Grey parcels only

Stable Parcels

• Newer buildings
• Uses unlikely to move
• High L/I ratio (90% and more)

Stable Parcels
Soft Parcels

- Vacant lots
- Surface parking
- Underutilized parcels (includes L/I ratio 60% or less)
- Lots 6 acres or larger

Large Parcels

Other Parcels
Constrained Areas

- Steep Slopes
- Streams and Wetlands

• Natural Resource/critical areas - streams & wetlands
• Slopes 25% or greater
Potential Development Areas

Stable Parcels

Large Soft Parcels

Other Soft Parcels

Constrained areas:
- Steep slopes
- Streams/wetlands

Potential Development Areas
HCT Lessons Learned
Fundamentals

1) Picking the Best Alignment
2) Alignment Design
3) Station Area Planning
4) Implementation
South/North Alignment Options
North Alignment Options

Interstate Ave. → Interstate 5
Ideal Station

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

- Light Rail
  - 1/4 Mile
  - 1/8 Mile

- High Density Residential
- Moderate Density Residential

- Roads to Station
**IDEAL TOD ASSUMPTIONS**

![Diagram of Ideal Transit Oriented Development (TOD)]

The Ideal Transit Oriented Development (TOD) has the following characteristics:
- Occurs on vacant land within a 360 degree, 1/4 mile radius of the transit stop.
- Has a neighborhood hub adjacent to the transit station containing a grocery store, retail, support services and public gathering space.

Assumptions related to the Ideal TOD development potential and transit ridership are listed below:

**Gross Areas - Ideal TOD**
- Within 1/8 mile of station: 31.4 acres
- 1/8 mile to 1/4 mile of station: 94.2 acres

**Developable Area**
- Subtract 10% for environmentally sensitive areas: 20.4 acres
- Subtract 25% for streets and public facilities: 61.2 acres
- Within 1/8 mile of station, 31.4 acres x 65%: 20.4 acres
- 1/8 mile to 1/4 mile of station, 94.2 acres x 65%: 61.2 acres

**Households & Employment**
- 20.4 acres x 40 dwelling units/acre: 816 units
- 61.2 acres x 25 dwelling units/acre: 1,531 units
- Employment, 3 acres x 95 employees/acre: 285 employees

**Generated Trips**
- 2,347 dwelling units x 10.8 trips per day: 25,347 trips per day
- 285 employees x 24.88 trips per day: 7,090 trips per day

**Transit Trips**
- 32,437 trips x 10% on transit: 3,244 trips per TOD
Station Location Evaluation

1) **Existing Population** - Existing population within ¼ mile of the station

2) **Future Development** - Potential for new development within ¼ mile of the station

3) **Neighborhood Hub** - Potential for a neighborhood hub adjacent to the study

4) **Pedestrian Access** - Potential for on-grade access from all directions

5) **Platform Environment** - Potential for an on-grade platform in a quiet safe environment

6) **Traffic Effects** - Intermodal connections and effects on traffic

<table>
<thead>
<tr>
<th>Good</th>
<th>Good/Fair</th>
<th>Fair</th>
<th>Fair/Poor</th>
<th>Poor</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>
Alignment Selection
Lessons Learned

1) Make TOD development potential a major consideration in the corridor selection process.

2) Be clear about how TOD development potential is defined.
Fundamentals

1) Picking the Best Alignment
2) Alignment Design
3) Station Area Planning
4) Implementation
Good Streets = Good Neighborhoods
Bad Streets = Bad Neighborhoods
## Alignment Design Priorities

<table>
<thead>
<tr>
<th>Typical</th>
<th>Recommended *</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) High Capacity Transit</td>
<td>1) Light Rail Transit</td>
</tr>
<tr>
<td>2) Car/Truck Lanes</td>
<td>2) Pedestrians</td>
</tr>
<tr>
<td>3) Bicycles</td>
<td>3) On-Street Parking</td>
</tr>
<tr>
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</tr>
<tr>
<td>5) Pedestrians</td>
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</table>

* Investors are attracted to pedestrian friendly streets.
## Alignment Design Priorities

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<td>4) Car/Truck Lanes</td>
</tr>
<tr>
<td>5) Pedestrians</td>
<td>5) Bicycles</td>
</tr>
</tbody>
</table>

* Investors are attracted to pedestrian friendly streets.
With Good Streets
+$234 Million

With Poor Streets
+$40 Million
Alignment Design
Lessons Learned - Interstate

1) Recognize that the street investment environment can be seriously eroded by additional right-of-way requirements.

