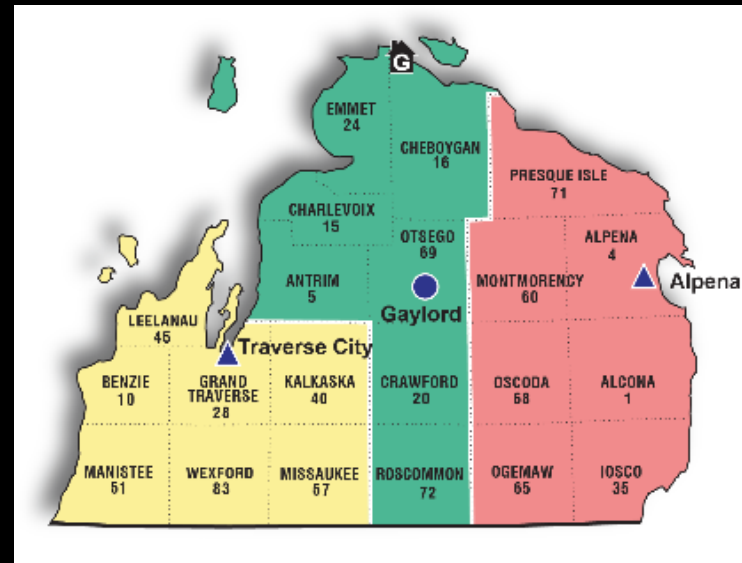


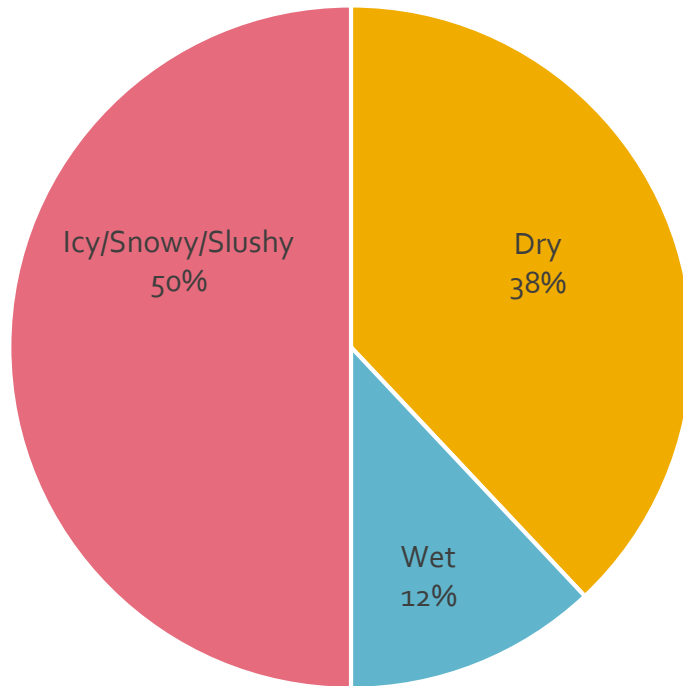
Garrett Dawe, P.E.
North Region Operations Engineer



