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# SUSTAINABLE Development

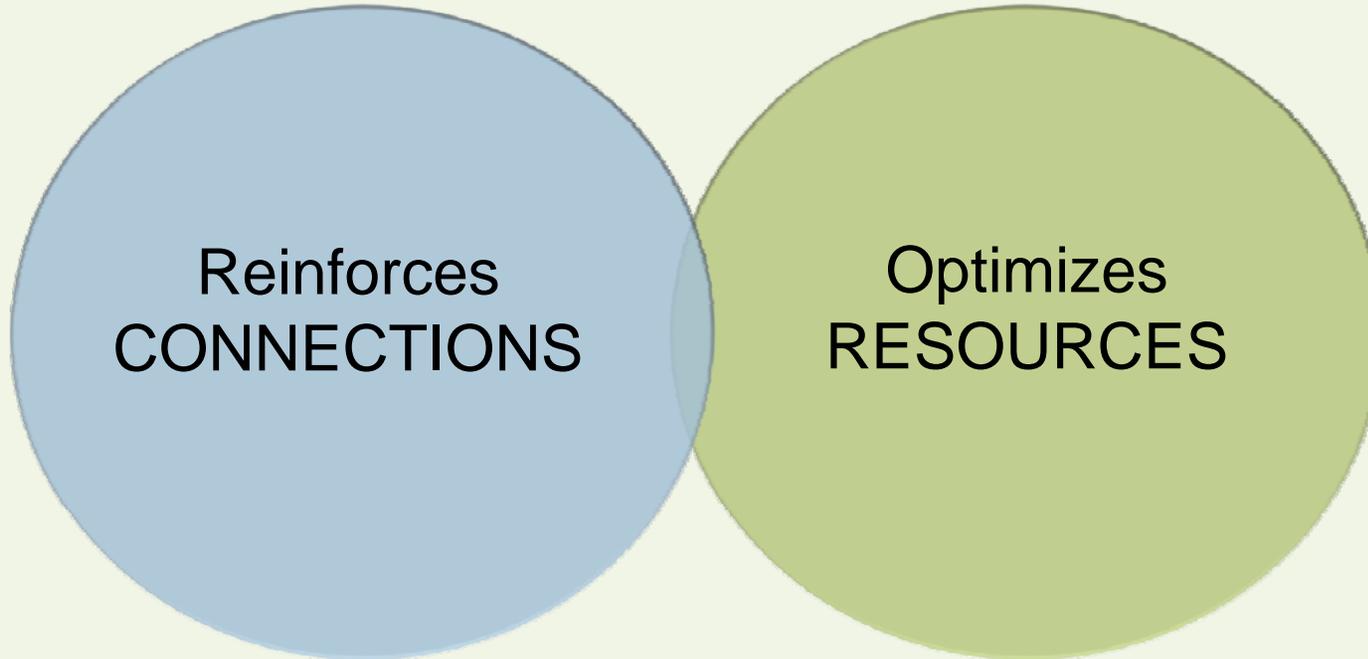
Meets Present Needs



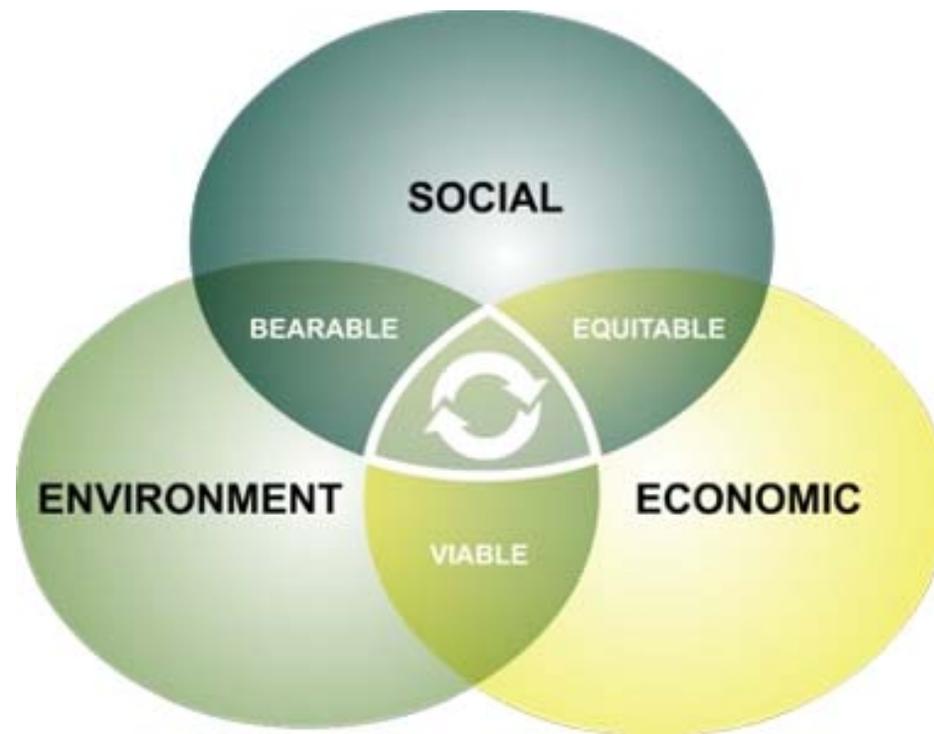
Future Generations  
to meet their needs

in a manner that allows

# SUSTAINABLE Development



# SUSTAINABLE Development



TRIPLE BOTTOM LINE

# **SUSTAINABLE Development**

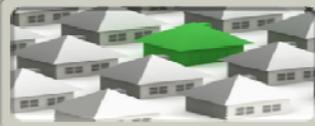
**Site Location and Linkage**

**Development Program**

**Neighborhood Design**

**Green Buildings and Infrastructure**

# Site Location and Linkage



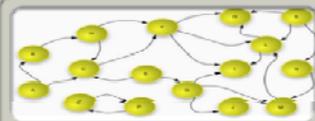
Build where previously developed



Develop proximate to diverse uses



Connect to alternate means of transportation



Connect to existing infrastructure



Identify and protect wetlands/water bodies



Preserve farmlands



Limit adverse effects to imperiled species

# Development Program



Incorporate a Mix of Uses



Incorporate a Range of Housing Prices



Incorporate Varied Building Types & Forms



Create **COMPACT, WALKABLE** Community

- ¼ mile to run daily errands
- ½ mile to reach mass transit and specialized civic uses

