

# "Greening the Code"

5<sup>th</sup> Annual New Partners for Smart Growth  
January 27-28, 2006

## Speakers:

- **Laurel Prevetti**: Deputy Director of Planning, San Jose
- **Ken Kay**: Principal at KenKay Associates
- **Susan Mudd**: Board member, Congress for the New Urbanism

## Lessons, Challenges & Opportunities Linking Ecology & Urbanism

Case Study:  
**Coyote Valley**  
San Jose, California

Prepared by: KenKay Associates & Laurel Prevetti

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## Places, Identity & Environment



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## What is Greening the Code?

The natural and built environments must be planned and integrated as a sustainable and seamless place for communities of people, plants and wildlife.

It must have a well defined public realm integrating natural and human systems together, to create the ecology of sustainability into codes, policies and patterns of smart growth.

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## Objectives of Greening the Code

- Advance the benefits of smart growth
- Create a framework to integrate ecology and human patterns of development
- Conserve, restore and enhance natural systems, species and habitats
- Protect and steward watershed resources, water quality and agricultural lands
- Create a multi-functional public realm i.e.: flood protection and recreation open space
- Integrate natural systems into compact development

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## "Greening the Code" Planning Issues

### STAKEHOLDER, COMMUNITY & GOVERNMENTAL PROCESS

- Vision and Outcomes
- Land Owners
- Open Community Decision- Making Process
- Multi-jurisdictional Planning and Coordination

### ENVIRONMENTAL PLANNING & PLACE MAKING

- Environmental Framework for Development and Sustainability
- Transit, Urbanism and Place - Making
- Green Infrastructure
- The Vision and Sustainability
- Blue Infrastructure
- Mobility

### ECONOMICS AND FINANCE

- Paying for Green
- Attracting Jobs
- Strategies to Build Over Time

### SOCIAL EQUITY

- Fair access to livelihood, education and resources
- Full participation in political and cultural life
- Self determination in meeting human needs

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## Approaches to Greening the Code

- Setting environmental, economic and social goals, policies, standards and plans
- Establishing relationships between fixed ecological systems and flexible market needs which change over time
- Integrating urban design, land use and ecological infrastructure with political, market, community and governmental consensus building

