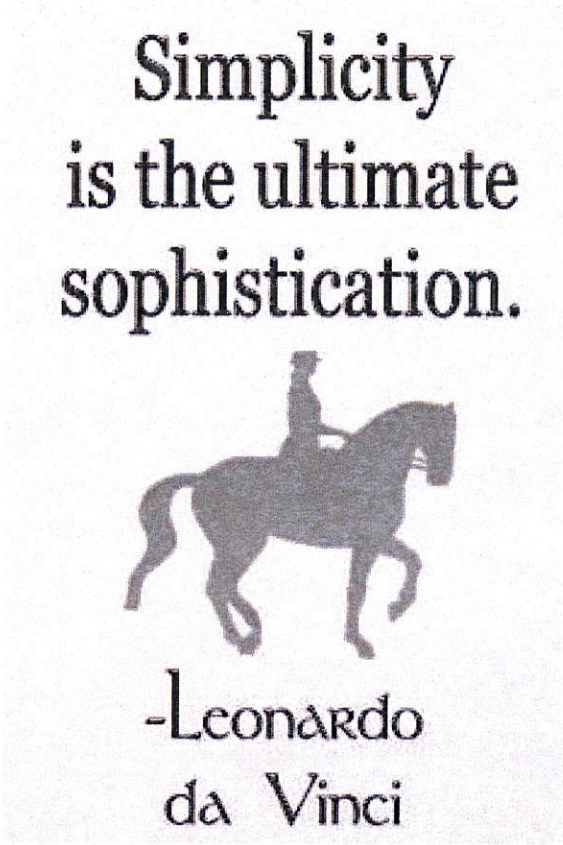
Planning for Success

- Keep it simple
- Keep it positive
- Keep it useful



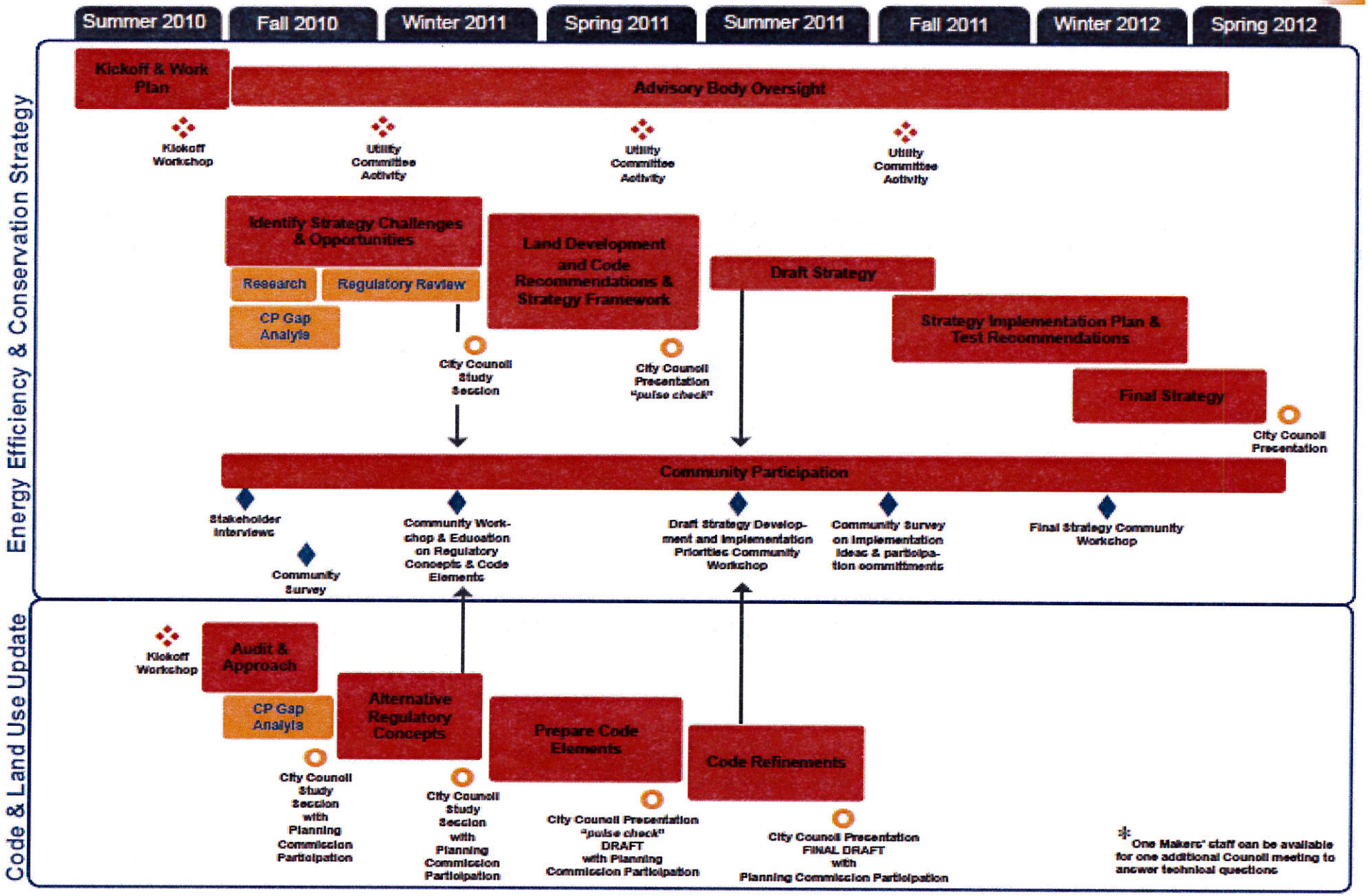
The Process

Process Matrix

	Task	Action	Contract 1 EEC Strategy					Contract 2 Land Use & Code Update				
			O'Brien & Co.	MAKERS	Cascadia GBC	Transpo	Watershed	O'Brien & Co.	MAKERS	Cascadia GBC	Transpo	Watershed
Summer 2010	1	Kick-off Workshop						•	•	•	•	
	1.7.A	Identify and Assign Internal City Staff Project Review Leads	•						•			
	2.1.A	Project Kick-off Workshop with City Staff to Initiate EECS Process	•	•	•							
	2	City Council Study Session + Planning Commission Participation						•	•	•	•	
	2.1B	Stakeholder Interviews	•	•				•	•			
	2.3	Land Dev. & Bldg Code Update and Regulations Review & Recommendations	•	•	•							
Late Summer / Early Fall 2010	2.1B	Stakeholder & Community Surveys	•	•								
	2	Audit and Approach						•	•	•	✖	✖
	2.1.B	Community Workshop	•	•	•	•	✖					
	2.2.A	Identify Strategy Challenges & Opportunities and Develop Framework	•	•	•							
	2.1.B	Community Workshop	•	•	•	•	✖					
Fall 2010	3	City Council Study Session + Planning Commission Participation						•	•	•	✖	✖
	1.7.B	Utility Committee Activity 1	•	✖	✖	✖						
	1.7.B	City Council Study Session + Planning Commission Participation	•	•	•	✖	✖					
	5	City Council Study Session + Planning Commission Participation						•	•	•	✖	✖
	3	Alternative Regulatory Concepts						•	•	•	•	✖
Winter / Spring 2011	4	Prepare Code Elements						•	•	•		✖
	1.7B	Utility Committee Activity 2	•	✖	✖	✖						
	4	City Council Pulse Check						•	•			
	5	Make Code Refinements						•	•	•	✖	✖
Summer 2011	2.2.B	Draft Strategy	•	•	•							
	2.1.B	Community Workshop & Survey	•	•	•	✖	✖					
Fall 2011 / Winter 2012	1.7B	Utility Committee Activity 3	•	✖	✖	✖						
	2.4 & 2.5	Mock Project Pilot	•	•	•	✖						
	2.4 & 2.5	Strategy Implementation Plan, Testing, and Recommendations; including Optional Implementation Activities Activities & Training	•	•	•							
	1.7B	Council Presentation	•	•								
Spring 2012	2.2.C	Final EEC Strategy & Council Adoption	•	•	•							

✖ *as needed*

Timeline


Summer 2010
Fall 2010
Winter 2011
Spring 2011
Summer 2011
Fall 2011
Winter 2012
Spring 2012
Energy Efficiency & Conservation Strategy
Kickoff & Work Plan
Advisory Body Oversight
Kickoff Workshop
Utility Committee Activity
Utility Committee Activity
Utility Committee Activity
Identify Strategy Challenges & Opportunities
Research
Regulatory Review
CP Gap Analysis
City Council Study Session
Land Development and Code Recommendations & Strategy Framework
City Council Presentation "pulse check"
Draft Strategy
Strategy Implementation Plan & Test Recommendations
Final Strategy
City Council Presentation
Community Participation
Stakeholder Interviews
Community Survey
Community Workshop & Education on Regulatory Concepts & Code Elements
Draft Strategy Development and Implementation Priorities Community Workshop
Community Survey on Implementation Ideas & participation commitments
Final Strategy Community Workshop
Code & Land Use Update
Kickoff Workshop
Audit & Approach
CP Gap Analysis
City Council Study Session with Planning Commission Participation
Alternative Regulatory Concepts
City Council Study Session with Planning Commission Participation
Prepare Code Elements
City Council Presentation "pulse check" DRAFT with Planning Commission Participation
Code Refinements
City Council Presentation FINAL DRAFT with Planning Commission Participation
*One Makers' staff can be available for one additional Council meeting to answer technical questions

Project(s) Team

- Consultant Team
- City Project Staff
- Council Members
- Utility Advisory Committee
- Planning Commission
- Stakeholders
- Community

Consultant Team

obrien & company

MAKERS
architecture · planning · urban design

CASCADIA
REGION GREEN BUILDING COUNCIL

transpoGROUP

THE WATERSHED COMPANY

City Council

Land Use Code Update & EE&C Strategy

- Initial planning workshop
- Study sessions
- Briefings & Pulse check
- Review & direction

Planning Commission

Land Use Code Update

- Initial planning workshop
- Interviews
- Study sessions
- Review & direction

Utility Advisory Committee

Energy Efficiency and Conservation Strategy:

- Initial planning workshop
- Interviews
- Three activities:
  - *Discovery*
  - *Planning*
  - *Review*

