Today’s Agenda

• Why and What to Measure
• Understanding your Data
• Data Visualization
• The Good, the Bad, and the Ugly
• Excel Features Demonstration
Why and What to Measure

So why bother measuring???????

“What gets measured gets done”

W. Edwards Deming

“What gets measured gets improved”

Peter Drucker

True, if what we measure is correlated to the desired outcomes and is actionable.
“Everything that can be counted does not necessarily count; everything that counts cannot necessarily be counted.”

Albert Einstein

Create dissatisfaction in status quo, without dissatisfaction their will be little motivation to change!
“Leading” versus “Lagging” indicators

Lagging indicators are typically “output” oriented, easy to measure but hard to improve or influence.

Leading indicators are typically input oriented, hard to measure and easy to influence.
Understanding your Data

Know thy data!

Data types
- Static – not changing
- Dynamic – can change over time

What influences your data
- Reliability - single vs multiple sources subject to interpretation
- Standardized – means the same for all

Quantity

Existing data sources
- Injury/incident data
  - Severity, return to work, investigations, corrective actions
- Planned activities
  - Training, audits, inspections, etc
- Perception survey
- Work Comp annual report
- Bureau of Labor Statistics
Main goal of data visualization is to communicate information clearly and effectively through graphical means.

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Basic

- