

Green Businesses/Green City

Prepared for the Kirkland Business Roundtable

April 11, 2007

Mayor Jim Lauinger – Remarks

What is a Green Business?

- “Sustainable industries may be defined as companies that provide a product or service whose use results in greater resource efficiency and/or reduction of negative impacts on the environment.” (Portland Development Authority)
- As understanding of global warming and its impacts percolates, all of us in the public and private sectors are stepping up to the plate
- Kirkland’s long commitment to environmental stewardship, transportation alternatives puts it ahead of the class
- But more needs to be done and today we will hear how we might get started

Lake Washington Technical College

Developing Curriculum

- Recipient of the Washington State CTED Clean Technology Cluster Grant
 - Lab courses to support on-line coursework through MATC
 - Leads to a Renewable Energy Certificate
 - 5 LWTC Faculty Selected

Lake Washington Technical College

Sustainability Practices at LWTC

- Redmond Campus LEED Silver
 - Recognized by U.S, Green Buildings Council -1st in State's two year system
 - First building in the City of Redmond
- Improving Campus Practices
- American College & University Presidents Climate Commitment- Charter member

Lake Washington Technical College

LAKE WASHINGTON INSTITUTE OF TECHNOLOGY
2012

EAST KING
COUNTY
CAMPUS

*Center for
Renewable
Resources

KIRKLAND
CAMPUS

*Center for Technical
and Life Sciences

REDMOND
CAMPUS

*Center for
Entrepreneurship
and Innovation

DUVALL
CAMPUS

*Center for
Interactive
Design

*Primary Focus

Lake Washington Technical College

Mueller Farm Property...



Bill Vadino, Executive Director Kirkland Chamber of Commerce

How Can Business Become Green?

- For green companies, there is no question that decreasing greenhouse gas emissions is critical
- But for most of us, maintaining a competitive business is our major focus
- But can we do both—be successful and also build sustainability into our business models?

A stylized white graphic of a leaf or flower, composed of several overlapping, curved shapes, set against a blue background. The graphic is positioned on the left side of the slide.

P.S. Reilly

ATHENA

April 11, 2007

More Value...Less Impact

- Smarter & greener ways to approach business, buildings, utilities and communities
 - Economically Valuable
 - Environmentally Sound
 - Stable and Secure
- Brilliant Solutions → Growth Markets
- Consulting, research programs, web tools, events and more.
- Discover Brilliant Sept 17-19 Seattle
- www.discoverbrilliant.com



MORE VALUE
LESS IMPACT

SMART +
GREEN =
BRILLIANT

Many Drivers Converging to Opportunity

- Industry is poised for growth
 - Demand is outstripping supply
 - Energy security issues
 - Climate commitments
 - Need for high-quality electricity, power and fuels solutions
 - Quality of life issues tied to energy availability
- Buying and investment are increasing
- People are starting to “feel” it
- Energy Prosperity or Energy Poverty?



Security Versus Climate

"The nation's second-largest oil company, Chevron Texaco, announced it was buying rival Unocal Corp.

A spokesman for Chevron Texaco, which made a \$13 billion profit last year, says the new company will be called