City Staff

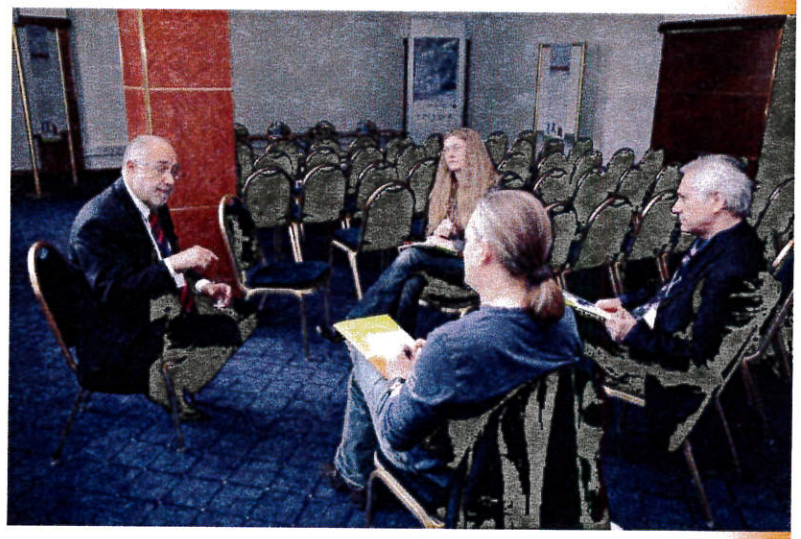
Land Use Code Update & EE&CS:

- Project team meetings & support
- Interviews
- Workshops
- Implementation planning & test

Additional Stakeholders*

Land Use Code Update & EE&CS:

- Interviews
- Invited to attend public events, such as Community workshops



** City Staff, Council, Planning Commission & Utility Advisory Committee are Primary Stakeholders; additional stakeholders refers to representatives from key community organizations, businesses & agencies, who contribute information and provide feedback*

Community

Workshops

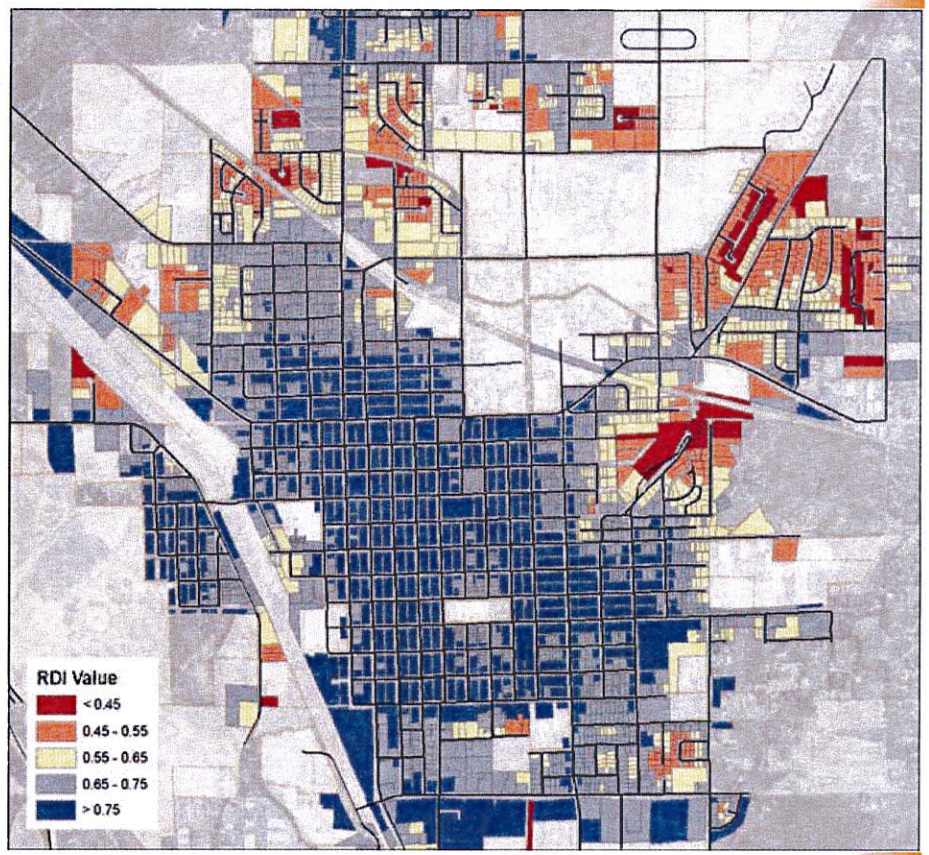
Public Venue Outreach

Project Newsletters & Website

Surveys

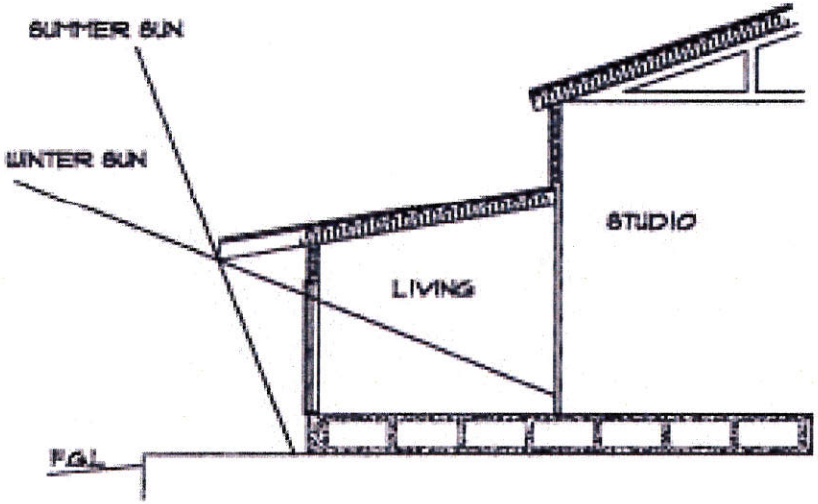
Project Synergies

Example 1. Improving connectivity can conserve transportation energy



Project Synergies

Example 2: Appropriate roof eave setback requirements can conserve building energy



Focus Session on Land Use Code Update

- Update outdated code
- Resolve inconsistencies among code sections
- Resolve inconsistencies between the Comprehensive Plan and current code
- Develop alternative code language options to update the code, resolve inconsistencies, and provide implementation options

What we'll cover…

- Approach
- Opportunities
- Group preferences and priorities

"Process and Product"

Code Update - Process

- Determine what's most important

Streetscape design?

Compact pedestrian-friendly development?

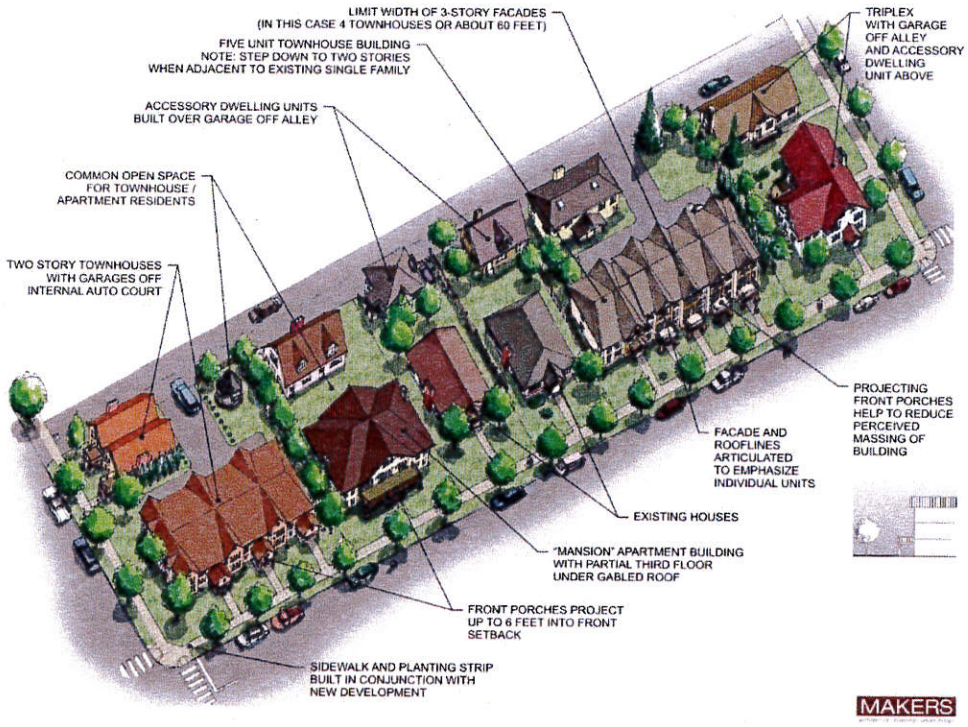
Building design?

Better landscaping?

Better connectivity?

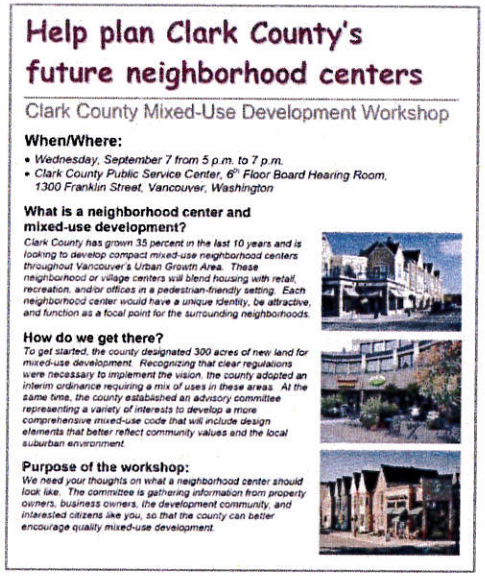
Code Update - Process

- Determine what's most important
- Help participants visualize options



Code Update - Process

- Determine what's most important
- Help participants visualize options
- Maximize staff/public/public officials' review of draft materials



Help plan Clark County's future neighborhood centers

Clark County Mixed-Use Development Workshop

When/Where:

- *Wednesday, September 7 from 5 p.m. to 7 p.m.*
- *Clark County Public Service Center, 6th Floor Board Hearing Room, 1300 Franklin Street, Vancouver, Washington*

What is a neighborhood center and mixed-use development?

Clark County has grown 35 percent in the last 10 years and is looking to develop compact mixed-use neighborhood centers throughout Vancouver's Urban Growth Area. These neighborhood or village centers will blend housing with retail, recreation, and/or offices in a pedestrian-friendly setting. Each neighborhood center would have a unique identity, be attractive, and function as a focal point for the surrounding neighborhoods.

How do we get there?