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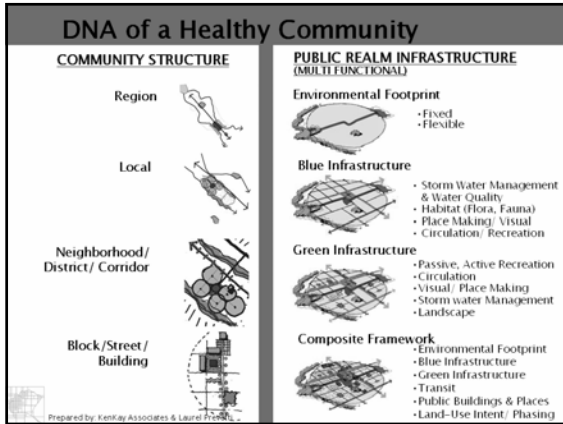
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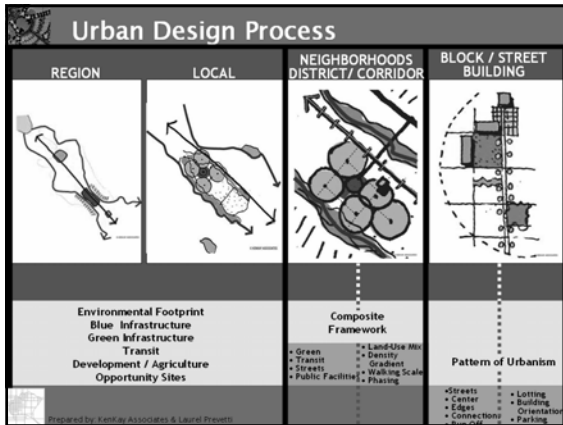
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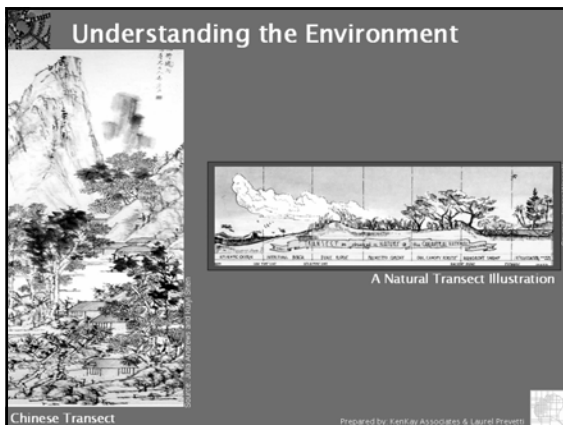
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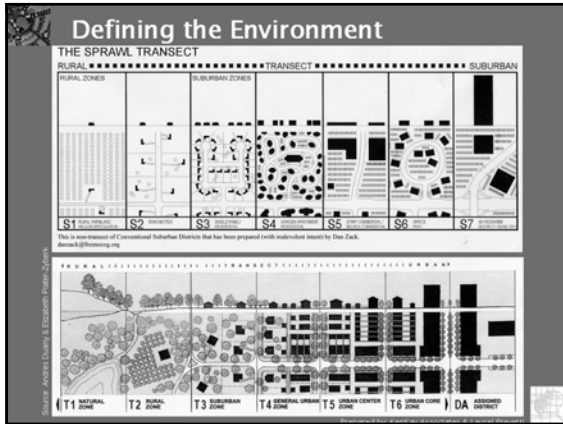
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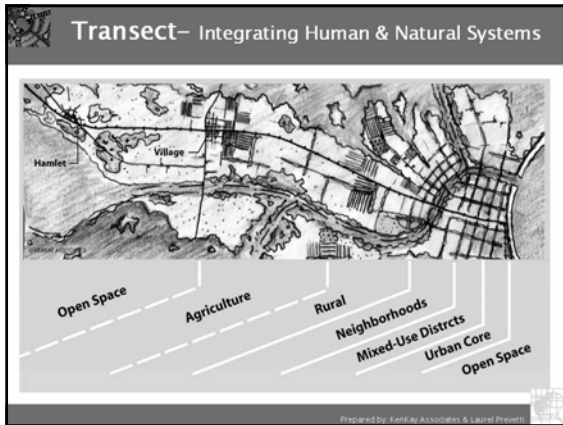
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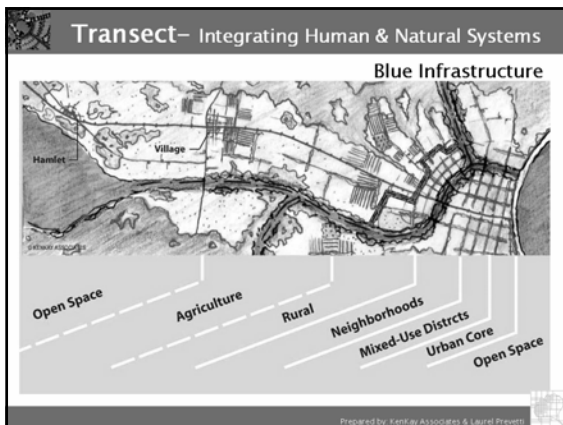
