Some Grounding Questions

- Who here lives in a single family home?
- Who has a car that gets more than 35 miles to the gallon?
- Who has chosen to take transit over driving in the past week?
- We all make rational choices, based on...

Our values, motivations and class

- Order & Laws
- Safety/Fear
- Comfort zone
- Consumption of Stuff
- Personal Responsibility
- Family

- Randomness
- Tolerance/Diversity
- Consumption of experience
- Community Responsibility
- Individual

- Suburban Development
- Smart Growth

Smart Growth may not be for everyone... It may not reflect some peoples values
Principles of Smart Growth

- Mix Land Uses
- Provide a Variety of Transportation Choices
- Foster Distinctive Communities with a Strong Sense of Place
- Encourage Community and Stakeholder Collaboration
- Make Development Decisions Predictable, Fair and Cost Effective

Range of Housing Choices:

Environmental Considerations

- Active and passive solar & southern exposure - house orientation
- Indoor air quality for health
- Size matters
Walkable & Sustainable Streets...
Forces on Streets in 21\textsuperscript{st} Century

- Increased population and housing demand
- Increased use of mobility
- Increased in land prices
- Increase in alternative transportation
- Increased in materials, etc.

- Smart, efficient changes
- Increased convenience, diversity, and use of streets
- Public space more accessible, programmed
- Increased speed or maneuverability
- Increased safety or security

Single Verses Multiple Objective Design
Sustainably Designed Streets
What should a green street do?
1. Serve multiple users
   - Place pedestrians/cyclists on equal footing with automobiles
   - Accommodate cars and transit vehicles
   - Serve aging & disabled population
   - Fire and safety vehicles
   - Utilities right of way
   - Aesthetics – homeowners, retail, office uses, etc.
   - “Community living room” – garage sales, block parties, farmer’s markets, play area, events, etc.
   - Equity – quality streets in all neighborhoods, different communities want different street programming

Green Street Techniques
2. Reduce stormwater – grassy swales, infiltration planters, flow-through planters, street swales, curb cuts, minimal impervious surfaces etc...

Green Street Techniques
3. Include greenways – dedicated paths to bicyclists and pedestrians
4. Change Street Design – traffic circles, curb bulges, pedestrian refuge, Street Edge Alternative streets, etc.

Seattle SEA (Street Edge Alternative) Streets: flat curbs to allow water to flow onto grassy swales
Green Street Techniques

5. Improve the urban forest to reduce heat island effect, provide habitat, water efficient native landscaping

6. Reduce materials and energy use
   - Use energy efficient lighting
   - Low light pollution
   - Use alternative materials – cost of asphalt will double in next 5 years

Sustainable Street Materials

- Pervious paver block systems
- Pervious concrete mixes
- Pervious asphalt mixes
Direct Development
Towards Existing Communities
- Loss of 2 million acres of farm land and open space per year
- Ground water recharge and storm water runoff
- Reduce materials use for infrastructure development (sewer, water, roads, lighting, etc)
- Reduce auto-miles and green house gas production

Preserve Open Space, Farmland, Natural Beauty & Critical Environmental Areas
- Market value of homes is 20% higher when proximate to parks (500 to 2,000 feet)
- Passive parks increase market value more than active parks
- Well maintained parks with visibility from nearby streets are best
- Pocket parks and linear parks that directly back onto housing, reduce the market value of those homes.
Preserve Open Space, Farmland, Natural Beauty & Critical Environmental Areas

Fiscal Impact of parks
- Parks generate $0.37 in cost for every $1.00 in revenue they generate.
- Residential uses generate $1.15 in costs for every $1 in revenue.

Open Space & The Urban Farmer

How can we incorporate the “need to work the land” and our need for “open spaces” into smart growth practices?
- Community Gardens
- Courtyard Housing
- Alternating House sites
Compact Building Design

Waste Generation:
- Construction & Demolition debris are 25% of municipal waste, 136 million tons/year.
- 12 tons of waste for new construction of a 2,000 sq ft home.
- 20 tons/home remodel = 60 years of curbside recycling.
- 30% of green house gas emissions.

