GOALS (Proposed Language):



Reduce neighborhood automobile trips

"Encourage greater use of transit and multi-modal transportation by working to capture a portion of all trips made by persons living in the development area by walking, bicycling or transit through the use of transit oriented development, traditional neighborhood development, mixed use development, transit access for early neighborhood residents, transportation demand management plans, walkable environments, bike facilities, or other transportation demand management practices. This should be achieved over the build-out of the Northeast Neighborhood, and in partnership with the City, developers, builders, and end users."



Reduce household use of fossil fuels

"Reduce household consumption of natural gas and fossil fuel generated electricity compared to current city-wide household levels through the use of energy efficient construction, alternative energy sources, on-site energy production, conservation education and outreach, or other energy conservation practices."



Reduce residential per capita water use

"Reduce residential per capita water use compared to current city-wide per capita levels through the use of low-flow appliances and fixtures, dual-flush and low-flow toilets, rain barrels, low-impact lawn care design, conservation education and outreach, or other water conservation practices."



Increase stormwater infiltration

"Infiltrate stormwater volume on or adjacent to points of generation through the use of rain gardens, green roofs, porous sidewalks and drives, or other on-site stormwater management practices, to the extent feasible given on-site soil conditions."

KEY ROLE PLAYERS:



City



Builders



Developers





Reduce neighborhood automobile trips

"Encourage greater use of transit and multi-modal transportation by working to capture a portion of all trips made by persons living in the development area by walking, bicycling or transit through the use of transit oriented development, traditional neighborhood development, mixed use development, transit access for early neighborhood residents, transportation demand management plans, walkable environments, bike facilities, or other transportation demand management practices. This should be achieved over the build-out of the Northeast Neighborhood, and in partnership with the City, developers, builders, and end users."

APPROACH: Walking, Biking, Bus Ridership, Commuter/Light Rail

IMPLEMENTATION:



Traditional Neighborhood & Mixed-Use Development

- Plan & develop a range of housing types throughout
- · Integrate walkable destinations & amenities throughout
- · Integrate walkable humane public spaces throughout
- Plan & develop a network of streets & blocks
- Design & build walkable environments with walkable distances
- Increase neighborhood density



Transit Oriented Development

- Reference all above principles of "TND & Mixed-Use Development"
 - Located within ¼ ½ mile radius of transit stop
 - · A mixed-use, high-density hub
 - Maximized access to mass transit



Transportation Demand Management Plans

- Focus TDMs on commuter travel
- Encourage the use of alternative transportation modes
- Coordinate development to enhance transit use



Behavioral Conservation Practices

- · Live near work & frequent destinations
- Use alternative modes of transportation
- · Utilize daily commute as form of exercise (walk or bike)
- · Rideshare & combine daily trips when feasible



Education & Outreach

- · Develop transit education, outreach, & incentives
- Promote employee programs, education, & incentives
- Integrate teaching & curriculum in schools
- Communicate conservation initiatives through various outlets: news, websites, television, publications, etc.

ROLES:

City



- Create TND, TOD, & mixed-use neighborhood plans
- Create dept. policies to support & implement TND, TOD, & mixed-use: Planning, Engineering, Traffic, Parks, Fire, Metro Transit, etc.
- · Integrate regional commuter service
- Explore regional transit systems
- · Expand community bike program
- Education, outreach, & programming Transit availability & use

- Fitness & community recreation
 Rideshare & community cars
 Local food education & outreach

Developers



- Develop TNDs, TODs, & mixed-use neighborhoods
- Create TDM plans for all
- · Promote community car programs

Builders



- Develop mixed-use projects
- · Meet Green Built, Energy Star, Green Globes, or LEED standards
- Discourage construction of excess parking stalls
- · Integrate shared parking, shared ride,
- · Provide bike parking & pedestrian access at primary building entrances



- · Live near work & frequent destinations
- Use alternative transportation
- Utilize commute as form of exercise
- Rideshare & combine daily trips









Reduce household use of fossil fuels

"Reduce household consumption of natural gas and fossil fuel generated electricity compared to current city-wide household levels through the use of energy efficient construction, alternative energy sources, on-site energy production, conservation education and outreach, or other energy conservation practices."

APPROACH & IMPLEMENTATION:



Energy Efficient Design, Construction, & Certification

Explore various programs for home & building energy efficiency certification:

- · Green Built Home
- · Energy Star
- Green Globes
- · LEED for Homes



Energy Efficient Appliances & Fixtures

- Install all Energy Star appliances, light fixtures, & energy star light bulbs
- Install all low-flow water fixtures & high efficiency water softener
- · Install a "tank-less" hot water heater
- Install a natural gas oven/stove & clothes dryer (vs. electric)
- Install and use a solar powered clothes dryer (clothes line)



Renewable Energy Sources

Explore various renewable energy sources:

- · Solar Energy (passive & active)
- Wind Power
- · Geothermal Heating & Cooling
- · Biomass Energy Production



Local Food

· Incorporate private & public vegetable gardens, green houses, & orchards

Behavioral Conservation Practices



- Purchase wind power through local utility provider
- Invest in renewable energy sources (solar, wind, geothermal, biomass)
- Invest in energy efficient design, construction, appliances & fixtures
- · Grow a vegetable garden as a supplemental food source
- Use BMP landscaping techniques (fertilizers, pesticides, herbicides)
- Turn off lights when room is not in use
- Reasonably turn down heating temperature; dress accordingly



Education & Outreach

- Establish builder education & incentives
- · Create homeowner programs, education, & incentives
- · Integrate teaching & curriculum in schools
- Communicate conservation initiatives through various outlets: news, websites, television, publications, etc.