2) Recognize that adjacent neighborhoods can be degraded by a poor pedestrian environment along the alignment.

3) Clearly define the criteria to be used to evaluate the street investment environment.

CRANDALL ARAMBULA, PC
Fundamentals

1) Picking the Best Alignment
2) Alignment Design
3) Station Area Planning
4) Implementation
Ideal Station

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

- Light Rail
- 1/4 Mile
- 1/8 Mile
- Roads to Station
Agency Concept

Design Concept ($500,000)
Hillsboro development
Oregon’s top project

Take a mix of housing, parks, a traditional neighborhood “main street” retail area and a community shopping center and what do you have? The DJC’s top construction project for 1999.

Orenco Station is a well-publicized and much-honored experiment in mixed-use development taking shape on 190 acres along the westside light-rail line in Hillsboro. It has attracted nationwide attention as an example of “New Urbanism,” a move to incorporate the successful elements of traditional neighborhoods as an alternative to sprawl, and has won praise from the likes of Vice President Al Gore, who called it a “smart development” for the type of land-use planning and neighborhood design that’s needed to create more livable communities in America.

A man promenade connects Orenco Station to the MAX line, extending from the light-rail station through multi-family housing and the town center retail area, and terminating in the community’s main park.

Traditional architecture, tree-lined streets and numerous open spaces — including two large parks — are signatures of the development. Garages are tucked behind homes on test driveway lanes, and a large central park with two pavilions serves as the centerpiece of the community.

The friendly environment makes Orenco Station a closer to the street and feature detailed Craftsman and English Cottage exterior, many with front porches. Single-family, detached and attached houses are integrated to help create the look and feel of a traditional neighborhood. Carriage town can be built atop the garages to extend or separate living spaces.

At the heart of Orenco Station is a mixed-use town center of shops, restaurants and offices with loft residences above. Also in the town center are live/work townhomes reminiscent of San Francisco’s Potrero neighborhoods, with workspaces below and living spaces above. These are served by test driveway lanes, and the street is designed to capture the essence of a neighborhood business district.

At the southeast corner of the community, located at the intersection of Cornell and Cornelius Pass roads, is The Crossroads at Orenco Station, a 50-acre, mixed-use development that features a supermarket, sporting goods store and other retailers.

The entire Orenco Station community adheres to certain design guidelines and common village architectural themes, features and materials.

Pacific Real Estate Associates (PacTrust) is the master developer for Orenco Station and will own and manage the two commercial sites. PacTrust has teamed up with Costa Pacific Home to build approximately 450 single-family cottages and townhomes. A pair of neighboring multifamily projects featuring nearly 1,400 apartments are being built by Simpson Housing and FairField Investments.

The land-planning team also consists of PacTrust, Turner & Associates, Fletcher Farr Ayers, Walker & Macy and Alpha Engineering Inc.
Station Area Planning
Lessons Learned – Orenco Station

1) The station location can have a significant impact on future development potential.

2) The station area “neighborhood hub” must be located and designed using fundamental economic siting requirements.

CRANDALL ARAMBULA, PC
Station Area Planning
Lessons Learned – Beaverton Creek

1) Station area development plans – land use and circulation frameworks – need to be developed concurrent with preliminary engineering.

2) Supporting ordinances and design guidelines need to be adopted to ensure plan implementation.

Crandall Arambula, PC
COMING SOON.

Beaverton, OR
Beaverton looks to take control of the Round

City officials want to bring in their own developer to finish the beleaguered downtown centerpiece.

The Round was expected to include stores, offices, condominiums, apartments, a movie theater and a hotel surrounding a brick courtyard, all accessible by light rail.

If the land goes into foreclosure, it could be sold at a sheriff's sale. If that happens, the city would be in danger of losing the land altogether.