'Bend Over, America.'" --Dennis Miller

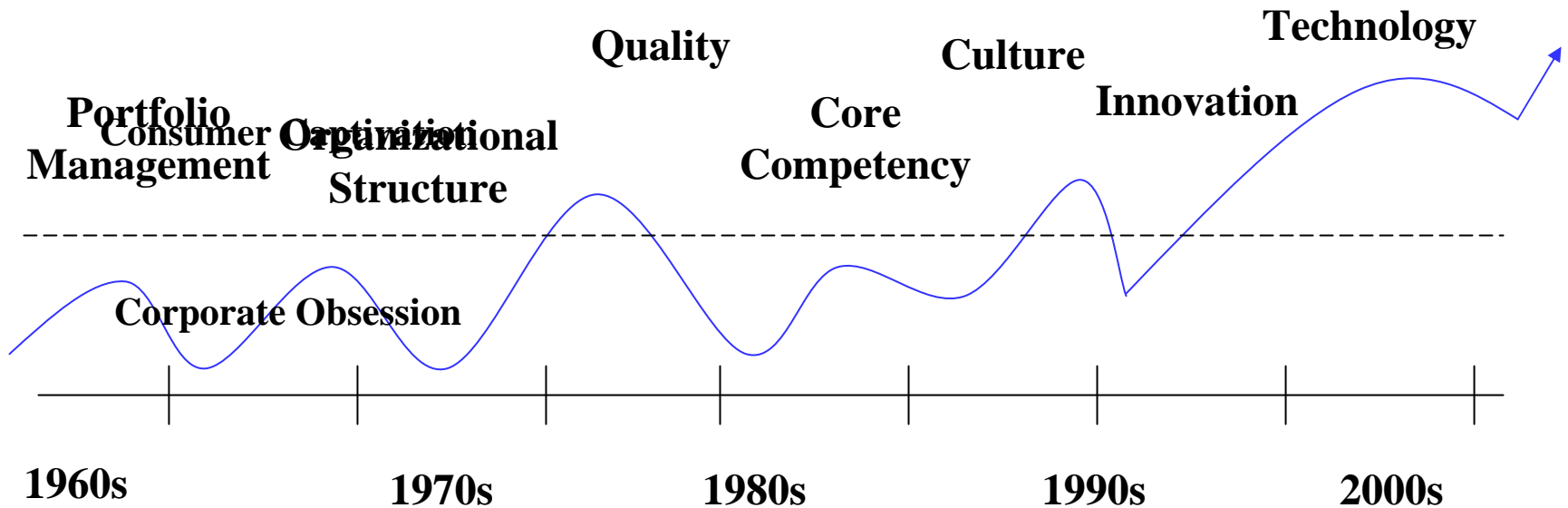
"According to a new U.N. report, the global warming outlook is much worse than originally predicted.

Which is pretty bad when they originally predicted it would destroy the planet." -Jay Leno