To get started, the county designated 300 acres of new land for mixed-use development. Recognizing that clear regulations were necessary to implement the vision, the county adopted an interim ordinance requiring a mix of uses in these areas. At the same time, the county established an advisory committee representing a variety of interests to develop a more comprehensive mixed-use code that will include design elements that better reflect community values and the local suburban environment.

Purpose of the workshop:

We need your thoughts on what a neighborhood center should look like. The committee is gathering information from property owners, business owners, the development community, and interested citizens like you, so that the county can better encourage quality mixed-use development.

Code Update - Product

- Integrated with current code

Chapters:

13.02 General Provisions
13.04 Definitions
13.06 Official Map
13.08 Boundaries
13.10 Zones
13.11 Airport Overlay Zone (A-O)
13.12 Residential Suburban Zone (R-S)
13.14 Residential Low Density Zone (R-L)
13.16 Residential Medium Density Zone (R-M)
13.17 Residential High Density Zone (R-H)
13.18 Residential Office Zone (R-O)
13.20 Commercial Neighborhood Zone (C-N)
13.22 Tourist Commercial Zone (T-C)
13.24 Highway Commercial Zone (C-H)
13.25 Master Site Plans for Regional Retail Commercial Projects
13.26 Public Reserve Zone (P-R)
13.28 Central Commercial Zone (C-C)
13.29 Central Commercial II Zone (C-C II)
13.30 Light Industrial Zone (I-L)
13.32 Heavy Industrial Zone (I-H)
13.34 Manufactured Home Park Zone (MHP)
13.36 Manufactured Home Subdivision Zone (MHS)
13.37 Downtown Historic District
13.38 Planned Unit Development
13.39 Critical Areas
13.40 General Use Regulations
13.41 First Railroad Addition Historic District
13.42 Off-Street Parking
13.44 Fences, Walls and Hedges
13.45 Wireless Communications
13.46 Nonconforming Uses
13.47 Manufactured Homes in R-S, R-L, R-M, R-O, C-C and C-C II Zones
13.48 Variances

Code Update - Product

- Integrated with current code
- Hard standards with flexibility: Emphasize clear minimum standards, but allow departures

EXAMPLE

6.1.7. Articulation Departures

Departures to the interval frequency and number of required articulation treatments will be considered for ALL articulation standards herein provided alternative treatments meet the intent of the standards and achieve equal or better results as determined by the Responsible Official.

Considerations for articulation departures:

(a) Views from sidewalk plus all other observable distances.

(b) Types of materials used and how they help to achieve the intent: *To reduce the scale of large buildings and to encourage architectural design that contributes to the pedestrian environment.*

(c) The type of articulation treatments and how effective they are in meeting the intent.

(d) How effective the articulation treatments respond to the site's context and visibility (for instance, side streets warrant greater flexibility than primary streets where façades are more visible).

Figure 6-25. Façades using high quality materials and detailing don't necessarily need techniques like vertical modulation to add visual interest and contribute to the pedestrian environment (Vancouver, BC).

Code Update - Product

- Integrated with current code
- Hard standards with flexibility: Emphasize clear minimum standards, but allow departures
- Toolbox approach: Menu of desirable options to choose from

EXAMPLE

6.1 Building Articulation and Massing

INTENT

- To reduce the scale of large buildings and add visual interest.
- To encourage architectural design that contributes to the pedestrian environment.

6.1.1 Storefront Articulation Checklist

Building façades on Storefront Streets and all other façades adjacent to public sidewalks shall include articulation features every 40 feet to create a pattern of small storefronts.

At least two of the following articulation methods must be employed at intervals no greater than 40 feet:

- ☐ Use of window and/or entries that reinforce the pattern of small storefront spaces. (a)
- ☐ Use of weather protection features that reinforce small storefronts. For example, for a business that occupies 120 feet of frontage, use three separate awnings to break down the scale of the storefronts. (b)
- ☐ Change of roofline per Standard 6.1.4. (c)
- ☐ Placement of building columns or vertical piers that reinforce a small storefront pattern. (d)
- ☐ Change in building material or siding style.(e)
- ☐ Other methods that meet the intent of the standards. (f)

Departures: *see Standard 6.1.7 for criteria for departures to this standard.*

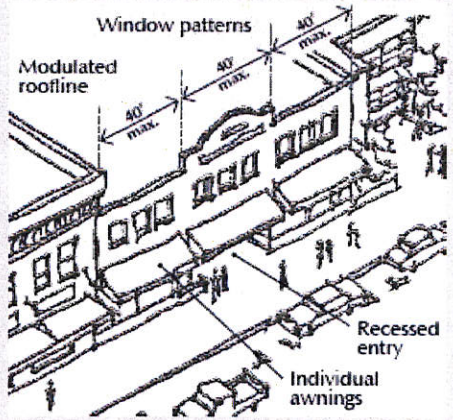


Figure 6-2. This building uses distinct window patterns, separate awnings, and roofline modulation at 40-foot intervals.

Figure 6-3. This building uses distinct window patterns, vertical piers, and separate awnings to articulate the façade (Bend, OR).

Code Update - Product

- Integrated with current code
- Hard standards with flexibility: Emphasize clear minimum standards, but allow departures
- Toolbox approach: Menu of desirable options to choose from
- Visualization: Illustration of good & bad examples

YES (Mercer Island, WA)

YES (Bend, OR)

Unacceptable

Figure 21B.30.100c. Acceptable and unacceptable pedestrian-oriented façade examples.

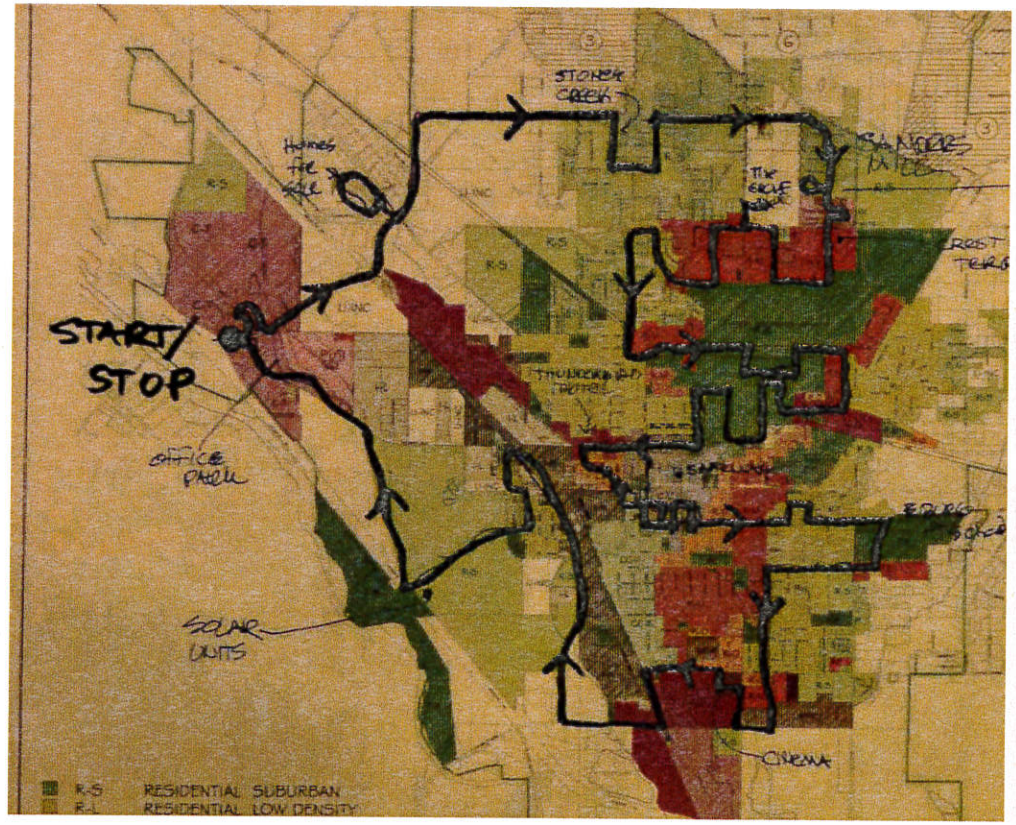
Code Update - Product

- Integrated with current code
- Hard standards with flexibility: Emphasize clear minimum standards, but allow departures
- Toolbox approach: Menu of desirable options to choose from
- Visualization: Illustration of good & bad examples
- Simple and easy to use

Comments/questions on approach?

