborhood Planning Through the Lens of LEED-ND



## Stakeholders Workshop

August 5, 2015



Smart Growth America  
Making Neighborhoods Great Together



# Agenda



## **Morning**

- EPA & Smart Growth America programs
- LEED-ND overview
- Workshop focus areas
- 10:30 - break
- ND location strategies
- ND urban design strategies

## **12 pm - Lunch**

## **Afternoon**

- 1 pm - other assessment systems
- Finish urban design
- ND green infrastructure & building strategies
- 2:30 pm - break
- Assemble focus area scorecards
- ND leveraging options going forward
- 4 pm - adjourn

# Workshop Goals

- Identify opportunities to strengthen Sanford neighborhood planning using LEED ND principles and strategies.
- Facilitate potential ND development projects in focus areas.



# LEED-ND Goals for Neighborhoods



Location



Design



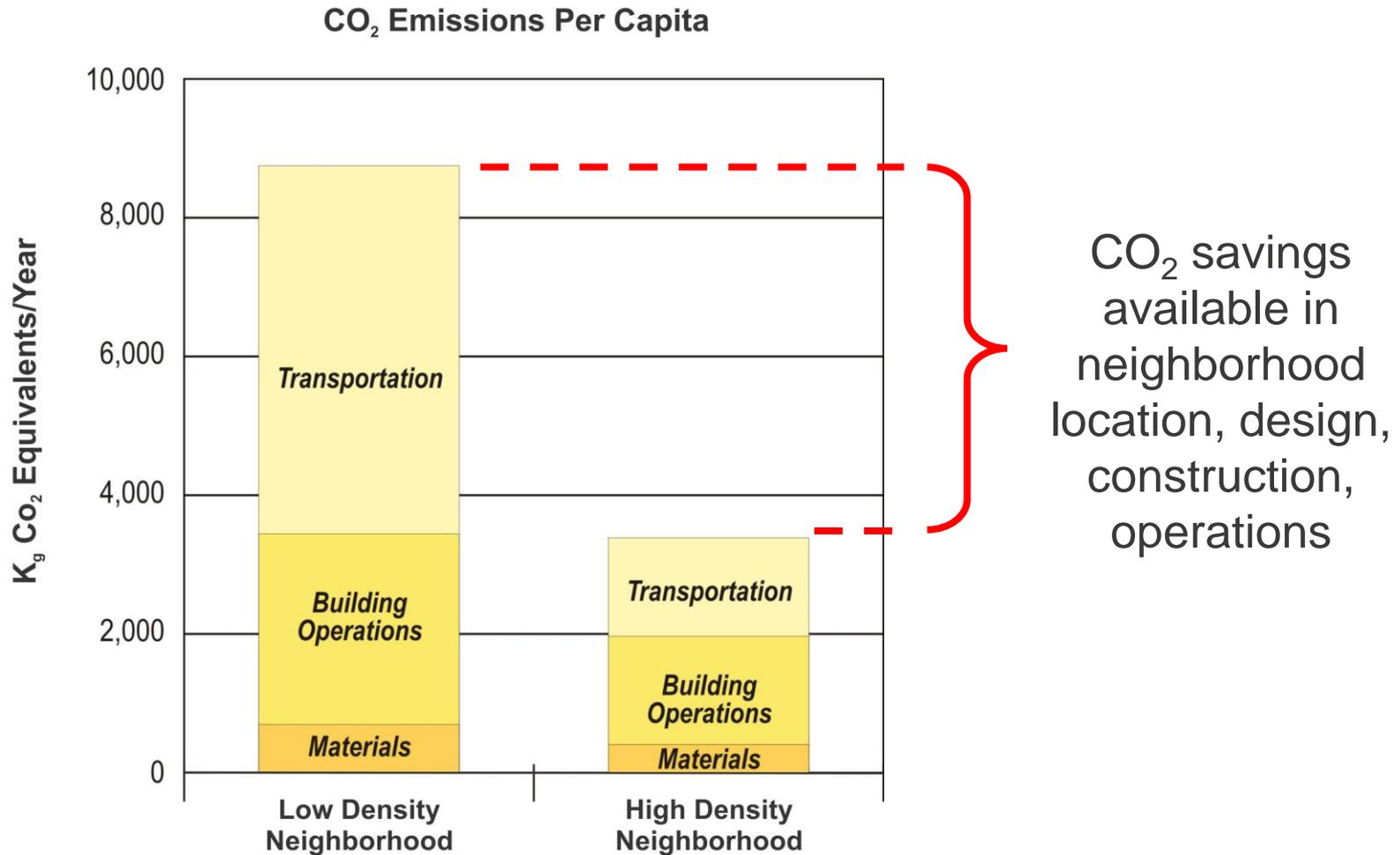
Construction

**Location** that's within or connected to existing communities.

**Design** that's compact, complete, and connected.

**Construction** using green technologies and materials.

# Neighborhoods Matters



# Business Advantages

## ND Strategy

*Benefits to  
Real Estate Developers/  
Investors*

*Benefits to  
Businesses*

**Compact redev  
with existing  
infrastructure**

✓ Reduced land  
& infrastructure costs

✓ Increased productivity,  
investment attraction

**Walkable places**

✓ Increased sales  
& sale prices

✓ Increased economic  
activity

**Diverse housing,  
stores, workplaces,  
transportation**

✓ Increased sales  
& investment value

✓ Increased employee  
& customer attraction

# Uses of the System

- Design excellence
- Triple bottom line development
- Accelerated community prosperity/resiliency



# Prerequisites & Credits



## Location

5 Prerequisites  
9 Credits  
**27 Points**



## Design

3 Prerequisites  
15 Credits  
**44 Points**



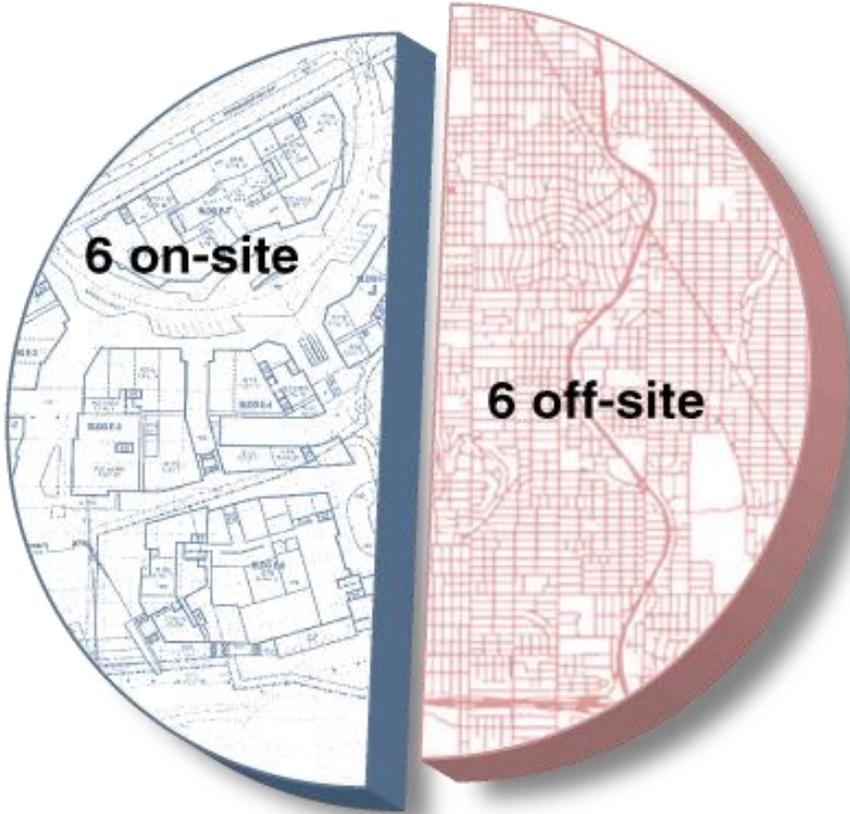
## Construction

4 Prerequisites  
17 Credits  
**29 Points**

# Community + Developer = LEED ND

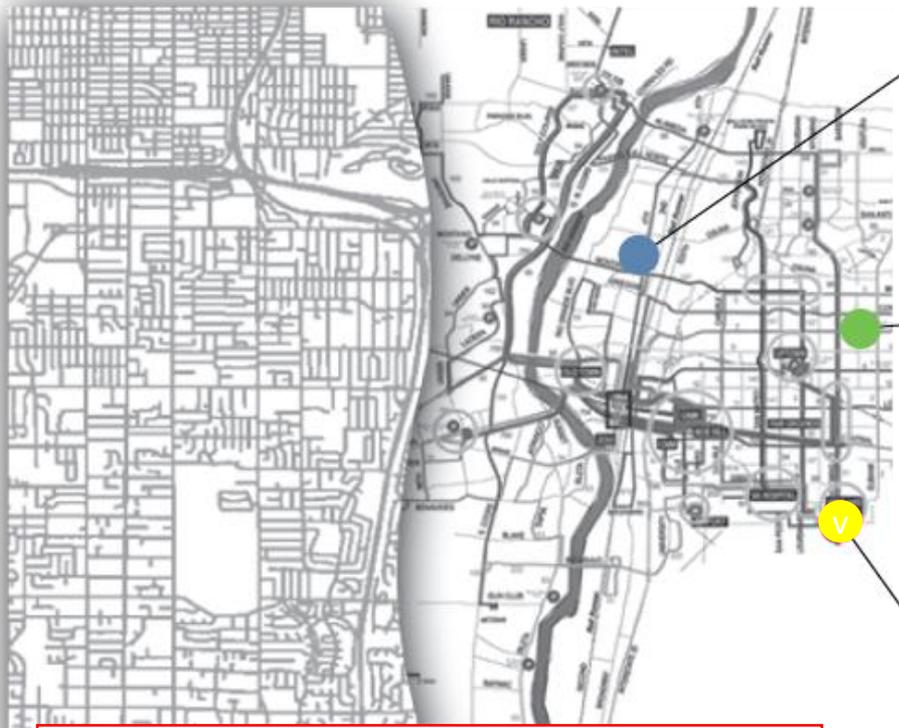
12 Prerequisites

100 Credit Points



# Location Prerequisites

**Within:** water & wastewater service areas, and...



**Infill / Adjacent**

75% surrounded or 25% adjacent

*or*

**Transit-served**

50% of dwellings/ businesses within 1/4-1/2 mile walk of quality service

*or*

**Walkable Amenities**

30% residential & 1/4-1/2 mile walk of 5-7 diverse uses

**Avoid:** water resources, habitat, agricultural land, floodplains

# Location Credits

## Location

Previously developed

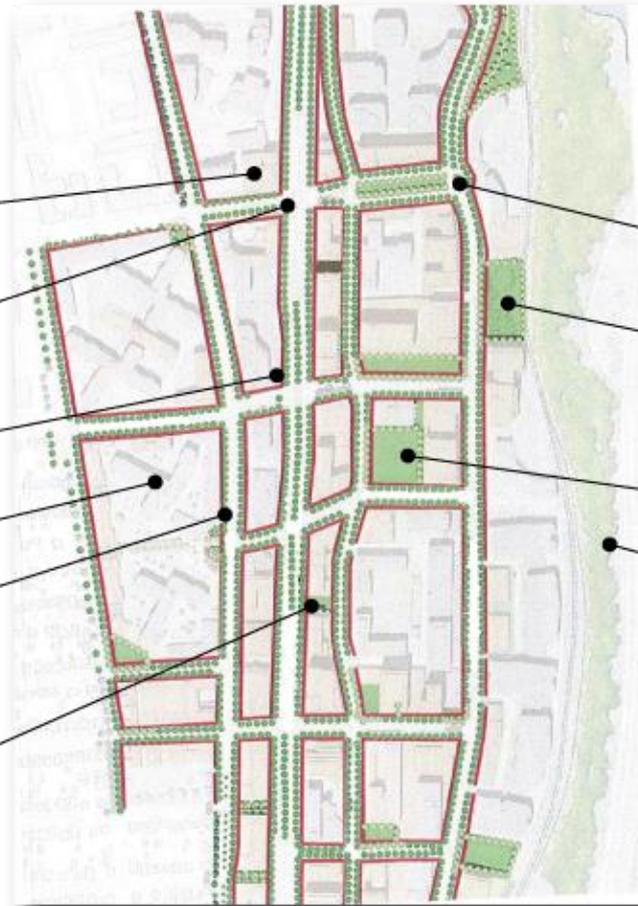
Street connectivity

Transit service

Jobs/housing

Bike network

Brownfields & incentive areas



## Resource protection

Site design

Restoration

Long-term management

Slope protection

# Design Prerequisites

## Buildings

Height 33% of street width,  
15% of streets

Entries on 90%  
of street façades

## Density

7-12 dwellings/acre

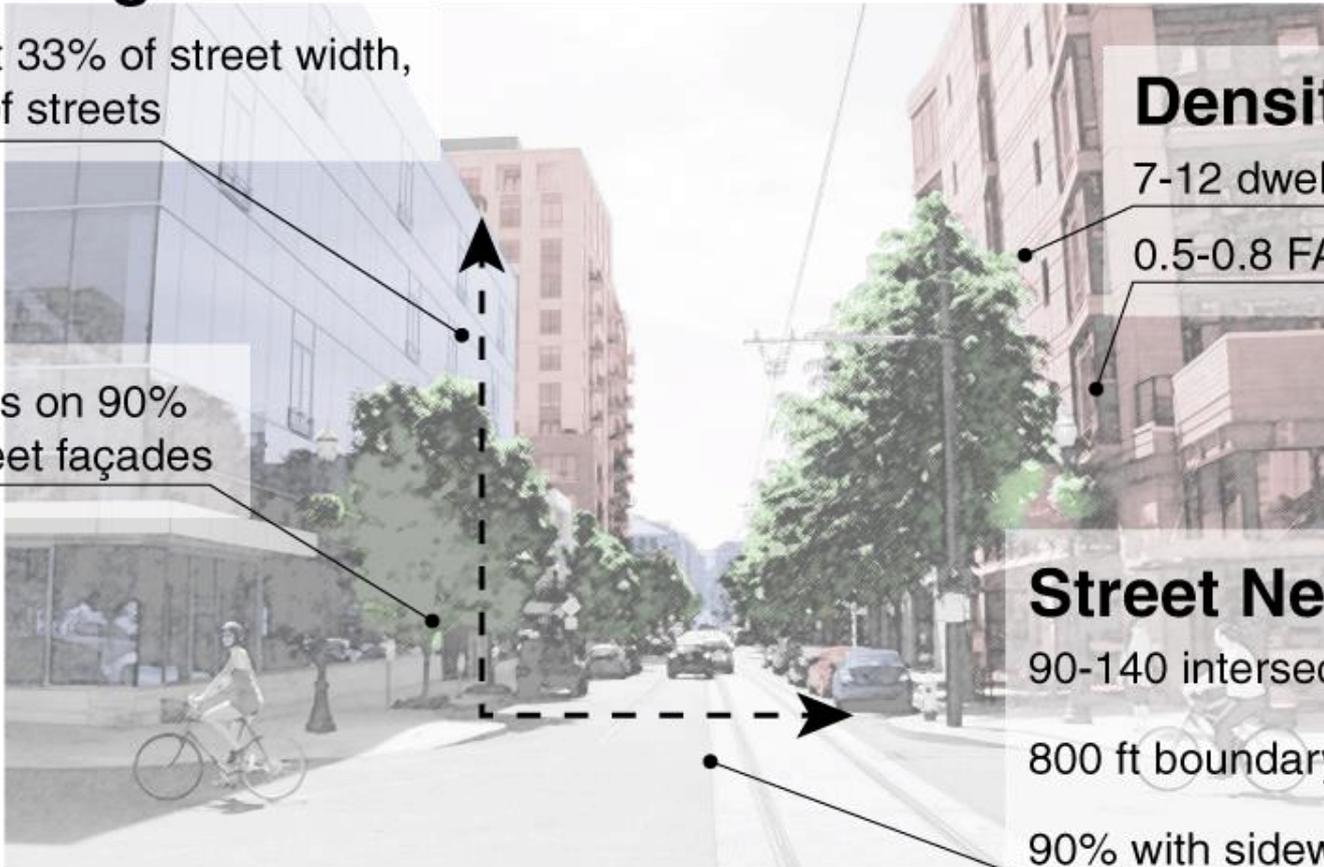
0.5-0.8 FAR

## Street Network

90-140 intersections/sq mile

800 ft boundary intervals

90% with sidewalks



# Design Credits

Density & mixed-uses

Walkable/connected streets

Public outreach

Diverse/affordable housing

Access to amenities

Visitability/universal design

TDM programs



# Green Infrastructure & Building Prerequisites

One certified green building and...

## Energy

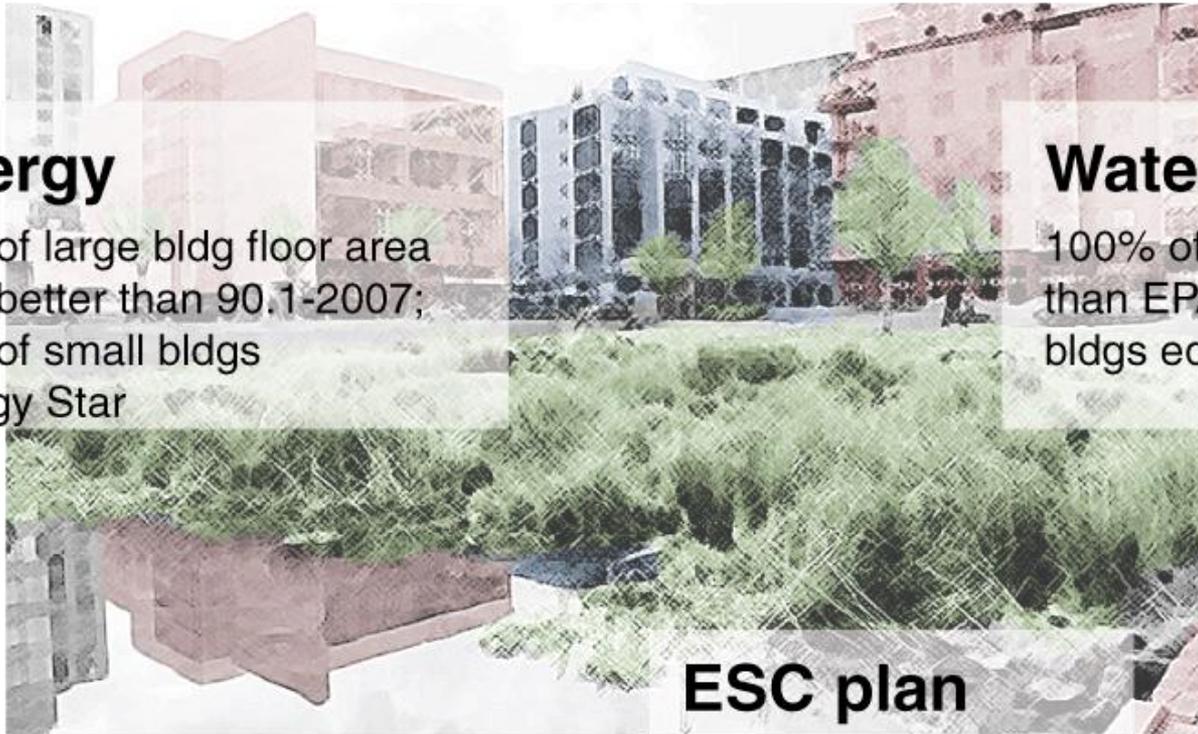
90% of large bldg floor area  
10% better than 90.1-2007;  
90% of small bldgs  
Energy Star

## Water

100% of large bldgs 20% less  
than EPA 92; 90% of small  
bldgs equiv 3 pts Homes WEC3