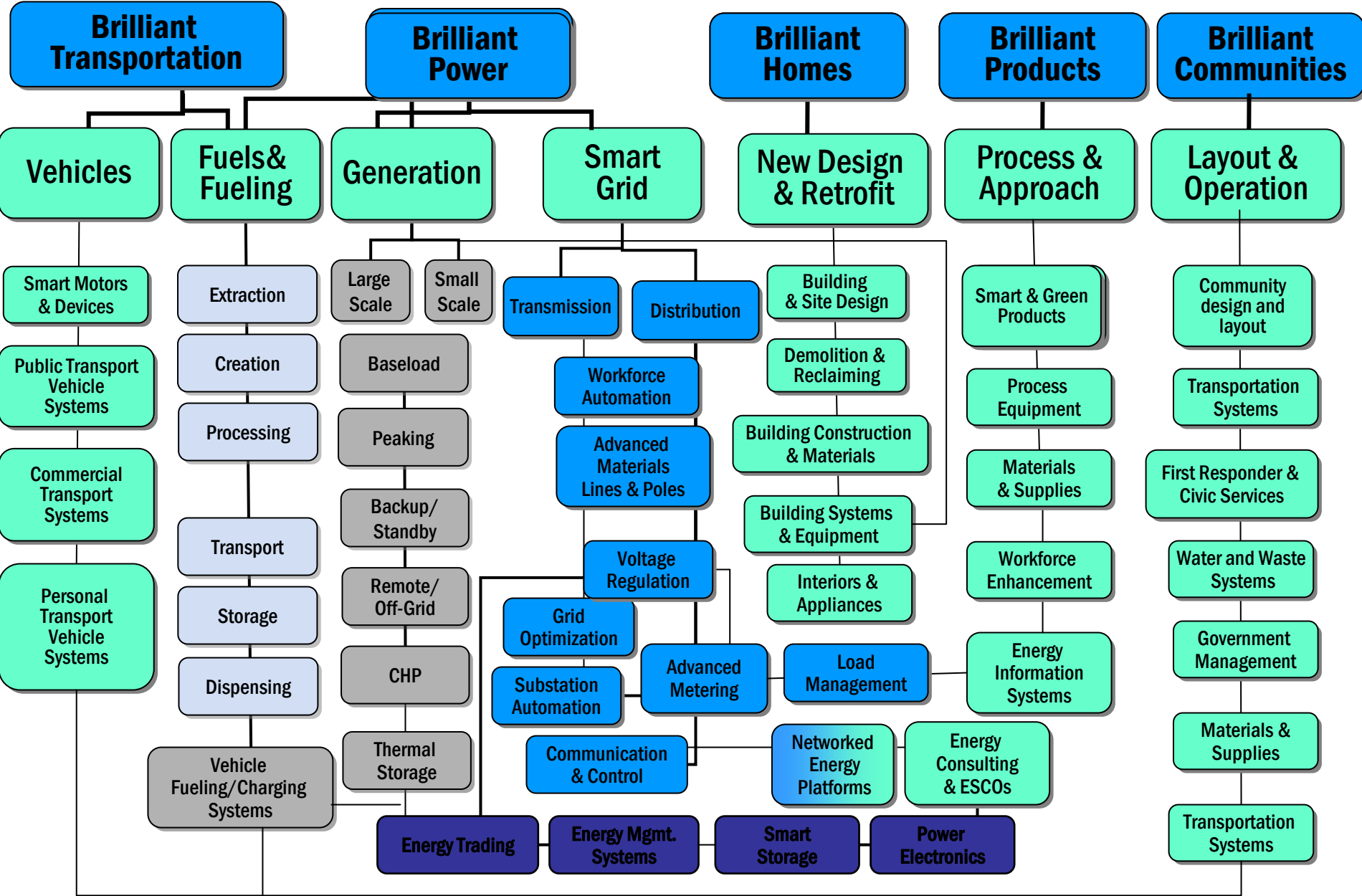
SMART +
GREEN =
BRILLIANT

Brilliant Business

The Next Wave of Sustainable Competitive Advantage for Business



Functional Areas of Focus



Source: Athena Institute, all rights reserved

SMART +
GREEN =
BRILLIANT

Easy, Golden or Brilliant

The opportunity is vast—Find ways to enhance our competitive advantage



BRILLIANT

Whatever is easiest—
not our core focus

EASY

GOLDEN

This is our mantra—
As much green as we
can afford



ATHENA



**Greg Rock, Co-Founder
Sustainability Engineer**

www.greencarco.com

The Copenhagen Model

- 50's - Copenhagen saw a massive influx of automobiles, which required new infrastructure and space to be constructed.
- 60's - Architect Jan Gehl, with others, convinced city leadership increased automobile traffic decreases not increases the cities primary socioeconomic factors.
- 70's - following the OPEC oil embargo, and more aware of the environmental impacts of automobiles, most Western Europe follows Copenhagen's lead

Goals

- Reduce Automobile Traffic into and out of the city center and replace it with alternate modes.
- Construct and maintain public squares, walk-able streets, bike paths, and areas for recreation.
- Make bicycle, followed by foot then car the most time efficient mode of transportation through the city center



Action

- Tore out 2 miles of roadway and replaced it with a retail pedestrian boulevard
- Tore out 7 surface parking lots and replaced them with public squares
- Replaced one lane of auto traffic with a bike path on essentially every city street
- Automobile Parking costs \$4-\$5 per Hour inside the center
- Bikes get 10 second head start at all intersections
- Traffic lights timed for bikes not cars



