

The Latest MDSS Technologies from QTT-SSI

Jon Tarleton
Marketing Manager -
Meteorologist

Quixote

Transportation Technologies, Inc.

SSI[®]

Sensing the Future

Who is QTT?



Weather Solutions - Provide our customers with the very best road weather technology including weather sensing equipment, advanced highway notification solutions, and road weather software.



Introducing the “Q” line of sensors

thermo-Q

- Non-intrusive pavement temperature sensor
- No need for lane closures for installation
- Easier to maintain
- Cost effective solution



Optional Innovative Design

thermo-Q 360

- Same sensor as the thermo-Q, but with **pan** and **tilt** feature to give you multiple surface readings.



Quixote

Transportation Technologies, Inc.

SSI[®]

Sensing the Future

Surface Patrol

Acquired from Control Products November 2006

- Non-contact mobile infrared pavement sensor
- QTT-SSI enhancements (under development)
 - Integration with RWIS data
 - Additional features



Winter Maintenance Support Tool

Winter Maintenance Index

- To be tested during the winter of 2007-2008.
- Developed in partnership with a third party European Company.



What is the Winter Maintenance Index?

- An historical measure of the severity of winter weather vs. maintenance activities performed.
- “This winter was worse than last!” Why?
“We used more salt and overtime.”
- Is that a true way to measure?
- What if your supervisors made poor decisions?

What about measuring weather?

- “What about the amount of snow or ice?”
- Is a winter where you have 5 storms, 6 inches each for a total of 30 inches, the same as 15 storms, 2” each?



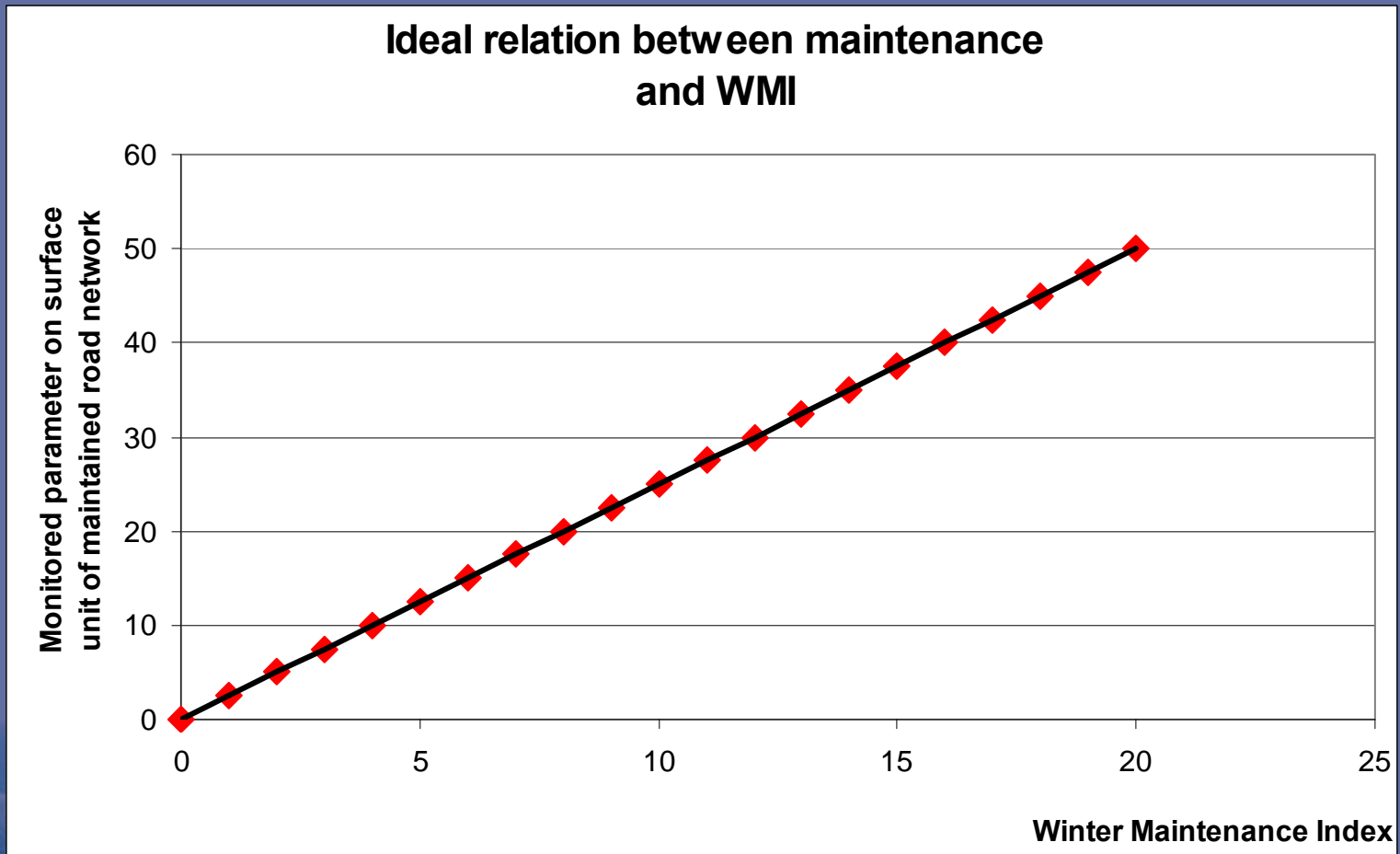
What makes up the index?

- Weather data for a particular time at a particular location
 - New Snow
 - Frost Conditions
 - Freezing Rain/Sleet
 - Freezing Conditions at the Surface
 - Blowing Snow
- Maintenance operations data for the same time period and location.

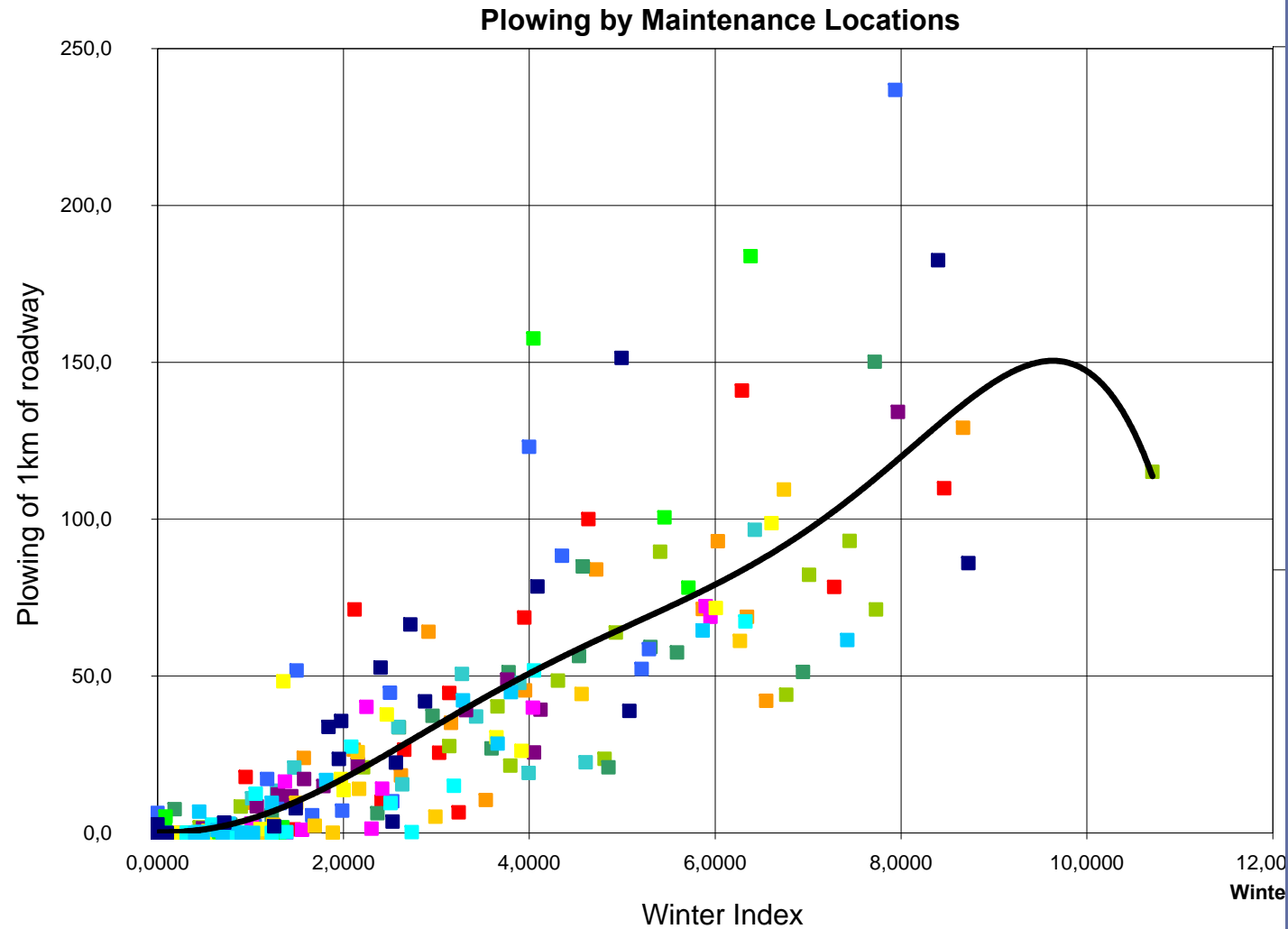
Example of some of the maintenance parameters recorded