## ESC plan

BMPs from Western  
Wash State



# Infrastructure & Building Credits

## Energy

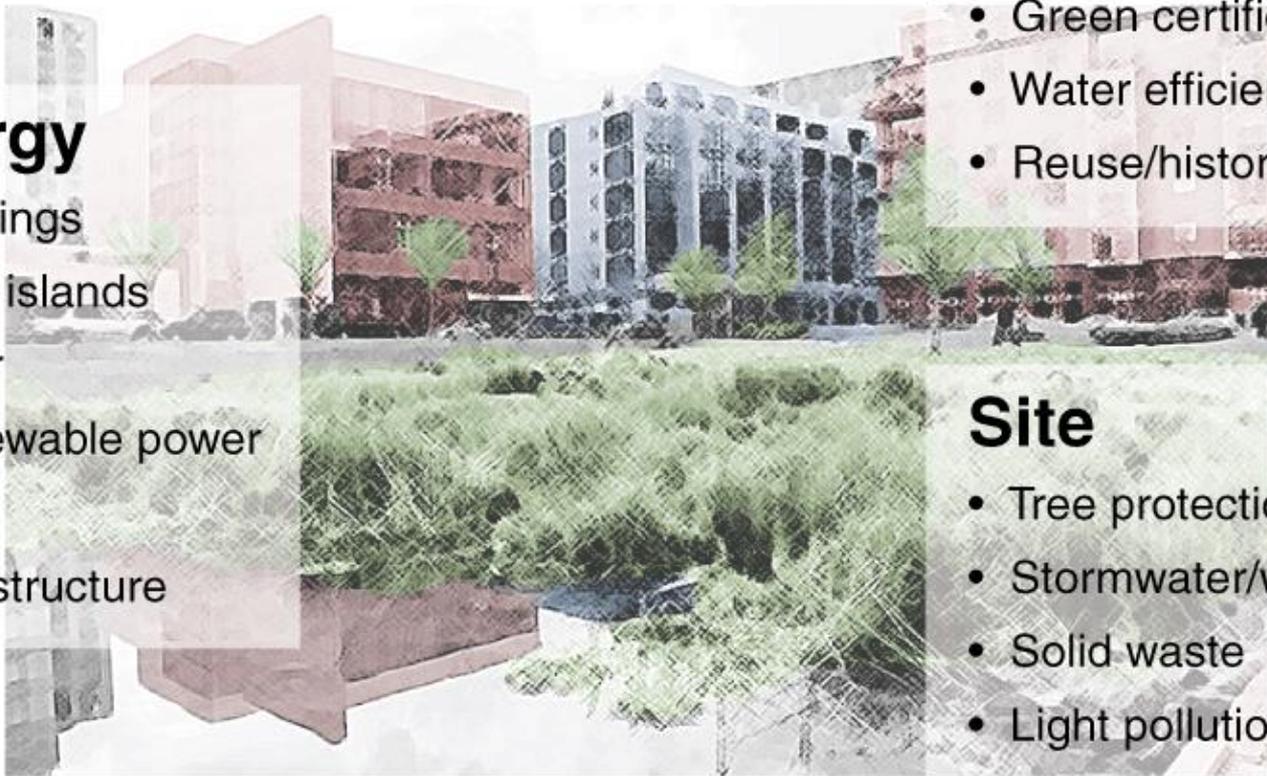
- Buildings
- Heat islands
- Solar
- Renewable power
- DHC
- Infrastructure

## Buildings

- Green certification
- Water efficiency
- Reuse/historic adaptation

## Site

- Tree protection
- Stormwater/wastewater
- Solid waste
- Light pollution



# Additional Credits

- Innovation and exemplary performance
- Accredited professional
- Regional priorities
- Pilot credits

# ND Scorecard

## 8 0 0 0 Smart Location and Linkage 27 Points Possible

	Y	N	P	H	Points	Required
10	Y					Required
11	Y					Required
12	Y					Required
13	Y					Required
14	Y					Required
15						
16						
17						
18						
19						
20						
21						
22						
23						

## 24 0 0 0 Neighborhood Pattern and Design 44 Points Possible

	Y	N	P	H	Points	Required
27	Y					Required
28	Y					Required
29	Y					Required
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						

## 45 0 0 0 Green Infrastructure and Buildings 29 Points Possible

	Y	N	P	H	Points	Required
48	Y					Required
49	Y					Required
50	Y					Required
51	Y					Required

## Green Infrastructure and Buildings, Continued

	Y	N	P	H	Points
Credit 1					5
Credit 2					2
Credit 3					1
Credit 4					1
Credit 5					1
Credit 6					1
Credit 7					1
Credit 8					4
Credit 9					1
Credit 10					1
Credit 11					3
Credit 12					2
Credit 13					1
Credit 14					2
Credit 15					1
Credit 16					1
Credit 17					1

## 0 0 0 Innovation and Design Process 6 Points

	Y	N	P	H	Points
Credit 1.1					1
Credit 1.2					1
Credit 1.3					1
Credit 1.4					1
Credit 1.5					1
Credit 2					1

## 0 0 0 Regional Priority Credit 4 Points

	Y	N	P	H	Points
Credit 1.1					1
Credit 1.2					1
Credit 1.3					1
Credit 1.4					1

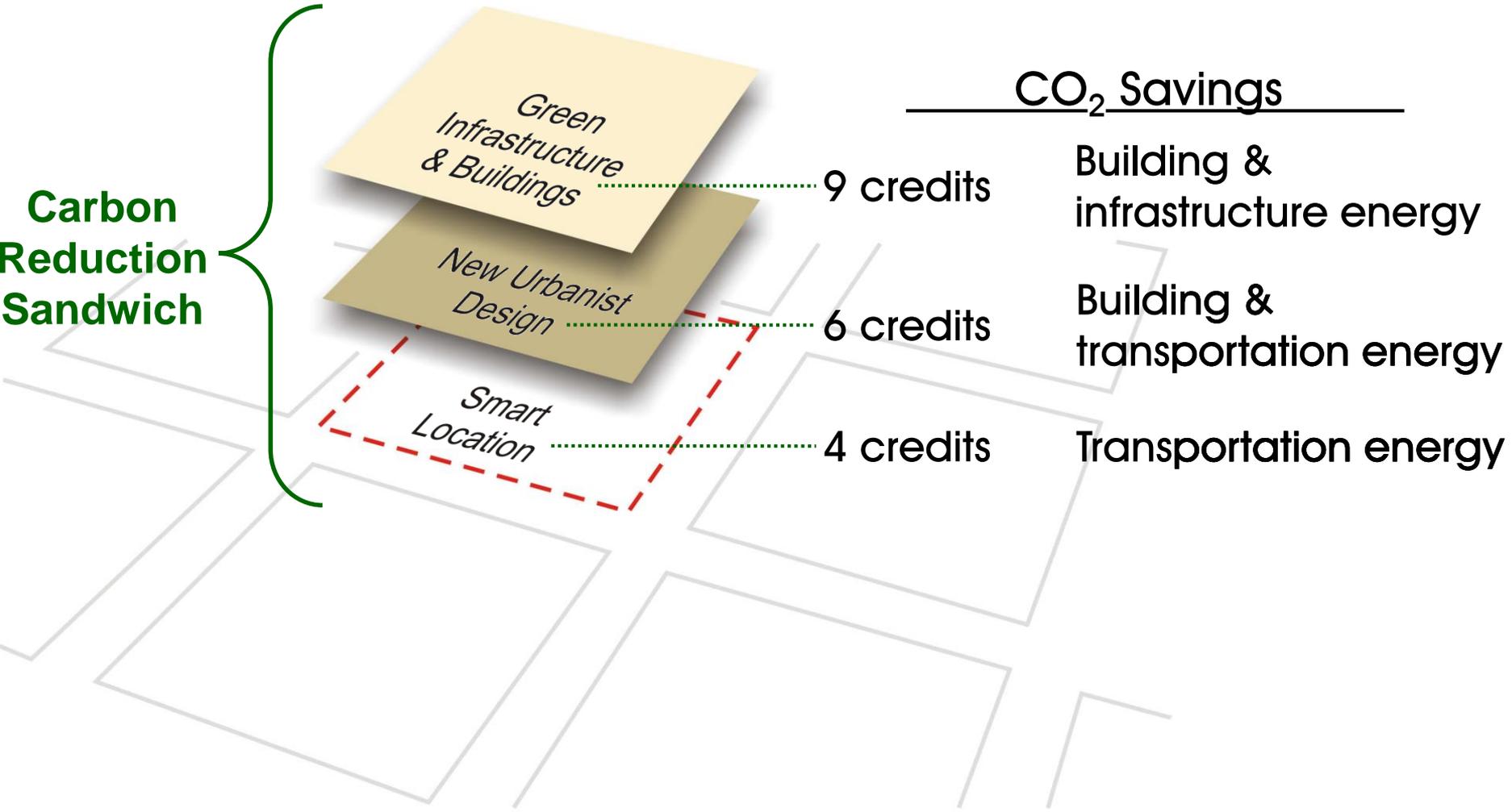
## 0 0 0 Project Totals (Certification estimates) 110 Points

**Certified:** 40-49 points, **Silver:** 50-59 points, **Gold:** 60-79 points, **Platinum:** 80-89 points

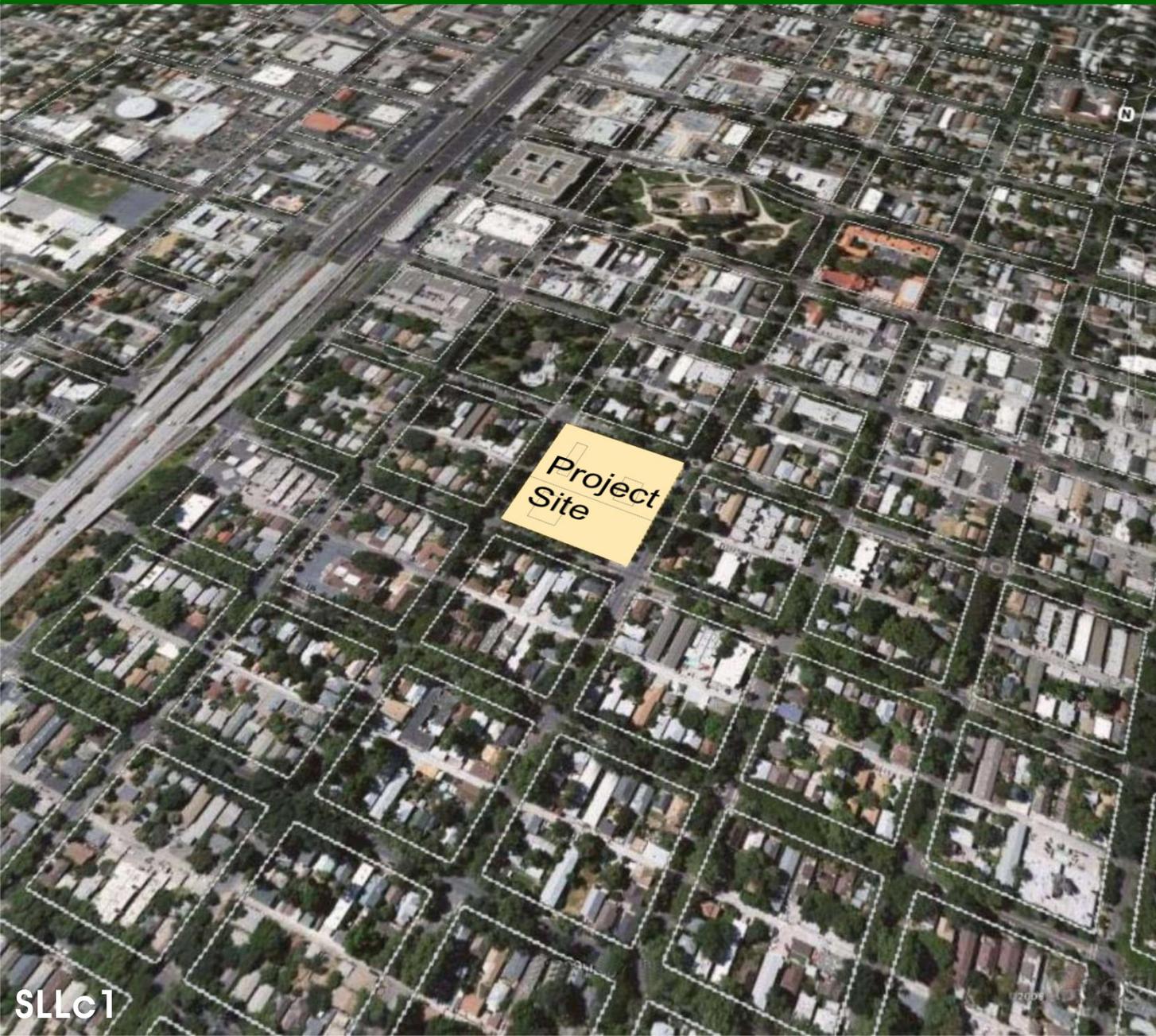
# Project Example - Low Carbon Neighborhood



