Putting the Solution Together

Many separate offerings to blend in to a one stop shop
A modular/Scalable approach is required that allows products to match differing capabilities and requirements within a road organization……….

- Analytical information for planners and policy makers
- Custom Treatment Recommendations
- Information for area decision makers
- Wider information for Drivers/Depot/contractors
- Concise & intuitive information for non-winter maintenance staff
Advisor for Guardian – Simple Single Site View

- Surface good
- surfaceState dry
- Surface temperature is Well above freezing

Graphs showing level of grip, water layer, and surface temp over time.

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RoadDSS - Mobile Weather Data Collection

- Friction
- Pavement State
- Air & Road Temperature
- Humidity

Integrated into Vaisala RoadDSS Suite

Continued sensor & capability development
### RoadDSS Value Calculator

#### RoadDSS Calculator Results - Potential Benefits

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary</td>
<td></td>
</tr>
<tr>
<td>Customer Benefits</td>
<td></td>
</tr>
<tr>
<td>Community Benefits</td>
<td></td>
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<tr>
<td>Other Benefits</td>
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<tr>
<td>All Benefits</td>
<td></td>
</tr>
<tr>
<td>Change Assumptions</td>
<td></td>
</tr>
</tbody>
</table>

#### Customer Information

- **Name:** Paul Bridge
- **Organization:** Snowy City
- **Phone Number:** 555-555-5555
- **Email Address:** paul.bridge@vaisala.com

#### Calculator Input

- **Number of Black Patches:** 20
- **Number of White Lines:** 10
- **Number of Street Lights:** 100
- **Number of Traffic Signs:** 50
- **Average Vehicle Speed:** 30 mph
- **Number of Vehicles:** 200
- **Number of Accidents:** 100
- **Cost of Accident:** $18,617,500
- **Pollution Costs:** $23,818,003

#### Customer Labor & Infrastructure

- **Design Labor Cost:** $200,000 USD
- **Construction Labor Cost:** $300,000 USD
- **Operational Labor Cost:** $200,000 USD
- **Annual Labor Cost:** $1,000,000 USD
- **Labor Cost:** $12,000 USD

#### Maintenance Fleet Vehicles

- **Vehicle Maintenance:** $50,000 USD
- **Fuel Cost:** $50,000 USD
- **Procurement Cost:** $60,000 USD
- **Depreciation Cost:** $40,000 USD

#### Treatment

- **Material Cost:** $100,000 USD
- **Labor Cost:** $50,000 USD
- **Equipment Cost:** $40,000 USD
- **Total Cost:** $200,000 USD

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Summary

- **Continued development of Vaisala RoadDSS suite**
  - Modular to fit your staff needs and takes account of your operations

- **Mobile Weather Data collection**
  - Understanding the Surface State & Friction of your network in concise displays

- **RoadDSS Value Calculator**
  - Helping you to protect your budgets