Code Update - Opportunities

Preliminary Observations



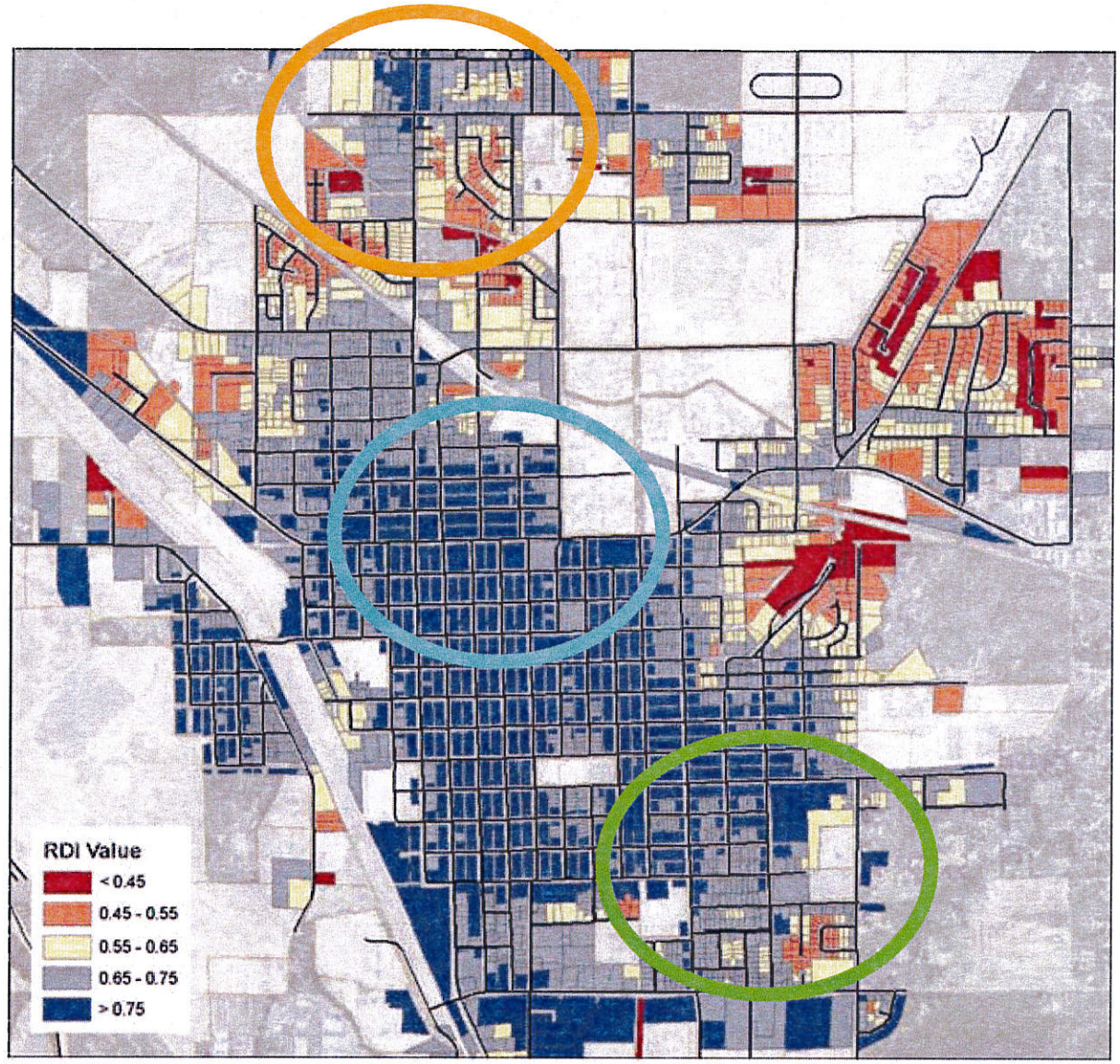
Connectivity

Measuring Connectivity

Cul-de-sac
Ave RDI = 0.58

Grid
Ave RDI = 0.76

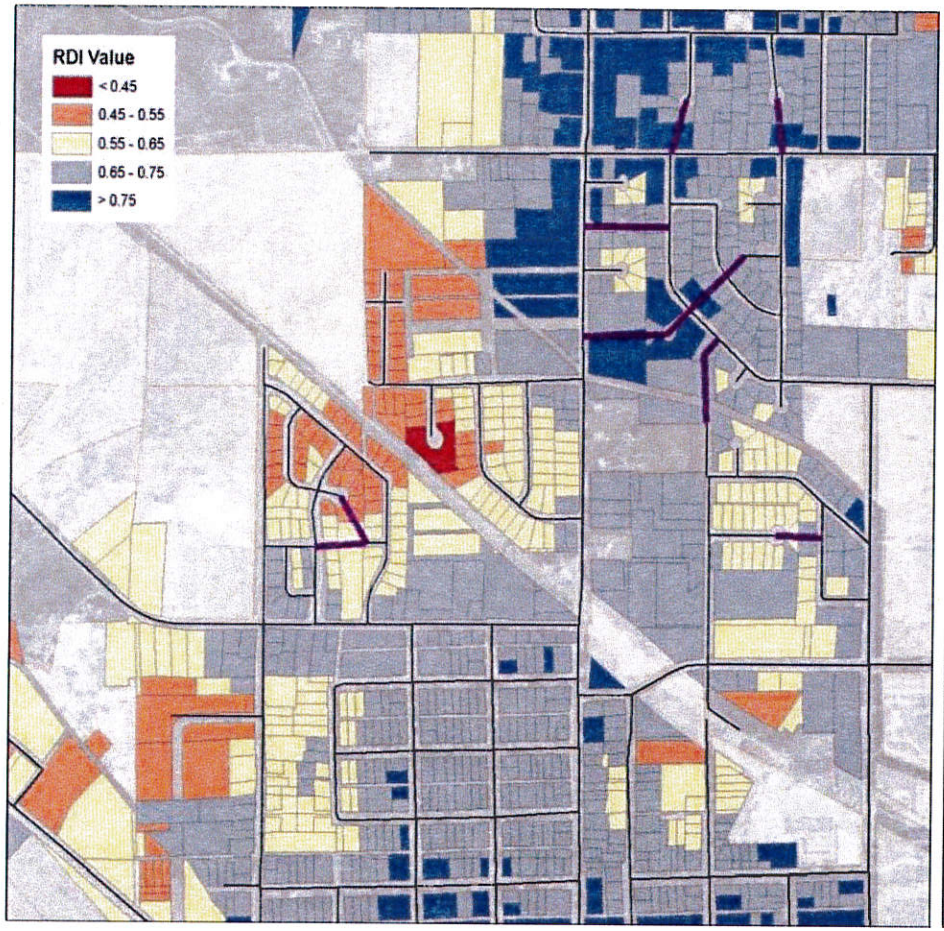
Hybrid
Ave RDI = 0.68



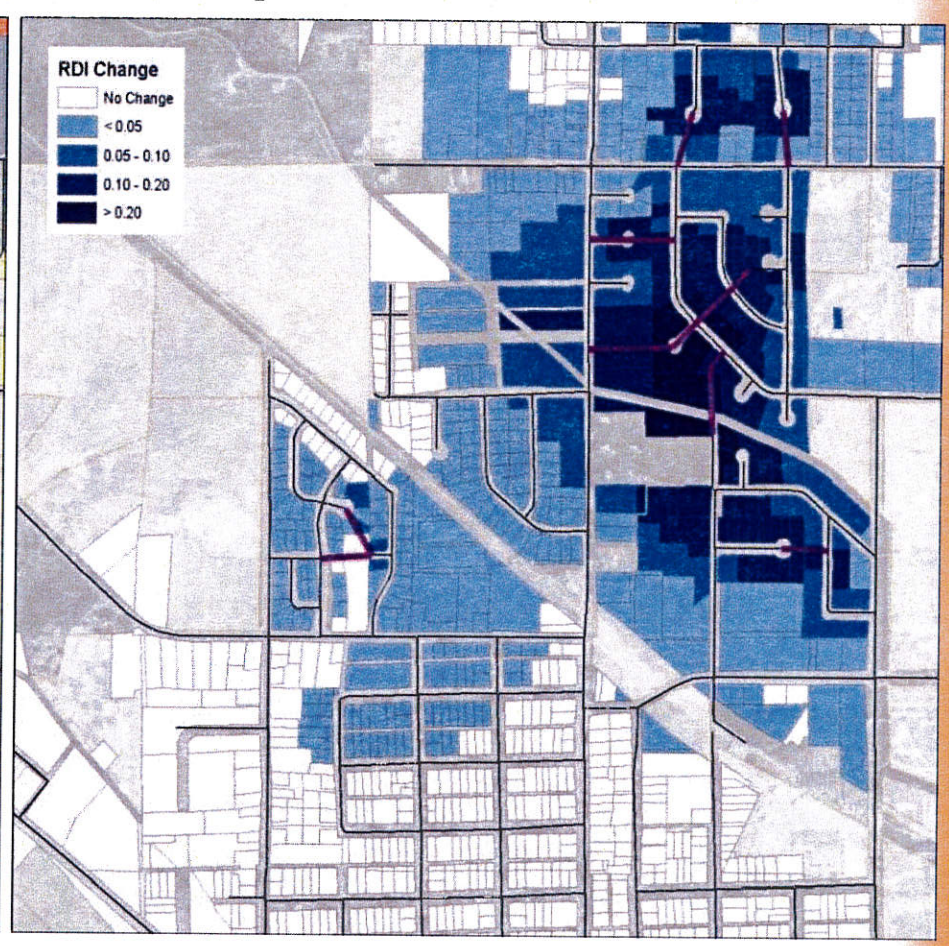
transpoGROUP

Connectivity: What if?

Current Conditions



Improved Condition



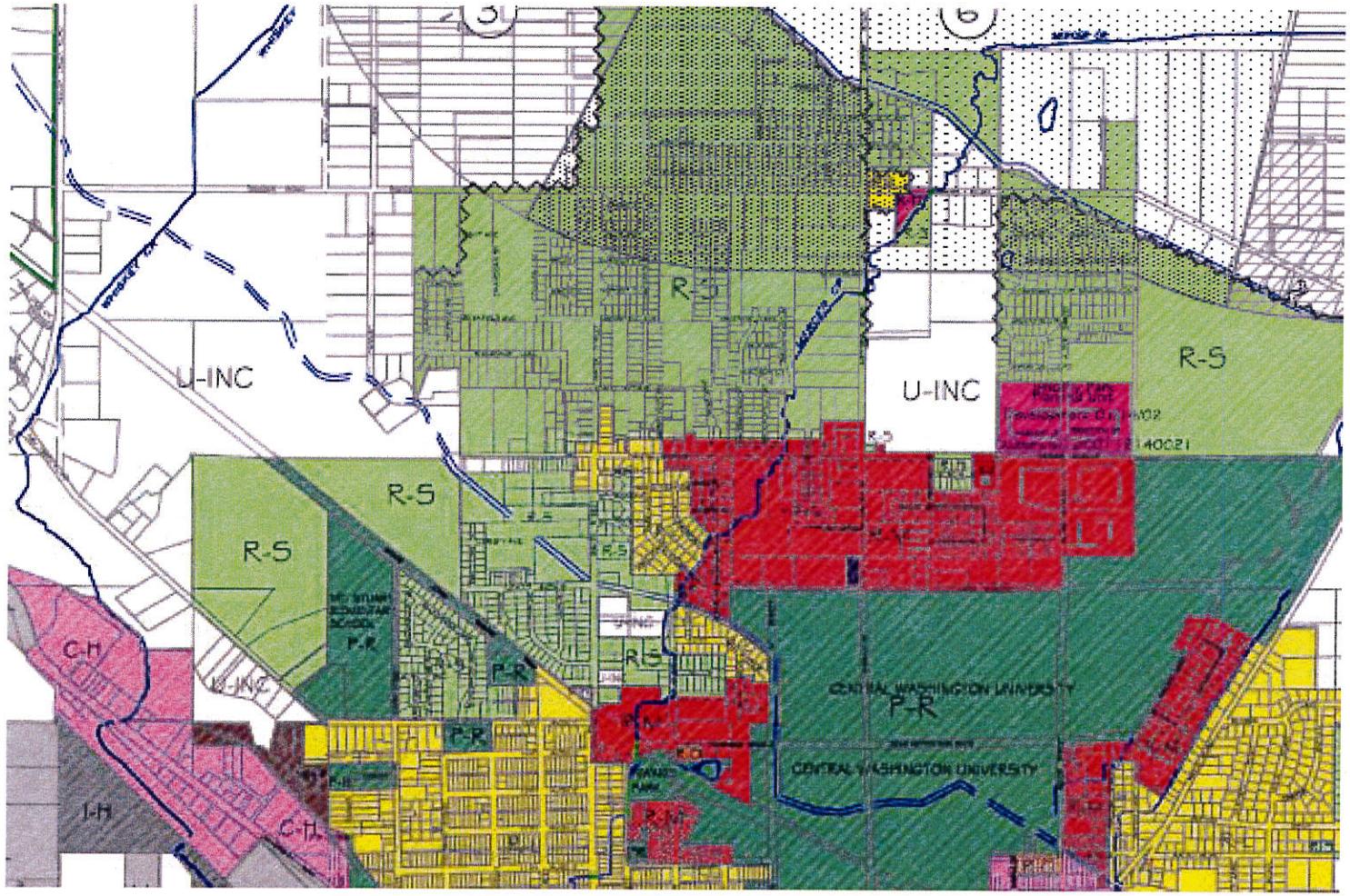
transpoGROUP

Streetscapes Opportunities

Streetscapes Opportunities

Density and Housing Types

Density and Housing Types



Density and Housing Types

- What are the housing needs?
- What are the desired forms and mixes of housing?
- What are the regulatory options available?
- What are the implications on Ellensburg in the future?
- How viable are these options?