Results

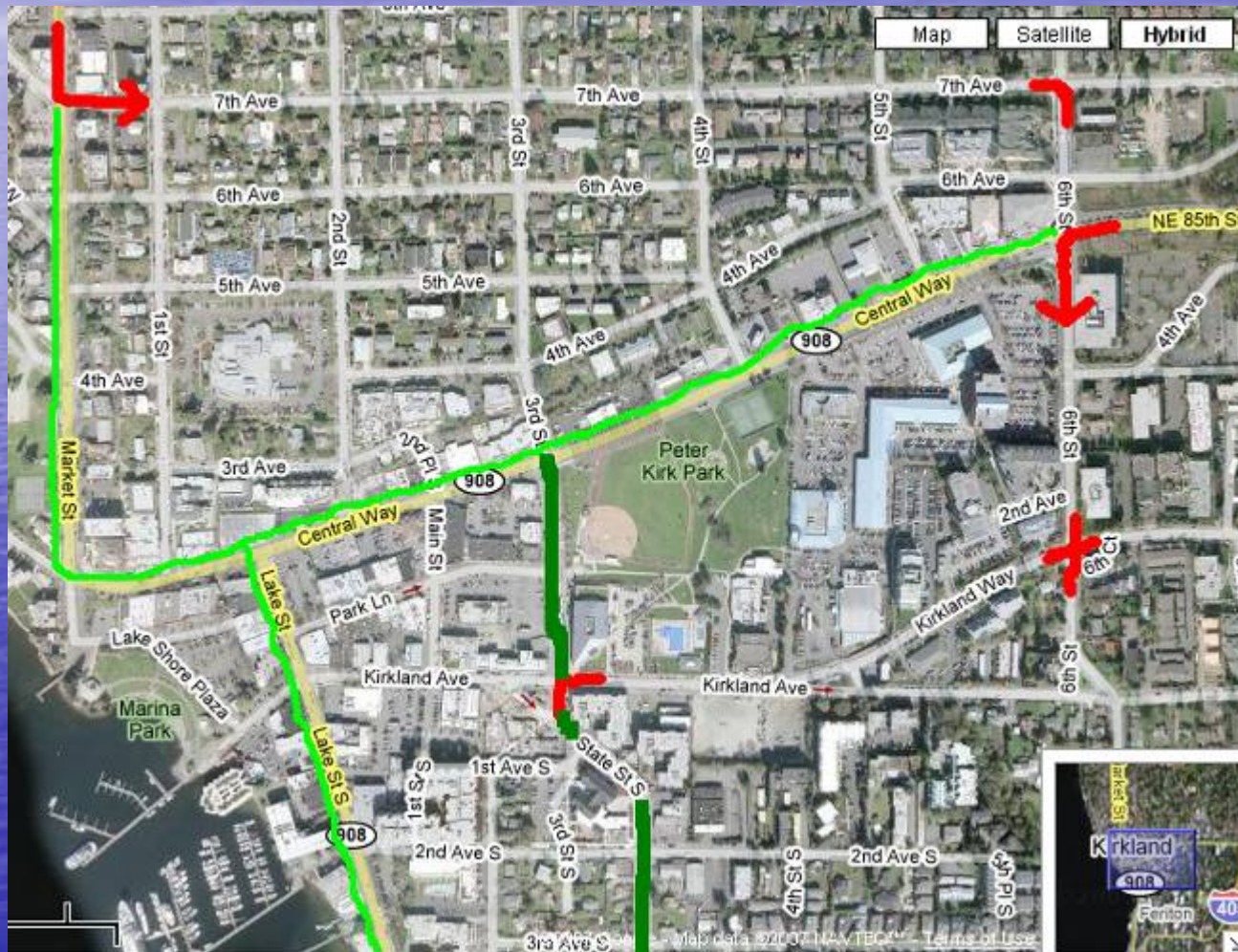
- 4 times as many people using downtown area as before
- Thriving retail/commercial/social environment
- Transit Split: 1/3 Bike, 1/3 Automobile, 1/3 Public Transit
- 70% of bikers continue to ride through winter
- Very low traffic congestion rates

Mayor of Copenhagen - "The economic income generated from the growth in our economy following the redevelopment has far exceeded the development costs associated with removing the parking lots, re-establishing pedestrian parks, walkways and building the cities massive bike transit infrastructure."