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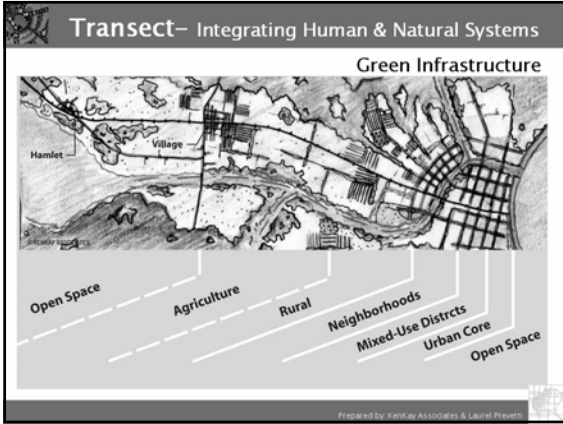
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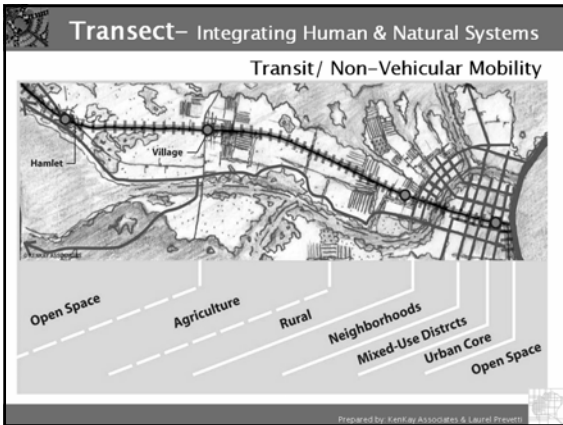
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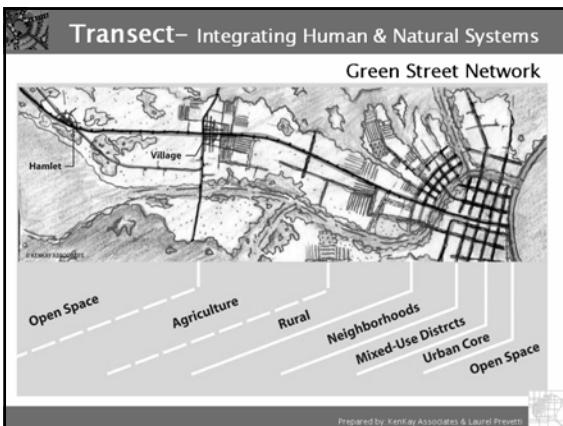
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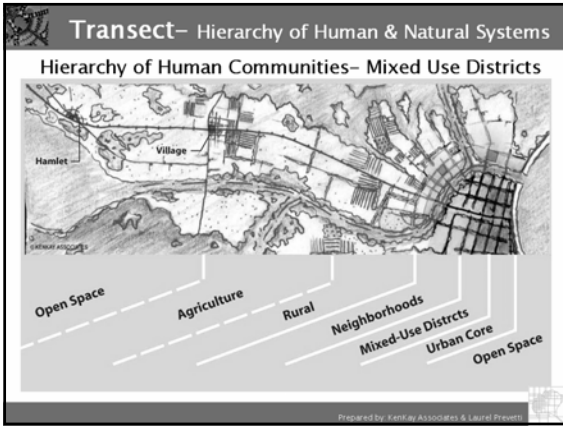
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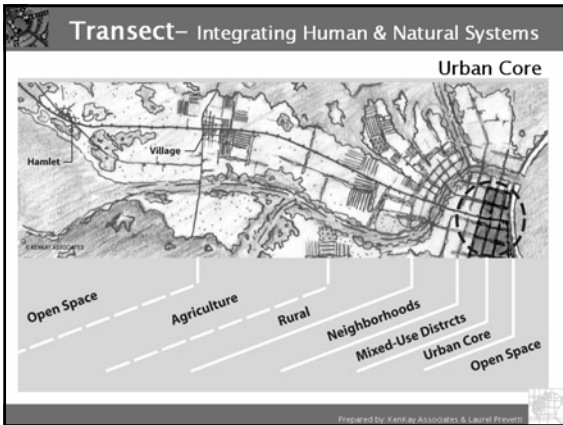
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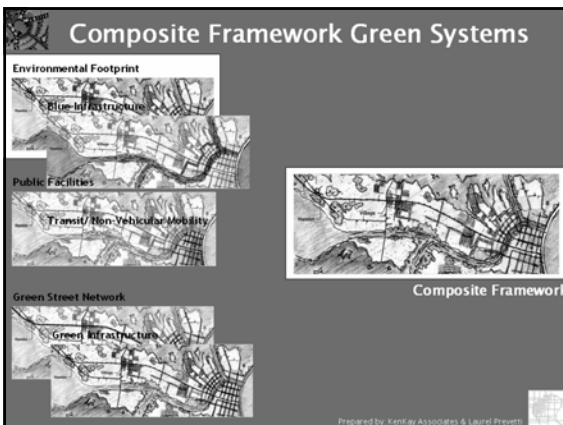
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## Coding Process: Conventional Codes

