Study Purpose

- Investigate the feasibility of a connection along SW 127th Avenue between SW 144th Street and SW 142nd Street
- Presently no connection across the CSX Railroad corridor
Study Area Setting

Looking northeast from SW 127th Avenue.

Looking south along SW 127th Avenue

Looking southwest from SW 127th Avenue.

Looking north along SW 127th Avenue from SW 144th Street

Looking south along SW 127th Avenue

SW 144th Street

CSX Railroad

FP&L Power Lines
Alternatives Considered

- **Alternative 1:** At-grade Roadway
- **Alternative 2:** Overpass with 5% Grades
- **Alternative 3:** Overpass with 5% and 9% Grades
Alternative 1 - At-grade Connection
Alternative 2 – Overpass 5% Grades
Alternative 3 – Overpass 5% and 9% Grades
Conceptual Cost Estimates

- Alternative 1: At-grade Roadway $4.9 million
- Alternative 2: Overpass with 5% Grades $14.3 million
- Alternative 3: Overpass with 5% and 9% Grades $13.6 million

NOTES:
- Conceptual capital cost estimate based on 2017 unit costs.
- Includes allowance for powerline adjustments.
- Includes 20% contingency.
- Excludes right-of-way, environmental mitigation, permitting, underground utility relocation, engineering design, and construction administration services.
## Alternatives Comparison

<table>
<thead>
<tr>
<th>Alternative 1</th>
<th>Alternative 2 (Overpass - 5% Grades)</th>
<th>Alternative 3 (Overpass - 5% and 9% Grades)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>At-grade Connection</strong></td>
<td>▪ Capital Cost: $14.3 million</td>
<td>▪ Capital Cost: $13.6 million</td>
</tr>
<tr>
<td>▪ Railroad crossing avoided</td>
<td>▪ Railroad crossing avoided</td>
<td>▪ Railroad crossing avoided</td>
</tr>
<tr>
<td>▪ No impacts to area traffic circulation</td>
<td>▪ Impacts to area traffic circulation – no access from SW 144th Street</td>
<td>▪ Impacts to area traffic circulation – no access from SW 144th Street</td>
</tr>
<tr>
<td>▪ No overhead power line relocation</td>
<td>▪ Overhead power lines require relocation</td>
<td>▪ Overhead power lines require relocation</td>
</tr>
<tr>
<td>▪ Access to proposed property plat not affected</td>
<td>▪ Access to proposed property plat would be affected</td>
<td>▪ Access to proposed property plat would be affected</td>
</tr>
<tr>
<td>▪ No apparent significant environmental issues</td>
<td>▪ No apparent significant environmental issues</td>
<td>▪ No apparent significant environmental issues</td>
</tr>
<tr>
<td>▪ No visual quality issues with retaining walls near residences</td>
<td>▪ Possible visual quality issues with retaining walls near residences</td>
<td>▪ Possible visual quality issues with retaining walls near residences</td>
</tr>
</tbody>
</table>
## Alternatives Comparison Summary

<table>
<thead>
<tr>
<th>Evaluation Factor</th>
<th>Alternative 1 – At-grade Connection</th>
<th>Alternative 2 – Overpass with 5% Grades</th>
<th>Alternative 3 – Overpass with 5% and 9% Grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Cost</td>
<td>↓</td>
<td>↑</td>
<td>↑</td>
</tr>
<tr>
<td>Railroad Crossing</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Development Access</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Powerline Relocations</td>
<td>✗</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

- **Alternative 1 – At-grade Connection**
  - About 1/3 cost of Alt. 1 and Alt. 2
  - Requires new railroad crossing
  - Compatible with proposed development access
  - No overhead powerline relocations

- **Alternative 2 – Overpass with 5% Grades**
  - About 3 times the cost of Alt. 1, similar in cost to Alt. 2
  - No new railroad crossing required
  - Not compatible with proposed development access
  - Major overhead powerline relocations

- **Alternative 3 – Overpass with 5% and 9% Grades**
  - About 3 times the cost of Alt. 1, similar in cost to Alt. 2
  - No new railroad crossing required
  - Not compatible with proposed development access
  - Major overhead powerline relocations