Environmental Impacts of Building:
- 65.2% of U.S. electricity consumption
- > 36% of U.S. energy
- 12% of potable water
- 40% of timber come annually of raw materials
- 25% of wood resources.

Compact Building Design

Reduce environmental and economic waste:
- Build to standard lumber dimensions (a 10X12 room vs. 9X13 room)
- Save energy and water: energy modeling, SIPs, ICFs, high performance windows, energy efficient appliances & equipment, passive solar.
- Conserve natural resources: use products that are durable, low-maintenance, recycled, made from rapidly renewable resources: bamboo, cork flooring, natural linoleum, wheat board, recycled carpet tiles, straw board.
- Improve indoor environmental quality: low VOC paints, adhesives, carpets, composite wood, no formaldehyde insulation, operable windows, daylighting, etc.

Examples: Rapidly Renewable Resources

Linoleum
- Has been around for 100 years
- Made from linseed oil, rosin, and wood flour, on a natural jute backing
- Tough, visually striking, highly resistant to heavy rolling loads and foot traffic
- Performance enhanced by time, as exposure to air hardens and increases durability
- Low VOC
- Rapidly renewable resource

Bamboo Flooring
- 30 year finish
- Rapidly renewable resource
- Low VOC
- Variety of colors
Examples: Materials

Cellulosic Insulation
- Increased fire resistance (25-50% over fiberglass)
- Improved safety from smoke
- Higher insulation value & coverage
- Recycled material, no VOCs

Straw Board
- Engineered board product made from straw fibers and non-toxic resins. Superior properties of moisture swell, elasticity, internal bond, density and strength.
- Suited for normal or sensitive applications in both residential and commercial settings.
- Price falls between particleboard and MDF.
- Used for furniture, door cores and cabinet cases. Can be painted or laminated with wood veneers, melamine and vinyl.
- Renewable resource. Wheat farmers must remove straw residue following the annual harvest. In the past, they burned fields & created air pollution.

Mix of Uses

Risks
- Mixed use developments have greater front end risks that create a higher “price of admission.” Risks include more complex entitlements process, financing from multiple sources, and the need to penetrate different markets simultaneously.

Benefits
- Diversified projects can better handle economic downturns, (one market will always be up)
Mix of Land Uses

Retail has Gone Wild

- What is the cost of retail on the bottom floor of every mixed-use infill project?
  - Economic cost to developer
  - Social cost to community

- How many roof tops are needed to create demand for 1,000 SF of retail?

<table>
<thead>
<tr>
<th>Mix of Land Uses</th>
<th>What else goes on the ground floor?</th>
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<tbody>
<tr>
<td>Non-profits &amp; arts</td>
<td>Social service organizations</td>
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<tr>
<td>Social service organizations</td>
<td>Day care &amp; elder care</td>
</tr>
<tr>
<td>Performing arts</td>
<td>Visual Arts</td>
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<tr>
<td>Active live-work for artists</td>
<td>Stoops and pedestrian-friendly residential entrances outside of the retail core</td>
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<tr>
<td>Dare I say…parking</td>
<td></td>
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</tbody>
</table>
A Variety of Transportation Choices

The high cost of parking:
- Assume land costs of $25/SF and 350SF/Space: a single surface space = $10K, a 3 story garage space = $18K.
- Just like in Monopoly everyone wants to hit free parking.
- 99% of all car trips end in a “free” parking space. Non-car users indirectly pay for parking through rents and prices.
- High parking requirements do kill great projects.
- Ugly urban form

Site Specific Parking Alternatives
- Reduce parking requirements 1/500SF
- Maximum parking requirements
- Parking in-lieu fee
- Car-share
- Showers and bicycle storage in building design
- Build within a half mile of transit
Distinctive, Attractive, Tolerant Communities with Strong Place

Cities and the Creative Class Richard Florida

- Cities like Portland, Seattle, Minneapolis, New York, San Francisco, Santa Cruz, Austin, Ann Arbor, San Jose, Madison, Kalamazoo, etc.
- Three Ts of economic growth: technology, talent, tolerance
- Tolerant and welcoming communities attract the technology and the talent ("the Bohemian and gay index")
- The talent (or the creative class) makes up 30% of workers, 47% of income, employed in science, engineering, R&D, tech, arts, design, health care, finance, etc.