# Neighborhood Design



Design for Density



Design for Accessibility



Incorporate Green Spaces

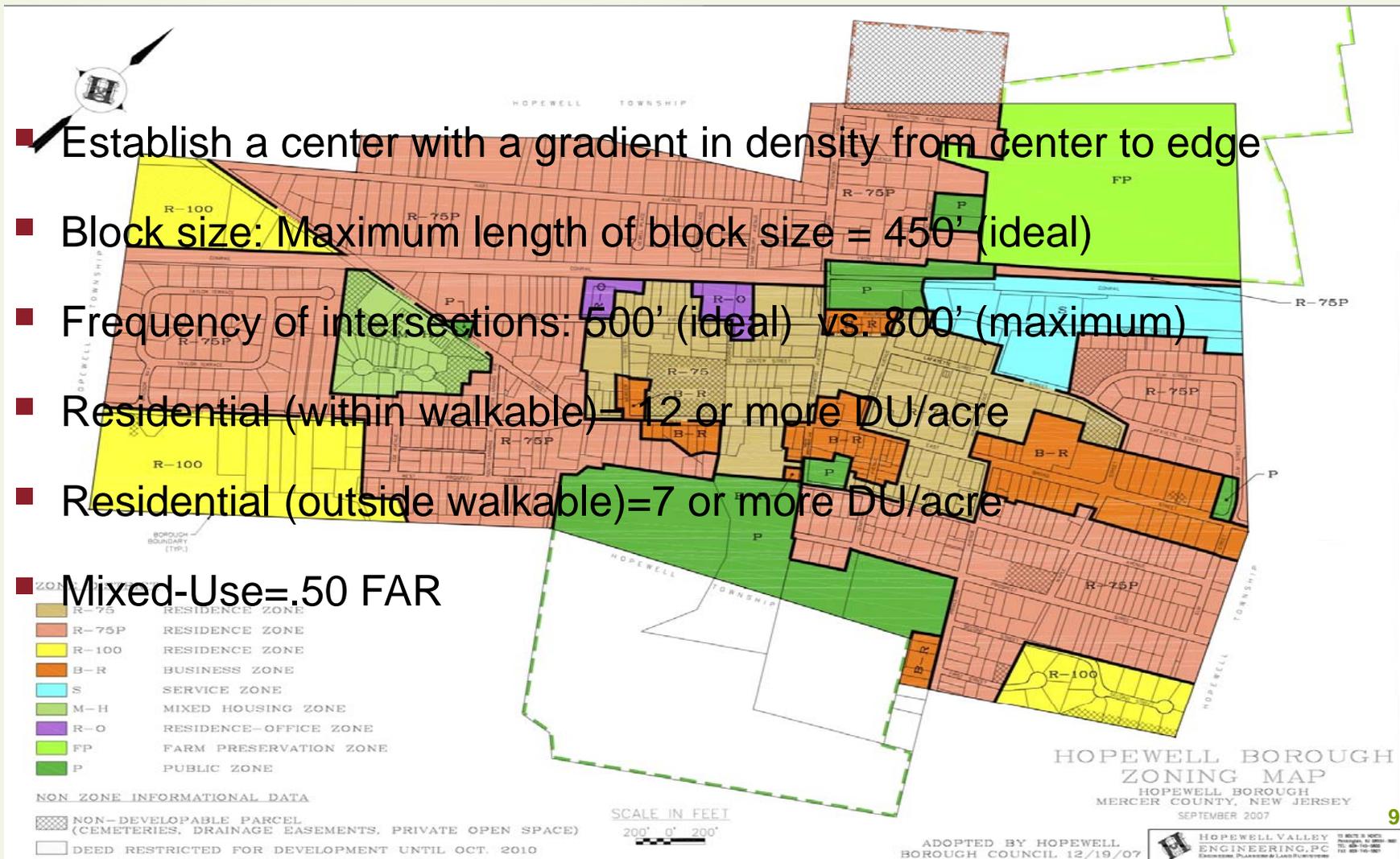


Create a Vibrant Community Core

# Neighborhood Design

## Design for Density

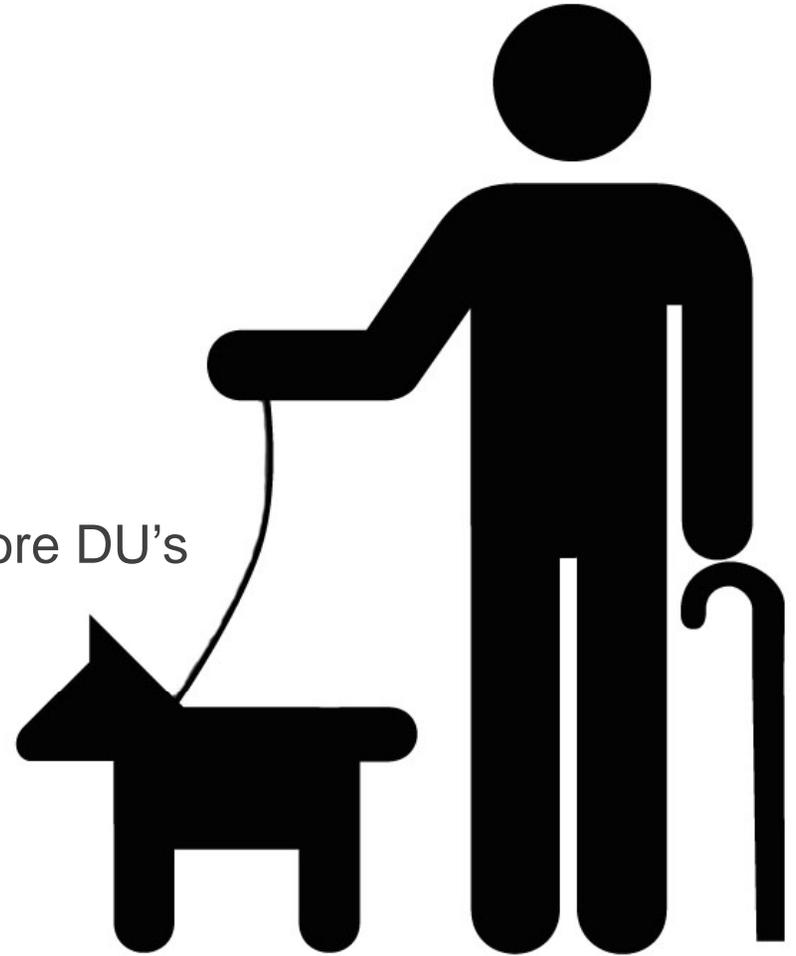
- Establish a center with a gradient in density from center to edge
- Block size: Maximum length of block size = 450' (ideal)
- Frequency of intersections: 500' (ideal) vs. 800' (maximum)
- Residential (within walkable) = 12 or more DU/acre
- Residential (outside walkable) = 7 or more DU/acre
- Mixed-Use = .50 FAR