**Urban Core**



**Zoning Code District TC-1**

- Parking
- Setbacks
- Height
- Uses
- Density

**Subdivision Ordinance Standards**

- Lots
- Streets
- Parks
- Storm Water
- Water
- Sewer

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[illegible]

**Code End-User Needs**

**Transect Community Structure**

**Developer Application Requirements**

**RURAL** **URBAN**

**ENVIRONMENTAL FOOTPRINT**

**BLUE INFRASTRUCTURE**

**GREEN INFRASTRUCTURE**

**TRANSIT & NON-VEHICULAR CONNECTIONS**

**STREETS**

**PUBLIC FACILITIES**

**Open Space**

**Agriculture**

**Rural**

**Neighborhood**

**Mixed-use District**

**Urban Core**

**"Green" Systems**

- Construction
- Maintenance
- Management

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The diagram illustrates the relationship between three main components: Composite Framework, Community Building Maps, and the Transect Table.

- Composite Framework:** A stack of six categories representing different levels of urban form:
  - Environmental Footprint
  - Blue Infrastructure
  - Green Infrastructure
  - Transit & Non-Vehicular Connections
  - Streets
  - Public Facilities
- Community Building Maps:** A set of maps categorized by urban form:
  - NEIGHBORHOODS
  - MIXED-USE DISTRICTS
  - URBAN CORE
  - RURAL
  - AGRICULTURE
  - OPEN SPACE
- TRANSECT TABLE:** A central table that receives input from both the Composite Framework and the Community Building Maps. It displays a grid of shaded cells, representing the relationship between the categories. The table is labeled "Transect Table" and has "Category" and "Transect" as headers.

Arrows indicate the flow of information from the Composite Framework and Community Building Maps into the Transect Table.

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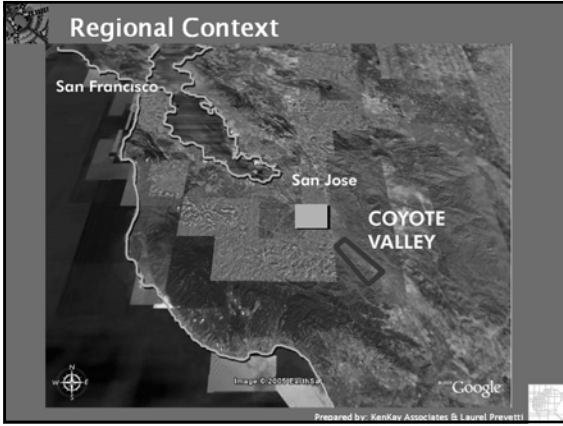
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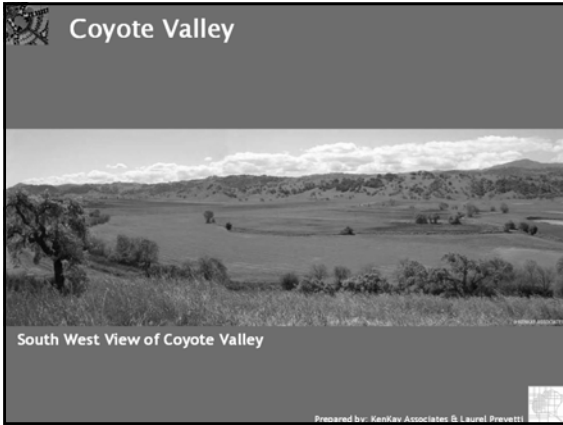
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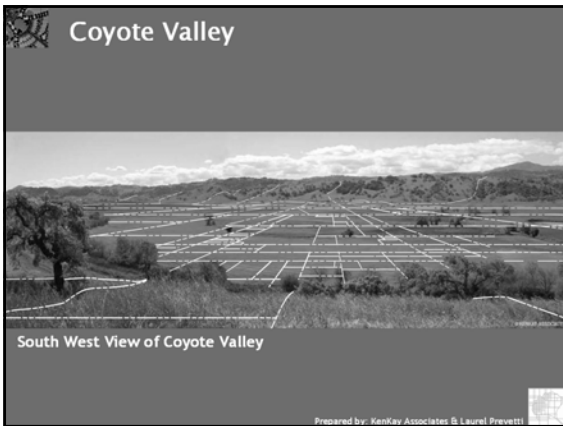
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## Coyote Valley Vision