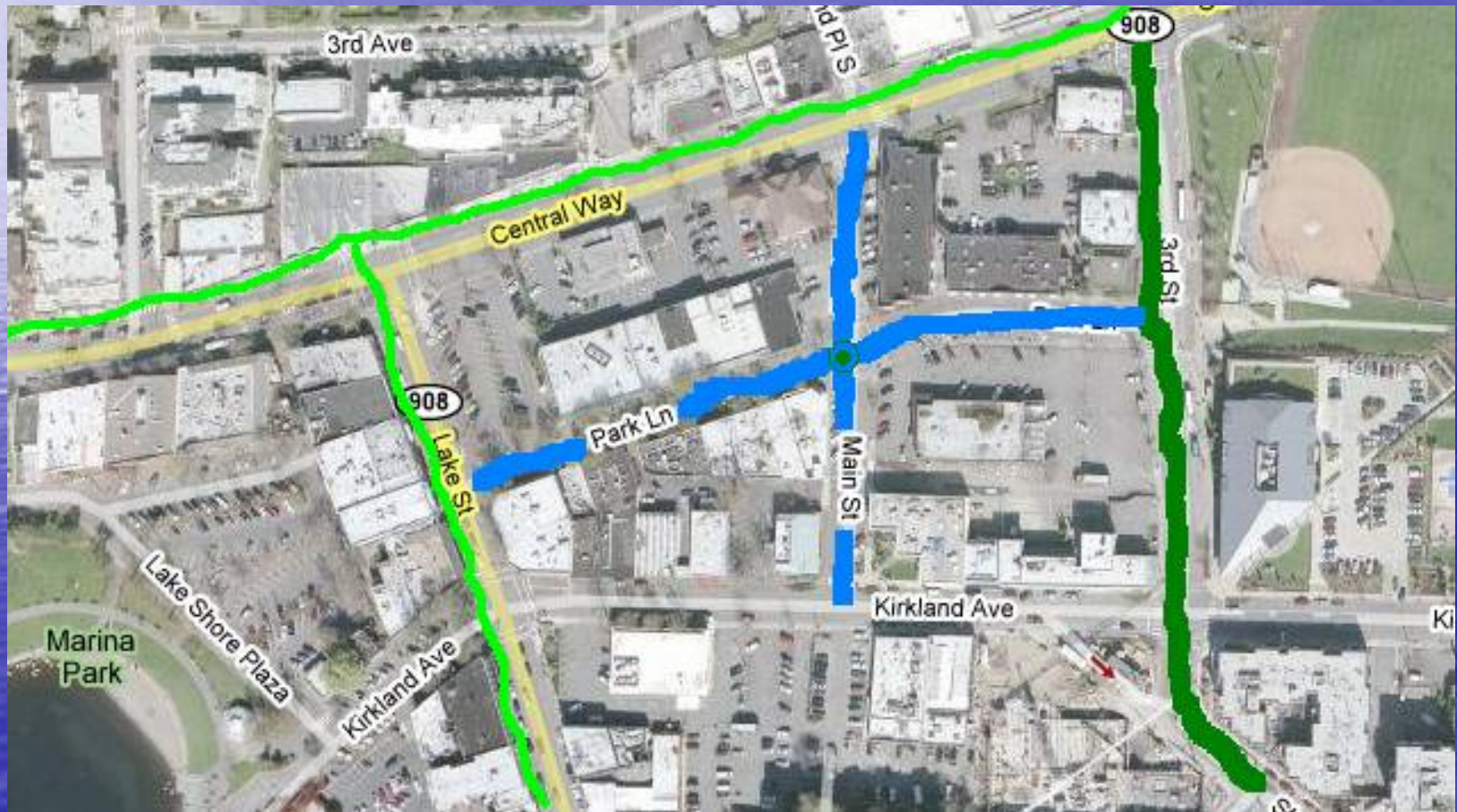
Kirkland - Step 1

Divert through traffic, Reduce speed limit, Add bike paths, Increase Public Transit Access



Kirkland - Step 2

Convert Park Lane into a Pedestrian only Boulevard
Convert Main St into a mixed use street with priority for pedestrians, bicycles, motorcycles and other small lightweight vehicles



Kirkland - Step 3

Reduce/Eliminate Surface Parking

Build Public Squares, Recreational Spaces, Parking Structures



Ellen Miller-Wolfe, ED Manager

Cutting-Edge Cities

- Cities can be leaders in sustainability
- Permitting programs can promote environmentally friendly building practices
- Procurement policies can support green businesses
- Government can exemplify a green business
- It can recognize green efforts

Cutting-Edge Cities

Chicago

- The Green permit program in Chicago promotes environmentally friendly construction by encouraging private developers with a combination of
 - Technical support
 - Expedited building permits
 - Financial assistance
 - Public recognition

Cutting-Edge Cities

Beaverton, Oregon

- The 'smart' redevelopment of downtown Beaverton required the wise use of energy resources
- An important element of the City's economic development activity is a highly efficient centralized heating and cooling plant, the Central Beaverton Plant (CBP)
 - A controls network optimizes h/c across multiple buildings while allowing tenants control over their space conditioning
 - CBP includes highly efficient equipment, redundant components, flexible control, and intelligent monitoring
 - Besides h/c services, CBP supplies domestic hot water to both residential and retail spaces and equipment cooling for dedicated computer and server rooms
 - Lower energy costs enables businesses to be more competitive

Kirkland Industry Clusters

Kirkland has a strong component of green businesses primarily in development/engineering/architecture and hospitality clusters.