# Neighborhood Design

## Design for Accessibility

- MINIMUM 20% Single Family DU's
- MINIMUM 20% 2-3 Family DU's
- MINIMUM 20% Mixed-Use with 4 or more DU's



# Neighborhood Design

## Incorporate Green Spaces

- Civic + Public Space
- Active Recreation
- Community Gardens
- Small + Meditative Moments
- Cemeteries
- Monuments

# Neighborhood Design

## Create a Vibrant Community Core

- Maintain continuous building facades
- Provide ample sidewalks on both sides of street
- Keep garage openings and loading docks away from sidewalk
- Provide interesting street furniture, plantings and trees
- Locate utilities underground
- Provide on-street parking



# Green Infrastructure & Building

In USA, buildings account for:

14% of all Potable Water Consumption

39% of all Energy Consumption

71% of all Electricity Consumption

In USA, construction accounts for:

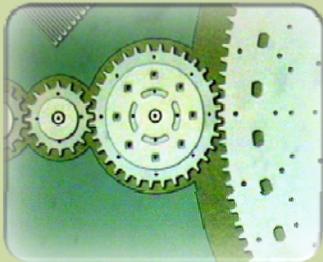
40% of Raw Materials

50% of Landfill Waste

# Green Infrastructure & Building



Sustainable Building Design and Technologies



Sustainable Building Systems



Sustainable Site Design

# Green Infrastructure & Building

## Sustainable Building Design & Technologies

- Regulate % of construction waste to be recycled
- Require increased energy efficiency for all new infrastructure: Traffic lights, street lights, wastewater pumps, etc.
- Incorporate reflective roofs, parking and walkways
- Specify motion-activated and downlighting
- Require recycling collection locations in all non-residential, mixed-use and multi-family buildings
- Exceed baseline standards for energy efficiency and for potable water use in all non-residential, mixed-use and multi-family buildings
- Require ALL single family DU's to achieve Energy Star rating
- Require public buildings to be LEED certified
- Provide incentives for an Energy Enterprise Zone (EEZ)

# Green Infrastructure & Building

## Sustainable Building Systems

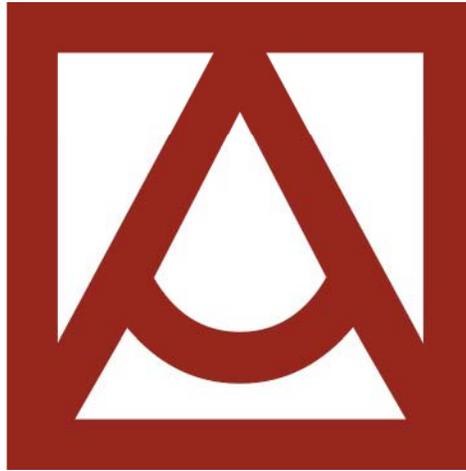
- Encourage on-site energy generation to reduce 5% of developments annual electric and thermal cost
- Reduce use of potable water for irrigation and landscape maintenance

# Green Infrastructure & Building

## Sustainable Site Design

- Preserve existing trees and native vegetation
- Zone for reduced parking requirements for mixed-use and multi-family dwelling units
- Use recycled content and pervious paving for roads, parking lots and sidewalks
- Incorporate storm water management strategies that retain water on site, allowing local recharge of aquifers





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