Understanding Place & Community

- Firms cluster to capitalize on talent.
- Educational attainment is the single strongest predictor of economic success for the individual and for a region.
- Talent gravitates towards places that are inclusive, diverse, and offer abundant high-quality experiences. Talent is diverse.
- Weaker social capital ties, less stable, more innovative
- Urban form reflects the cultural mix: coffee shops, live music venues, great restaurants, funky housing, excellent outdoor recreation, the X games, cutting edge arts, fashion, etc.
Predictable, Fair and Cost Effective Development Decisions

- Location
- Land Costs
- Labor Costs
- Community Support
- Insurance
- Environmental Issues
- Floor Area Ratio
- Height Limits
- Parking Requirements
- Material Costs
- Design Costs
- Materials Costs
- Interest Rates
- Lease Rates
- Vacancy Rates
- Competitive Product
- Sale Prices
- Regulations
- Developer
- Market
- Environmental Issues
- Developer
- Market

Predictable, Fair and Cost Effective Development Decisions

1st Year
- Site Selection
- Regulatory Approval
- Market Analysis
- Design, Site Planning and Engineering
- Construction Financing
- Construction
- Permanent Financing
- Marketing & Sale

2nd Year
- 1st Year

3rd Year

What does delay do to the IRR?

- $37 million mixed-use project
  - 100 2 BR units
  - 15,000 SF Retail, 10,000 SF Restaurants
  - 5,000 SF Plaza
  - 162 parking spaces
  - IRR = 19%
- Six month delay IRR = 16%
- One year delay = 12%
- Two year delay = 9%
Our Current Paradigm

- Tax Base
- Jobs
- Economic Growth
- Consumption
- Status

What is in our Future?

- Rising Gas Prices
- Climate Change
- Rising Sea Levels
- Walmart
- 800+ channels of TV
- One book a year

- Ecological Extinction
- Consumption
- The Credit Government

What is the new paradigm?
What really works will be determined by better empirical knowledge tempered by local context and experience.

Smart Growth is not formula driven.
Principles of Smart Growth

- Create range of housing opportunities & choices
- Create walkable neighborhoods
- Strengthen & direct development towards existing communities
- Preserve open space, farmland, natural beauty & critical environmental areas
- Take advantage of compact building design
Research relates crime to:
- Specific site, district or neighborhood attributes
- “Neighborliness” and social cohesion
- Traffic and transit patterns
- Changes in demographics or length of occupancy
- Ineffective rules or policies
- Activity schedules or routines
- Educational attainment and economic stability
Offenders ask themselves

- How easy is the area to enter?
- How visible, attractive or vulnerable do targets appear?
- What are the chances of being seen?
- If seen, will anyone do anything about it?
- Is there a direct and quick route to leave once crime is committed?

Five “Fear” Basics

- Fear is widespread
- Fear is not evenly distributed
- Fear makes people feel uncomfortable emotionally
- Fear prompts people to adopt defensive measures
- Fear of crime does not parallel actual crime

Disorder

- Fear is often triggered by conditions of disorder
  - Graffiti, noise, homeless, blight
- When disorder reaches a critical mass, crime conditions and urban decay are typically fostered
“Place” plays as important a role in the drama of crime as do “victims” and “offenders”.
There are three basic types of “places,” each amenable to specific types of prevention strategies:
- locations (i.e. specific addresses)
- places (i.e. parks, schools, etc.)
- areas (i.e. neighborhoods)

What Do We Know About “Place” & Crime?
- Neighborhood features & conditions contribute to residents getting out and about (Nassar & Julian 1995; Kelling & Coles 1996)
- Neighborhood blocks are essentially behavior settings that can influence social relations (Mayo 1979)
Neighborhoods that balance vehicular & pedestrian needs increase residents' familiarity & interaction with one another (Appleyard 1981).