Total Employment: 30,865

Employment by Industry:

Construction: 7.5%

FIRES: 7.0%

Manufacturing: 6.2%

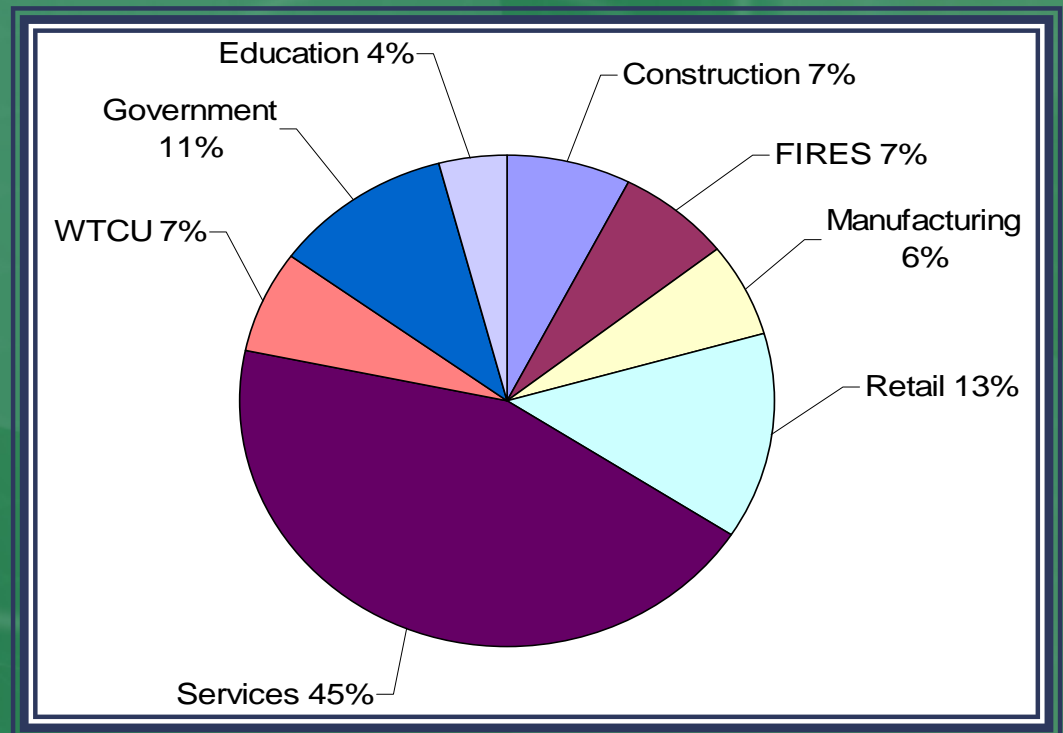
Retail: 13.5%

Services: 44.2%

WTCU: 6.8%

Government: 10.6%

Education: 4.3%



Green Kirkland—Environmental Stewardship and Sustainability Efforts

“We commit to the proactive protection of our environment. An integrated system of natural resource management focuses on the preservation of wetlands, trees, open space and other sensitive areas, water quality, clean air and waste reduction.”

Climate Protection Efforts

- Emissions inventory and forecast, and benchmarking
- Use alternative fuels in fleet (hybrids, scooters, electric)
- Transportation Demand Mgmt. & Commute Trip Reduction

Sustainable Building & Development Practices

- Low Impact Development (techniques, standards, City projects)
- Green buildings (develop an action plan)

Green Kirkland—Environmental Stewardship and Sustainability Efforts

Natural Resources Management

- Protection of streams, wetlands, fish and wildlife, shorelines
- Open space acquisition
- Water conservation
- Cascade Land Conservancy Partnership –Invasive Management
- Increase tree canopy

Solid Waste/Recycling Programs

- Residential and commercial collection

Other

- Consider Green City purchasing
- Attracting green businesses and fostering green business practices
- Pest management practices

Green Kirkland

The City of Kirkland continues to strive to be a green city. It has signed the U.S. Mayor's Climate Protection Agreement and has begun to implement green, sustainable practices in its management and operations.