# LEED ND Carbon Credits



# Location & Linkages



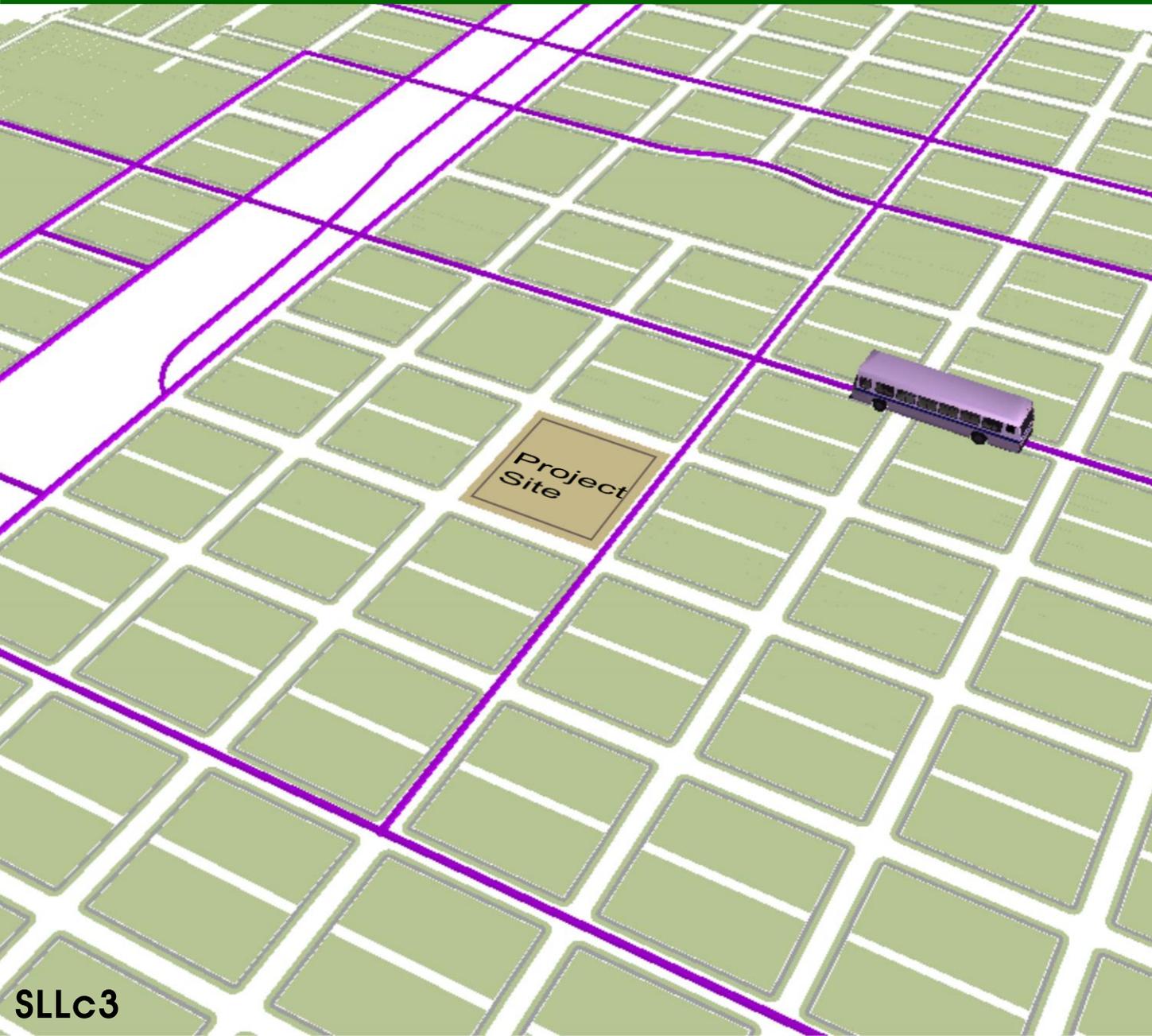
## Infill & Previously Developed Site

- Multi-modal travel location
- Use of existing infrastructure

**5**

Points

# Location & Linkages



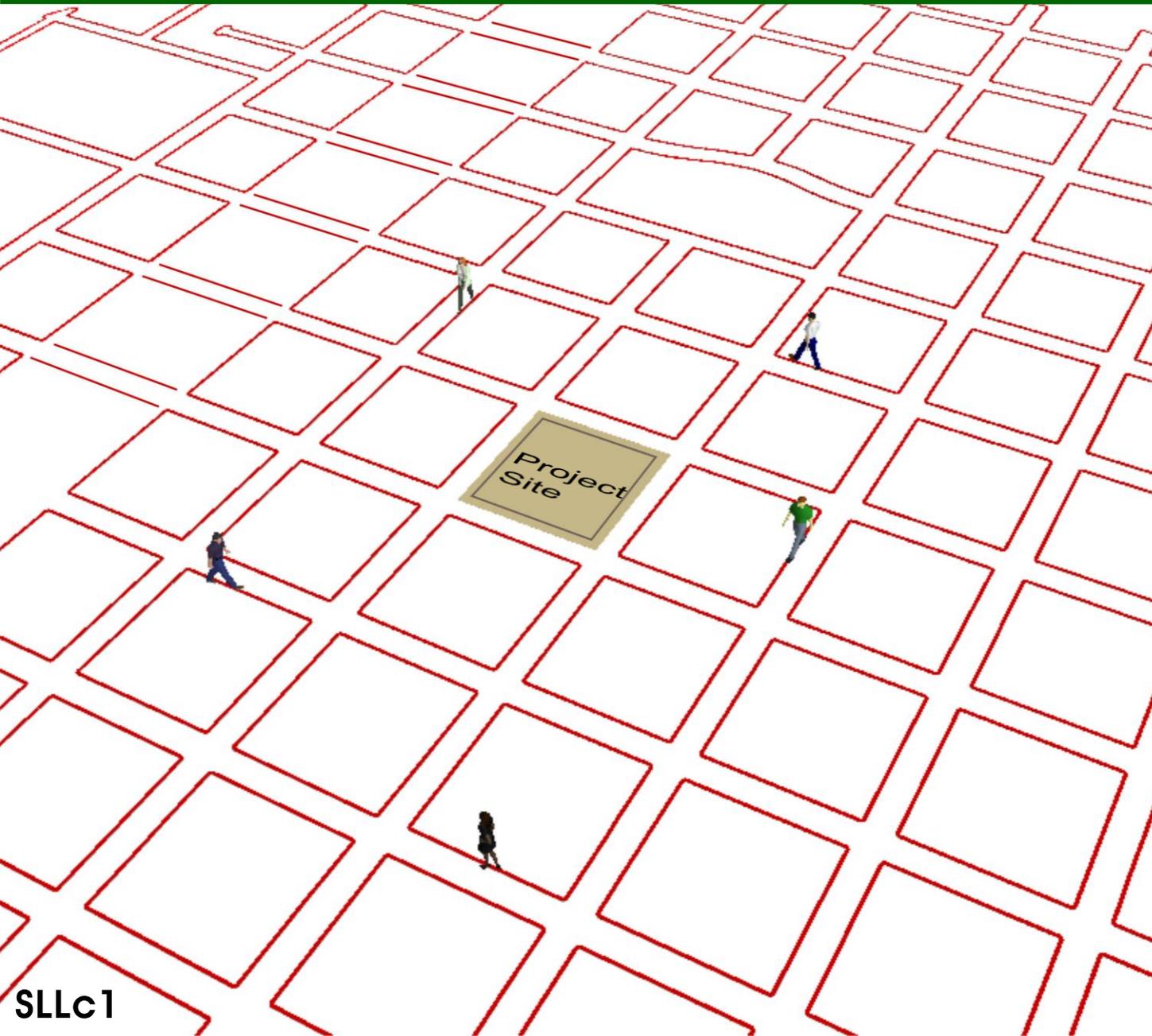
## Transit Served Area

- Superior regional access
- Mode shifting to transit

**7**

Points

# Location & Linkages



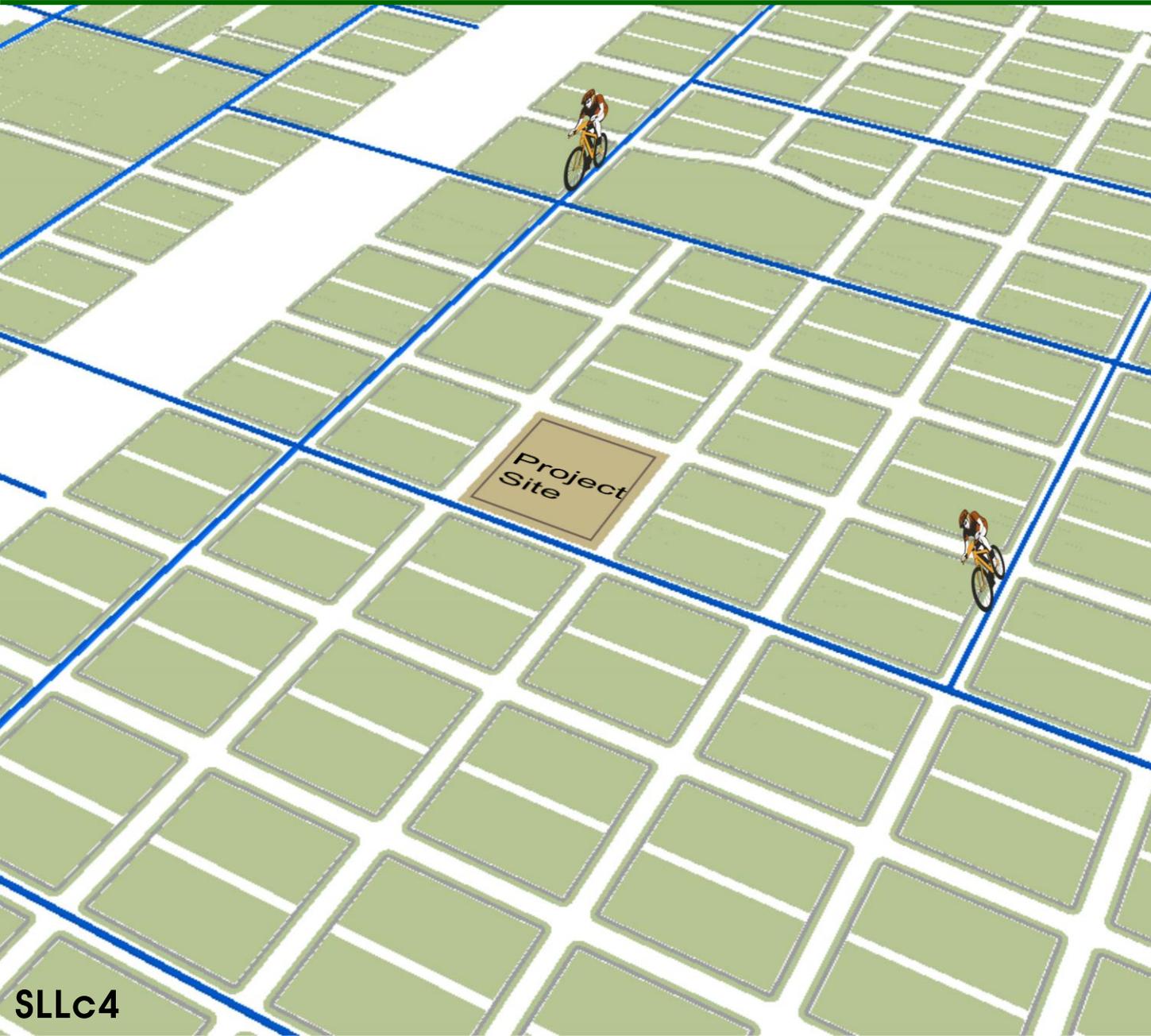
## Walkable Vicinity

- Superior neighborhood access
- Mode shifting to walking

**5**

Points

# Location & Linkages



## Bikeable Vicinity

- Superior community access
- Mode shifting to biking

**1**

Point

# Location & Linkages



## Jobs – Housing Balance



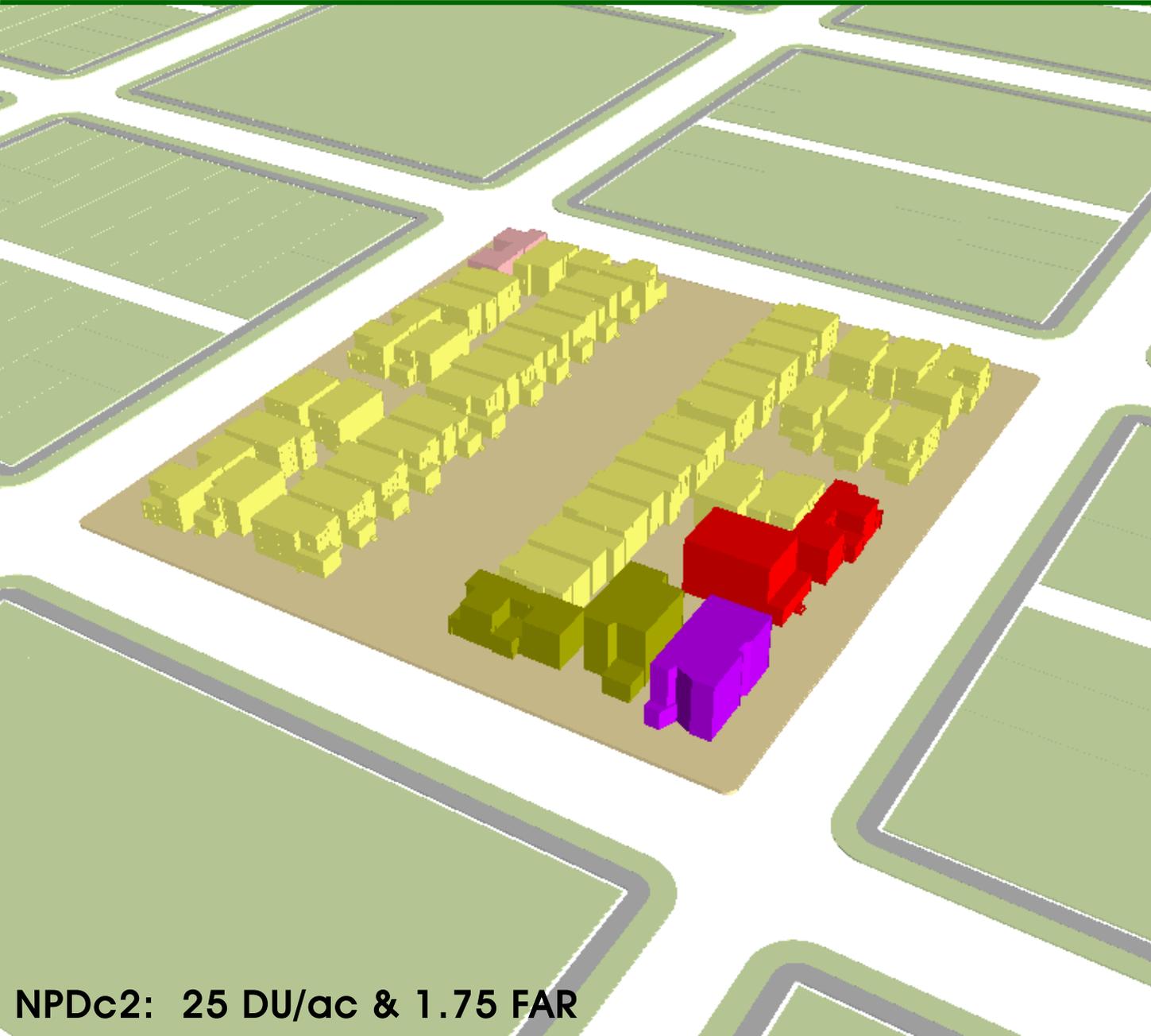
- Mode shifting to walk/bike/transit
- Shorter auto trips

