Correctional Facility Siting – Comparative Site Evaluation

Report to Prison Relocation Commission

August 11, 2015
AGENDA

Correctional Facility Siting: Report to PRC

- Sites Under Consideration
- Comparative Site Evaluation Process
- Comparative Site Evaluation Categories and Criteria
- Comparative Site Evaluation Matrix
Sites Under Consideration
Sites Under Consideration

Four Sites

• I-80 / 7200 West (Salt Lake City)
• SR 138 Industrial Park (Grantsville)
• Lake Mountains West (Eagle Mountain)
• Cedar Valley South (Fairfield)
Comparative Site Evaluation Process
Comparative Site Evaluation Process

- Cultural resources research
- Phase I Environmental Site Assessments
- Wetland delineations
- Special status species studies
- Geotechnical investigations
- Property appraisals
- Title research
Comparative Site Evaluation Process

- Boundary and topographic surveys
- Well development feasibility study
- Utility system studies
- Water rights research
- Road access studies
- Cost estimates
- Permits research
Comparative Site Evaluation Process

Challenge

• Compile large volume of highly technical information
• Organize information for ease of use
• Compare and contrast each site’s unique features and considerations
• Consider quantifiable and non-quantifiable topics
• Thorough and comprehensive
• Easy to understand
• Aid decision-making process
Comparative Site Evaluation Process

Solution: Comparative Site Evaluation Matrix
Comparative Site Evaluation Process – Categories and Criteria

<table>
<thead>
<tr>
<th>Evaluation Categories</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Considerations</td>
<td>10</td>
</tr>
<tr>
<td>Environmental Resource Considerations</td>
<td>11</td>
</tr>
<tr>
<td>Land Use Considerations</td>
<td>6</td>
</tr>
<tr>
<td>Utility Service Considerations</td>
<td>7</td>
</tr>
<tr>
<td>Access Considerations</td>
<td>12</td>
</tr>
<tr>
<td>Property Acquisition Considerations</td>
<td>4</td>
</tr>
<tr>
<td>Community Considerations</td>
<td>11</td>
</tr>
<tr>
<td>Capital Cost Considerations</td>
<td>14</td>
</tr>
<tr>
<td>Key Long-Term Operating Cost Considerations</td>
<td>10</td>
</tr>
</tbody>
</table>

Total Evaluation Categories: 9
Total Criteria: 85
## Comparative Site Evaluation Matrix (Example)

<table>
<thead>
<tr>
<th>Evaluation Category</th>
<th>Criteria</th>
<th>I-80/7200 West</th>
<th>SR 138 Industrial Park</th>
<th>Lake Mountains West</th>
<th>Cedar Valley South</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SITE CONSIDERATIONS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jurisdiction</td>
<td>Salt Lake City, Salt Lake County.</td>
<td>Grantsville City, Tooele County.</td>
<td>Eagle Mountain City, Utah County.</td>
<td>Town of Fairfield, Utah County.</td>
<td></td>
</tr>
<tr>
<td>Site Acreage (Total)</td>
<td>4,000+ acres.</td>
<td>3,000+ acres.</td>
<td>700+ acres.</td>
<td>2,700+ acres.</td>
<td></td>
</tr>
<tr>
<td>Site Acreage (Developable)</td>
<td>1,000+/-. acres.</td>
<td>2,000+ acres.</td>
<td>600+ acres.</td>
<td>2,000+ acres.</td>
<td></td>
</tr>
<tr>
<td>Conceptual Design Fit Test</td>
<td>Capable of siting 360-acre conceptual design with capacity expansion potential.</td>
<td>Capable of siting 360-acre conceptual design with capacity expansion potential.</td>
<td>Capable of siting 360-acre conceptual design with capacity expansion potential.</td>
<td>Capable of siting 360-acre conceptual design with capacity expansion potential.</td>
<td></td>
</tr>
<tr>
<td>Site Expansion Potential</td>
<td>Somewhat limited; bordered by conservation zones, I-80, International Center, former landfill, canals.</td>
<td>Yes, expansion potential beyond 500 acres.</td>
<td>Yes, expansion potential beyond 500 acres.</td>
<td>Yes, expansion potential beyond 500 acres.</td>
<td></td>
</tr>
<tr>
<td>Topography (Elevation and Average % Slope)</td>
<td>Elevation: 4,215-4,225 feet above mean sea level. Level (0-1% average).</td>
<td>Elevation: 4,300-5,000 feet above mean sea level. Moderately sloping (5-10% average).</td>
<td>Elevation: 4,835-4,850 feet above mean sea level. Level (0-1% average).</td>
<td>Elevation: 4,870-5,160 feet above mean sea level. Slightly sloping (0-5% average).</td>
<td></td>
</tr>
</tbody>
</table>
Comparative Site Evaluation Process