SINGLE FAMILY – SMALL LOT

Single family dwelling unit on a lot 5,000 SF or less

TYPICAL SPECIFICAT

Location:
- Neighborhood infill
- Anywhere single fa is allowed/consider

Target Demographic:
- Full range

Construction Feature
- Wood-frame

Site Area: Less than 5

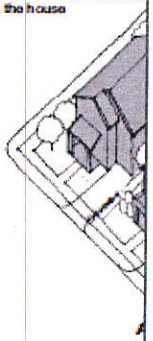
Density: 9-20 du/acre

Unit Size: 1,200-2,25

Benefits:
- Denser alternative family developmen
- Ability to fit into ex on a variety of site
- Smaller lot size m affordable

Drawbacks/Challeng
- Requires special a design to ensure p visual impacts of v

Small lot example with street access and tandem garage setbac behind the front wall of the house



MAKERS architectu

BELLINGHAM RES

ACCESSORY DWELLING UNIT (ADU)

Additional subordinate dwelling unit on a single family lot (attached or detached)

TYPICAL SPECIFICATIONS

Location:
- Attached ADU's: Anywhere single detached housing is allowed/cons
- Detached ADU's: Work best wher are present or on large lots

Target Demographic:
- Singles and young couples
- Seniors and empty nesters

Construction Features:
- Wood-frame

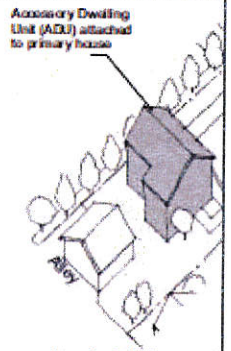
Site Area: All lots as long as house, and accessory structures meet setba other applicable development standa

Density: Up to one ADU per lot

Unit Size: 300-800 SF (studio to 2-b

Benefits:
- Ability to fit into existing neighbo on a variety of sites
- Reduces pressure for sprawl by increasing density
- Blends well into existing single f neighborhoods

Drawbacks/Challenges:
- Relatively new housing type for Bellingham, particularly detache



Attached ADU example

MAKERS architecture and urban

BELLINGHAM RESIDENTIAL C

COTTAGE HOUSING

Small detached houses clustered around a common open space

TYPICAL SPECIFICATIONS

Location:
- Neighborhood infill
- Anywhere single family detached ho is allowed/considered

Target Demographic:
- Singles
- Couples and young families
- Seniors and empty nesters

Construction Features:
- Wood frame

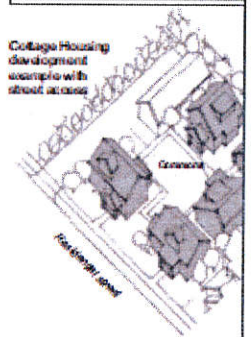
Site Area: 10,000 SF and up

Density: 10-35 du/acre

Unit Size: 600-1,200 SF (1- to 2-bed)

Benefits:
- Increases density without the bulk large buildings
- Creates a sense of community thr clustering and shared open space
- Small building scale works well wit traditional single family neighborh

Drawbacks/Challenges:
- Concept is new to Bellingham – community acceptance and high development risk
- Relatively high construction costs r development to occur in single fami areas (and costs are usually to hig multi-family zoned areas) to work



MAKERS architecture and urban d

BELLINGHAM RESIDENTIAL CO

TOWNHOUSE

Single family dwelling units attached on one or more sides

TYPICAL SPECIFICATIONS

Location:
- Neighborhood infill or new development
- Areas close to urban amenities & servic

Target Demographic:
- Singles seeking home ownership
- Couples and young families
- Seniors and empty nesters

Construction Features:
- Wood frame over private garage

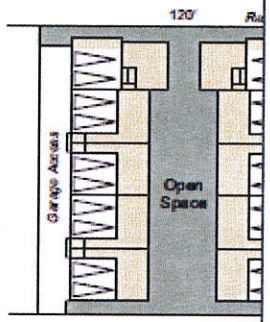
Site Area: 4,000 SF and up (3-unit infill)

Density: 20-50 du/acre

Unit Size: 1,200-2,000 SF (2- to 3-bed)

Benefits:
- Denser alternative to single family detached
- Ability to fit into existing neighborhood on a variety of sites
- Opportunity for first-time home buyers
- Hides parking

Drawbacks/Challenges:
- Relatively new housing type for Bellingham
- Neighborhood acceptance of use/dens



Plan View – Ground Flo

MAKERS architecture and urban desi

BELLINGHAM RESIDENTIAL CODE

LOWRISE (3-over-1)

3 floors of residential over retail/office or parking

TYPICAL SPECIFICATIONS

Location:
- Areas close to urban amenities & services

Target Demographic:
- Full range

Construction Features:
- Wood frame, with or without a concrete base

Site Area: 6,000 SF and up

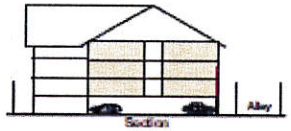
Density: 30-70 du/acre

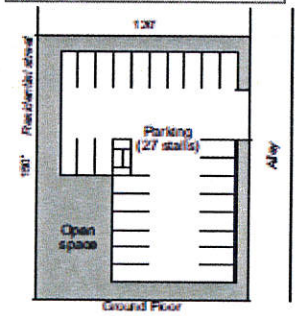
Unit Size: 600-1,200 SF (studio to 2-bed)

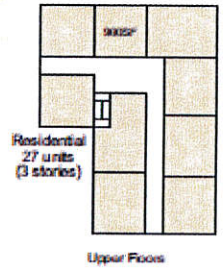
Benefits:
- Reduces pressure for sprawl by increasing density
- Increases pedestrian activity and vitality of immediate area
- Enables alternate forms of transportation
- Construction costs are lower than for a residential tower
- Height and bulk are generally compatible with neighborhoods
- Increased opportunities for open space due to lack of no surface parking

Drawbacks/Challenges:
- Requires more density and/or height than most areas currently allow
- Structured parking leads to higher rents than typical walk-up apartments
- Neighborhood acceptance of use/density

Lowrise example with 3 floors over 1 level of parking







Lowrise Example (left and above):
- 18,000 SF lot size
- 4 floors (3 residential over 1 parking)
- 27 units
- 1 parking space/unit

MAKERS architecture and urban design

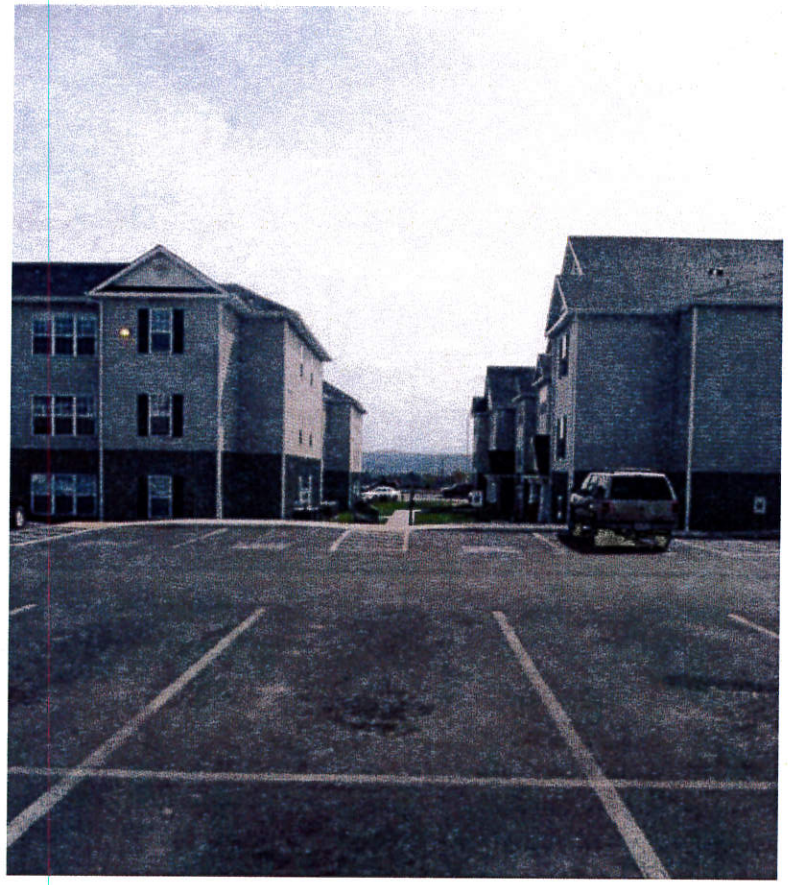
BELLINGHAM RESIDENTIAL CODE - SUMMARY OF RECOMMENDED CHANGES

Multifamily Design

Multifamily Design

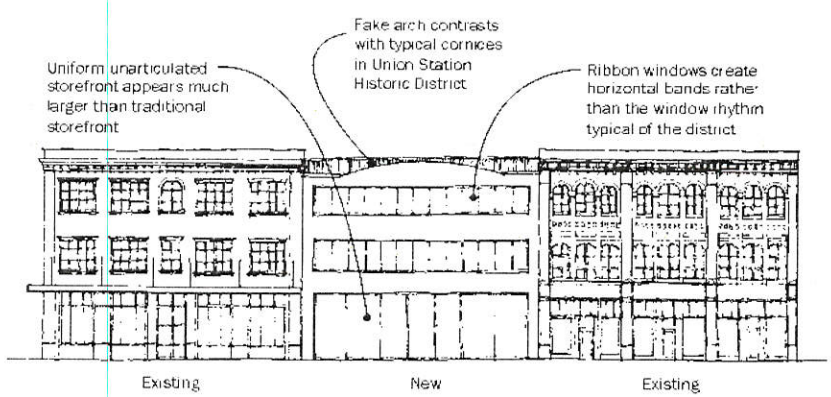
- Consider user needs – current & future
  - Location/ access/ design
- Impacts on community character
- Design issues:
  - Orientation to Street
  - Access and circulation
  - Usable open space
  - Design (scale, height, character)