**3**

Points

SLLc5

# 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



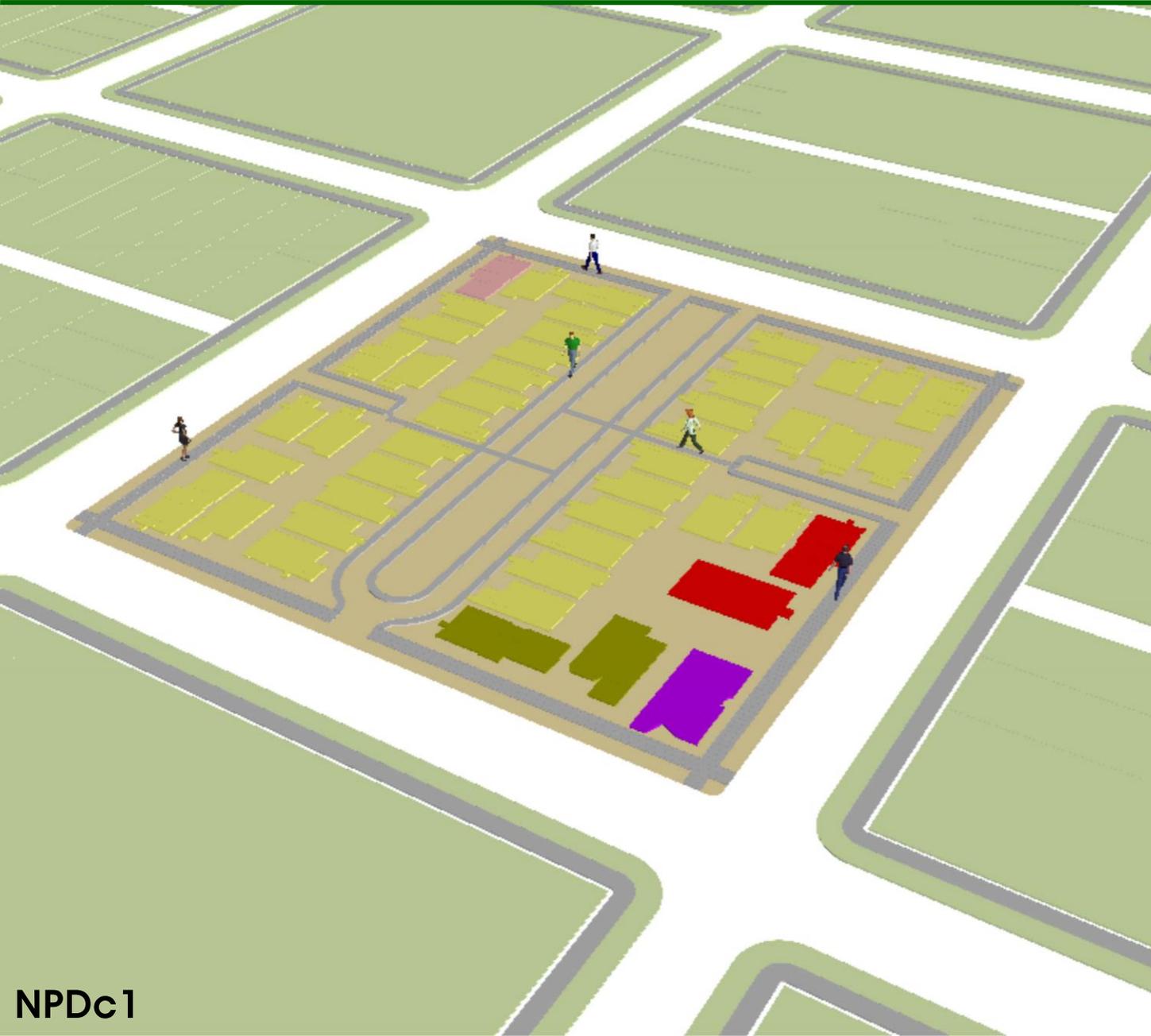
## Diverse Neighborhood Assets

- Mode shifting to walk/bike
- Shorter auto trips

4

Points

# Pattern & Design



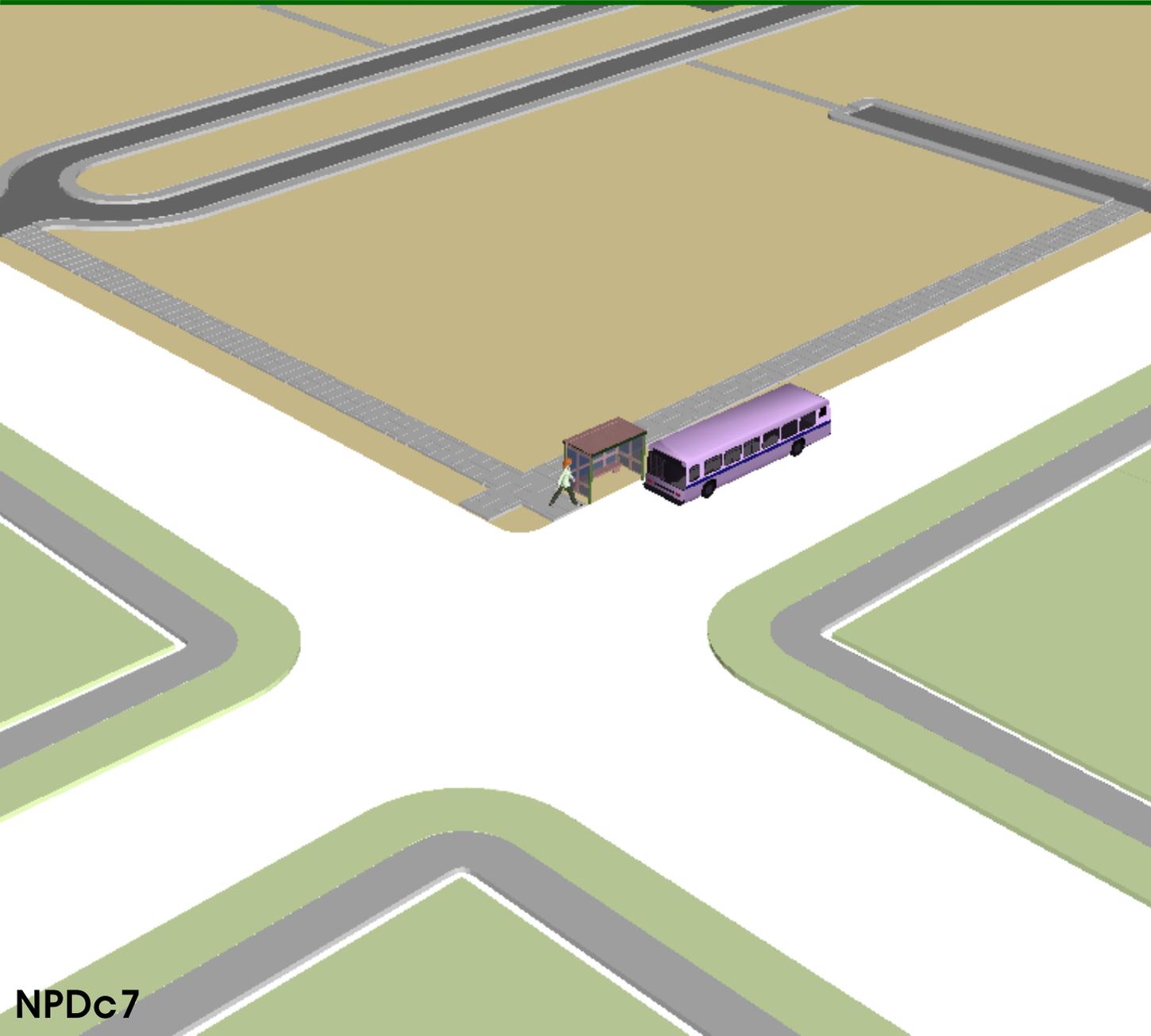
## Walkable Site

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

**12**

Points

# Pattern & Design



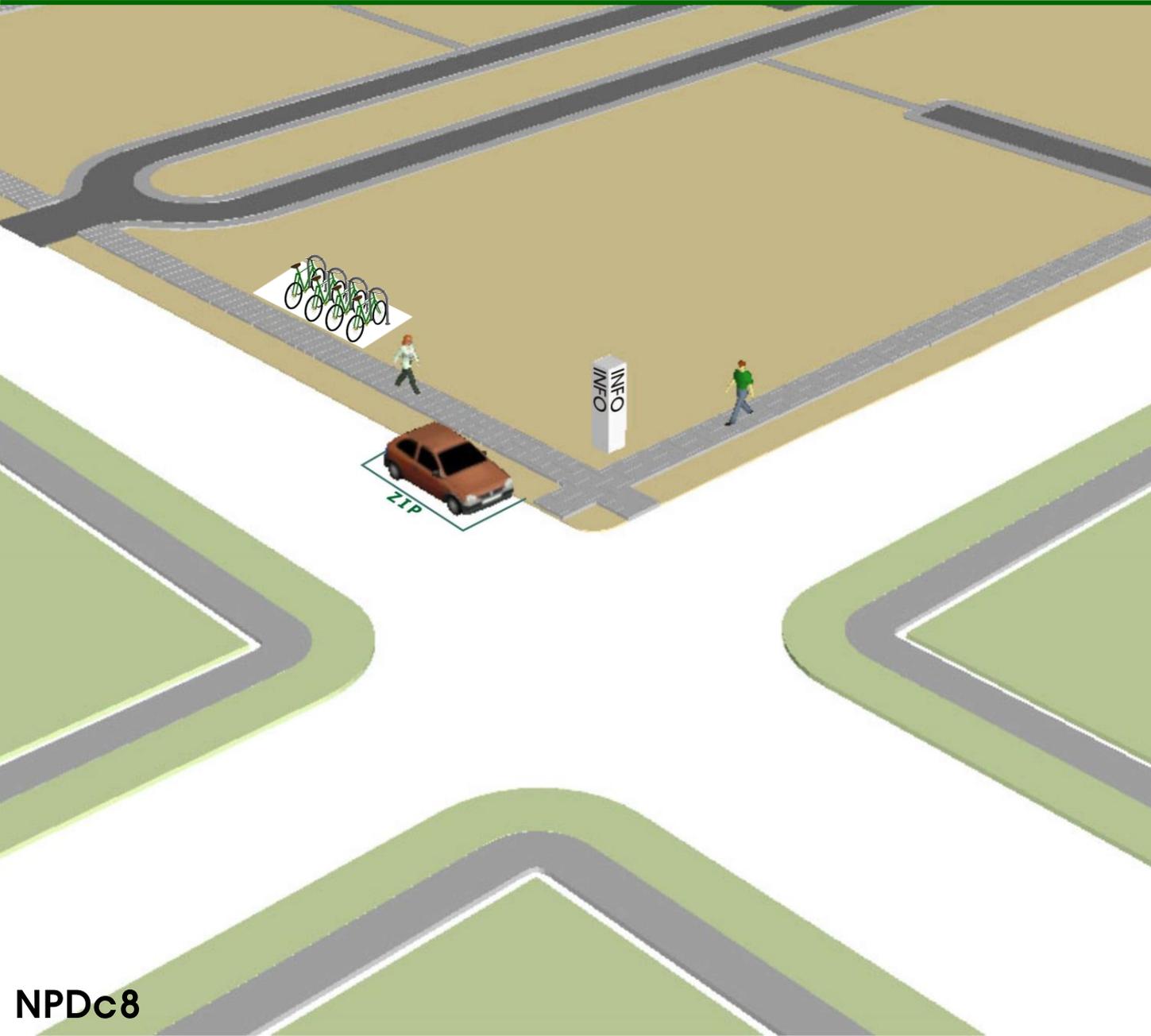
## Transit Stops

- 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



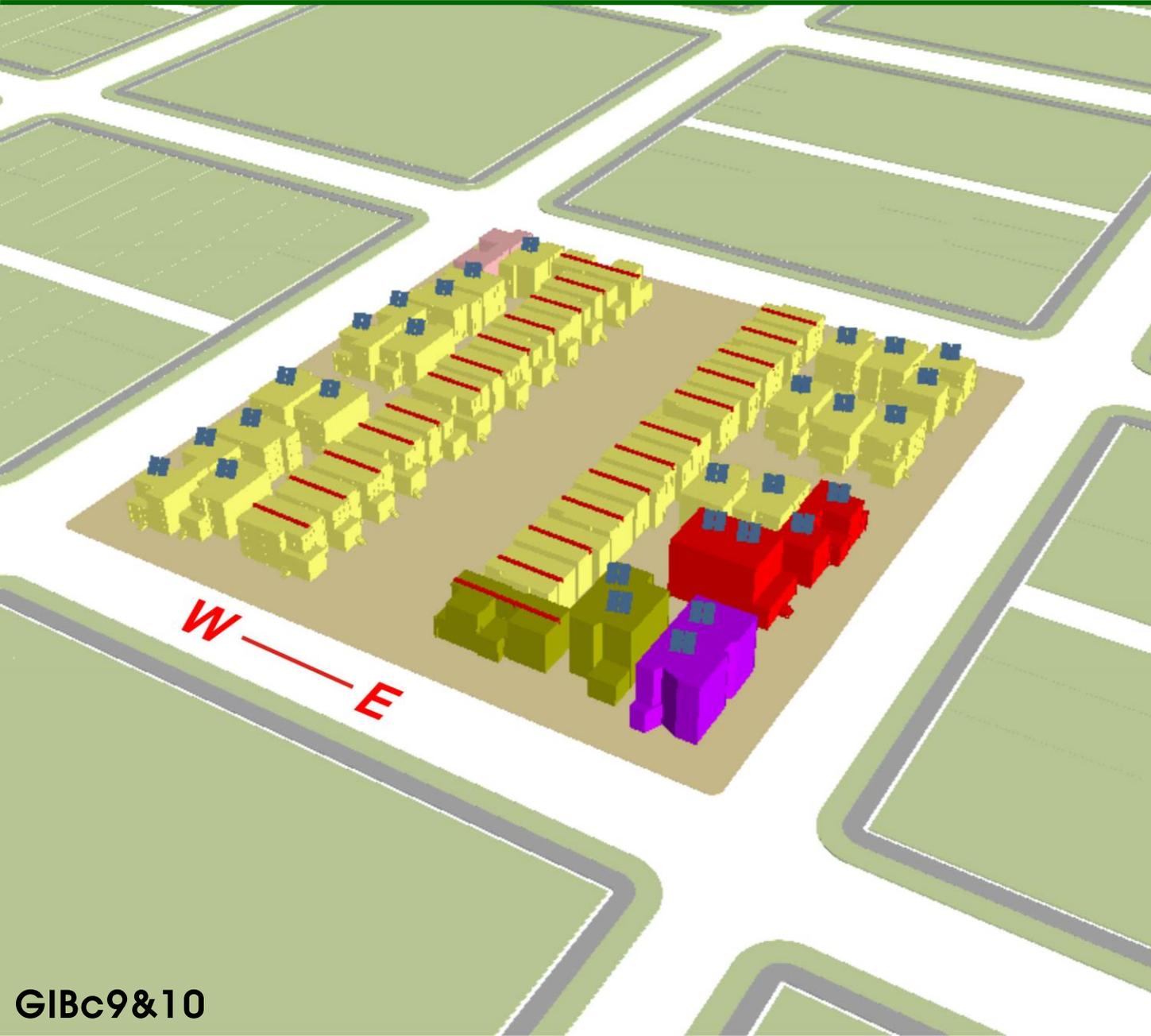
## Building Energy Efficiency & Reuse

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

8

Points

# Infrastructure & Buildings



## Solar Orientation & Power

- Passive savings
- PV power

4

Points

# Infrastructure & Buildings



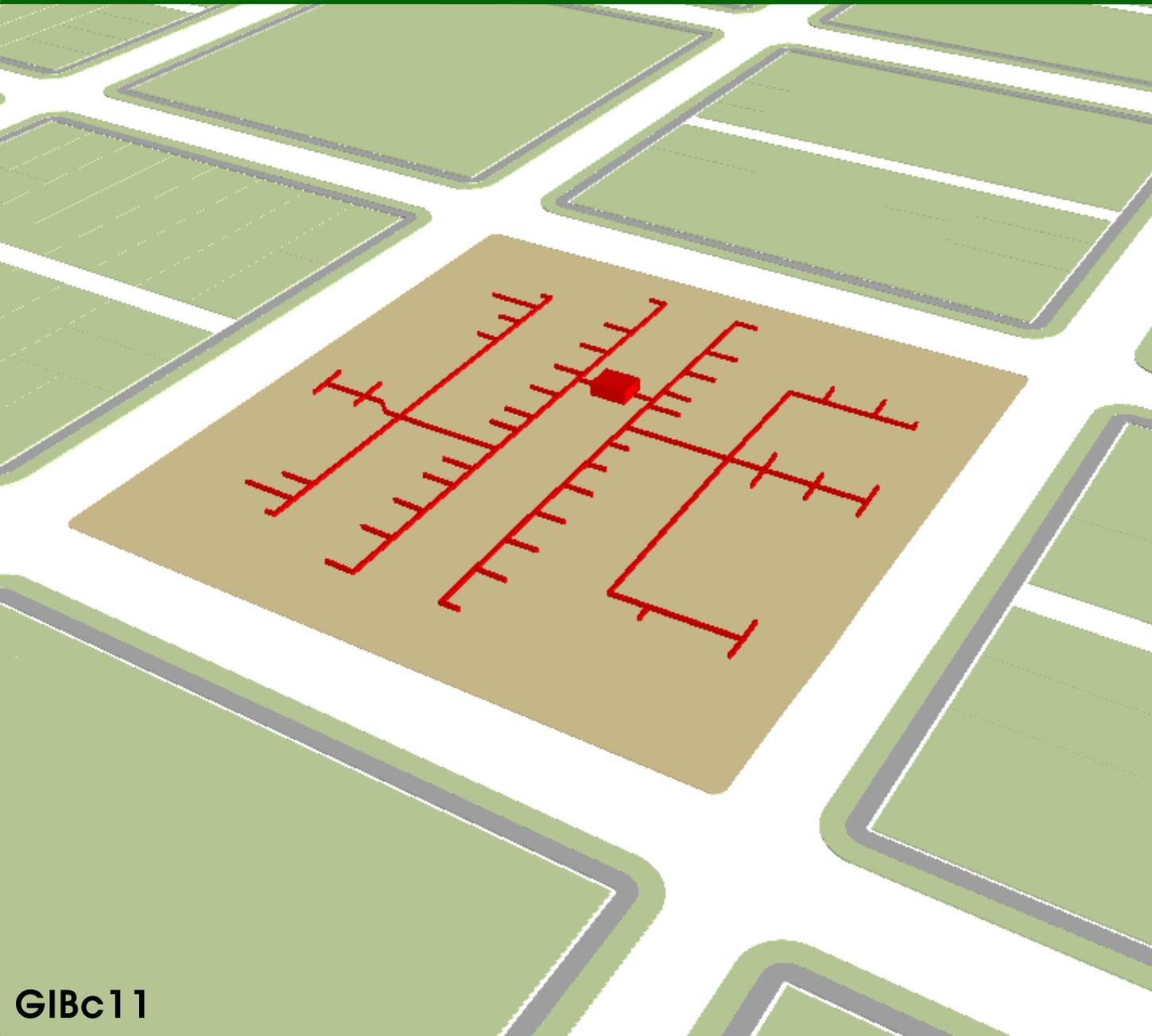
## Heat Island Reduction

- High-reflectance materials
- Green roofs
- Tree shading

**3**

Points

# Infrastructure & Buildings



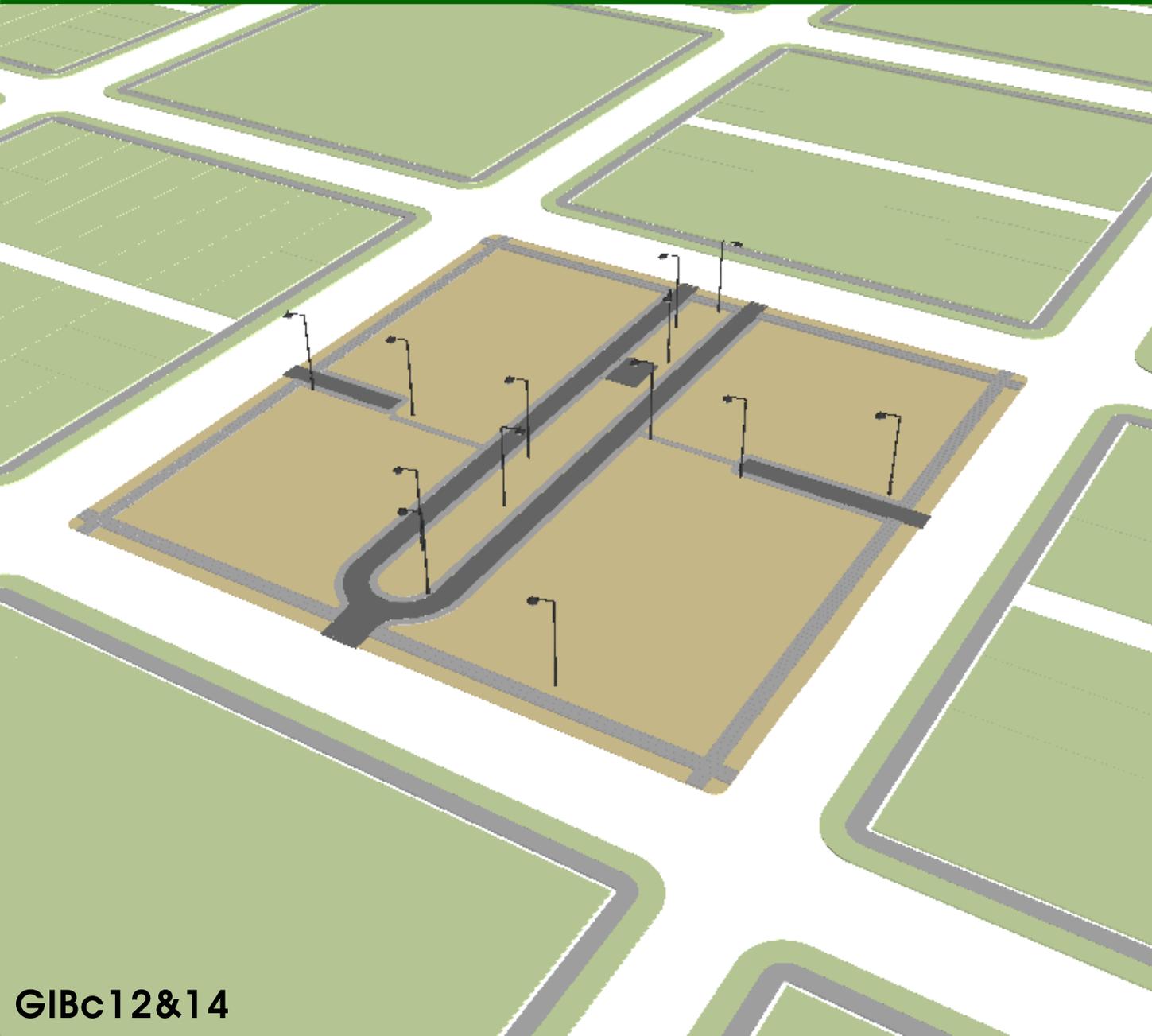
## District Heating & Cooling

- Central plant efficiencies
- Peak load diversity

**2**

Points

# Infrastructure & Buildings



## Infrastructure Energy Efficiency & Recycled Content

- High-efficiency fixtures
- Materials-embodied savings

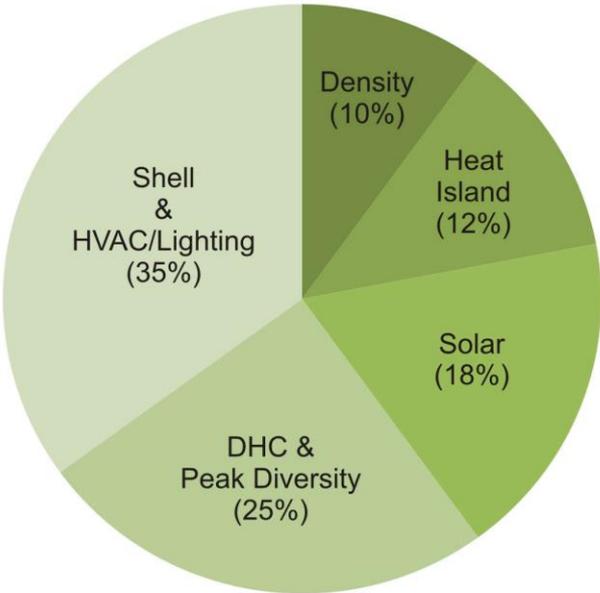
**2**

Points

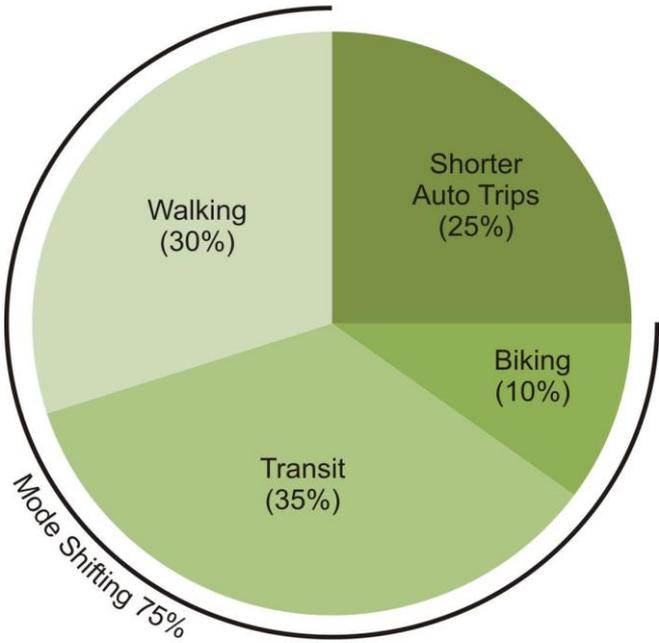
# ND Energy & GHG Savings

	Illustrative Baseline CO <sub>2</sub> lbs/capita/yr	Illustrative ND Savings (%)
Buildings	17,500	35
Transportation	21,000	25
Infrastructure	1,000	15

Building Energy & GHG Savings



Transportation Energy & GHG Savings



# LEED-ND GHG Totals



**63**

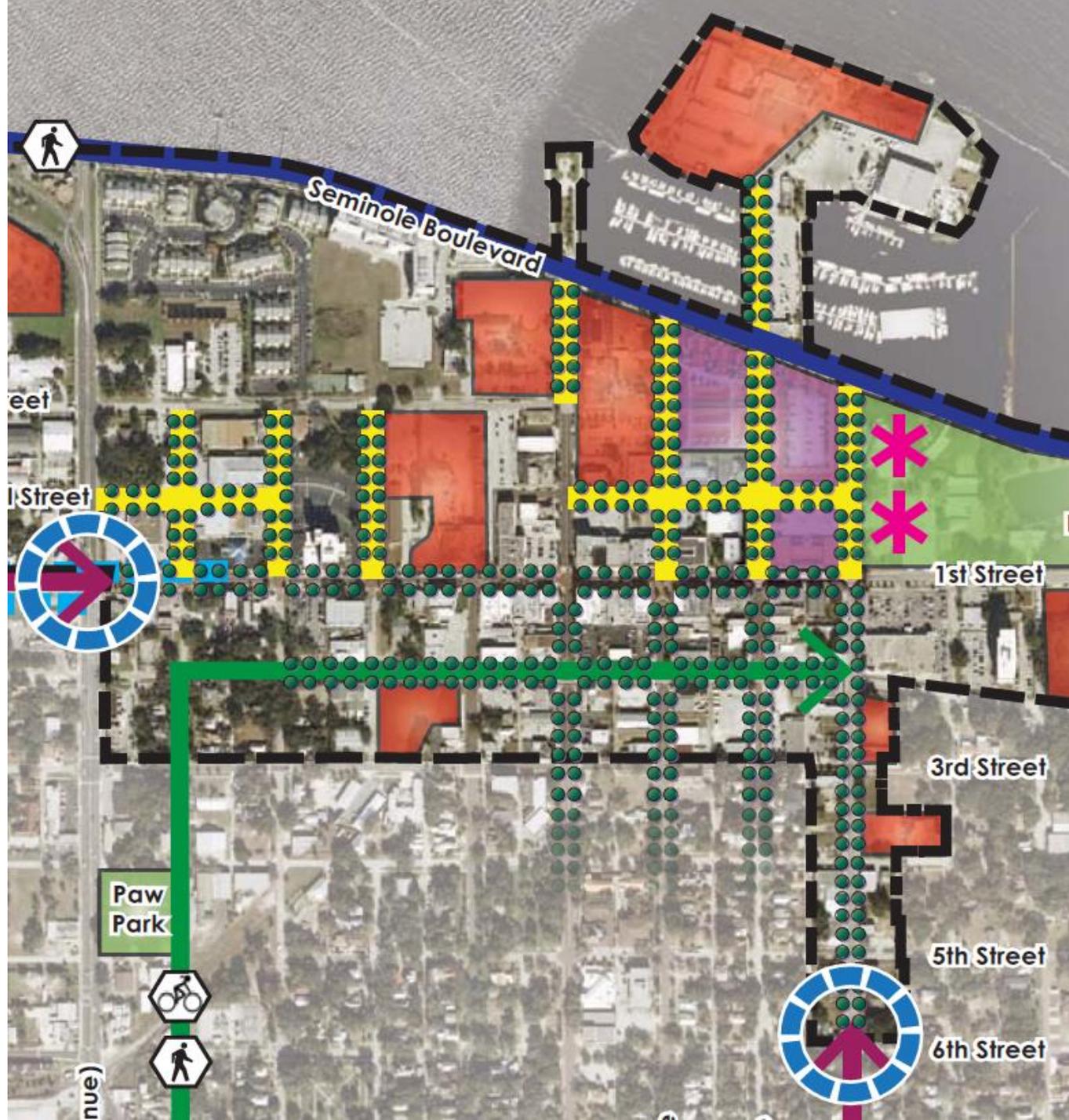
ND Points

**Gold  
Certification  
&  
32% GHC  
Reduction**

**12,000**

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

# Sanford Downtown Focus Area



# Downtown Development Concept - *Workshop Only*

-  Parcels
-  Workshop Concept Boundary (133 Acres)
-  LYNX Bus Stops
-  Streets
-  Concept Development Sites
-  Central Node
-  1/4 mi. Walkshed
-  1/2 mi. Walkshed



Total dev area – 24.46 acres  
 Dwelling units – 900 (incl 96 ALF)  
 Retail – 193,000 sq ft  
 Office – 129,000 sq ft  
 Hotel rooms - 200

Regatta Shores

# SunRail Station Focus Area

Wayne Densch

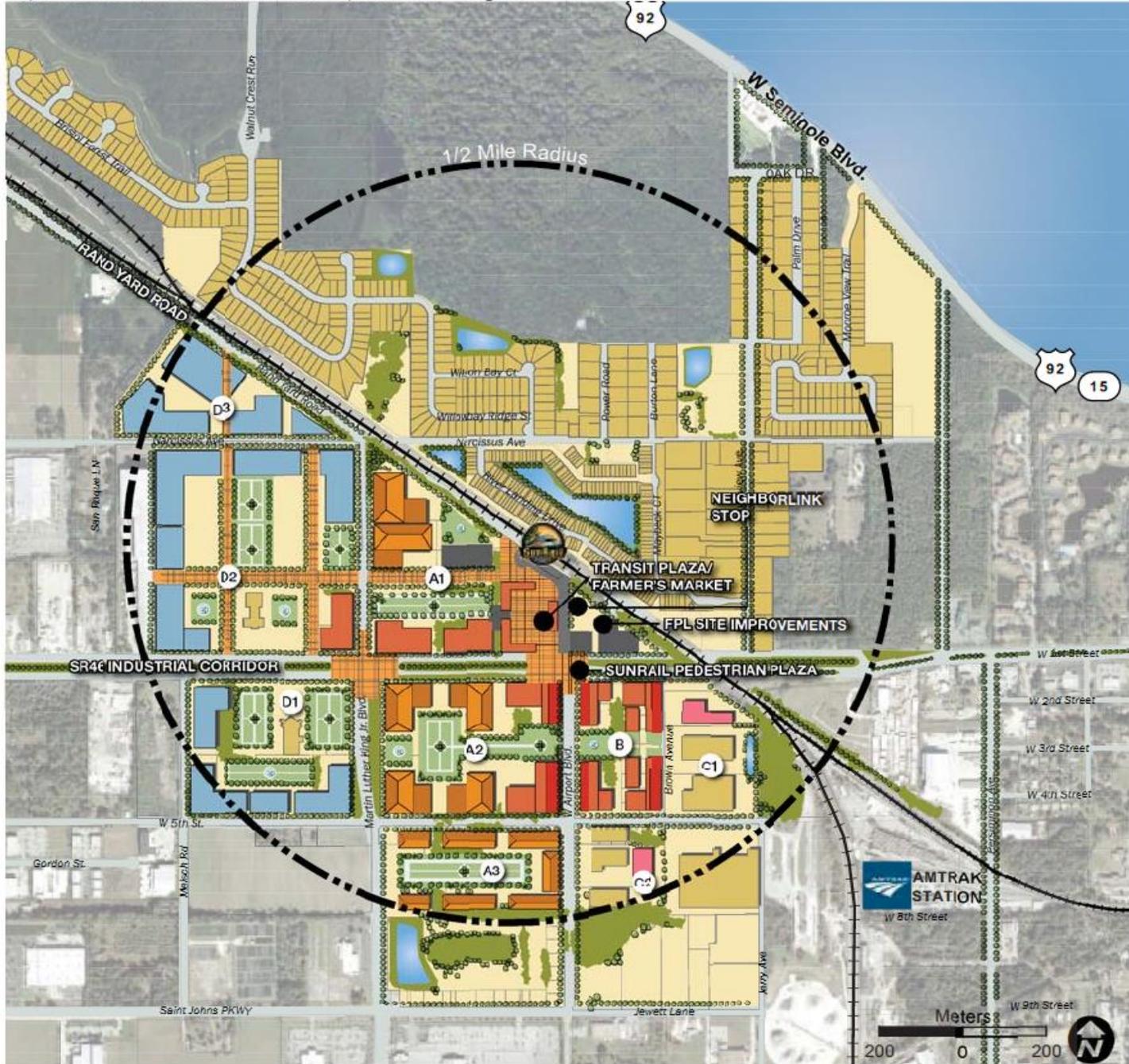


Central Baptist Church

Sanford Auto Train

46

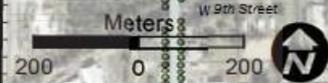
Map 24: SunRail Mixed-Use Transit Plaza Proposed Urban Design Plan