- For each location:
 - Amount of miles treated with chemical
 - Amount of miles treated and plowed
 - Amount of miles plowed only
 - Amount of granular chemical used
 - Amount of liquid chemical used
- Can be done using historical maintenance data or entered “as we go” via a web site
- System can be customized for what an agency records
- For each location we also need to know altitude, terrain type, and road characteristics.

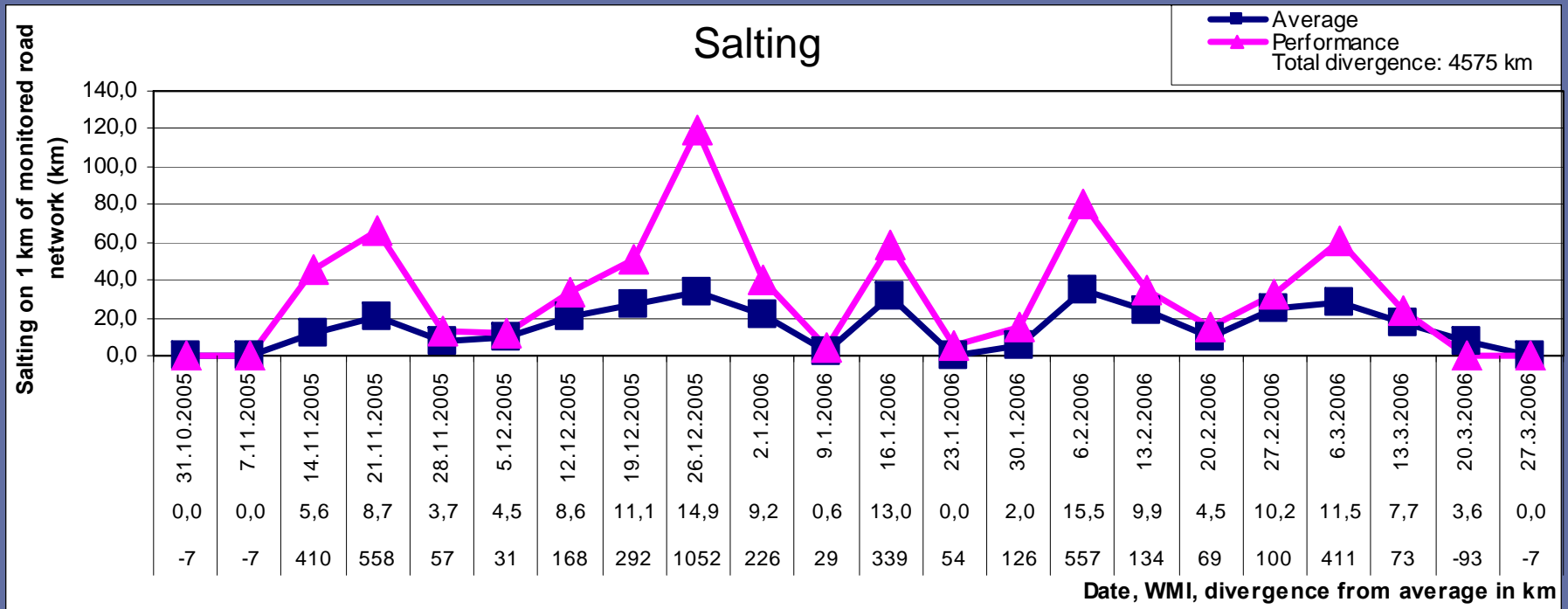
What do we get?