ROLES:

Explore incentives towards:

development

energy generation

· Advanced green neighborhood

· Installations of renewable energy

systems (solar, wind, geothermal)

Advanced green buildings

· Locate solar, wind, geothermal

 Establish a food & yard waste municipal compost program

within public buildings & parks

Explore municipal "urban biomass"

City



- Developers
- Design plats to allow for solar access whenever feasible
- Explore potential for district heating & cooling systems

Builders



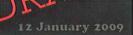
- Meet Green Built, Energy Star, Green Globes, or LEED standards
- Install all energy efficient appliances, fixtures, & systems
- Maximize passive & active solar orientation
- Explore renewable energy systems (solar, geothermal)



- · Perform energy audits
- Purchase wind power
- Invest in renewable energy sources
- Invest in energy efficient design, construction, appliances & fixtures
- · Use solar clothes dryer (clothes line)
- Use rain barrel
- · Grow a vegetable garden
- · Use BMP landscaping techniques
- Turn off lights when not in 15
- · Reasonably turn down









Reduce residential per capita water use

"Reduce residential per capita water use compared to current city-wide per capita levels through the use of low-flow appliances and fixtures, dual-flush and low-flow toilets, rain barrels, low-impact lawn care design, conservation education and outreach, or other water conservation practices."

APPROACH & IMPLEMENTATION:



Low-Flow Appliances & Fixtures

- Install all Energy Star & low-flow water fixtures
- · Install a high efficiency water softener



Dual-Flush & Low-Flow Toilets

Install all dual-flush & low-flow toilets



Rain Barrels

 Install rain barrels on downspouts and use rainwater for landscaping, gardens, & indoor plants



Low-Impact Lawn Care Design

- Install low maintenance landscaping with native & drought resistant plants
- · Reduce use of irrigation systems; if necessary use drip irrigation
- Use Best Management Practices sustainable landscaping techniques



Behavioral Conservation Practices

- · Reduce lawn watering
- Use rain barrel rainwater for landscaping, gardens, & indoor plants
- · Only run dishwasher & clothes washer with "full" loads
- · Take "quick" showers; not baths



Education & Outreach

- · Establish builder education & incentives
- Create homeowner programs, education, & incentives
- Integrate teaching & curriculum in schools
- Communicate conservation initiatives through various outlets: news, websites, television, publications, etc.

ROLES:

City



- Explore incentives towards:
- Advanced green buildings
- Low-flow appliances & fixtures
- Rain barrels
- · Allow use of graywater in irrigation

Developers



Builders

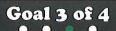


- Meet Green Built, Energy Star, Green Globes, or LEED standards
- Install all energy efficient appliances, plumbing fixtures, & systems
- Install all dual-flush & low-flow toilets
- · Install high-efficiency water softeners
- · Install tank-less water heaters
- · Install rain barrels
- Use low maintenance landscaping



- · Reduce lawn watering
- Use rain barrel rainwater for landscaping, gardens, & indoor plants
- Only run dishwasher & clothes washer with "full" loads
- Take "quick" showers; not baths









Increase stormwater infiltration

"Infiltrate stormwater volume on or adjacent to points of generation through the use of rain gardens, green roofs, porous sidewalks and drives, or other on-site stormwater management practices, to the extent feasible given on-site soil conditions."

APPROACH & IMPLEMENTATION:



Neighborhood Infiltration/Stormwater Management

- Design stormwater systems to enhance infiltration throughout the neighborhood from point source to regional facilities
- Integrate lot design, street design, plat, & regional stormwater systems



"Green" Streets & Porous Pavements

- Reduce pavement/impervious surfaces through reduced street widths
- Use porous pavements wherever possible (streets, walks, drives, parking, etc.)
- Divert stormwater to terraces & boulevards through curb inlets or flat curbs
- Construct & landscape terraces with rain garden systems



Rain Gardens & Rain Barrels

- Install rain gardens in streets (reference "green" streets section above)
- Install rain gardens in parking lots using landscaped islands
- · Install rain gardens near homes/buildings capturing roof water
- Install rain barrels on downspouts & use rainwater for landscaping & gardens



"Green" Roofs

- · Capture stormwater through soil & vegetation cover
- Capture rainwater & use "graywater" for building's use
- Use green roofs for gardens or outdoor spaces



Behavioral Conservation Practices

- Invest in "green" construction & technologies
- Use rain barrel water for landscaping & gardens
- · Maintain rain gardens, green roofs, & landscaping



Education & Outreach

- Establish developer/builder education & incentives
- Create homeowner programs, education, & incentives
- Integrate teaching & curriculum in schools
- Communicate conservation initiatives through various outlets: news, websites, television, publications, etc.

ROLES:

City









- Incorporate regional stormwater approach in neighborhood plan
- Protect & restore existing wetlands
- Protect steep slopes
- Incorporate "green" street systems & rain gardens
- Utilize porous pavements wherever possible
- · Create incentives for "green roofs"
- · Reduce off-street parking

Developers

- Incorporate neighborhood-wide stormwater management techniques
- Incorporate "green" street infiltration, swale systems, & rain gardens
- Require downspouts to be directed to infiltration areas or rain barrels
- Utilize porous pavements wherever possible · Protect & restore existing wetlands
- & water bodies Protect steep slopes

Builders

- · Install rain barrels
- Install rain gardens
- · Install "green" roof treatments for a majority of commercial or flat roofs

- Invest in "green" construction & technologies
- Use rain barrel water for landscaping & gardens
- Maintain rain gardens, green roofs, & landscaping