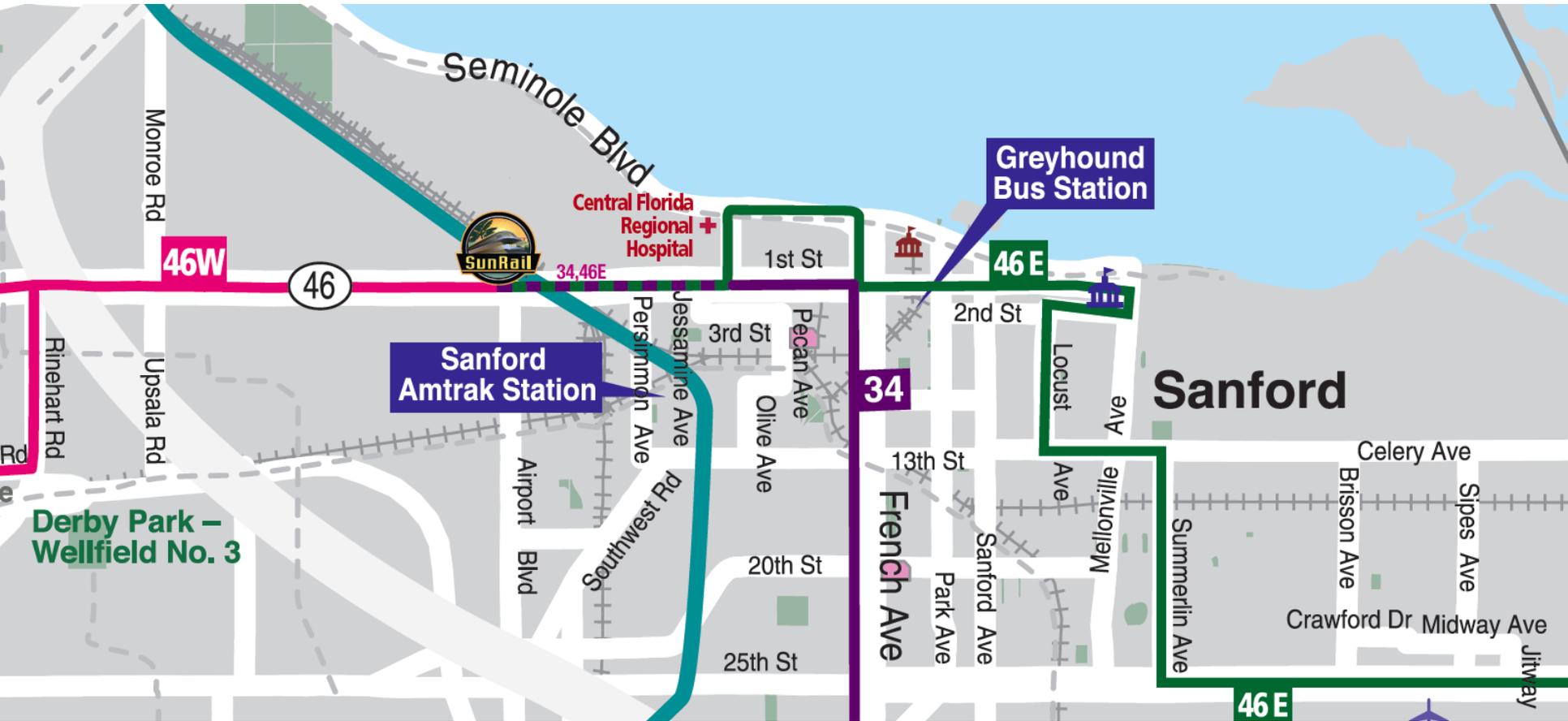
**LEGEND**

- Study Area Boundary
- ==== SunRail Line
- SunRail Station
- Amtrak Rail Line
- Amtrak Station
- Existing Buildings
- Mixed Use Housing
- Commercial / Office
- Industries
- Housing
- Institutional
- Open Space
- Parking

<b>A1</b>	<b>Mixed Use Housing District</b>	
	Commercial Retail:	74,910 SF
	Mixed Use Office:	429,767 SF
<b>A2</b>	<b>Mixed Use Residential District</b>	
	Mixed Use Offices:	210,901 SF
	Mixed Use Residential:	412,556 SF
<b>A3</b>	<b>Mixed Use Institutional District</b>	
	Mixed Use Residential:	120,454 SF
	Residential:	180,667 SF
<b>B</b>	<b>Mixed Use Offices</b>	
	Mixed Use:	338,378 SF
<b>C1</b>	<b>Industrial District</b>	
	Industrial:	225,431 SF
<b>C2</b>	<b>Industrial District</b>	
	Industrial:	423,933 SF
<b>D1</b>	<b>Institutional District</b>	
	Educational:	373,798 SF
<b>D2</b>	<b>Mixed Use Institutional District</b>	
	Mixed Use:	87,686 SF
	Institutional:	661,397 SF
<b>D3</b>	<b>Institutional District</b>	
	Health:	492,407 SF



# Sanford Transit Routes & Stations



# ND Scorecard

## 8 0 0 0 Smart Location and Linkage 27 Points Possible

	Y	N	P	H	Points	Required
10	Y					Required
11	Y					Required
12	Y					Required
13	Y					Required
14	Y					Required
15						
16						
17						
18						
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## 24 0 0 0 Neighborhood Pattern and Design 44 Points Possible

	Y	N	P	H	Points	Required
27	Y					Required
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29	Y					Required
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## 45 0 0 0 Green Infrastructure and Buildings 29 Points Possible

	Y	N	P	H	Points	Required
48	Y					Required
49	Y					Required
50	Y					Required
51	Y					Required

## Green Infrastructure and Buildings, Continued

	Y	N	P	H	Points	Required
Credit 1					10	
Credit 2					2	
Credit 3					7	
Credit 4					1	
Credit 5					3	
Credit 6					1	
Credit 7					1	
Credit 8					1	
Credit 9					1	
Credit 10					1	
Credit 11					3	
Credit 12					2	
Credit 13					1	
Credit 14					2	
Credit 15					1	
Credit 16					1	
Credit 17					1	

## 0 0 0 Innovation and Design Process 6 Points

	Y	N	P	H	Points	Required
Credit 1.1					1	
Credit 1.2					1	
Credit 1.3					1	
Credit 1.4					1	
Credit 1.5					1	
Credit 2					1	

## 0 0 0 Regional Priority Credit 4 Points

	Y	N	P	H	Points	Required
Credit 1.1					1	
Credit 1.2					1	
Credit 1.3					1	
Credit 1.4					1	

## 0 0 0 Project Totals (Certification estimates) 110 Points

**Certified:** 40-49 points, **Silver:** 50-59 points, **Gold:** 60-79 points, **Platinum:** 80-89 points

# LEED-ND Certification Levels



**LEED-ND  
CERTIFIED**

**40-49 pts**



**LEED-ND  
SILVER  
CERTIFIED**

**50-59 pts**



**LEED-ND  
GOLD  
CERTIFIED**

**60-79  
pts**

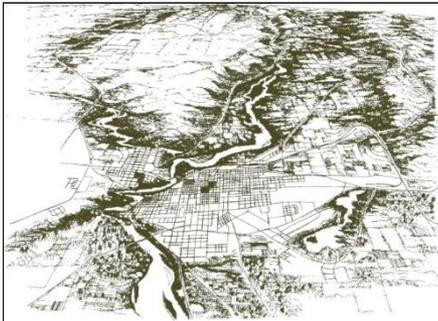


**LEED-ND  
PLATINUM  
CERTIFIED**

**80+  
pts**

# LEED-ND Rating System

## Smart Location & Linkage



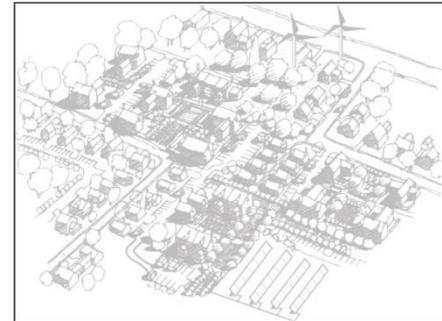
**5 prerequisites**  
**27 points**

## Neighborhood Pattern & Design



*3 prerequisites*  
*44 points*

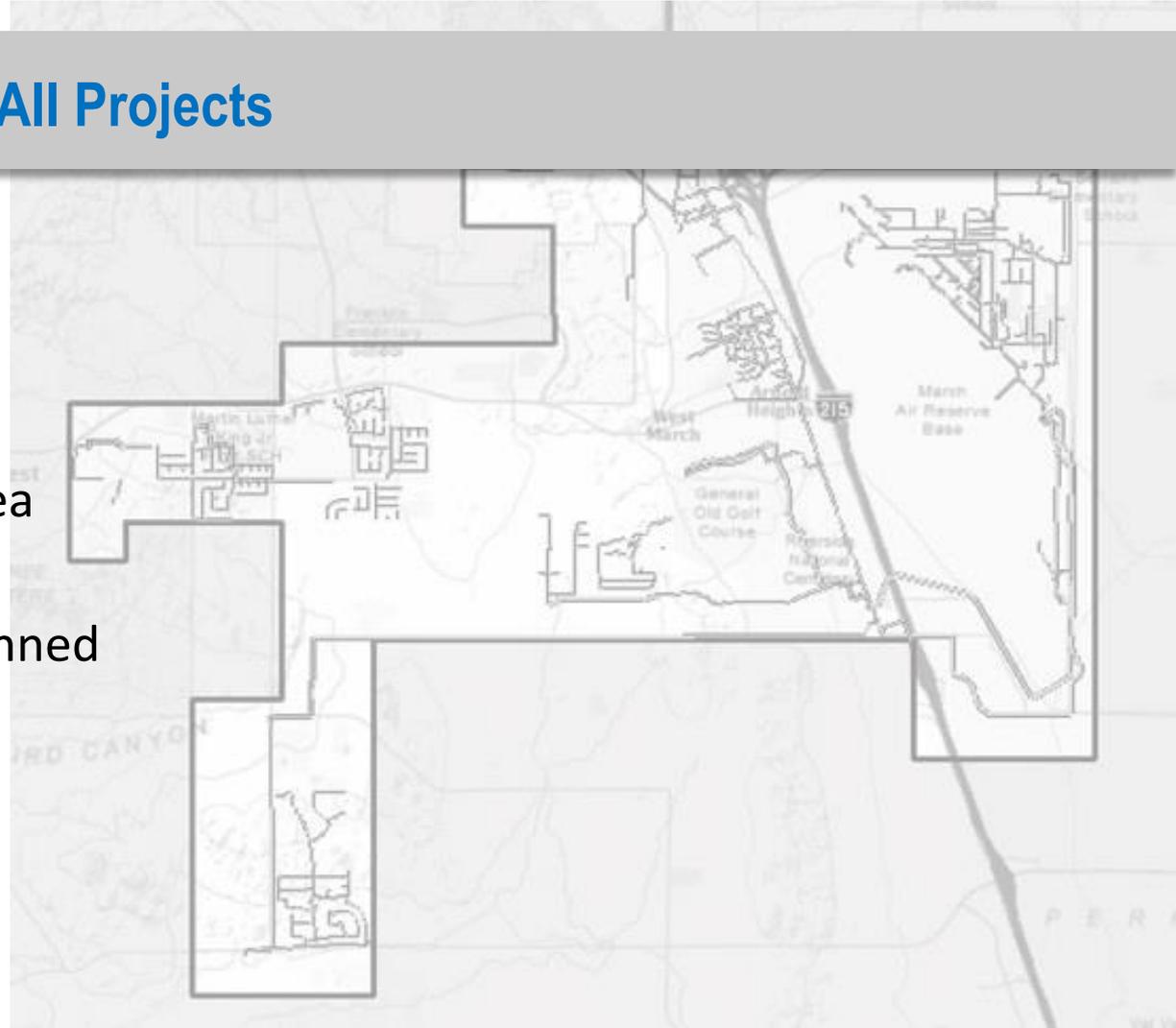
## Green Infrastructure & Buildings



*4 prerequisites*  
*29 points*

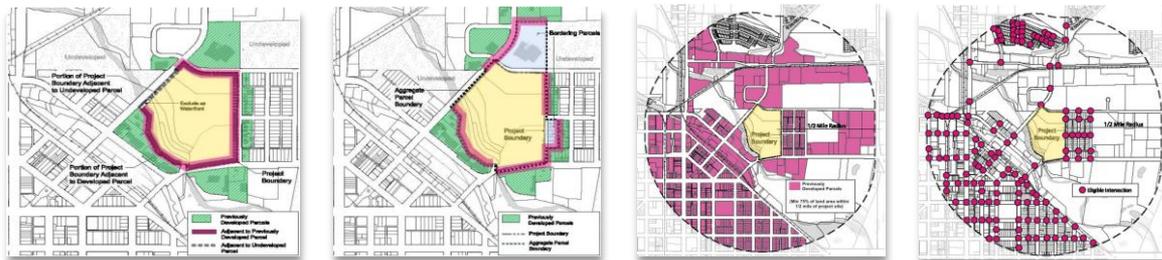
## SLLp1 Smart Location: All Projects

- Existing water & wastewater service area
- Or legally-adopted planned service area



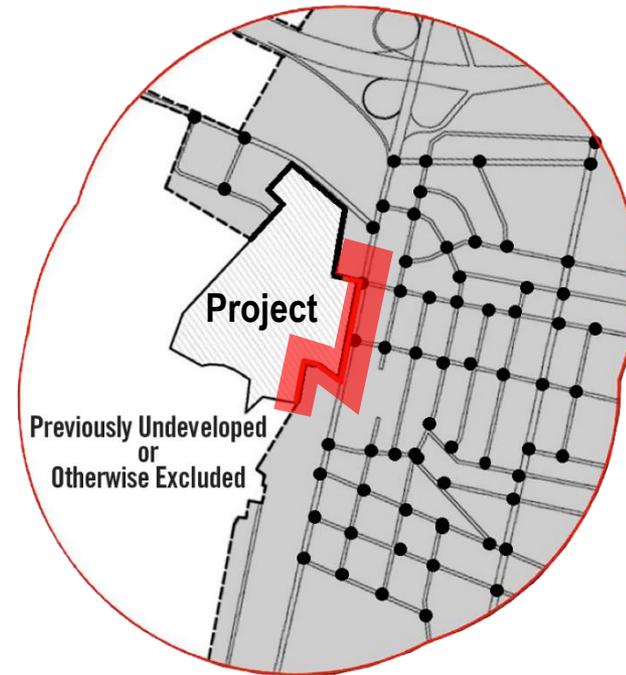
# SLLp1 Option 1: Infill

- 75% surrounded by previous development
- Site and bordering parcels 75% surrounded
- 75% previous development within one-half mile
- 140 intersections per square mile within one-half mile



## SLLp1 Option 2: Adjacent & Connected

- 25% adjacent previous development
- 90 intersections per square mile
- ROW intersects average 600 ft



## SLLp1 Option 3: Transit-Served

- 50% of dwellings and non-residential uses within one-quarter to one-half mile walk of transit stops
- Transit rides: 60 trips weekdays; 40 trips per weekend day
- Planned transit fully committed, including funding



## SLLp1 Option 4: Walkable Assets



- Walkable existing diverse uses
- Project square footage minimum 30% residential
- Walk distances:
  - One-quarter mile from boundary to five uses
  - Project center within one-half mile of seven uses

# LEED ND Diverse Uses

## **Food Retail**

Supermarket  
Other food store with produce

## **Community-Serving Retail**

Clothing  
Convenience  
Farmer's market  
Hardware  
Pharmacy  
*Other retail*

## **Services**

Bank  
Gym, health club  
Hair care  
Laundry, dry cleaner  
Restaurant (no drive-throughs)

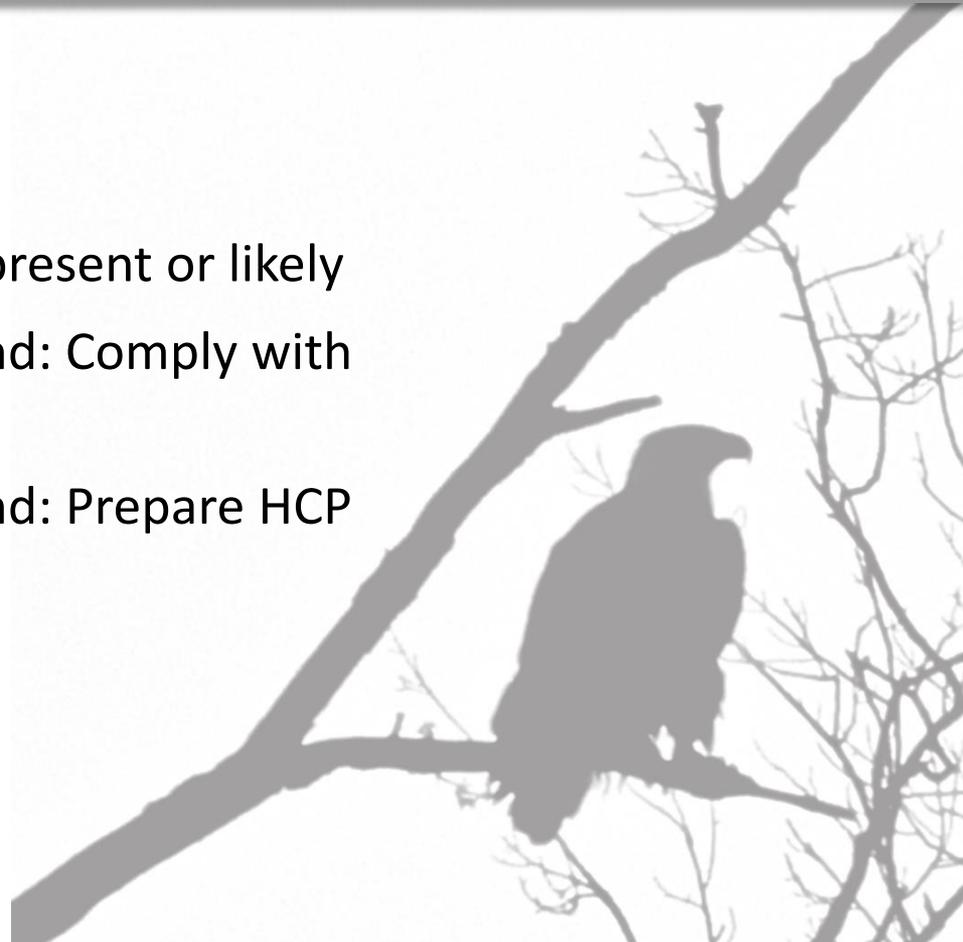
## **Civic and Community Facilities**

Adult or senior care  
Child care  
Community or recreation center  
Cultural arts facility  
Educational facility  
Family entertainment venue  
Government office  
Place of worship  
Medical clinic  
Police or fire station  
Post office  
Public library  
Public park  
Social services center

## SLC p2 Imperiled Species Conservation

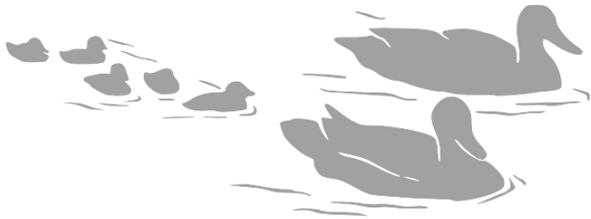
Three compliance pathways:

- No species or communities present or likely
- Species or communities found: Comply with HCP
- Species or communities found: Prepare HCP



## SLL p3 Wetland/Water Body Conservation

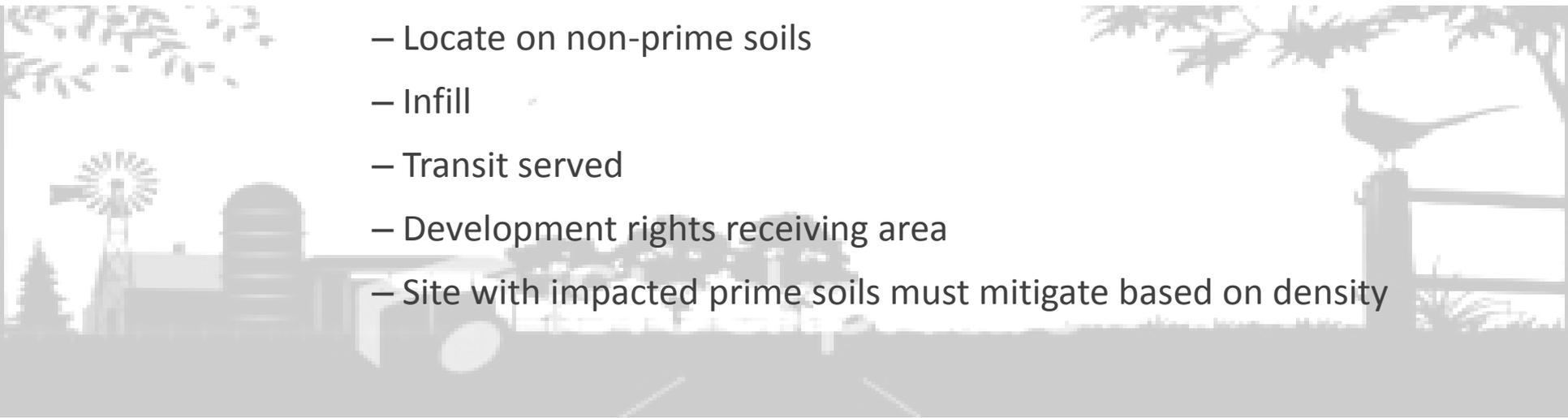
- Locate on site with no wetlands, water bodies, or land within 50 feet of wetlands, and land within 100 feet of water bodies
- Two compliance pathways if wetlands and/or water bodies located on site:



- Wetlands and buffers not impacted unless minor improvement or previously developed
- Earn 1 point under GIB c8 – Stormwater Management and impact limited to a percentage of land based on project density

## SLL p4 Agricultural Land Conservation

- Do not develop within state or locally-designated agricultural preservation districts
  - Five compliance pathways:
    - Locate on non-prime soils
    - Infill
    - Transit served
    - Development rights receiving area
    - Site with impacted prime soils must mitigate based on density



## SLL p5 Floodplain Avoidance

Three compliance paths:

1. Sites without floodplains
2. Locate on infill or previously developed site, and comply with NFIP within floodplain portion.
3. Other sites with floodplains: only develop outside floodplain or previously developed portions.