After analyzing 9 categories and 85 criteria, key drivers are:

- Capital Costs
- Key Long-Term Operating Costs
- Everything Else
  - Site Considerations
  - Environmental Resource Considerations
  - Land Use Considerations
  - Utility Service Considerations
  - Access Considerations
  - Property Acquisition Considerations
  - Community Considerations
Comparative Site Evaluation Matrix
Comparative Site Evaluation Matrix

I-80 / 7200 West Site (Salt Lake City)
Comparative Site Evaluation Matrix

I-80 / 7200 West Site (Salt Lake City)
• Sufficient developable land; meets conceptual design fit test
• Complex subsurface conditions resulting in highest site preparation costs
• Environmentally sensitive; adjoins conservation and recreation areas, wetlands, canals, etc.
• Past land uses (former landfill, military use, etc.) may require remediation
• 2 viable water and wastewater service providers (Salt Lake City and Magna Water District)
Comparative Site Evaluation Matrix

I-80 / 7200 West Site (Salt Lake City)

- Lowest capital cost for electric power extensions and upgrades
- Excellent road access via I-80
- Excellent access to community resources (medical and courts)
- Best access to staff, volunteers, visitors and major vendors
- Inmate transport: lowest annual driving miles (390,000) equals lowest air pollution emissions
- Potential to be catalyst for economic development in strategically important location
## Comparative Site Evaluation Matrix

### Estimated Capital Costs: I-80 / 7200 West Site

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property Acquisition</td>
<td>$30 million</td>
</tr>
<tr>
<td>Site Preparation</td>
<td>$60 million</td>
</tr>
<tr>
<td>Water Supply</td>
<td>$22.1 million</td>
</tr>
<tr>
<td>Wastewater Treatment</td>
<td>$15.9 million</td>
</tr>
<tr>
<td>Electric Power</td>
<td>$13.4 million</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>$5 million</td>
</tr>
<tr>
<td>Roads</td>
<td>$8 million</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$154.4 million</strong></td>
</tr>
</tbody>
</table>
## Comparative Site Evaluation Matrix

**SR 138 Industrial Park Site (Grantsville)**
<table>
<thead>
<tr>
<th>Comparative Site Evaluation Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR 138 Industrial Park Site (Grantsville)</td>
</tr>
<tr>
<td>• Sufficient developable land; meets conceptual design fit test</td>
</tr>
<tr>
<td>• Sloping topography results in second highest site preparation costs</td>
</tr>
<tr>
<td>• Environmental sensitivity low; potential for adverse impacts low</td>
</tr>
<tr>
<td>• Current and past land uses pose low risk of contamination</td>
</tr>
<tr>
<td>• Lowest capital cost for natural gas extensions and upgrades</td>
</tr>
<tr>
<td>• Lowest capital cost for roadway improvements</td>
</tr>
<tr>
<td>• Closest to residential areas among all sites</td>
</tr>
</tbody>
</table>
SR 138 Industrial Park Site (Grantsville)

- Highest capital cost for wastewater treatment improvements (via Grantsville City system)
- Inmate transport: second highest annual driving miles (740,000) with corresponding air pollution emissions
- Farthest from medical center, courts, employee base, volunteers, visitors, and major vendors
- Access dependent upon unimpeded travel on I-80; some risk during emergencies
- Fewest current UDC employees reside in Tooele County; potential for significant disruption to UDC operation
Comparative Site Evaluation Matrix

Estimated Capital Costs: SR 138 Industrial Park Site

- Property Acquisition: $20 million
- Site Preparation: $34 million
- Water Supply: $18.2 million
- Wastewater Treatment: $40.9 million
- Electric Power: $19.9 million
- Natural Gas: $0.35 million
- Roads: $1.5 million