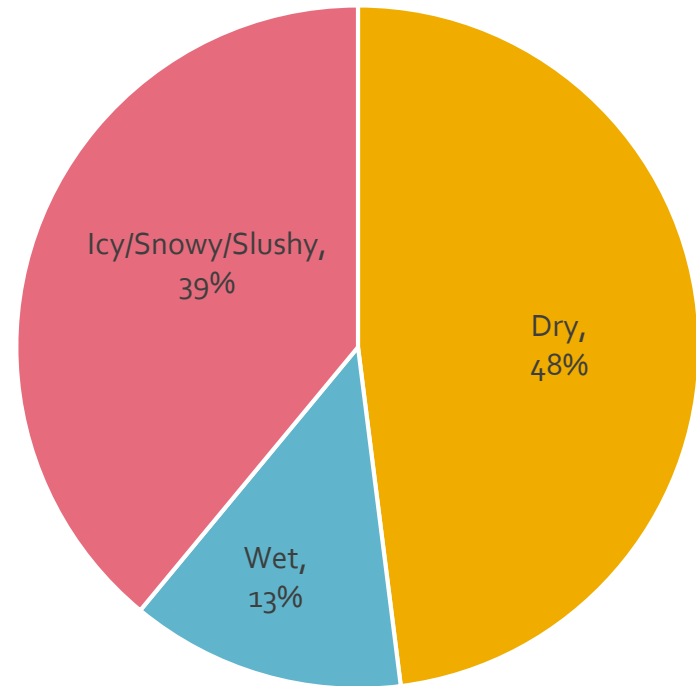
Living Snow Fence

High Level Crash Analysis

All Lane Departure Crashes



K/A Lane Departure Crashes



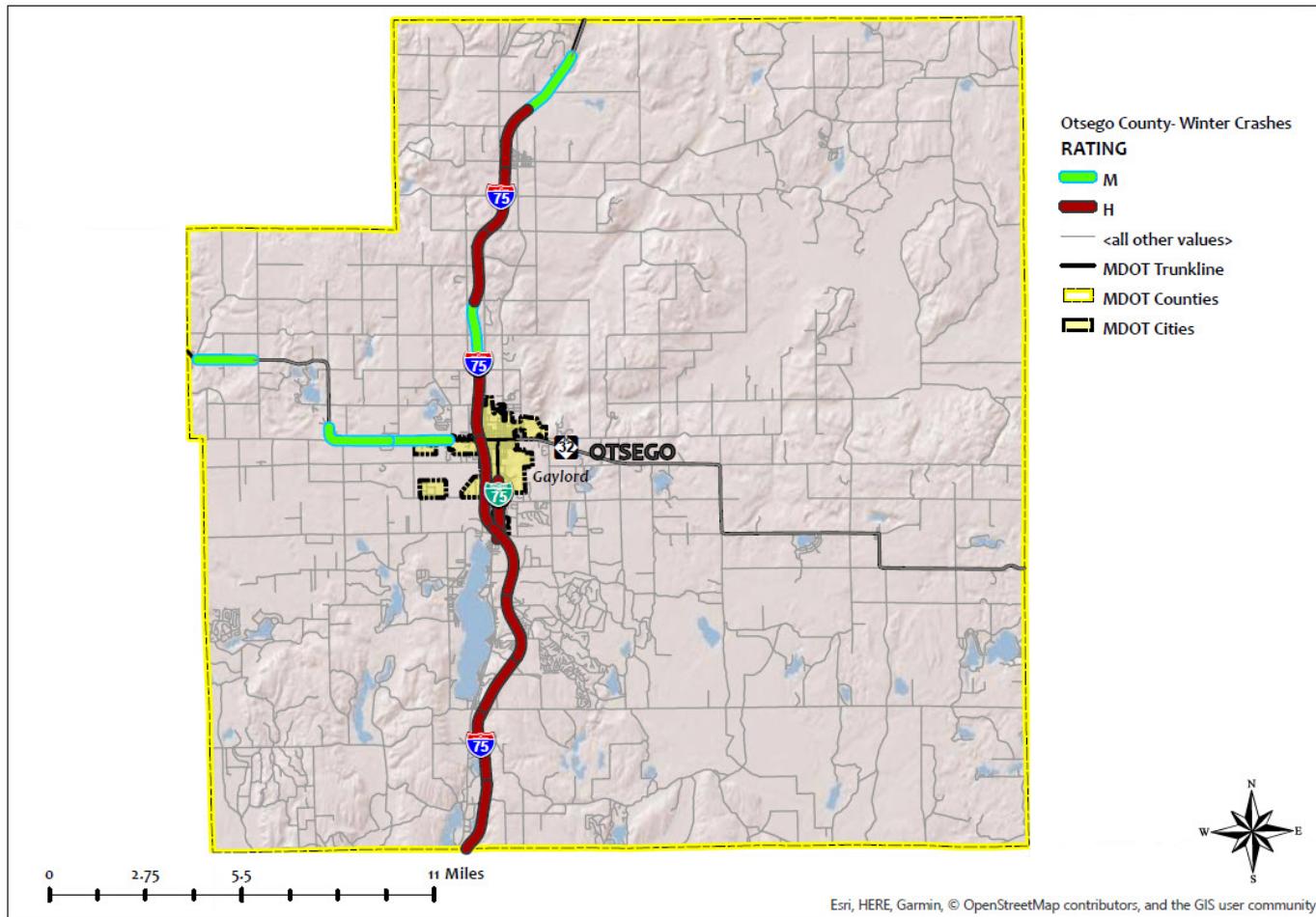
Snowy Weather



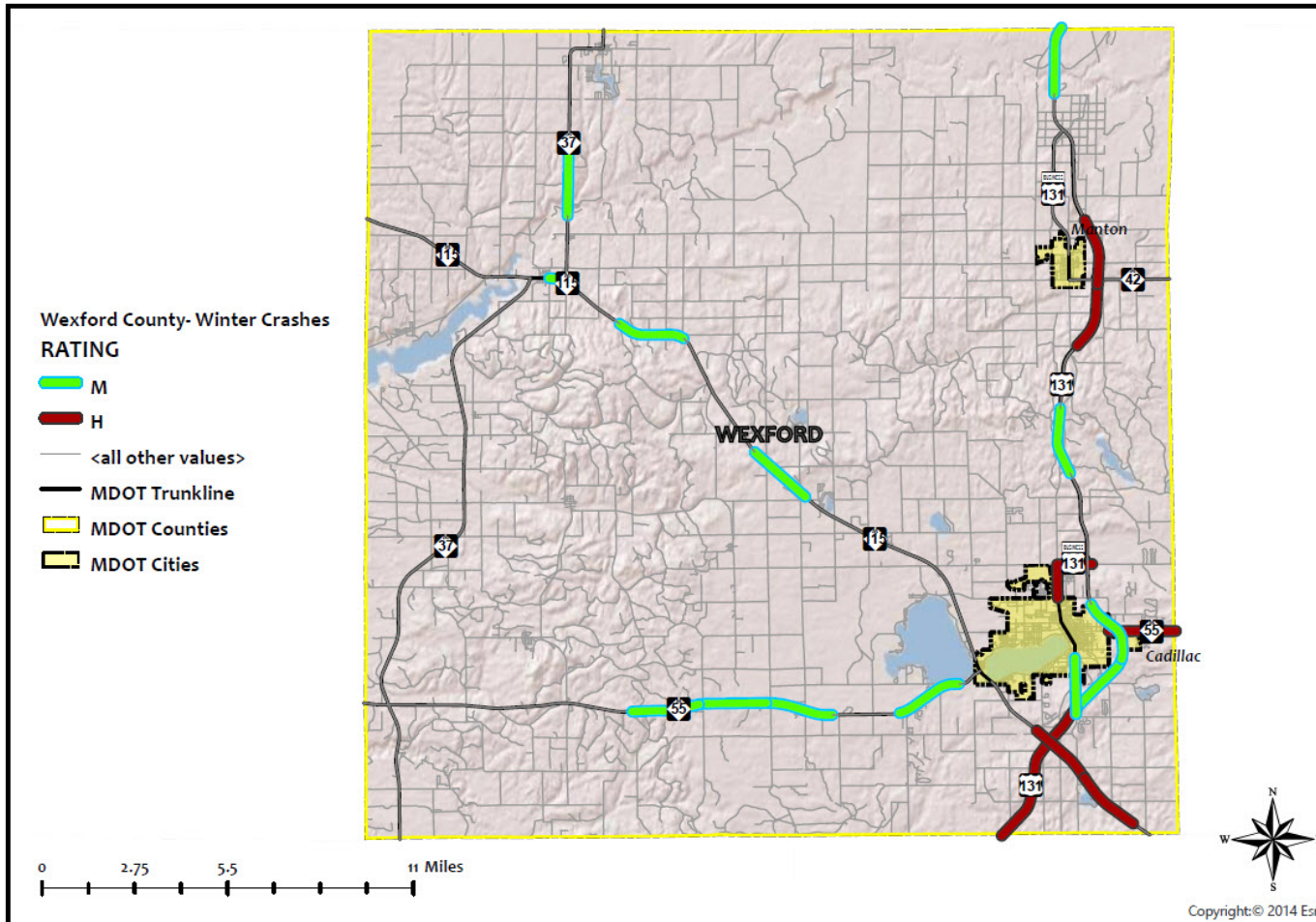
Blowing & Drifting Snow



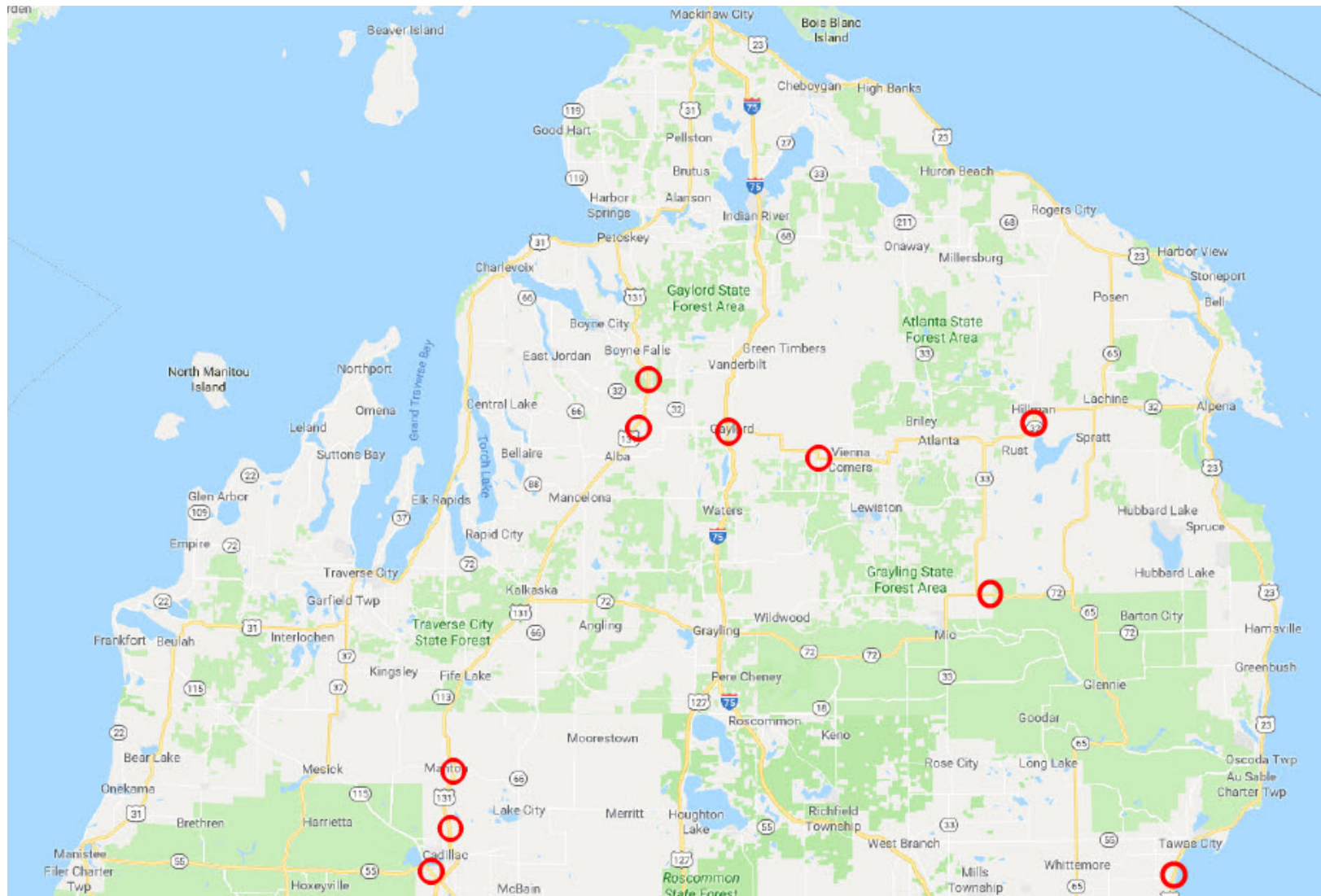
Trunkline Lane Departure



Trunkline Lane Departure



Recent Deployments



Layout



Purchasing/Cost

- Purchase “rejects” from nurseries and Christmas tree farms
 - Poor Christmas trees work just fine for snow fence, and at $\frac{1}{4}$ of the price.
 - \$12-14 per tree
- Norway Spruce (3-6' tall in 10 gallon pot)
 - Hardy w/out many diseases
 - Grows fast with branches to the ground

Norway Spruce

- 100 year life expectancy. Grow to over 100'.
- Plant hardiness zones 2-7.
- Full sun. Will survive in up to 50% shade but growth rate is reduced.
- Grow 2-3' per year in first 25 years of life.



Installation

- Installed by:
 - Road Commissions
 - Youth Development & Mentoring Program
- Skid steer with 18" auger and DMI
- Planting immediately upon delivery helps with survival rate



Performance

- Watering generally not done, unless very dry after initial planting.
- Too early to determine crash reductions, but maintenance is already noticing improvements with blowing snow. This will only improve as the trees grow.

Future

TZD Strategy

Utilize the icy/snowy/slushy crash maps to identify at least 6 locations that would benefit from living snow fence, and install.



Garrett Dawe, P.E.
North Region Operations Engineer

Questions?



Toward Zero DeathsTM
National Strategy on Highway Safety