Walkability contributes to self policing by neighbors - "keep the peace through peaceful means" (Newark, NJ Foot Patrol Experiment, Diggs Town, Minnie Street, etc.).

Human Widths
- Walkway Width Min.
  - 5 feet, 6 feet pref.
Disinvestment in existing communities often results in degraded social well-being through crime and disorder ( Sampson, Raudenbush, and Earls 1997) 

Fear is often triggered by conditions of disorder
- Graffiti, noise, homeless, blight
- When disorder reaches a critical mass, crime conditions and urban decay are typically fostered

Crime in our communities is generally concentrated heavily in a few "hot spots" of crime

In a study of police calls for service in Minneapolis, MN, 3% of "places" were responsible for 50% of the calls to which the police were dispatched.
Walking Speeds
- Average Adult: 260 feet per minute
- Grades of 6% or less: Walking speed unchanged

Walking Distances
- 700’ average in U.S.
- 250’ to 500’ average block lengths
- 1320’ = ¼ mile walk
- Interesting environment extends walking distance comfort
Seeing & Being Seen
- To feel safe, we need to know that others are aware of our presence. Likewise, it is important that we are aware of the people and activities going on around us.

Plan
50% to 75% “Eyes on the Street”
Homogenous land use patterns create predictable patterns.

Criminals like predictable patterns to maximize reward & minimize risk.

25% of American parents said they would be less concerned about leaving children home alone if they had a nearby neighbor who could help with emergencies or problems.
Integrated/mixed land use patterns showing increased evidence of crime prevention and reduction as a result of increased activities and overlapping, mutually supportive activities that increase risk to criminals (Jacobs 1961; Poyner & Webb 1991; Wekerle & Whitzman, 1995)

- Allow/Promote In-Law Units in SF Neighborhoods
  - See: www.ci.santa-cruz.ca.us

- Prepare Amendments to General Plan and Zoning/Create Form-Based Code Allowing Mixed Use
  - See: www.ci.rocklin.ca.us
2 billion+ hours stuck in traffic per year in U.S.
- US Average: 73 minutes/day driving
- 200% increase in workers commuting to another county
  - 2 hour RT commute/day = 20 days/year
  - 3 hour RT commute/day = 30 days/year
- Children: 65 minutes/day in cars

The poorest fifth of Americans spend 42% of their annual household budget on the purchase, operation, and maintenance of automobiles, more than twice as much as the national average.
- 1 in 6 American parents leave a child unattended at home for 30 minutes or more for 2 to 3 days per work week (1/2 of these leave their children alone every workday)
-Latchkey kids are at greater risk of truancy, receiving poor grades, and risk taking behavior.
· Physical design influences probability for sense of place and community (Talen 1999)
· Visual appearance of public and private spaces and places correlates with neighboring (Skjaerveland and Garling 1997)

Centrifugal
One of the most effective ways of reducing the fear of crime is to raise community confidence and improve social capital.

Involving and empowering local communities and strengthening the ties between friends and neighbors is fundamental in tackling the fear of crime.

Social networks (who people know) have value.

Through social networks, people do things for one another.

This cooperation drives many community activities – including self-policing - & contributes to social cohesion.
“Community Controllers” are an important component in building social cohesion and controlling crime:
- “intimate guardians” (i.e. parents, family members, etc.)
- “guardians” (i.e. store clerks, teachers, the police, etc.)
- “place managers” (i.e. landlords, apt. managers, etc.)

The Strategic Purpose of the Redlands Police Department

➢ To control crime before it occurs by supporting strong families, resilient youth and safe and sustainable neighborhoods
The way we build, rebuild, and maintain our communities affects the behavior of people. That behavior influences public safety. The degree to which public safety exists affects the vitality of our communities.