Offer for land falls

Beaverton downtown deal collapses again

Contractors who have gone unpaid balk at a deal in which the city would take over the Round at Beaverton Central

By AARON PENTRESS
THE OREGONIAN

BEAVERTON — Lienholders have turned down a proposed deal expected to save the Round at Beaverton Central, leaving the city and developers looking for other ways to complete the perpetually-under-construction downtown core.

Beaverton had offered to buy the 4.5-acre site from BCB Group Developers LLC for $3.4 million over two years. That money would have gone to about 75 contractors owed $4.8 million to keep them from foreclosing on the property on Southwest Watson Avenue, just north of Canyon Road.

A handful of lienholders wary about giving up their lien rights, however, did not like the deal because it lacked guarantees that future city administrations would continue to make the staggered payments.

If nothing is resolved, lienholders could begin foreclosure proceedings that could result in a sheriff's sale of the property. But most have indicated that they would like to see the project completed.

Beaverton officials made the purchase offer to try to avoid foreclosure. They remain hopeful the project will be completed by either BCB or another developer, said Linda Aldard, Beaverton chief of staff and lead negotiator for the city. But securing an investor has proved difficult.

Beaverton and BCB have begun discussing other alternatives to save the project, envisioned as an amalgamation of stores, offices, condominiums, apartments, a movie theater and hotel surrounding a brick courtyard and accessible by light rail.

At this point, Beaverton taxpayers are not losing money on the project. Beaverton exchanged the land, valued at $2.7 million, to BCB for its work on preparing the soft soil for construction. That work cost about $3 million more than the land's value, prompting Beaverton to give BCB a $5 million tax break over 10 years.

Please see ROUND, Page C7

Round: Developer ran out of cash

Continued from Page C1

“'The reality is that all of the creditors are victims and they have the right to the $2.9 million in liens now,' she said.

That means contractors would probably end up having to settle.
Station Area Planning
Lessons Learned – Beaverton
Round

1) Developer offerings are not a substitute for a station area framework plan

2) Developer offerings should be responsive to an adopted framework plan
17 years later ...
Station Area Planning
Lessons Learned – Rockwood

1) A transit station alone will not stimulate development.

2) A station area development framework plan is necessary to create investor interest.
Without
Development Framework
$9.5 Million

With
Development Framework
$83.5 Million
<table>
<thead>
<tr>
<th>Development Type</th>
<th>Existing Framework</th>
<th>Development Framework</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Units</td>
<td>Area</td>
</tr>
<tr>
<td><strong>Residential</strong></td>
<td></td>
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<tr>
<td>Town Houses</td>
<td>38</td>
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<tr>
<td>Housing</td>
<td>45</td>
<td>-</td>
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<tr>
<td><strong>Office</strong></td>
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<tr>
<td>New</td>
<td>-</td>
<td>11,000</td>
</tr>
<tr>
<td>Renovated</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Retail</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New</td>
<td>-</td>
<td>-</td>
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<tr>
<td><strong>Service Commercial</strong></td>
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<tr>
<td>New</td>
<td>-</td>
<td>-</td>
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<tr>
<td><strong>Light Industrial</strong></td>
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<tr>
<td>New</td>
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<tr>
<td><strong>Denver Ave. Renovation</strong></td>
<td></td>
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<tr>
<td>Lofts</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>SRO &amp; Apartments</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Office</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Retail</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Parking</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>83</td>
<td>11,000</td>
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## Revenue Benefit

### INVESTMENT

<table>
<thead>
<tr>
<th></th>
<th>Without Development Plan</th>
<th>With Development Plan</th>
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<tbody>
<tr>
<td>Public Improvements</td>
<td>$0</td>
<td>$9.5 Mill.</td>
</tr>
<tr>
<td>Private Development</td>
<td>$9.5 Mill.</td>
<td>$83.5 Mill.</td>
</tr>
<tr>
<td>Land Acquisition (Net Neutral)</td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>

### NEW REVENUES (Annual)

<table>
<thead>
<tr>
<th></th>
<th>Without Annual Revenues</th>
<th>With Annual Revenues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxes From New Development ($20/$1000 of assessed value)</td>
<td>$190,000</td>
<td>$1,670,000</td>
</tr>
<tr>
<td>Taxes From Existing Development Upgrade (Not Included)</td>
<td>plus</td>
<td>plus</td>
</tr>
<tr>
<td>Farebox Income (10% of new trips on transit)</td>
<td>$52,000</td>
<td>$582,000</td>
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</tbody>
</table>