## SLLc1: Preferred Locations – 12 pts

- Option 1
  - Previously developed/adjacent/infill sites
  
- Option 2
  - Over 200 intersections per square mile (*including internal intersections*)
  
- Option 3
  - Federally-designated high-priority redevelopment areas, eg enterprise zones

## SLL c2: Brownfields – 2 pts



- Option 1: Locate on a designated brownfield and remediate.
- Option 2: Locate in EPA superfund site, federal empowerment zone, etc.

## SLLc3: Reduced Auto Dependence – 7 pts

- Transit-served locations
- Calculation based on transit type, number of trips

Weekday Trips	Weekend Trips	Points
60	40	1
76	50	2
100	65	3
132	85	4
180	130	5
246	150	6
320	200	7

## SLLc4 Bicycle Network & Storage – 1 pt



*At least 1 of 3:*

- Existing bike network of 5 miles + within ¼-mile.
- If 100% residential, existing network within ¼-mile connecting to school or job center within 3 miles.
- Existing network within ¼-mile connecting 10+ diverse uses within 3 miles.

*And storage:*

1 space/occupant for 30% of res units; 1 space/worker for 10% of workforce plus 1 space/5000 sq ft for visitors, etc.

## SLLc5 Housing & Jobs Proximity – 3 pts

### *Option 1*

30% residential share of total sq ft, and center within ½-mile walk of existing jobs equal or greater than projects DU count, and earn NPDc4 affordable housing point.

### *Option 2*

Same as Option 1 but without affordable housing.

### *Option 3*

30% non-residential share of total sq ft, on infill site, and within ½-mile walk of heavy transit, and existing DUs equal or greater than 50% of new jobs in project.

## SLLc 6 Steep Slope Protection – 1 pt

### *Option 1*

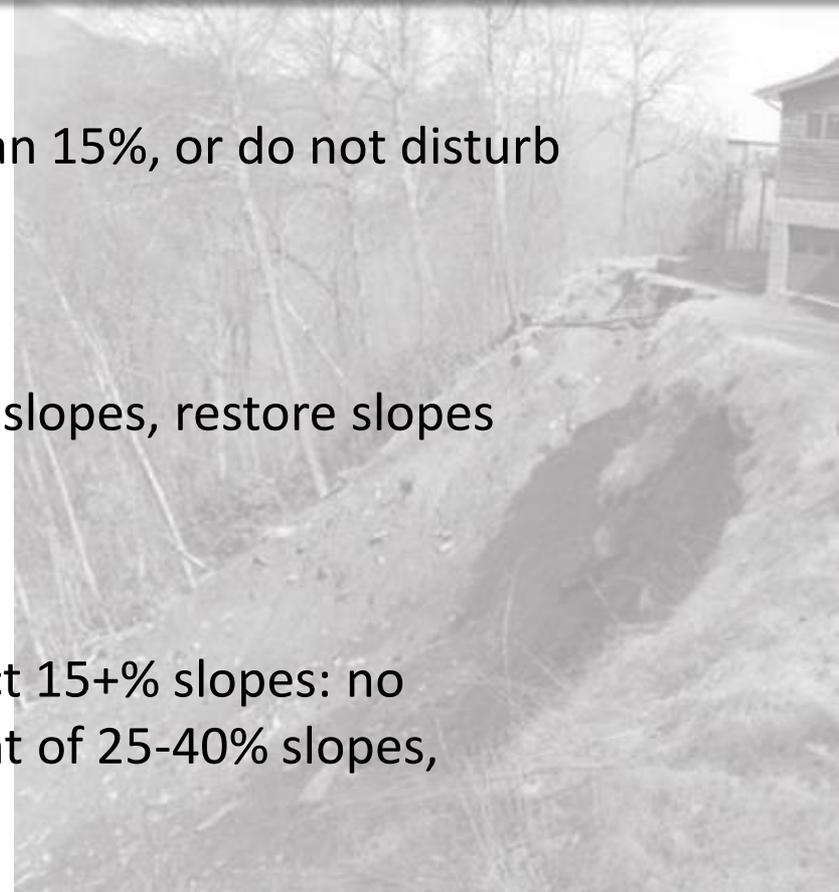
Locate on sites without slopes greater than 15%, or do not disturb such slopes.

### *Option 2*

On previously developed sites with 15+% slopes, restore slopes with native plantings.

### *Option 3*

On sites not previously developed, protect 15+% slopes: no disturbance of 40+%, limited development of 25-40% slopes, CC&R protections.



## SLLc7 Site Design for Habitat/Water Conservation - 1 pt

### *Option 1*

Locate on site without significant habitat.

### *Option 2*

Delineate and protect significant habitat.

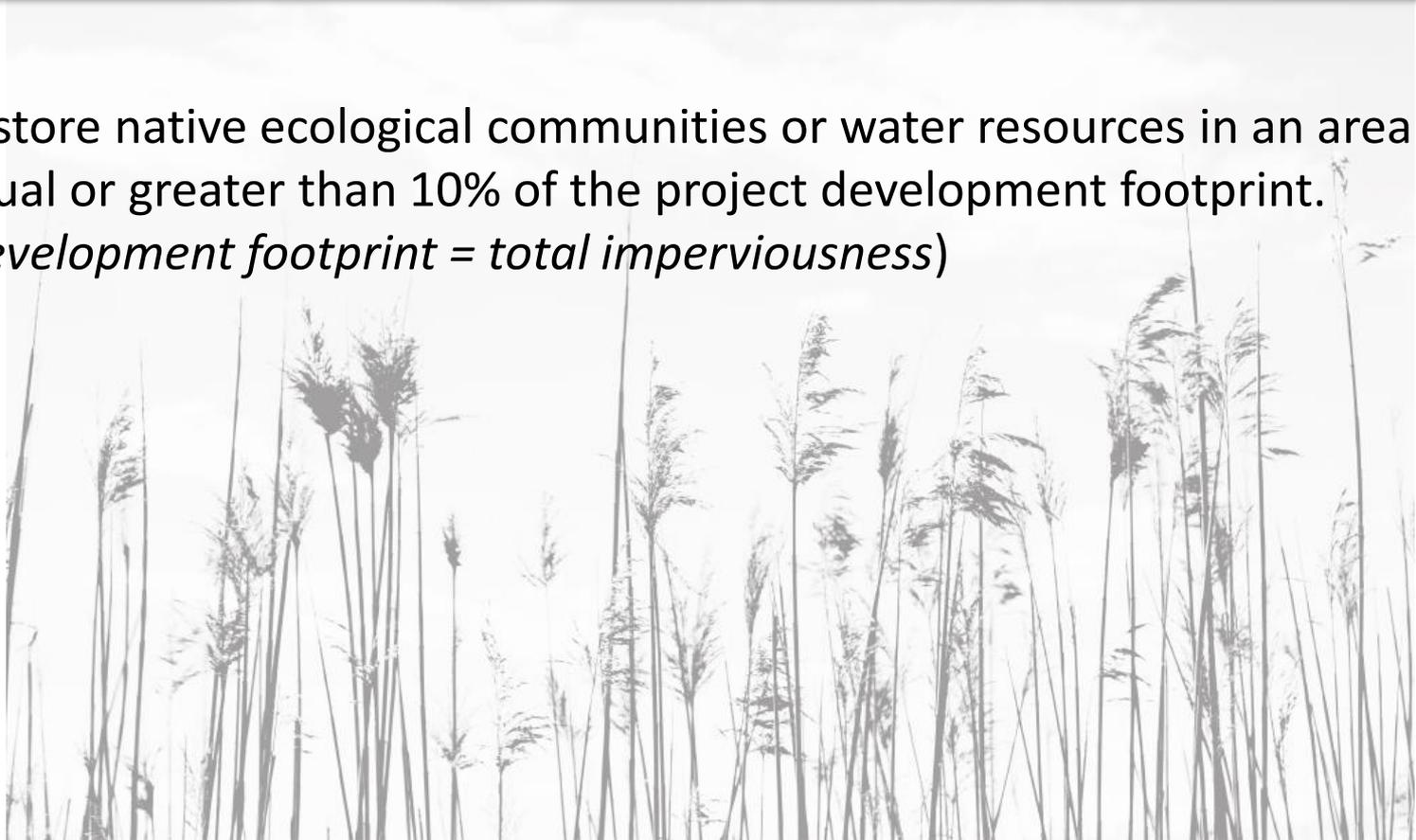
### *Option 3*

Conserve 100% of all wetlands, water bodies, and buffers.



## SLLc8 Restoration of Habitat/Water Resources – 1 pt

Restore native ecological communities or water resources in an area equal or greater than 10% of the project development footprint.  
*(development footprint = total imperviousness)*



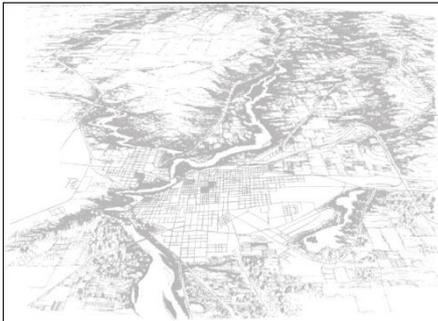
## SLLc9 Long-Term Conservation Mgmt – 1 pt



Create & implement a minimum 10-year management plan for habitat and/or water resources.

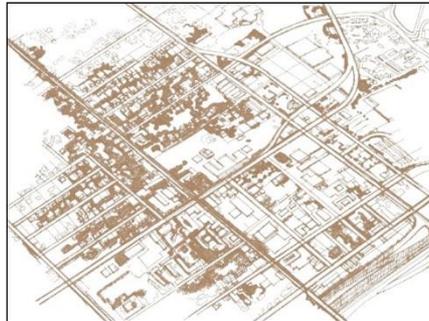
# LEED-ND Rating System

Smart  
Location  
& Linkage



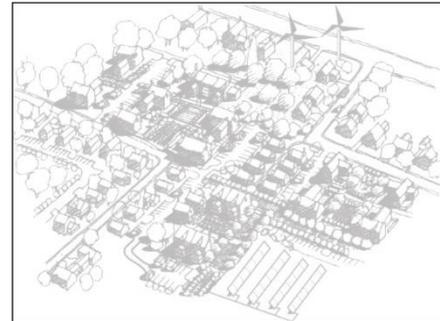
*5 prerequisites  
27 points*

**Neighborhood  
Pattern  
& Design**



***3 prerequisites  
44 points***

Green  
Infrastructure  
& Buildings

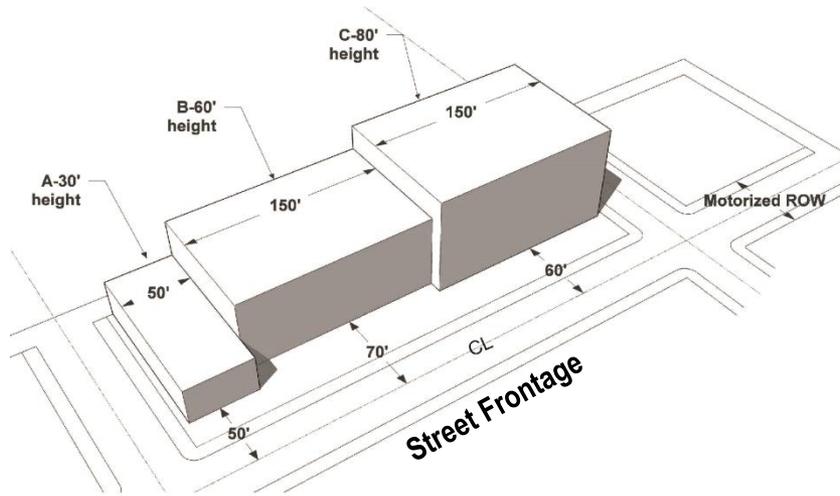


*4 prerequisites  
29 points*

## NPDp1: Walkable Streets

- Minimum 90% of building entries facing public spaces, not parking lots.
- Minimum 15% of street frontages with minimum 1:3 building height-to-street width ratio.
- Sidewalks on both sides of 90% of streets.
- Maximum 20% of street frontages devoted to garage/service bay openings.

# Building Height-to-Street Width Ratio



BH-SW of 1:3 = BH-CL of 1:1.5 = 0.66

1. Applies to planned & existing streets.
2. Measure total street network centerline length, minus intersecting driveway & alley widths.
3. Total length \* 15% = required minimum ft.
4. For each bldg façade facing a street, divide bldg height by façade distance to street centerline.
5. If result is 0.66 or greater, add bldg frontage width to 'qualifying' list.
6. Repeat until qualifying list totals minimum ft.



75 ft

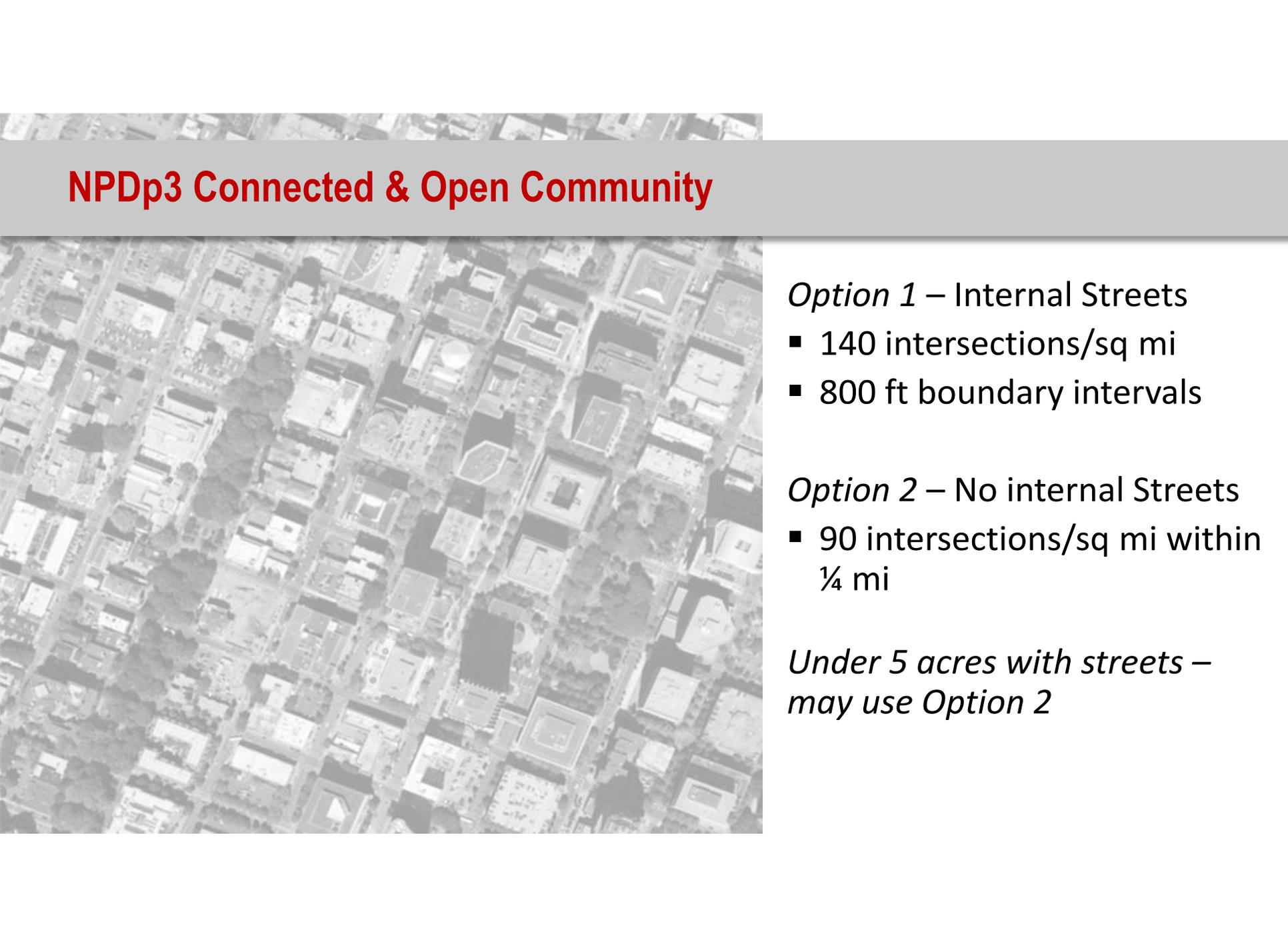
Min.  
25 ft

## NPD p2 Compact Development

- Option 1: Projects with 76+ weekday transit rides
  - Residential density: 12 DU/acre
  - Nonresidential density: 0.8 FAR
- Option 2: All other projects
  - Residential densities: 7 DU/acre
  - Nonresidential densities: 0.5 FAR

Site	Acres	Dev. Program	DU/acre	FAR
A	6.8	150 Apartments 100-room hotel 2 restaurants 96 Room ALF	164	0.67
B	3.3	31,000 Retail 43,000 Office 165 DU	132	0.82
C	2.9	31,000 Retail 43,000 Office 145 DU	145	0.89
D	3.16	31,000 Retail 43,000 Office 158 DU	158	0.78
E	2	35 DU	18	—
F	2.3	82 DU, 40k sf retail	63	0.91
G	1.2	100 Rm Hotel 18,000 Retail	—	3.2
H	1.2	18,000 Retail 30 DU	150	1.0
I	0.6	9,000 Retail 15 DU	38	1.0
J	1	15,000 Retail 25 DU	38	1.0

24.46



## NPDp3 Connected & Open Community

### *Option 1 – Internal Streets*

- 140 intersections/sq mi
- 800 ft boundary intervals

### *Option 2 – No internal Streets*

- 90 intersections/sq mi within  $\frac{1}{4}$  mi

*Under 5 acres with streets –  
may use Option 2*

## NPDc1 Walkable Streets – 12 pts

- 50-80% of facades with 1-25 ft setbacks.
- Ground-level uses and parking: clear glass facades, blank walls, unshuttered windows, on-street parking on 70% of streets, sidewalks on 100%, raised ground-floor DUs, mixed-use ground floors, 1:3 BH-SW on 40% of streets.
- 70-75% of internal streets at 20-25 mph.
- Driveway crossings no more than 10% of sidewalk length.

## NPDc2 Compact Development – 6 pts

### *Residential Density (DU/ac)*

10-13

13-18

18-25

25-38

38-63

63+

### *Non-Res Density (FAR)*

0.75-1.0

1.0-1.25

1.25-1.75

1.75-2.25

2.25-3.0

3.0+



## NPDc3 Mixed-Use Neighborhood Centers – 4 pts

- 50% of DUs within ¼-mile walk of 4+ diverse uses; at least one from each of four use categories
- Projects over 40 acres must cluster diverse uses with 3-9 uses per cluster, and maximum 300-400 ft between uses in cluster.
- Projects with 150k+ retail sq ft must earn Reduced Auto Dependence point.