**CITY COUNCIL'S VISION AND EXPECTED OUTCOMES:**

- New, Smart Growth, Pedestrian and Transit- Oriented Community
- Mixed-Use, Urban High Density
- Pay It's Own Way
- Environmentally sustainable and self- financing
- 50K Jobs, 25K Residences with Balanced Job and Housing Growth
- 25 Years Build-Out

**COMMUNITY BUILDING VISION FOR A NEW COYOTE COMMUNITY**

The natural and built environments must be planned and integrated as a sustainable and seamless place for communities of people, plants and wildlife.

A vibrant and sustainable built environment must be diverse in use and population, scaled for the pedestrian, and be capable of providing alternatives to the automobile with transit, bicycles and walking.

It must have a well defined public realm supported by built and unbuilt environments reflecting the natural ecology and culture of the region.

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## Coyote Valley History




Agriculture




Grazing



Flooding



Ohlone Indians



Changes to the land overtime  
(1876 Fisher Creek)

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## Coyote Valley Today




Coyote Creek




Agriculture




Coyote Hamlet



Spreckels Hillock



Laguna Seca (Dry Lake)



IBM Campus

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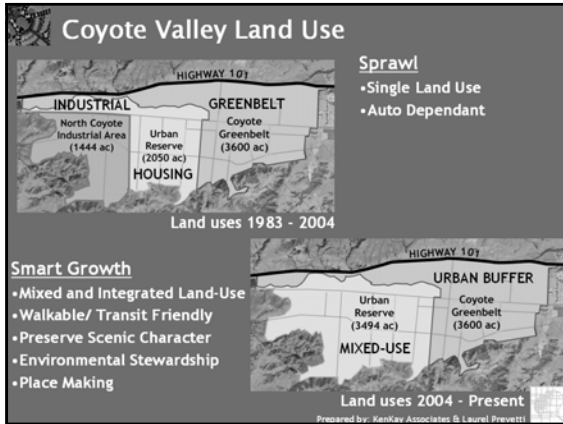
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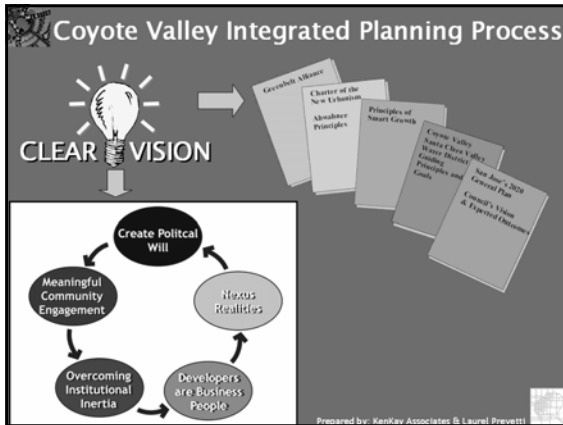
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## Meaningful Community Engagement



- Involve the community
- Listen for values
- Help define high quality of life
  - Visual preference surveys
  - Slide shows/voting exercises



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## Overcoming Institutional Inertia



- It is ok to start small
  - Focus on key geography (e.g., downtown, business district street, etc.)
  - Focus on land use type (e.g., housing or commercial)
  - Focus on environmental issue (e.g., sensitive species, riparian, etc.)
- Use regulation to be visionary



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## Institutional Realities

- Bureaucracies are slow to change
- Staff resources and training are essential
- Consider performance based measures (sustainability indicators) for budgeting and staff evaluation



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## Developers are Business People

- Appeal to the profit motive
- Sell lifestyle
- Recognize larger institutional barriers:
  - Insurance
  - Lending
- Consider incentives:
  - Faster permits
  - Reduced taxes
  - Multi-purpose lands



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## Nexus Realities

- Understand regulatory hierarchy
- Use Comprehensive/General Plan as policy foundation for "green" initiatives
- Modify zoning codes
- Modify other codes
- Modify internal procedures