### NEW EXPENSES (Annual)

<table>
<thead>
<tr>
<th></th>
<th>Without Annual Expenses</th>
<th>With Annual Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Debt Service ($9.5 Mill. @ 5.5% with 10 year payoff)</td>
<td>$0</td>
<td>$1,237,200</td>
</tr>
<tr>
<td>Operating Expenses (Not Included)</td>
<td>minus</td>
<td>minus</td>
</tr>
</tbody>
</table>

### SUMMARY

<table>
<thead>
<tr>
<th></th>
<th>Without Summary Total</th>
<th>With Summary Total</th>
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</thead>
<tbody>
<tr>
<td>New Revenues</td>
<td>$242,000</td>
<td>$2,252,000</td>
</tr>
<tr>
<td>Less: New Expenses</td>
<td>$0</td>
<td>$1,237,200</td>
</tr>
</tbody>
</table>

| PUBLIC REVENUE BENEFIT (Annual)     | $242,000               | $1,014,800         |

### Station Area
Station Area Planning
Lessons Learned - Kenton

A development framework can:
1) Enhance the existing neighborhood.
2) Stimulate transit supportive development by minimizing the investor’s risk.
3) Increase tax increment revenues.
4) Increase transit ridership.
Fundamentals

1) Picking the Best Alignment
2) Alignment Design
3) Station Area Planning
4) Implementation
Priorities
Public Investment $1,800,000 1.0
Private Investment $13,100,000 7.0
## Investment Potential

<table>
<thead>
<tr>
<th></th>
<th>Private Investment</th>
<th>Public Investment</th>
<th>Investment Ratio</th>
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<tbody>
<tr>
<td>Priority 1</td>
<td>$13,100,000</td>
<td>$1,800,000</td>
<td>7/1</td>
</tr>
<tr>
<td>Priority 2</td>
<td>$7,200,000</td>
<td>$700,000</td>
<td>10/1</td>
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<tr>
<td>Priority 3</td>
<td>$26,600,000</td>
<td>$900,000</td>
<td>30/1</td>
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<tr>
<td>Priority 4</td>
<td>$12,600,000</td>
<td>$600,000</td>
<td>21/1</td>
</tr>
<tr>
<td>Priority 5</td>
<td>$4,500,000</td>
<td>$500,000</td>
<td>9/1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$64,000,000</strong></td>
<td><strong>$4,500,000</strong></td>
<td><strong>14/1</strong></td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>$19,500,000</td>
<td>$2,600,000</td>
<td>7/1</td>
</tr>
<tr>
<td>Community Center</td>
<td>-</td>
<td>$2,400,000</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$83,500,000</strong></td>
<td><strong>$9,500,000</strong></td>
<td><strong>9/1</strong></td>
</tr>
</tbody>
</table>
Implementing Plans
Lessons Learned – All Stations

An implementation strategy requires:
1) Identifying catalyst projects.
2) Estimating costs for catalyst projects - public and private.
3) Establishing project priorities.
4) Developing zoning ordinances and design guidelines.
5) Assigning responsibilities and preparing a schedule.
6) Constructing street and open space improvements to catalyze private development.

CRANDALL ARAMBULA, PC
Potential Development Areas

- Large Soft Parcels
- Other Soft Parcels
- Constrained areas:
  - Steep slopes
  - Streams/wetlands

Potential Development Areas
Potential Alignments

SR 520 Option

16th Street Option

Bel-Red Option

1/4 Mile Radius

Potential Alignments
16th Street Alignment Option

Station Area Potential Development 166 ac

53 ac
95 ac
18 ac

1/4 Mile Radius
Bel-Red Alignment Option

- 18 ac
- 58 ac
- 53 ac

Station Area Potential Development 129 ac

1/4 Mile Radius
SR 520 Alignment Option

Station Area Potential Development 92 ac

33 ac

5 ac

53 ac

1/4 Mile Radius
Station Area Potential Development

- **SR 520 Option**
  - 92 ac

- **16th Street Option**
  - 166 ac

- **Bel-Red Road Option**
  - 129 ac