RE-Envisioning Bel-Red
A Case Study in Planning for Sustainability

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When we try to pick out anything by itself, we find it hitched to everything in the universe
John Muir. 1892

This book is a personal testament to the power of sun, moon, and stars, the changing seasons, seedtime and harvest, clouds, rain and rivers, the oceans and the forests, the creatures and the herbs. They are with us now, co-tenants of the phenomenal universe, participating in that timeless yearning that is evolution, vivid expressions of time past, essential partners in survival and with us now involved in the creation of the future.

…Man is that uniquely conscious creature who can perceive and express. He must become the steward of the biosphere. To do this he must design with nature.

Ian McHarg, Design with Nature, 1969

The key to making substantial greenhouse gas reductions and stemming global warming is to encourage smarter development patterns rather than sprawl
Reid Ewing, National Center for Smart Growth, 2008
RE-Envisioning Bel-Red

Smart Growth
- Transit Oriented Development
- Low Impact Development
- Energy Conservation
- Biodiversity Conservation

Climate Change
- Growing Cooler
- Ecology Restoration
- Pollution Prevention
- Conservation Design

Sustainable Development
- Best Management Practices
- Ecological Indicators
- Growth Management

Green Infrastructure
- Place-making
- Transfer Of Development Rights
Convergence
Principles for Green Planning

- Location
- Design with nature—Protect/restore natural features
- Diversity of uses
- Compact development form
- Reduce auto dependence/transportation choices
- Walkability
- Sense of place
- Green construction & technology
- Green stormwater management
- Community and stakeholder collaboration
Summary of Project

- Long-range plan update for Bel-Red Corridor (launched by City Council in August, 2005)
- Coordinated land use/transportation plan
- Identify preferred routing and station locations for light rail (being considered in East Link project)
Existing Plan and Zoning

Existing Comprehensive Plan land use designations shown below.
Study area—topography
Stream Characterization
Headwaters of Kelsey Creek

Goff Creek - includes relatively undisturbed natural habitat

Unnamed Tributary of Kelsey Creek

Valley Creek - diverse habitat suitable for salmon

Tributary to Valley Creek

West Tributary of Kelsey Creek

Lake Bellevue

Study Area Boundary

Photo locations:
- Streams with no anadromous fish presence (Streamnet 2003)
- Streams with anadromous fish presence (Streamnet 2003)
- Piped streams
- Open streams
- Approximate study boundary
- National Wetlands Inventory
# Market Forecast

<table>
<thead>
<tr>
<th>Use</th>
<th>Higher End</th>
<th>Mid-Level</th>
<th>Lower End</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Commercial (Office, Retail)</strong></td>
<td>4.5 million sf (4 million office, 500K retail)</td>
<td>3.5 million sf (3.2 million office, 300 K retail)</td>
<td>2.5 million sf (2.3 million office, 200 K retail)</td>
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<tr>
<td><strong>Housing</strong></td>
<td>5,000 units</td>
<td>3,500 units</td>
<td>2,000 units</td>
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**Ranges of Development in Alternatives:**

- **Mid-Range:** 3.5 million square feet commercial, 3,500 housing units
- **Higher Housing, Lower Employment:** 2.5 million square feet commercial, 5,000 housing units
- **Higher Employment, Higher Housing:** 4.5 million square feet commercial, 5,000 housing units.
TOD--Ideal Station
Ideal Station

Neighborhood Hub
Grocery Store
In-Line Retail Shops
Office
Support Services
Public Gathering Area

Light Rail

1/4 Mile

1/8 Mile

Moderate Density Residential

High Density Residential
Potential TOD/Mixed Use Nodes
Envisioning Bel-Red

Fundamental Concept

Transit-oriented

Places to Arrive

Distinctive Neighborhoods

Unifying Green Spine

Natural Environment featured

Downtown Bellevue

Microsoft Campus (Redmond)
Transit Oriented Nodes

122nd Station Area (103 acres)
- Office focus with residential and retail uses
- Spring District proposal
- Provision being contemplated for 20% residential in projects 5+ acres