Pedestrian Connections

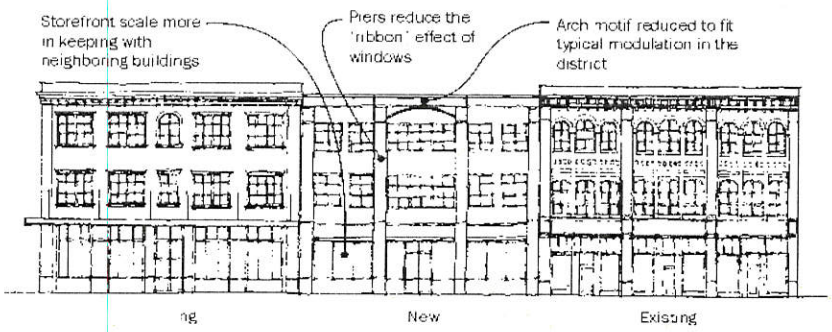


Historic Character

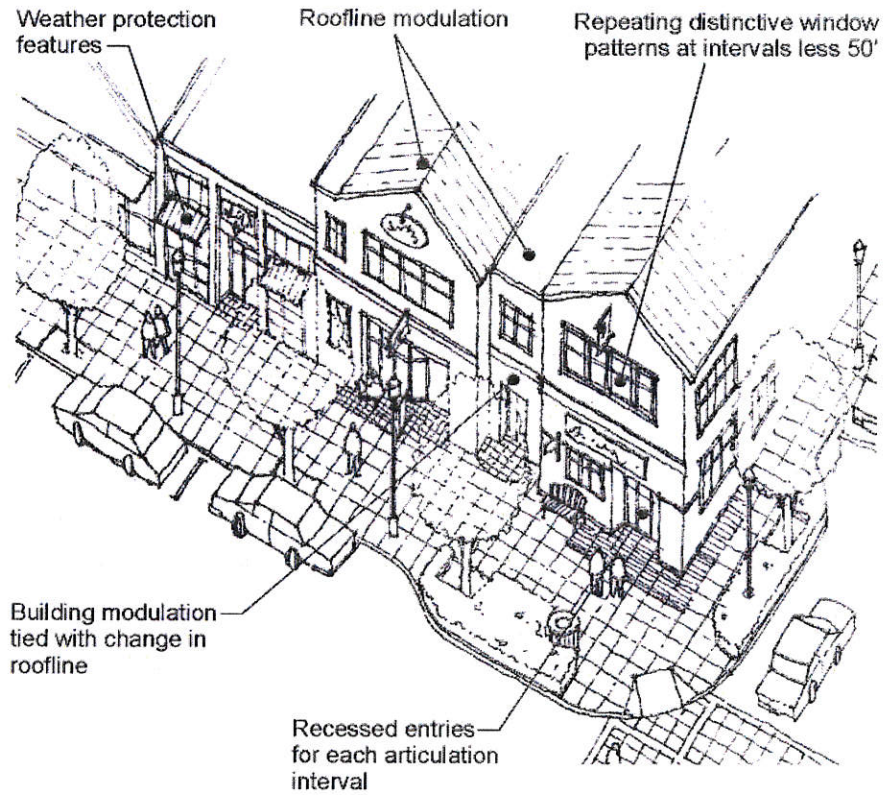
Historic Character



New building inappropriately scaled



building reinforces the scale of existing buildings through architectural means



Adaptive Reuse

- "Repurpose" underutilized existing buildings

Relating Streets to Site Development

Relating Streets to Site Development

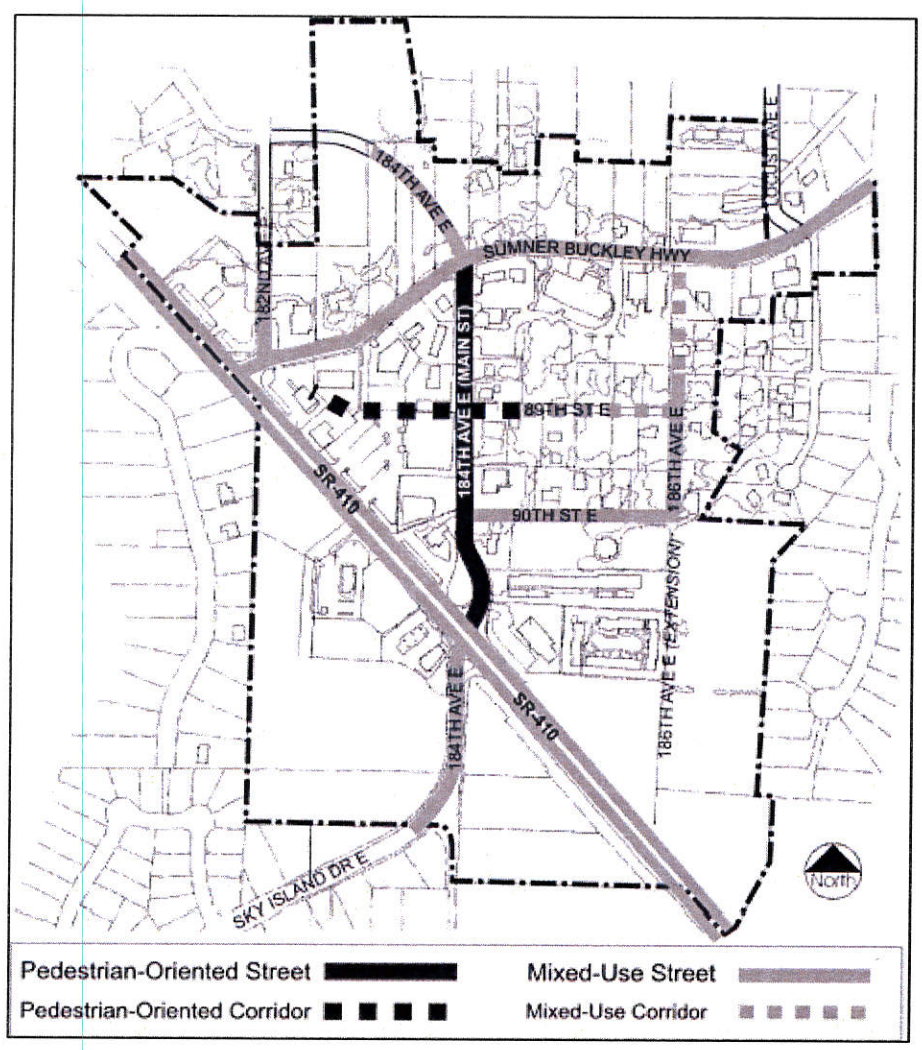


Table 1. Summarizing options and requirements for non-residential uses (see Standards 1.1.1 - 1.1.4 for detailed requirements and recommendations)

Streetfront Configuration	Tolt Ave sites between Rutherford & Eugene (see 1.1.3)	"Gateway Property" along SR-203/ Tolt Ave (see 1.1.4)	Other sites adjacent to Tolt Ave (see 1.1.5)	All other areas
Pedestrian- oriented façade adjacent to the sidewalk	●	X	◉	○
Building facing the street with landscaped setback, parking to the side or rear	X	◉	◉	◉
Parking lot between the building and the street	X	○	X	○
25' front yard landscaping	X	●	○	○
Blank wall visible from street or corridor	X	X	X	X

TABLE LEGEND:

● Feature required (some exceptions)
◉ Feature encouraged
○ Feature acceptable if conditions are met
X Feature prohibited (some exceptions)

The Canal and Creeks

What issues are most important in the Code Update?

Break

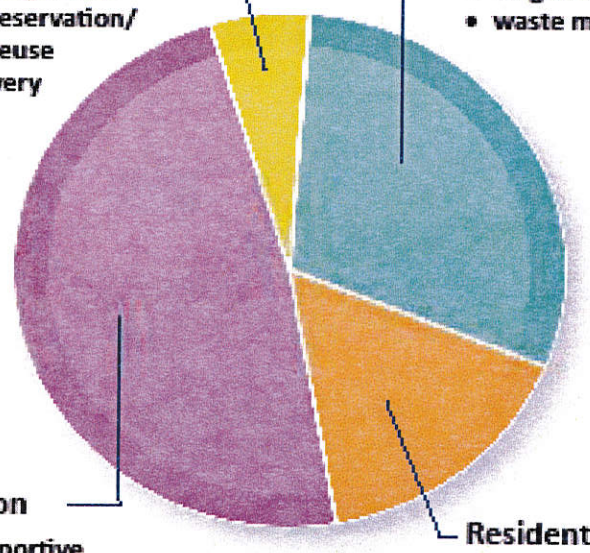
Please return in 10 minutes

Focus on Energy Efficiency & Conservation Strategy

- Review Comprehensive Plan and land development/building codes to identify obstacles to energy efficiency and conservation
- Recommendations for code updates to support and facilitate implementation of the Strategy
- Identify alternative implementation activities

Strategies for Energy Independence

Energy Conservation + Carbon Reduction Strategies



Commercial
- energy efficiency codes
- LEED incentives
- renewable energy
- waste management
- historic preservation/ adaptive reuse
- heat recovery incentives

Industrial
- process savings
- water treatment
- LEED incentinves
- co-generation incentives
- waste management