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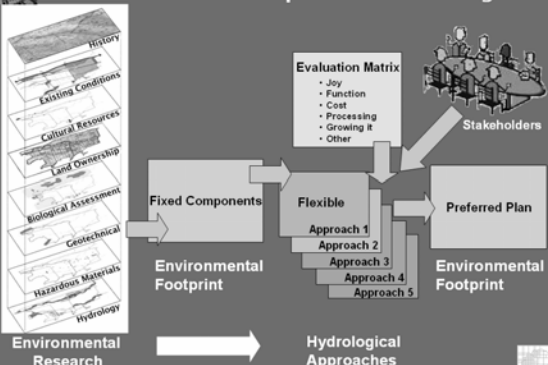
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## Environmental Footprint: Process Diagram



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## Outreach-Review/ Approval Agencies

### Regulatory Agencies

- Regional Water Quality Control District
- California Environmental Protection Agency
- Army Corps of Engineers
- Fish and Wildlife Services
- Department of Safety and Dams
- California Department of Fish and Game
- National Marine Fisheries
- USDA Natural Resource Conservation Service

### Santa Clara County

- County Parks & Recreation
- Santa Clara Valley Water District
- County Roads and Airports
- County Planning
- County Floodplain Administrator
- Department of Health Services
- Board of Supervisors
- County Communication

### City of San Jose

- Planning, Building & Code Enforcement
- Flood Plain Administrator
- Public Works
- Parks & Recreation
- Department of Transportation

### Housing

- Economic Development
- Fire
- Police
- Environmental Services
- Historic & Landmarks Commission
- Waste Water Pollution Control

### Transportation

- VTA
- Caltrans
- MTC
- Union Pacific Railroad
- Bay Area Transportation & Land Use
- Walk San Jose
- Silicon Valley Bicycle Coalition
- Peninsula Bicycle & Pedestrian Coalition
- Surface Transportation Policy Project

### Educational Stakeholders

- Center for Education Planning
- Gavilan College
- Morgan Hill Unified School District
- Oak Grove Elementary School District
- San Jose City College
- San Jose State University
- San Jose Unified School District

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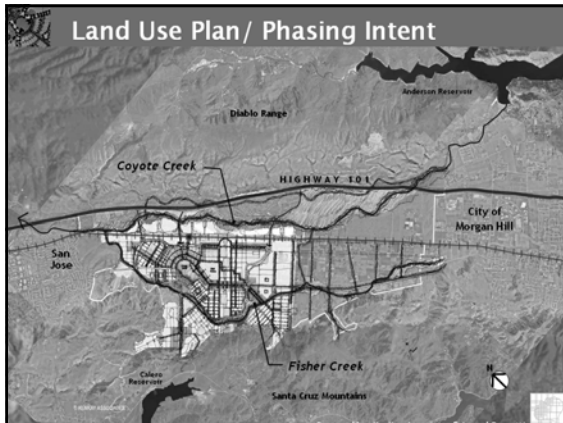
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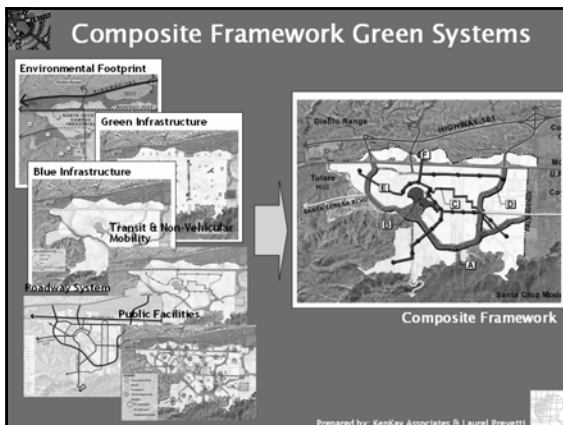
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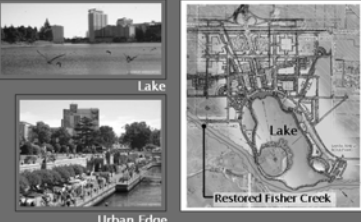
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## Blue Infrastructure- Coyote Lake



Lake

Urban Edge

Restored Fisher Creek

Lake Front Promenade

### Key Concepts

- Storm water Detention
- Recreation
- Visual Amenity/ Place Making
- Circulation- Walking/ Biking
- Lake 55 Acres (Approx.)
- Park 25 Acres (Approx.)
- Lake Walk 1.6 Miles

Prepared by: KenKay Associates B.

