OREGON UTILITIES
FRAMEWORK
IMPLEMENTATION TEAM

SEPTEMBER 30, 2016
CHALLENGES

• No consensus on public data
• Private entities are reluctant to share data
• Public agencies have diverse needs
• Geodata design is challenging to meet varied needs
OPEN STREET MAP (OSM)

Open Data is a potential source and mechanism to collaborate
<table>
<thead>
<tr>
<th>Key</th>
<th>Value</th>
<th>Comment</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>power</td>
<td>line</td>
<td>It's a power line, normally mapped as a</td>
<td>mandatory</td>
</tr>
<tr>
<td>voltage</td>
<td>&lt;operating voltage&gt;</td>
<td>The voltage at which the line is operated</td>
<td>recommended</td>
</tr>
<tr>
<td>operator</td>
<td>&lt;cable operator&gt;</td>
<td>The name of the company which operates this</td>
<td>recommended</td>
</tr>
<tr>
<td></td>
<td></td>
<td>power line section</td>
<td></td>
</tr>
<tr>
<td>cables</td>
<td>&lt;number of cables&gt;</td>
<td>The number of different phase conductors</td>
<td>recommended</td>
</tr>
<tr>
<td></td>
<td></td>
<td>for this power line section</td>
<td></td>
</tr>
<tr>
<td>circuits</td>
<td>&lt;number of circuits&gt;</td>
<td>The number of different and separated</td>
<td>recommended</td>
</tr>
<tr>
<td></td>
<td></td>
<td>electrical circuits built within this power</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>line section</td>
<td></td>
</tr>
<tr>
<td>wires</td>
<td>&lt;wire bundle per conductor&gt;</td>
<td>The bundle form factor for each</td>
<td>optional</td>
</tr>
<tr>
<td></td>
<td></td>
<td>conductor of the power line</td>
<td></td>
</tr>
<tr>
<td>frequency</td>
<td>&lt;operating frequency&gt;</td>
<td>The frequency given in Hertz at which</td>
<td>optional</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the power line is operating</td>
<td></td>
</tr>
<tr>
<td>name</td>
<td>&lt;name&gt;</td>
<td>The name of this power line section.</td>
<td>optional</td>
</tr>
<tr>
<td>ref</td>
<td>&lt;reference&gt;</td>
<td>The reference of this power line section.</td>
<td>optional</td>
</tr>
</tbody>
</table>
OSM POINTS & AREAS

: power=station transformer
: power=transformer points tower
: power=tower OR power=portal pole
: power=pole substation point
: power=substation OR power=sub_station switch
: power=switch converter point
: power=converter compensator point
: power=compensator generator
: power=generator areas switchgear
: power=switchgear converter area
: power=converter compensator area
: power=compensator substation area
: power=substation OR power=sub_station generator
: power=generator power plant
: power=plant