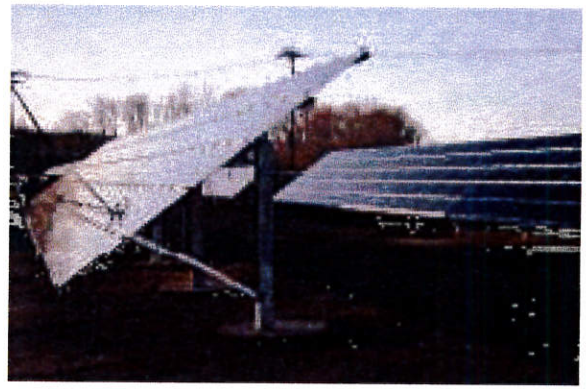
Transportation
- transit supportive development
- city fleet upgrade
- trip planning
- pedestrian and bike access
- compact development

Residential
(construction + operations)
- compact development
- energy efficiency codes
- renewable energy
- waste management
- LEED incentives

Approach

Build Upon Existing Initiatives

- Existing Building Stock
- Renewable Energy Resources
- Existing Standards
- Local Success Stories



ENERGY STAR

U.S. GREEN BUILDING COUNCIL LEED USGBC

BUILT GREEN®
Central Washington Built Green Association

Approach

Removing Regulatory Barriers

- Provisions that are missing (silent)
- Barriers in existing regulations

Approach

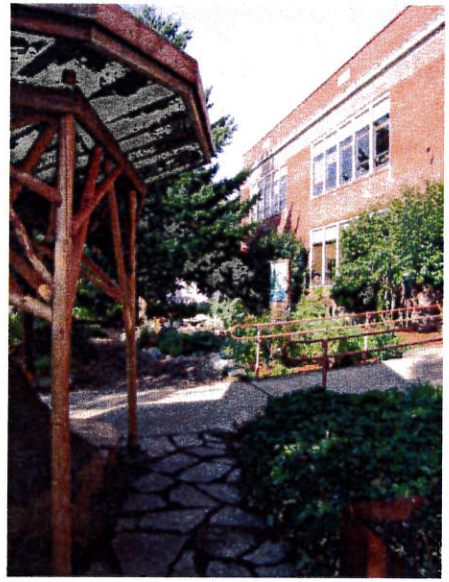
Identify Additional Opportunities that Make Sense

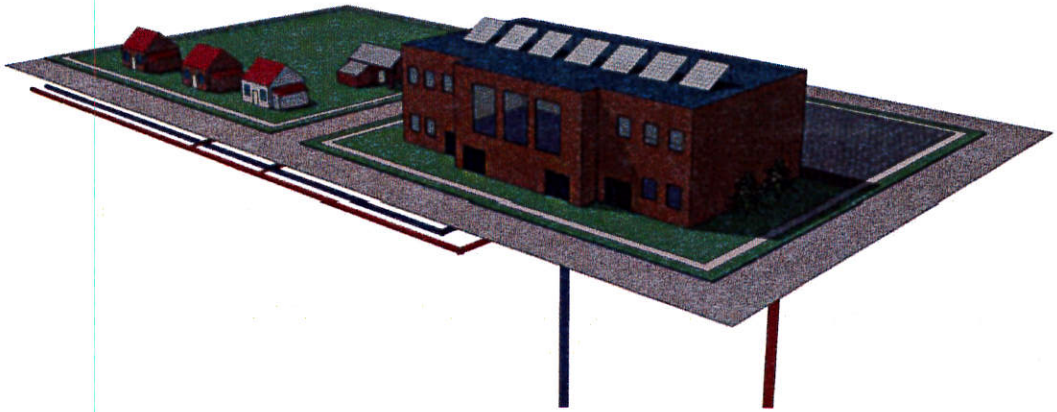
- Community Energy Conservation Examples
- Building Energy Conservation Examples

Energy or Eco-District Zoning

Community Energy Consumption

- City of Portland Eco District
- Sunnyside School: Portland

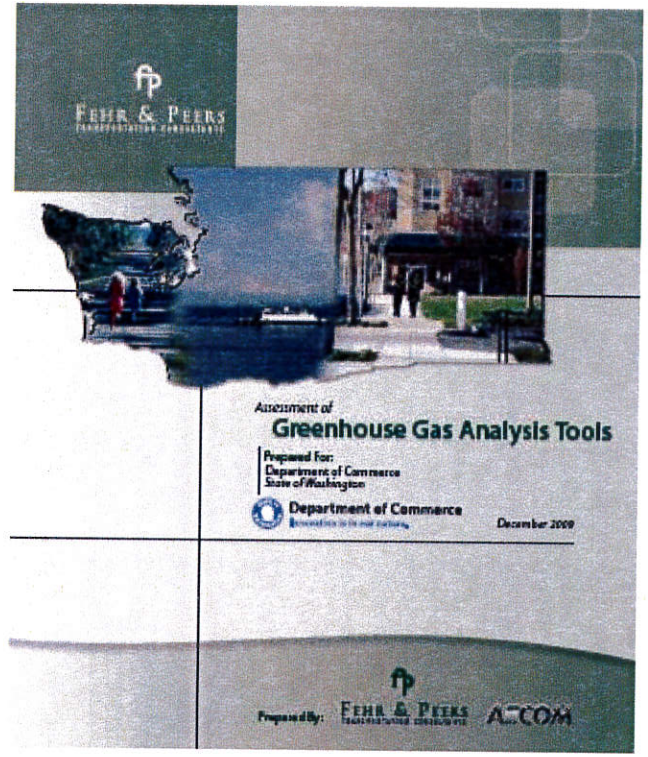




Modeling/Benchmarking

Community Energy Consumption

- PLACE^{3}S
- VMT / TDF tools
- ICLEI – CACP / STAR



STAR
COMMUNITY INDEX

PLACE^{3}S

Inferential Statistics

Community Energy Consumption

Relying on Research Others Have Done to Infer Potential Benefits

Transportation Research Board | SPECIAL REPORT 298

Driving and the Built Environment

The Effects of Compact Development on Motorized Travel, Energy Use, and CO_2 Emissions

Incentives for Smart Growth

Community Energy Consumption

- **Bonuses related to Smart Growth**
  - Incentive zoning
  - Density bonuses

Standards Allowing Urban Food Production

Community Energy Consumption

- Vertical agriculture/commercial urban agriculture
- Animal husbandry
- P-Patches / community gardens

Streamlining Approvals for Innovative/Demonstration Projects

Community Energy Consumption

- King County LID and Green Building Demonstration Ordinance (COMPLETED)
- City of Bainbridge Island Housing Design Demonstration Project (NEW)

Comprehensive Plan Amendment

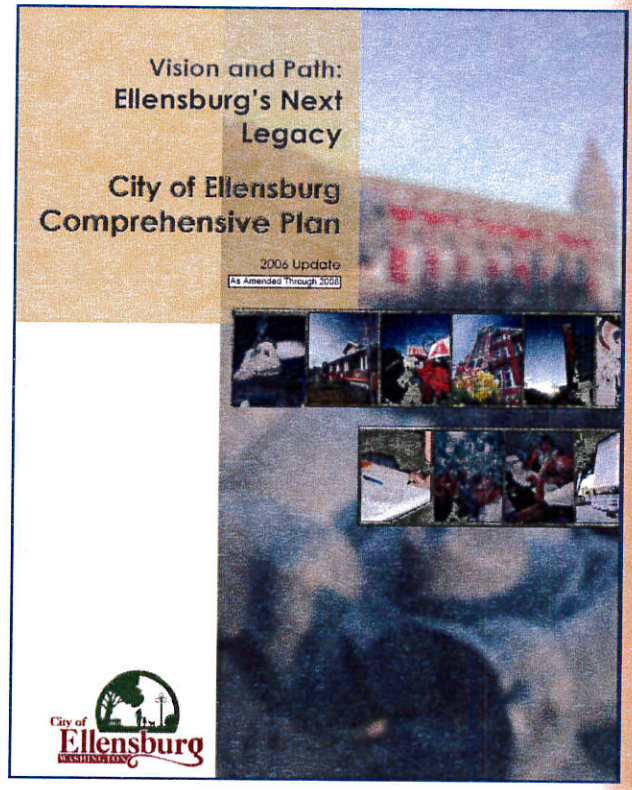
Community Energy Consumption

- City of Lynnwood Energy Element
- Sustainability Element

Incl. 2008 Amendments — Comprehensive Plan

ENERGY & SUSTAINABILITY ELEMENT

Introduction	1
Planning Context	2
The Iclei Five Milestone Process	7
Lynnwood's Role In Energy & Sustainability	8
Initial Energy Inventory	9
Goals, Objectives And Policies	10
Implementation	12



Grants & Fee-Bates

Building Energy Consumption

Avista

- Incentives for grocer refrigeration upgrades
- Residential Home Improvement Incentive program

Ellensburg Energy Services

- Existing programs

Special Permitting Assistance for Exemplary Energy Efficiency

Building Energy Consumption

- Go to the Front of the Line
- Allowing Building Innovations as Part of Demonstration or Pilot Projects
- Providing free green building consulting for projects in planning process

CITY OF ISSAQUAH

zHome

Code Guidance & Training

Building Energy Consumption

- Technical briefs
- Workshops

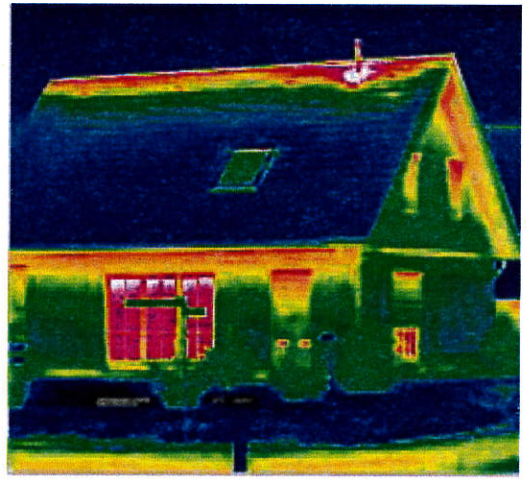
Browse

Energy Audits & Upgrades

Building Energy Consumption

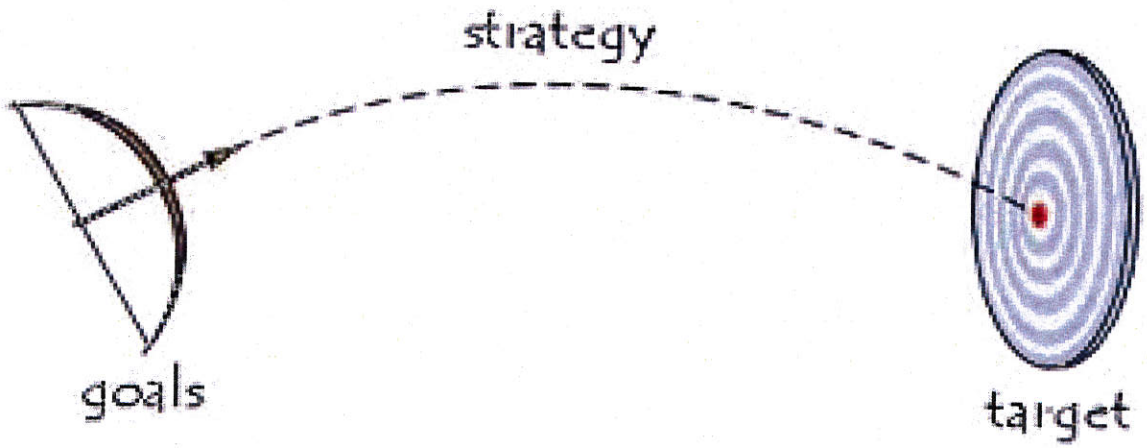
- Home Energy Testing & Weatherization
- ASHRAE Level I & II (Commercial)
- Energy Star Score (Portfolio Manager)