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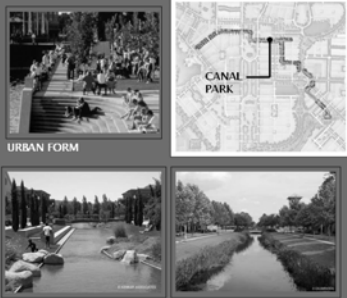
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## Blue Infrastructure- Canal Park



URBAN FORM

CANAL PARK

SOFT

NATURAL

### Key Concepts

- Linear Park
- Bio-Filtration
- Pedestrian/ Bicycle Circulation
- Storm Water Detention Quality
- 1.8 Miles

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## Green Infrastructure- Parks & Recreation



Community Park

Neighborhood Park

Recreational Trails

International Park

Laguna Seca Sports Fields

Central Commons

Greenbelt Sports Field

### Policies and Goals

- Connected Network Linked to Extensive Trail System
- Multi-Function System Circulation/Recreation Visual/ Place Making Stormwater, where appropriate
- Level of Service 75,000 population @ 3.2 acres/Labor 245

Neighborhood Parks	110
Community Parks & Facilities	117
Subtotal	227
Facilities to be Located	18
<b>Total</b>	<b>245</b>

• Other community facilities to be determined (Acreage preliminary)

Community Parks Typical School Shared Use park Neighborhood Parks County Park

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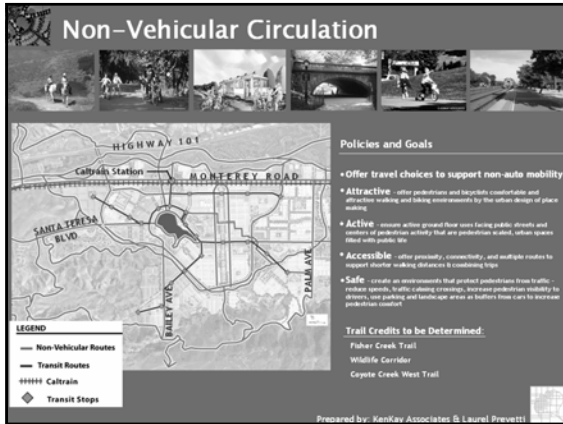
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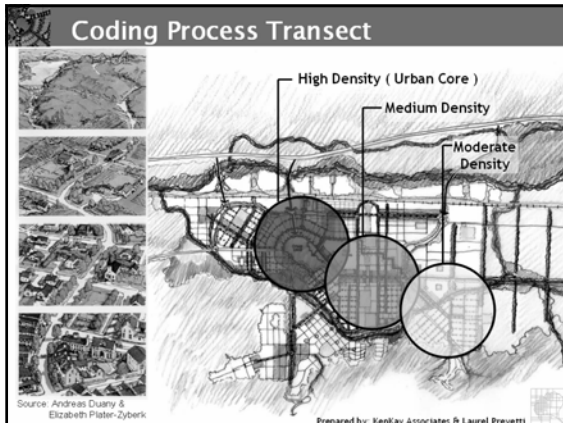
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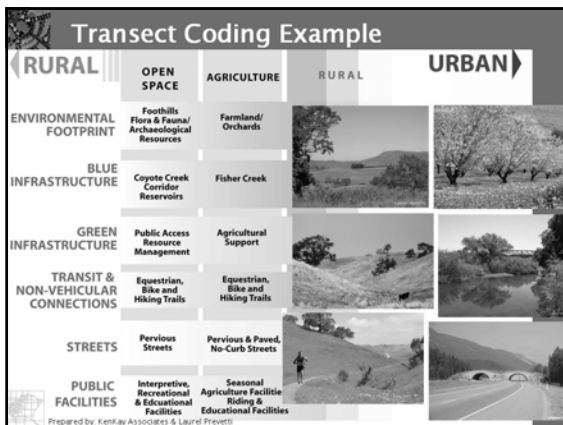
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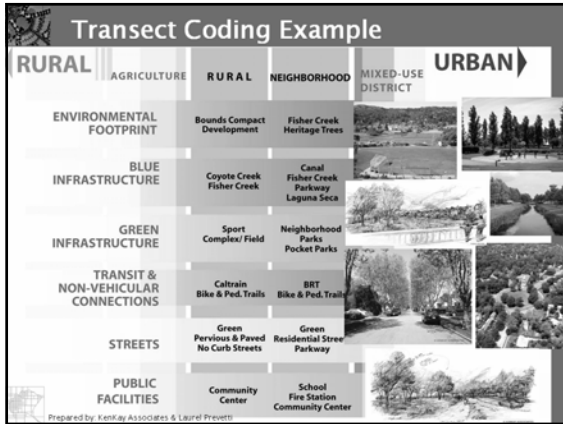
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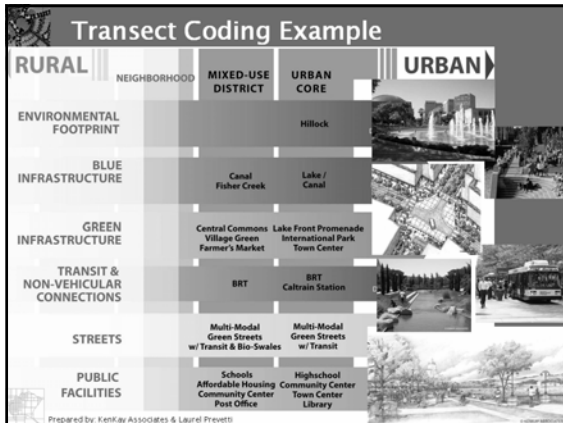
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### It is Not Too Late Even for "Built out" Communities