## NPDc4 Mixed-Income Diversity – 7 pts

- Option 1: Housing Type Diversity
  - Categories: 20
  - Simpson diversity index
- Option 2: Affordable Housing
  - Rental and for-sale percentages of total units
  - A 15-year affordability commitment
- Option 3: Combined Options 1 & 2
  - Bonus point if two points achieved in both Options 1 and 2



## NPDc4 Mixed-Income Diversity

Rental dwelling units				For-sale dwelling units			
Priced up to 60% AMI		Priced up to 80% AMI		Priced up to 100% AMI		Priced up to 120% AMI	
Percentage of total rental units	Points	Percentage of total rental units	Points	Percentage of total for-sale units	Points	Percentage of total for-sale units	Points
5	1	10	1	5	1	8	1
10	2	15	2	10	2	12	2
15	3	25	3	15	3	—	—

## NPDc5 Reduced Parking Footprint – 1 pt

- Off-street surface lots: either build none, or build at rear or side of buildings; maximum 2 acres each; total lots maximum 20% of development footprint.
- Bike parking per SLLc4.
- Carpool or shared vehicle parking – 10% of total spaces for each non-res and mixed-use bldg

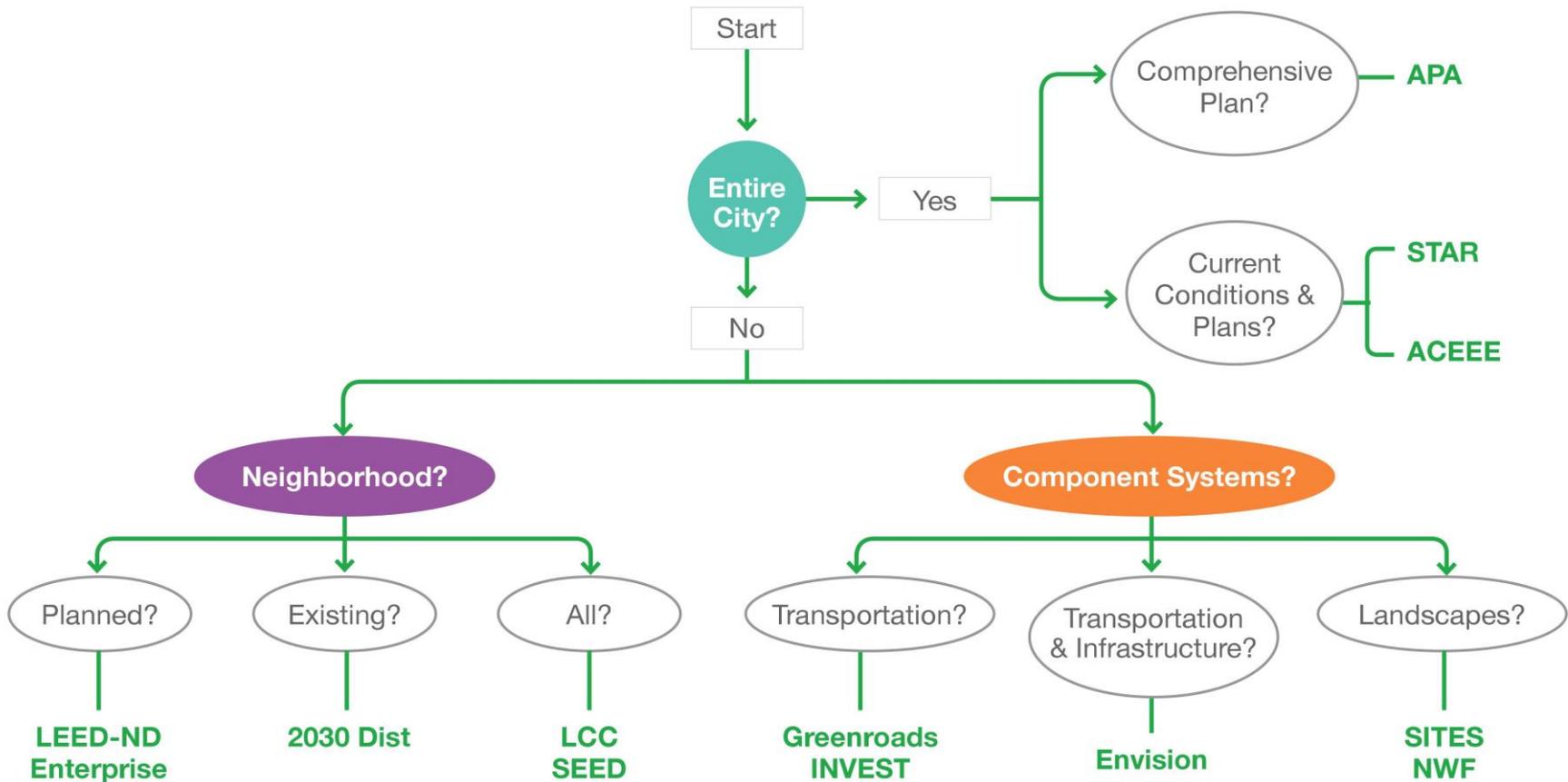


## NPDc6 Street Network – 2 pts

- Intersect boundary at least every 400 ft with through-connection or stub-out.
  - 90% of cul-de-sacs must have non-motorized through-connection.
  - Internal connectivity: 300-400 intersections/sq mi or 400+.



# Sustainability Rating Tool Choices



## NPDc7 Transit Facilities - 1 pt



- Shelters where requested by transit agency
- Shelters: roof, partial wall, seating, lighting, route info.
- Reserve space for future stops.

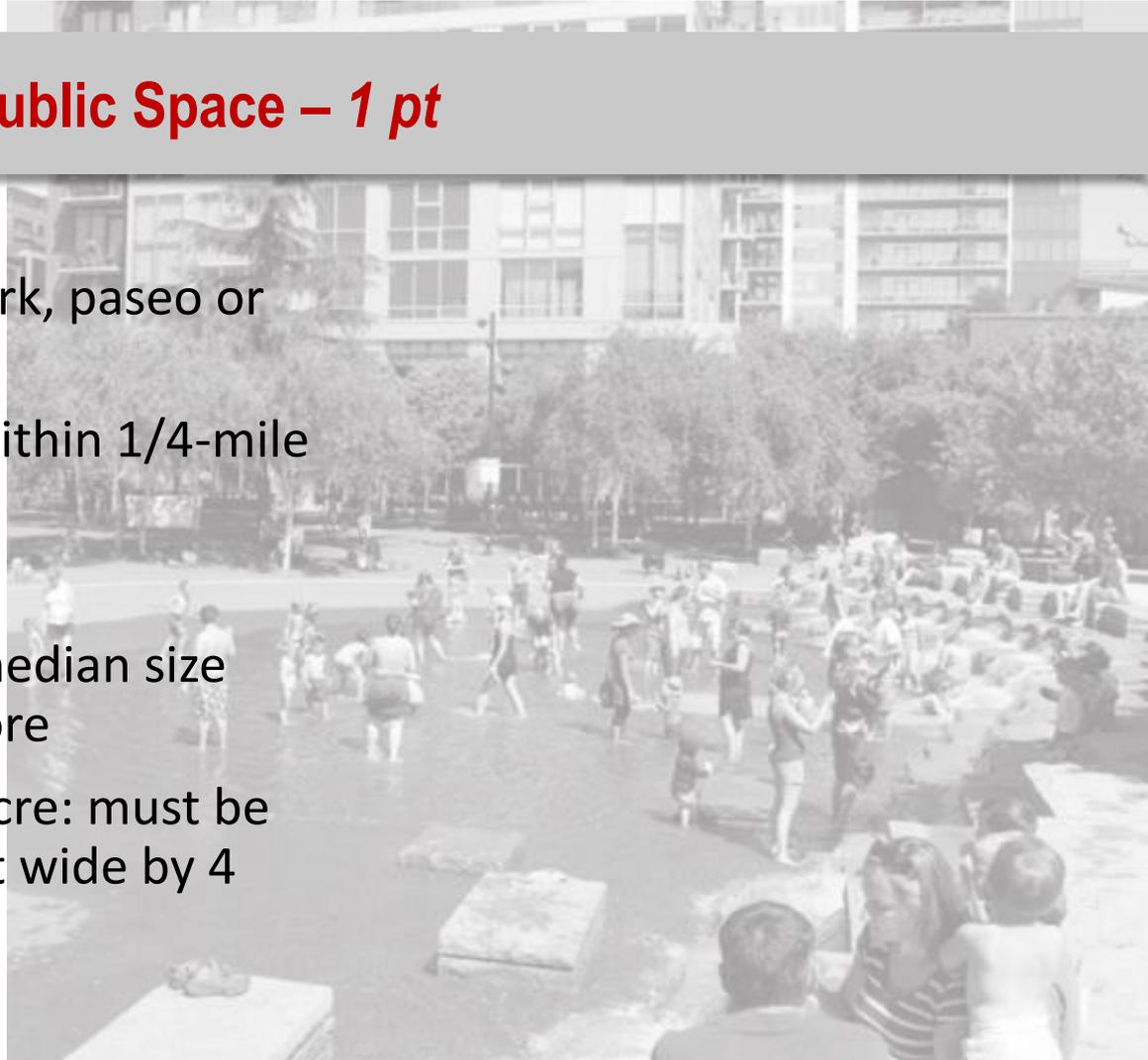
## NPDc8 Transportation Demand Mgmt – 2 pts

One point for every two options:

- *Option 1*: TDM program that reduces peak-period auto trips 20%.
- *Option 2*: Transit passes, 1 year, 50% subsidy, all occupants first three years.
- *Option 3*: Developer-sponsored transit from project to public transit/employment centers.
- *Option 4*: Vehicle sharing, 50% of DU & non-res within ¼ mi of one vehicle/100 DU or emps
- *Option 5*: Unbundled parking, 90% of multi-family DU or nonres sq ft sold/rented separately

## **NPDC9 Access to Civic & Public Space – 1 pt**

- Civic spaces: square, park, paseo or plaza
- 90% of dwelling units within 1/4-mile walk distance
- Minimum size: 1/6 acre
- Projects over 7 acres: median size must be half acre or more
- Spaces under quarter acre: must be no narrower than 1 unit wide by 4 units long



## NPDc10 Access to Recreational Facilities – 1 pt



- 90% of dwellings and jobs within 1/2-mile walk of recreational facilities
- Minimum size
  - Outdoor: 1 acre
  - Indoor: 25,000 square feet
- Must include physical improvements, i.e. not passive open space

## NPDc11 Visitability & Universal Design – 1 pt

- Option 1: at least 20% of DUs comply with stipulated design criteria.
- Option 2: construct/retrofit public ROWs for ADA/ABA compliance.



## NPD c12 Outreach & Involvement – 2 pts

- *Option 1* - community outreach beyond official proceedings; must start at pre-design step; include consultation, incorporation of input into design or explanation, and continuing communications
- *Option 2* – Option 1 plus 2-day charrette
- *Option 3* – Option 1 plus local endorsement from smart growth evaluation program

## **NPD c13: Local Food Production – 1 pt**

- All projects - allow gardens/greenhouses in any yard
- Option 1 - community garden on-site or within half mile
- Option 2 - community supported agriculture (CSA) shares
- Option 3 - farmers' market within ½ mile

## **NPDc14 Tree-Lined & Shaded Streets – 2 pts**

### *Option 1*

Tree-Lined Streets – 60% of streets both sides every 40 ft.

### *Option 2*

Shaded Streets – 40% of sidewalks shaded by trees or structures.



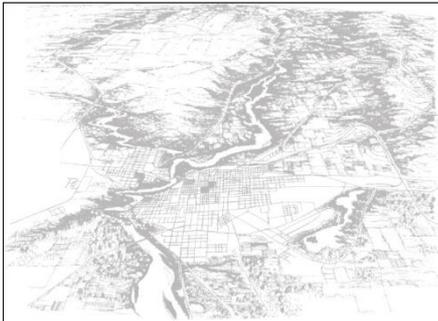
## NPDC15: Neighborhood Schools – 1 pt



- 30% of project residential; 50% of DU within 1/2 to 1 mile of elementary/middle/high school
- School campus maximum size:
  - Elementary: 5 acres
  - Middle: 10 acres
  - High: 15 acres

# LEED-ND Rating System

Smart  
Location  
& Linkage



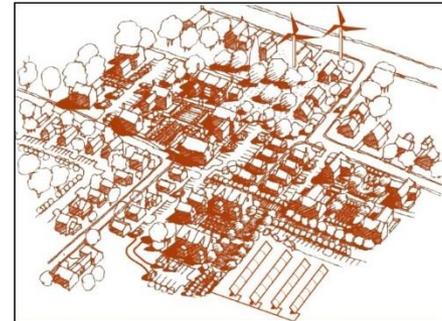
*5 prerequisites*  
*27 points*

Neighborhood  
Pattern  
& Design



*3 prerequisites*  
*44 points*

**Green  
Infrastructure  
& Buildings**



***4 prerequisites***  
***29 points***

## GIB p1: Certified Green Building

- One certified green building
- Any LEED rating system
- Other rating systems if ISO compliant



## GIBp2 Minimum Building Energy Efficiency

- 90% of square footage in non-residential, mixed-use, 4-story or higher multi-family buildings:
  - New construction: 10% savings
  - Renovations: 5% savings
  - Three documentation paths
- 90% single-family/multi-family under 4-story buildings:
  - ENERGY STAR (BOP or HERS)

## GIB p3 Minimum Bldg Water Efficiency

- Large non-residential and mixed use
  - 100% of bldgs: 20 percent less than federal baseline
- Small residential
  - 90% of bldgs achieve equivalent of 3 LEED for Homes points



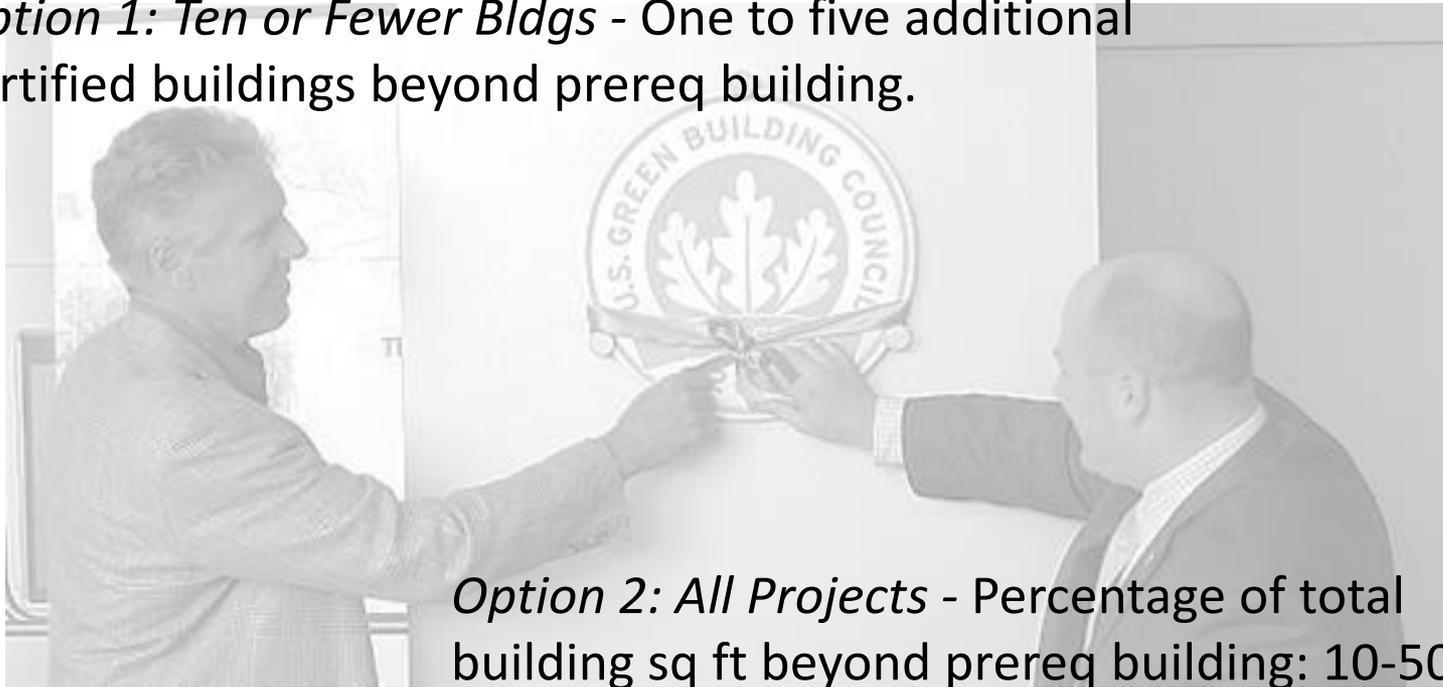
## GIB p4 Construction Pollution Prevention



- Erosion & sedimentation control plan
- BMPs from Wash Dept Ecology Stormwater Mgmt Manual
- Must address air pollution from construction.

## GIBc1 Certified Green Buildings – 5 pts

*Option 1: Ten or Fewer Bldgs* - One to five additional certified buildings beyond prereq building.



*Option 2: All Projects* - Percentage of total building sq ft beyond prereq building: 10-50+%.



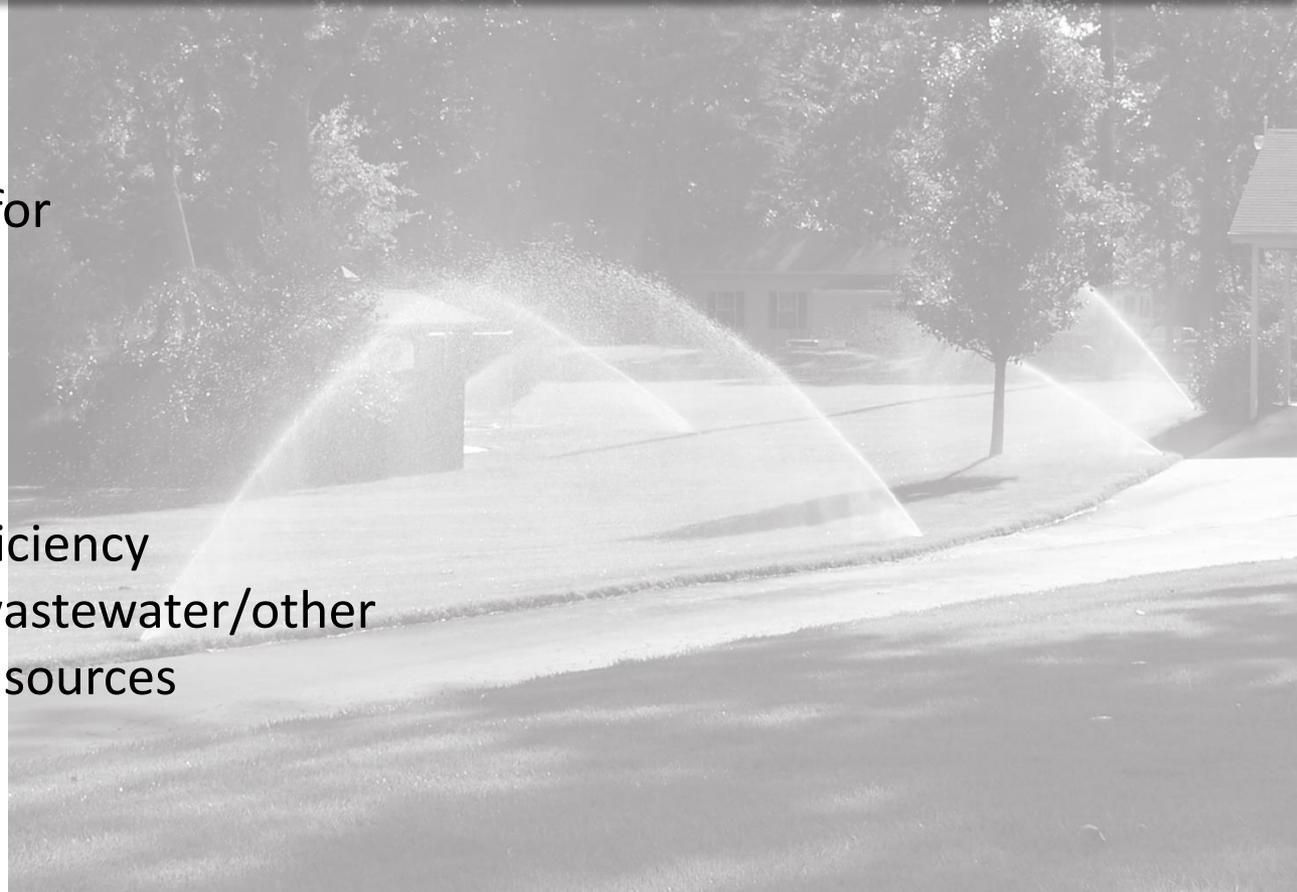
## GIBC3 Building Water Efficiency – 1 pt

- 
- A grayscale photograph of a modern faucet with water flowing into a sink. The water is captured in mid-air, creating a dynamic, blurred stream. The background is a plain, light-colored wall.
- Minimum savings increases to 40% for 100% of large buildings.
  - Small residential – 90% of buildings must theoretically earn 3 points under LEED-Homes.

## GIBc4 Water-Efficient Landscaping – 1 pt

50% reduction from  
midsummer baseline for  
100% of irrigated area  
within project using:

- Plantings
- Irrigation efficiency
- Rainwater/wastewater/other non-potable sources



## GIBc5 Existing Building Reuse – 1 pt



- Reuse buildings to achieve the *greater* of:
  - 50% of one building structure and envelope
  - 20% of total existing building stock
  
- Do not demolish historic buildings

## GIBc6 Historic Preservation & Reuse – 1 pt

- Historic building(s) and/or cultural landscape must be present.
- Do not disturb; if restored, adhere to applicable standards.



## GIBc7 Minimize Site Disturbance – 1 pt

### *Option 1*

Locate 100% of development footprint on previously developed land.

### *Option 2*

Leave undisturbed 10-20% of undeveloped portion based on project density.

### *All Projects*

Survey and protect important trees.



## GIBc8 Stormwater Management – 4 pts

- Reuse, infiltrate, or evapotransporate rainfall from 80-95<sup>th</sup> percentile event.
- Western Washington State BMPs or equivalent alternatives
- If 2 points are earned, an additional point is possible with one of following: previously developed site; SLLc2 was earned; NPDc1, 2, and 3 were earned at the 2-point level.

