AVL

• Last season there was a full roll-out AVL implementation
• Winter ops trucks model year 2013 and newer have AVL; all other have basic GPS
• New Vendor this season: Geotab
  • Division of Equipment has travelled across the state to install new device.
• AVL is NOT about being ‘Big Brother’. The goal is to provide the best tools and technology to help our crews be the best they can be at their jobs.
AVL

• AVL – how can it help you?
  • Proof that job has been done when addressing complaints
  • Help track when routes have been completed, avoid mistakenly forgetting routes
  • Learning – how can we do better next time?
  • Efficiency – material management. We can get the job done by using just the right amount of salt. Just give it time!
  • Engine diagnostics – identify issues before they are a problem, keep the truck on the road longer.
• AVL – how can it help Central Office?
  • We can compare winter ops activity to historical weather with a new Road Weather dashboard that is being built (more on that later)
  • This collection of data helps the Division of Maintenance to completely explain to the Public and Legislators what we are doing with the budget they give us, and why there is a need for more!
Road Weather Dashboard

- Currently being built in-house
- This will capture weather info at the roadway layer – so, we will have weather info recorded for the specific roadway segment.
- Can set alerts for emails or texts to go out when weather is approaching your area (both winter and rainfall).
  - Can provide more timely alerts for high water
- Not only for snow and ice, but will capture data for all weather.
- Storm Severity Index – help to ‘score’ winter weather and to track how that effects operations.
AVL and OMS

- New for this Season!
  - Bringing data from AVL into OMS to automate ‘Day Cards’ for salt and calcium usage.
  - This will be in ‘Test Mode’ this year
  - Also will assign material usage correctly to routes it has been applied on using the GPS
We can generally explain why certain areas spend more than others... mileage, interstate mileage, climate.
Storm Severity Index (SSI)

- **Performance Measures**: A way to measure our performance – how are we doing?
- **You can’t manage what you don’t measure.**
- **Storm Severity Index**: a way to describe storms.
- **Starting out basic:**
  - **Storm Type** + Temperature + Wind Condition + Radar Presence = SSI

```sql
SELECT kytcRoadID, AirTemp, WindSpeed, SNICPrecipAmt, 
CASE WHEN AirTemp > 60 THEN 1
     WHEN AirTemp >= 55 AND AirTemp <= 60 THEN 2
     WHEN AirTemp < 55 THEN 3
     WHEN AirTemp is NULL THEN 0
END AS AirTempValue,
CASE WHEN WindSpeed < 4 THEN 1
     WHEN WindSpeed >= 4 THEN 2
     WHEN WindSpeed is NULL THEN 0
END AS WindSpeedValue,
```
Storm Severity Index (SSI)
Storm Severity Index (SSI)
Storm Severity Index (SSI)
QUESTIONS?
CONTACT INFORMATION

Randi Feltner, PE
Randi.Feltner@ky.gov
502-782-5574

Twitter: @KYTC
Facebook: /kytc120
This slide contains the design standards for this PPT template:

- Colors
  - Black
  - Yellow (R:234, G:179, B:34)
- Font
  - Calibri

Please only use these colors and fonts when making edits. Thank you in advance from the Office of Public Affairs.