- Link new development with existing neighborhoods
  - Pedestrian/bike paths
  - Street connections
  - Strategic location of park/school/retail
- Complete facility master plans for
  - Trails, bicycle routes
  - Parks

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### Elements for Success

- Strong codes/policies
  - Clear intent
  - Balance flexibility with predictability
- Political will to create and implement are both critical
- Broad based coalitions
- Measure results
- Promote the good stories
- Modify if there are unintended consequences

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### Now is the Time

- Confluence of social equity, environmental sustainability, and economic goals
- Sensitivity to local conditions, values, and institutions



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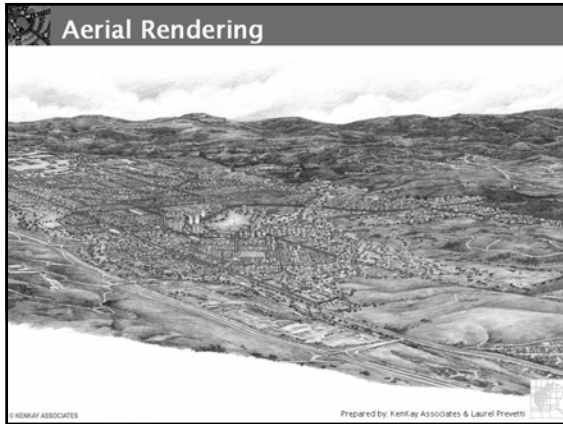
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## Acknowledgements

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**Planning Team**

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David Powers Associates  
Schaff & Wheeler  
Wetlands Research Associates  
Basin Research Associates  
Engeo  
Lowney Associates

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## Advancing LEED

**LEED: LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN – GREEN BUILDING RATING SYSTEM**

- Consensus-based national standard for sustainable buildings
- Integrated, whole building design practices
- Recognize environmental leadership
- Raise consumer awareness
- Green competition and transform building industry

**LEED FOR NEIGHBORHOOD DEVELOPMENT RATING SYSTEM: LEED-ND**

- Under Development
- Consensus based national standard – CNU, USGBC & NRDC
- Integrates Smart Growth, Urbanism and green building for neighborhood design

**GREENING THE CODE**

- More expansive than LEED-ND
- Regional and city scale
- Systems approach to integrating and designing ecological infrastructure for sustainability
- Not rating system, planning and coding system

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