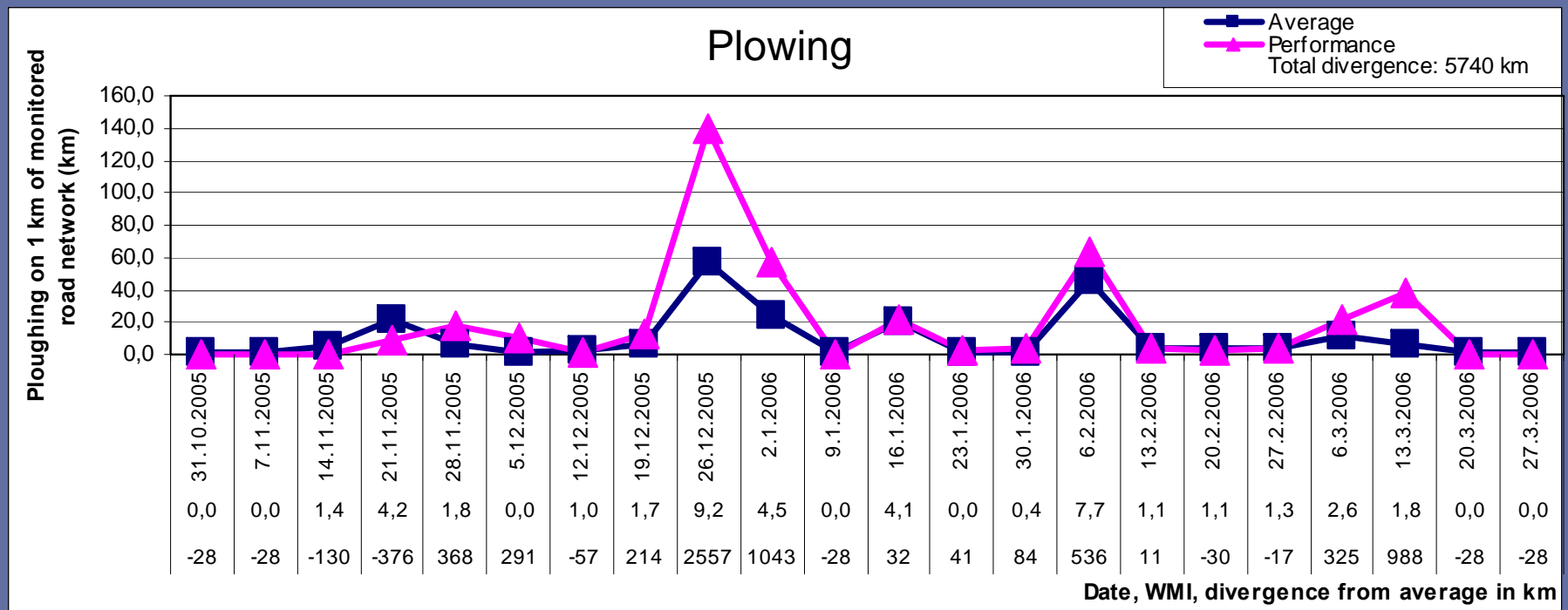
Example of Output



A Way to Evaluate Performance



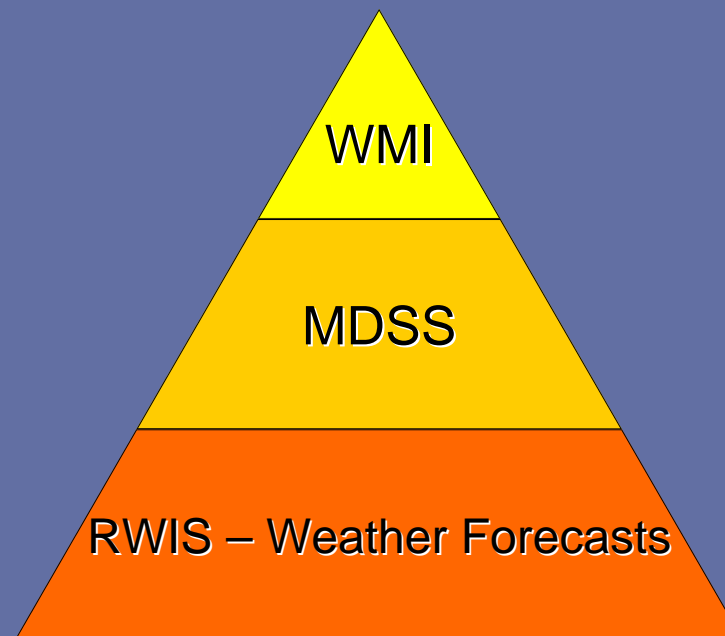
Can show you one-time problems



Winter Index

- Gives you a measure of each storm
- Allows you to compare to other locations
- Independent of any technology
- Ability to define standards and look for ways to optimize
- Short-term or seasonal way to evaluate performance independently of climate, terrain, altitude or road length.

Weather Maintenance Index



Quixote

Transportation Technologies, Inc.

SSI[®]

Sensing the Future

A blue-tinted photograph of a snowy mountain landscape. In the foreground, a road with yellow and white lane markings curves through a snow-covered valley. The middle ground is filled with snow-laden evergreen trees. In the background, large, snow-capped mountains rise against a clear blue sky.

Questions?

If interested in participating, come see me this week!

Quixote

Transportation Technologies, Inc.

SSI[®]

Sensing the Future