130th Station Area (82 acres)
- Mix of residential and retail uses
- Limitations on office intensities
- Pedestrian-oriented retail street on 130th Avenue
- Most parcels under 3 acres in size
“Great Streams” Vision

- Improve ecological function
- Create wider riparian corridors
- Allow human interaction with streams - “Place-making”
- Look for “Opportunity Areas” - co-locate parks, trails, bike paths, stormwater facilities within stream corridors
- Integrate ecological improvements in transportation, stormwater and parks projects
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West Tributary

• Wetland/wildlife focus
• Stormwater management
• Passive recreation
• Environmental education
• Trail network

“Great Streams” Vision

Existing Conditions
Goff Creek

- Stream feature part of urban development
- Salmon spawning
- “Green infrastructure”
- Open space

“Great Streams” Vision

Existing Conditions
Developing Conceptual Design

Riparian Corridors

Fish passage & habitat

Trails and Features
Draft Key Projects with Multiple Benefits

- Project WT1 - BNSF/West Trib Connection
- Project WT2 - 120th Ave NE
- West Tributary Ped-Bike Trail
- Project WT3 - 124th Ave
- Project WT4 - Wetland/Regional Pond Location
- Project BNSF 1 - BNSF/NE 16th
- Project WT5 - NE 16th
- Project WT6 - Daylight West Tributary
- Project WT7 - Bel-Red Road Culvert Replacement
- NE16th (proposed)
- Project Goff 1 - Daylight Goff Creek
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Park & Open Space Concept – Composite
Parks, Open Space & Trail System

Neighborhood Parks

Multi-use Trails (NE 15th/16th, BNSF)

Mini Parks, Gateways & Trailheads

Trail Connections along Stream Corridors

$16M first phase investment
Preferred Alternative Map

Legend

- Retail (Pedestrian-oriented)
- Commercial/Retail
- Mixed-use Housing/Retail
- Housing
- Mixed-use Housing/Office or Office (near 124th & 148th)
- Office/Housing (transition area)
- Office/Medical Office
- Cultural Arts District

Transit Stations (with 1/4-mile radius)
Other Transit Station Options
Regulatory 50-ft Buffer
Additional 50-ft Incentive Buffer

Proposed Light Rail Alignment
Potential Community/Neighborhood Park and Open Space Opportunities
Green Streets
Park Blocks

* Color-intensity denotes intensity of development

Optional locations and alignments for Overlake Hospital Transit Station (to be determined through separate process).

Parks and open space is a key component of the land use vision. Park features are shown conceptually, and will be further developed during project implementation.
Existing Street Grid
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Finer Local Street Grid w/ in Nodes
Key to Connectivity/Walkability
**Active Edges**

Active edges are characterized as building frontages with direct entries from the sidewalk and a high degree of transparency. This increased visual and physical interaction between the people inside and outside the buildings, creates a safe and vibrant pedestrian environment.
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Hydrologic Dispersal with LID
(generic diagram)

HOW LOW IMPACT DEVELOPMENT ELEMENTS WORK TO MIMIC WATERSHED PROCESSES

**HOUSES** use different strategies to collect, infiltrate, and cleanse rainwater.
- splashblocks
- rocks
- furrows or channels
- stormwater pop-ups
- planted depressions (raingardens)
- yard drains

**STREETS** slope to one side and cuts in curb direct rainwater into planted and grass swales.

**SWALES** collect, absorb, and filter rainwater from streets and houses into the ground before going into the city storm drain.