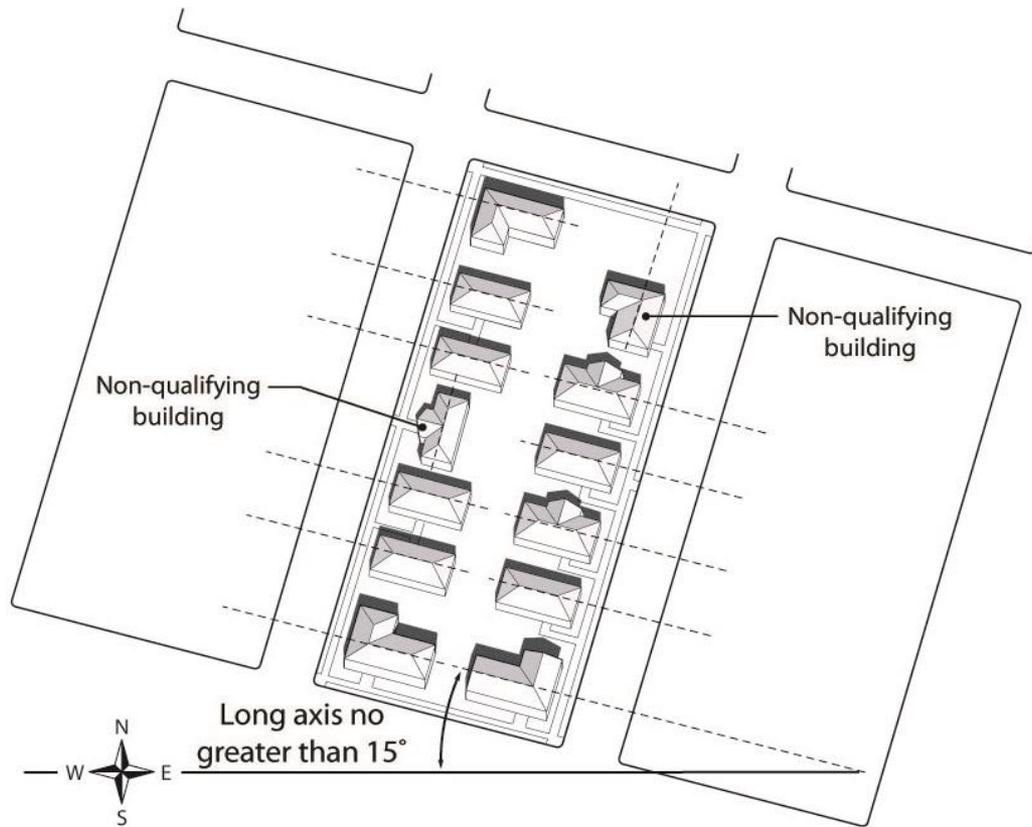
## GIBc9 Heat Island Reduction – 1 pt

*Option 1* - Non-roof measures: 50% of hardscape – shade, open grid or SRI 29 paving



*Option 2* - Roofs - 75% at SRI 29-78 or 50% vegetated (“green”) roofs

## GIB c10 Solar Orientation - 1 pt



### *Option 1*

Must earn 2 points  
NPDc2; 75% of  
blocks within 15  
deg E-W.

### *Option 2*

75% of building sq  
ft

## GIBc11 On-Site Renewable Energy – 3 pts



- Solar; wind; geothermal; small-scale hydroelectric; biomass
- Must be located on-site
- Can be combination of measures
- Up to 3 points depending on percentage of annual energy cost met by renewables

## GIBc12 District Heating & Cooling – 2 pts

- At least 2 buildings.
- Minimum 80% of total annual thermal load (excluding existing bldgs and SF residential).
- Each component must be 10% more efficient than baseline.



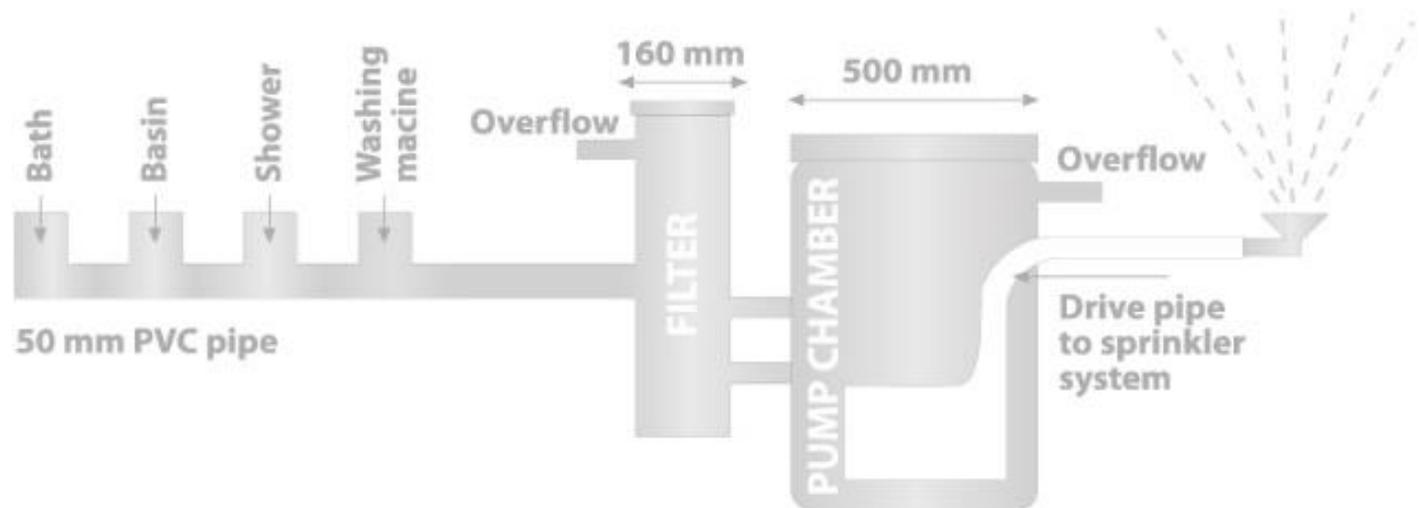
## GIBc13 Infrastructure Energy Efficiency – 1 pt



- 15% savings over baseline (least first cost) components.
- All new infrastructure: traffic signals, street lights, water/wastewater pumps.

## GIBc14 Wastewater Management – 2 pt

- Retain onsite at least 25-50% of wastewater for reuse that replaces potable water.



## GIBc15 Recycled Content in Infrastructure – 1 pt



- Sum of: postconsumer recycled content + in-place reclaimed material + half of pre-consumer recycled content = at least 50% of infrastructure material mass.

## GIBc16 Solid Waste Management – 1 pt

- Implement four of five measures:
  - Recycling
  - Drop-off point for hazardous materials
  - Compost station for occupants
  - Recycling containers on mixed-use blocks
  - Recycle 50% of construction debris



## GIBc17 Light Pollution Reduction – 1 pt



- Shared residential areas – 50% of lights use motion sensors to reduce light levels by 50% with no activity for 15 minutes.
- All shared area lights must have daylight sensors.
- Comply with international standards for light power density, trespass, and glare.

## IDPc1 Innovation & Exemplary Performance - 5 pts

- 1 to 5 proposals - potentially up to 5 points.
- Innovation proposals - items not already addressed by credits.
- Exemplary performance instead of innovation: where offered by specific credits.
- Pilot credits

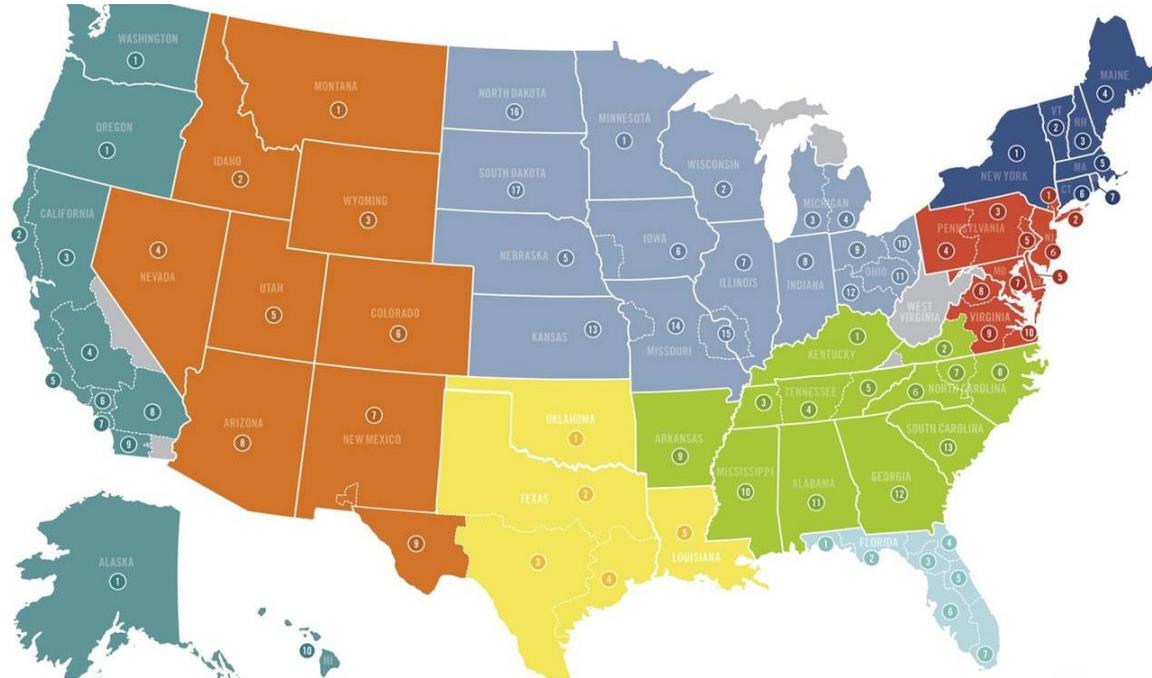
## IDPc2 LEED Accredited Professional - 1 pt



- LEED AP on the project team.

## RPC Regional Priority Credits – 4 pts

- 1 to 4 points by achieving up to four regional priority credits.



# Regional priority credit lookup

**FILTER** LEED ND: Plan v2009 United States

32772 



## Building water efficiency

GIBc3 | 1 point



## Water efficient landscaping

GIBc4 | 1 point



## Existing building reuse

GIBc5 | 1 point



## Mixed-use neighborhood centers

NPDc3 | Up to 4 points



## Mixed-income diverse communities

NPDc4 | Up to 7 points



## Restoration of habitat or wetlands and water bodies

SLLc8 | 1 point



# U.S. GREEN BUILDING COUNCIL

# CENTRAL FLORIDA CHAPTER

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## WELCOME

We are a group of dedicated professionals from all sectors of the building industry committed to transforming the market to one that designs and builds smarter, creates sustainable communities, and illustrates the profitability of building green. Our Chapter is a volunteer based, consensus driven organization made up of a Board of Directors and dedicated volunteers. Our mission is to be THE source for all things sustainable in Central Florida, and we strive to achieve our mission through education, outreach and advocacy in our work and community environments.

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\*\*\*\*\*



## EVENTS



← July 2015 →

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

None at this time.

[VIEW ALL >](#)

## NEWS



07/22/2013

# Focus Area Scores

- Downtown...
- SunRail station area...



**40-49 pts**



**50-59 pts**



**60-79 pts**



**80+ pts**

# ND Leveraging Options Going Forward

## *Engaging*

- Designers
- Developers
- City

# ND Local Leveraging Examples



# Assess Current Conditions

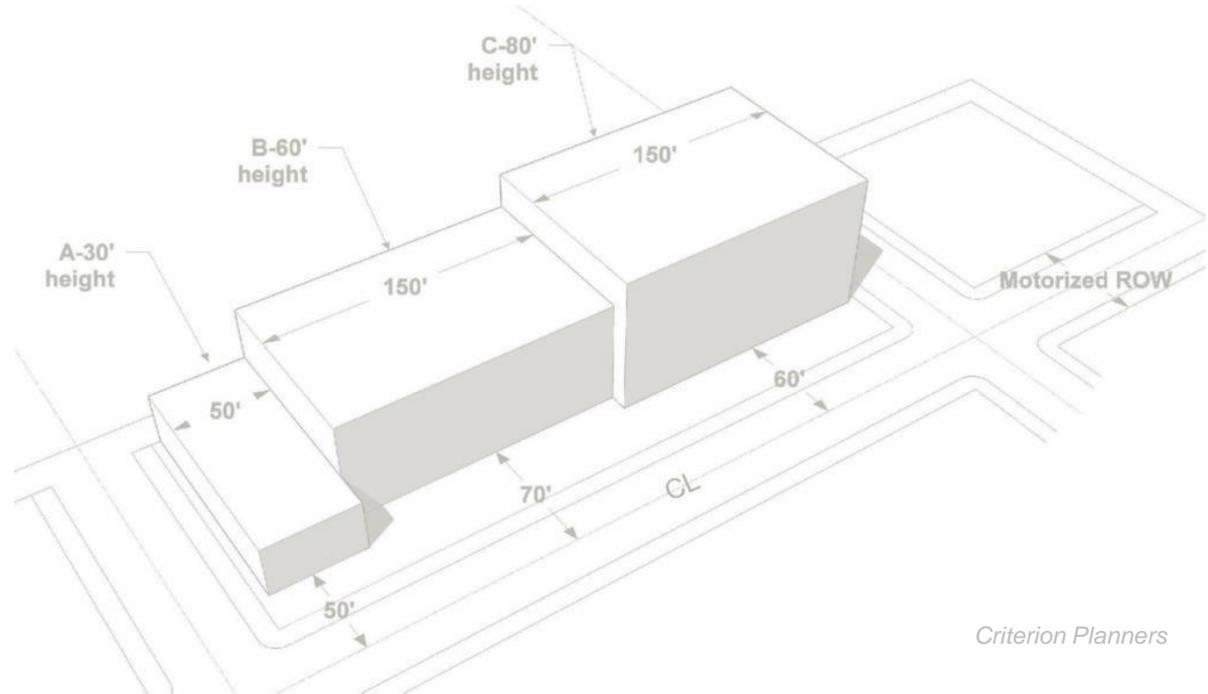
Checklist audit of local plans & codes relative to ND criteria:

- Strengths/weaknesses
- Gaps
- Conflicts/inconsistencies



# Remove Code Barriers

- Eliminate conflicts with ND criteria, e.g. minimum densities, traffic speed, setbacks
- Enable ND measures, e.g. renewable power



# Align Policies/Regulations/CIP

Amend policies & implementation measures to incorporate ND objectives and strategies:

- Comprehensive plan
- Zoning and land development
- Design review
- Capital improvements



# Establish Incentives

**Time:** green tape – expedited processing

**Money:** fee reductions, waivers, tax credits,  
ND cost reimbursement

**Entitlements:** development bonuses –  
density, height, lot size



# Sponsor Education

- Collaborate with trade groups
- Provide instruction in ND strategies, techniques, processes
- Provide tools for project evaluation, processing



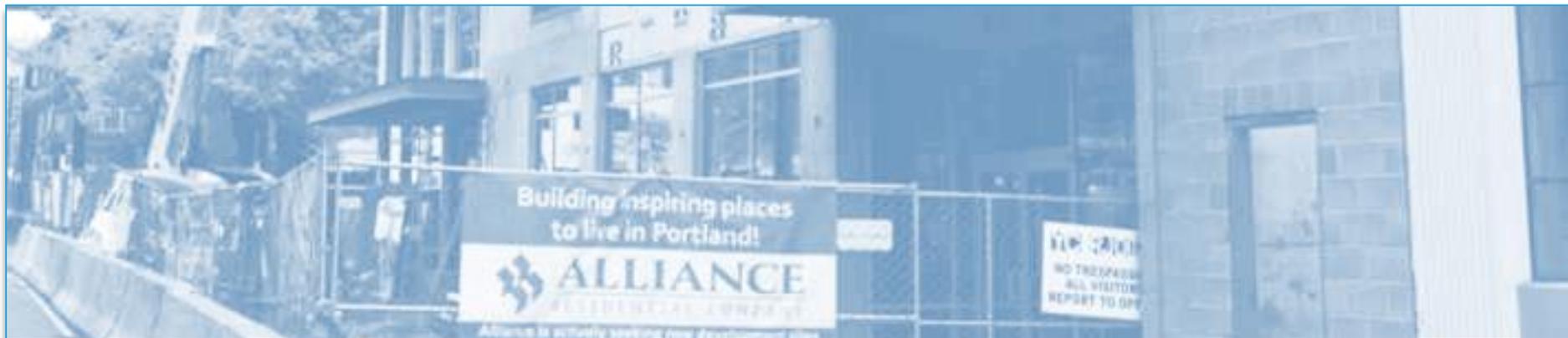
# Provide Technical Assistance

- Vicinity data for projects assembling certification submissions
- Walk/bike network distance analysis for projects assembling submissions
- Assist in obtaining agency, licensed professional documentation required by certain credits

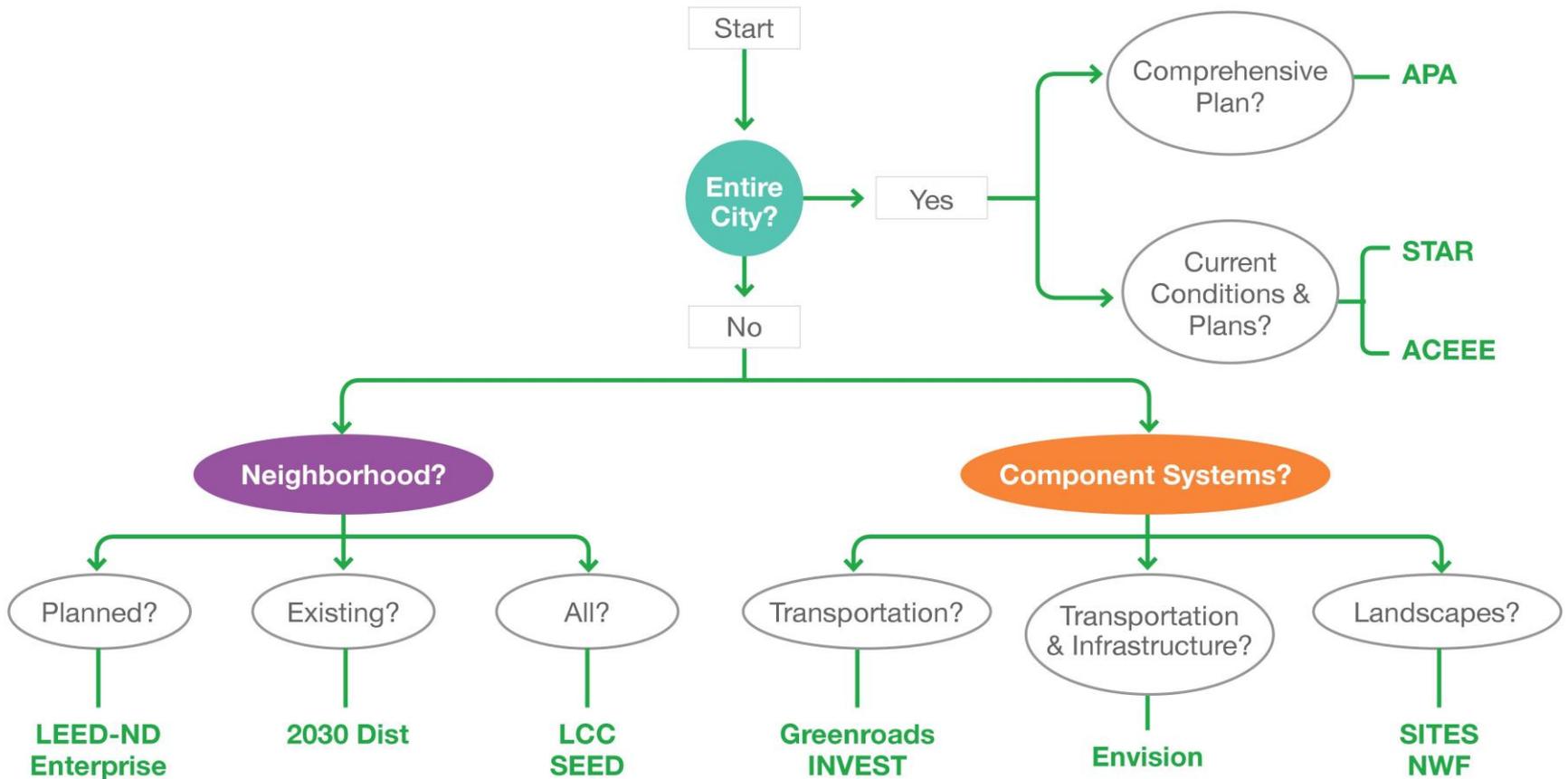


# Help Catalyze Projects

- Create partnerships to develop public properties using ND criteria
- Require consideration of ND in RFPs for private development of public properties



# Consider Other Tool Choices





Questions?

# Thanks

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