ENERGY STAR PARTNER



Planning Preferences

Strategy Goals Discussion



Planning Preferences

Discuss: Ideas That Appeal

- Building on Existing Initiatives
- Removing Regulatory Barriers

Planning Preferences

Discuss: Ideas That Appeal

- Energy or Eco-Districts
- Modeling/Benchmarking
- Relying on Inferential Statistics
- Streamlining Approvals for Innovative/Demonstration Developments
- Incentives for Smart Growth
- Standards Allowing Urban Food Production
- Comprehensive Plan Amendments
- Grants & Fee-Bates
- Special Permitting for Exemplary Building Innovation
- Energy Audits & Upgrades
- Code Guidance & Workshops

Strategy Examples

San Diego

Sustainability Report

- Energy Conservation
- Energy Efficiency
- Renewable Energy-
- Management of SDG&E Energy
- Policy Development and Implementation
- Leverage Resources

ENERGY CONSERVATION

Conservation efforts include simple actions that reduce energy demand, and this remains the most cost effective way to manage energy budgets. Employee education and outreach have been successful, including the use of newsletters, the "Watts Up" campaign, and electronic monitoring of HVAC systems.

OBJECTIVES:

1. By 2010, all City employees will understand the importance of energy conservation and will take actions at work and at home to reduce energy use;
2. By 2012, all residents in San Diego have the information available to make well-informed decisions about how to conserve energy; and
3. By 2020, *per capita* residential, commercial and industrial energy use is reduced by 50% using 2000 as a baseline.

ACTIONS:

1. Continue outreach programs to employees, including award programs for staff in buildings or departments with significant reductions in energy consumption; and
2. Expand outreach to the community through the use of City TV, working with existing community groups, adding an "energy page" to telephone books, and updating the City's websites.

SHORT –TERM PROJECTS (2009-2012)

- Promote various workshop educating City staff involved in energy conservation and sustainable building design. Increasing the knowledge of City staff will enhance energy conservation and sustainable building efforts.

LONGER-TERM PROJECTS (2012-2020)

- Identify and implement new programs and conservation measures using emerging technologies. Continue to promotion conservation goals to City staff, especially policy and decision makers involved with procurement decisions.

Strategy Examples

City of Pleasanton:

Energy Plan

A. Introduction
B. Policy Principles
C. Assets, Opportunities, and Barriers
D. Implementation
E. Action Plan
F. Attachments

ATTACHMENT D:

Initial Ranking of Action Items (by EAG Members)

Project Scorecard Survey

	Easy to Implement	Cost Effective	Address Barriers for Better Practices	Is Fair: Will Not Burden	Acceptable Environ Impacts	High Energy Savings Potential	Benefit Local Economy	Reliability	Total Score	Yes	No	Maybe
EDUCATION INITIATIVES (AWARENESS)	85	81	83	87	86	82	74	49	627	13	1	0
CONSERVATION PROGRAM	69	76	81	79	82	82	73	60	602	11	0	1
GREEN BUILDING ORDINANCE	67	70	79	61	85	82	75	50	569	13	0	0
INVESTIGATE EFFICIENCY STANDARDS FOR CITY	70	67	74	68	82	83	73	44	561	14	0	0
RESEARCH & MONITOR PROGRAMS	69	68	80	72	81	74	67	38	549	9	2	2
CITY DEMONSTRATION PROJECT	68	66	72	76	75	70	72	45	544	11	2	1
MAX PV DEPLOYMENT	57	60	73	63	89	80	70	48	540	13	1	1
CREATE CITY ENERGY OFFICE	71	58	73	71	77	72	70	41	533	7	3	4
AGGREGATE PURCHASE OF SOLAR EQUIP & SERVICES	56	65	73	67	78	74	68	48	529	12	1	1
INVESTIGATE RENEWABLES BUYDOWN	64	68	69	63	82	71	66	40	523	10	2	2
FUNDING/GRANT APPLICATIONS	64	68	67	61	74	69	70	43	516	10	2	2
ENERGY ELEMENT OF GENERAL PLAN	62	68	75	63	71	72	64	39	514	10	1	2
CITY ENERGY DEPARTMENT / ENERGY MANAGER	60	57	74	67	70	69	65	40	502	8	3	3
PUBLIC PRIVATE PARTNERSHIPS TECH TRANSFER	58	65	71	63	68	71	63	41	500	9	2	1
PLEASANTON SELF SUFFICIENT	52	54	73	65	76	72	65	38	495	11	1	2

Strategy Examples

City of Charlotte:

Energy Strategy

Energy Efficiency and Conservation Block Grant

City of Charlotte

Proposed Energy Strategy

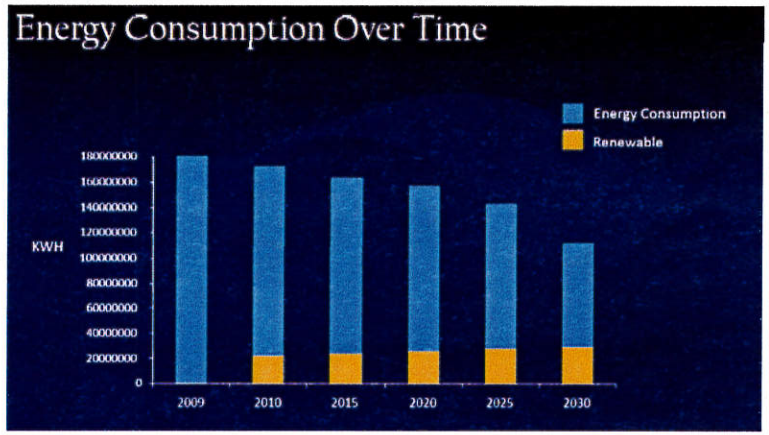
Project Summary

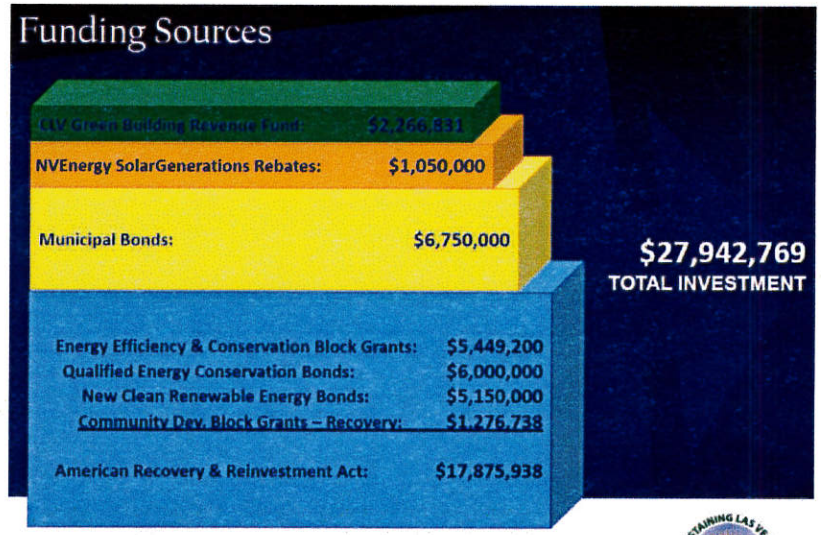
Energy Investments in Revitalization Areas	
1. Residential Energy Efficiency Improvements	$ 600,000
2. Commercial Building Retrofit Program	$1,200,000
Neighborhood Energy Challenge	
3. Neighborhood Energy Challenge	$ 650,000
Catalyst Projects	
4. Electric Vehicle Charging Stations and Vehicles	$ 240,000
5. I-485 Park & Ride Energy Efficient Lighting Pilot	$ 300,000
6. Center City On-Street Recycling	$ 110,000
7. Photovoltaic System - CMGC Parking Deck	$ 126,000
8. Outreach and Education Campaign	$ 200,000
Air Quality Specific Projects	
9. Bicycle Master Plan Project #1 – Wendover/Beal Intersection	$ 120,000
10. Complete Vehicular Wayfinding and Parking/Variable Messaging Signage	$ 324,000
Public Building Energy Efficiency Improvements	
11. CMU Admin./Brookshire – Energy Improvements	$ 648,000
12. Old City Hall – Energy Improvements	$ 464,000
13. CMPD – New Providence Station Geothermal Heating and Cooling System	$ 162,000
14. Energy Efficient Lighting Replacement – Multiple Facilities	$ 225,000
15. Energy Efficient Computing	$ 360,000
16. Solar Thermal Hot Water at CFD Stations #1, #10, Training Academy	$ 250,000
17. Charlotte Housing Authority – Parktowne Terrace Retrofit	$ 250,000
Energy Strategy Implementation	
18. Establish Energy & Sustainability Manager (2.5 yrs funding)	$ 300,000
Total	$6,529,000

Strategy Examples

Las Vegas

Sustainable Energy Strategy Implementation





City of Las Vegas
July 1, 2009

Planning Preferences

Discuss: Look & Feel of Sample Strategies

- Statement of Principles (Policy) – e.g. San Diego
- Traditional Strategic Plan (Policy & Recommended Actions) e.g. Pleasanton
- Implementation Plan (Planned Actions) e.g. Las Vegas

Planning Preferences

Discuss: Possible Utility Advisory Activities

- Technical Presentations
- Experiential Research/Field Trips
- Other?

Wrap up

- Remaining Questions?
- Public Comments
- Next Steps…

Thank You!