**CONVEYANCE FURROWS** direct water away from the house via a path of gravel and crushed rock.

- **slotted pipes** enable water to seep into the ground while moving away from the house and into the rain garden.
- **stormwater pop-ups** release water into the yard.
- **swales** are designed with crossing points.
- porous concrete **sidewalks** allow water to pass through into the ground.
- **yard drains** direct rainwater to swales or a pipe.
- splash blocks slow and direct water away from the house and should be kept clean of leaves.
- **city storm drain** to carry bigger rainstorms
  - filter soil mix
  - slotted pipe (underdrain)
  - rocky soil holds water until it seeps into the pipe.
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Potential Low Impact (Re)Development Elements -- Public and Private Projects

- Bioretention
  - Natural Drainage Swales
  - Stormwater Planters
  - Rain Gardens
- Permeable Pavement
- Vegetated Roofs
- Small Scale Surface Detention
Screenshot of borings color coded by depth, overlain on aerial coverage, one of many of the City’s GIS themes.
Areas of high potential permeability

2006 mapping
Draft Transportation Phasing
NE 15th/ 16th Key Design Elements

• Key new urban arterial with light rail and green infrastructure
• 4/5-lanes with light rail in the median
  • Interim 2/3 lane configuration with outside lanes for on-street parking or bus use that can be converted to general auto use in the future to meet capacity needs.
• Wide (urban scale) sidewalks both sides
• Multi-purpose off-street pedestrian and bicycle path – continuous on the north side
• Connective “green” elements: urban open spaces; significant tree canopy; natural drainage practices; and landscaping
NE 15th/16th Existing Condition
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Draft Bel-Red Subarea Plan

- Guiding policy document
- Directs that most new development occurs in **mixed-use, transit-oriented nodes**
- Supports multi-modal transportation system, with light rail as a key element
- Delineates parks and stream restoration projects
- Addresses a wide framework of other policy and implementation
Bel-Red Subarea Plan

- Develop a sustainable urban development pattern that dramatically reshapes the future of the Bel-Red Subarea, while allowing the area to transition gracefully from its past.
  - A thriving economy
  - Vibrant, diverse neighborhoods
  - A comprehensive, connected parks and open space system
  - Environmental improvements
  - A multi-modal transportation system
  - A sense of place
  - A unique cultural environment
  - Appropriate scale of development
  - Timing of development
  - Sustainability
Housing Goal

- Create a diversity of housing types and prices, including a significant share of “workforce housing.”
  - Encourage a diversity of housing types
  - Promote owner and rental affordability with targets for:
    - Low income households
    - Moderate income households, and
    - “Work force” household above the low and moderate levels
  - Integrate with a citywide approach
Implementation Strategy: Key Elements

- Comprehensive Plan Amendments
- Land Use Code, Design Guidelines
- Zoning
- Phasing Plan
- Financing Plan and Ordinances
- Infrastructure Development Standards
- Bellevue/Redmond Growth Impact Reconciliation/New Interlocal Agreement
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- New street grid, 300-350 foot block faces
- FARs up to 3.5 (through incentives)
- Building heights up to 150 feet (through incentives)
- Required ground-floor commercial/retail on 130th and fronting NE 15th/16th
- Neighborhood & mini parks, urban plazas
- Parking ratios to encourage modal choice
- Pedestrian and bicycle network (local and regional connections)
• Ambitious Incentive Zoning strategy will be a key contributor to parks, stream restoration, affordable housing
• Tiered system - Tier 1 funds parks, streams, and affordable housing first
• Tier 2 includes art uses, child care, non-profit space, public restrooms, public art, plazas, LEED gold/platinum, active recreation areas, and natural drainage features.
Regional TDRs

- Subarea Plan: “consider the Bel-Red Subarea as a potential receiving site for regional Transfer of Development Rights (TDRs), as a means to achieve conservation of rural resource lands outside the Countywide Urban Growth Boundary”

- Now exploring with King County a mechanism to accomplish this as part of the incentive zoning system
Public Process

• **Three-year planning process**

• **Council-appointed Steering Committee**
  – Final committee recommendation September 2007

• **Preparation of Draft EIS and Final EIS; analysis of a range of alternatives**

• **Broad public involvement**
  – 7 community-wide meetings
  – Series of panel discussions with business and property owners
  – Formal public hearing w/ 340 individual comments on hearing drafts
  – Regular City Council updates and briefings
  – Unprecedented involvement of 6 City boards/commissions, including 2 joint meetings
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Bel-Red: A Vision for 2030