TOTAL: $134.9 million
Comparative Site Evaluation Matrix

Lake Mountains West Site (Eagle Mountain)
• Sufficient developable land; meets conceptual design fit test
• Lowest site preparation costs
• Environmental sensitivity low; potential for adverse impacts low
• Current and past land uses pose low risk of contamination
• Lowest capital cost for water supply extensions and upgrades
• Lowest capital cost for wastewater treatment improvements
• Highest capital cost for roadway improvements and extensions
Lake Mountains West Site (Eagle Mountain)

- Inmate transport: third highest annual driving miles (710,000) with corresponding air pollution emissions
- Relatively distant from medical center, courts, employee base, volunteers, visitors, and major vendors
- Access dependent upon unimpeded travel on SR 73; some risk during emergencies
- Proximity to current UDC Draper employees; potential for less disruption to UDC operation
Comparative Site Evaluation Matrix

**Estimated Capital Costs: Lake Mountains West Site**

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property Acquisition</td>
<td>$10 million</td>
</tr>
<tr>
<td>Site Preparation</td>
<td>$8 million</td>
</tr>
<tr>
<td>Water Supply</td>
<td>$16.8 million</td>
</tr>
<tr>
<td>Wastewater Treatment</td>
<td>$9.4 million</td>
</tr>
<tr>
<td>Electric Power</td>
<td>$20.6 million</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>$2.2 million</td>
</tr>
<tr>
<td>Roads</td>
<td>$21.4 million</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$88.4 million</strong></td>
</tr>
</tbody>
</table>
Comparative Site Evaluation Matrix

Cedar Valley South Site (Fairfield)
Comparative Site Evaluation Matrix

Cedar Valley South Site (Fairfield)
- Sufficient developable land; meets conceptual design fit test
- Low site preparation costs
- Environmental sensitivity low; potential for adverse impacts low
- Current and past land uses pose low risk of contamination
- Lowest property acquisition costs
- Lowest capital cost for roadway improvements
Comparative Site Evaluation Matrix

Cedar Valley South Site (Fairfield)

- Highest capital cost for water supply extensions and upgrades
- Highest capital cost for wastewater treatment service
- Highest capital cost for natural gas system extensions and upgrades
- Inmate transport: highest annual driving miles (760,000) with corresponding air pollution emissions
- Relatively distant from medical center, courts, employee base, volunteers, visitors, and major vendors
- Access dependent upon unimpeded travel on SR 73; some risk during emergencies
## Estimated Capital Costs: Cedar Valley South Site

<table>
<thead>
<tr>
<th>Component</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property Acquisition</td>
<td>$5 million</td>
</tr>
<tr>
<td>Site Preparation</td>
<td>$10 million</td>
</tr>
<tr>
<td>Water Supply</td>
<td>$26.9 million</td>
</tr>
<tr>
<td>Wastewater Treatment</td>
<td>$14.2 million</td>
</tr>
<tr>
<td>Electric Power</td>
<td>$32.6 million</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>$7.9 million</td>
</tr>
<tr>
<td>Roads</td>
<td>$1.5 million</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$98.1 million</strong></td>
</tr>
</tbody>
</table>
Comparative Site Evaluation Matrix

Estimated Total Capital Costs: All Sites

- I-80/7200 West: $154.4 million
- SR 138 Industrial Park: $134.9 million
- Lake Mountains West: $88.4 million
- Cedar Valley South: $98.1 million
## Comparative Site Evaluation Matrix

### Key Long-term Operating Cost Analysis:

Legislative Fiscal Analyst
Comparative Site Evaluation Matrix

Estimated Total Capital Costs: All Sites

- I-80/7200 West: $154.4 million
- SR 138 Industrial Park: $134.9 million
- Lake Mountains West: $88.4 million
- Cedar Valley South: $98.1 million
Comparative Site Evaluation Matrix

Estimated Key Long-Term Operating Costs: All Sites

- I-80/7200 West: $423.0
- SR 138 Industrial Park: $676.0
- Lake Mountains West: $737.0
- Cedar Valley South: $757.0

(Millions)
Comparative Site Evaluation Matrix

Combined Capital and Key Long-Term Operating Costs

- I-80/7200 West: $577.4
- SR 138 Industrial Park: $810.9
- Lake Mountains West: $825.4
- Cedar Valley South: $855.1

Legend:
- Capital Costs
- Key Operating Costs
For additional information: www.le.utah.gov/prc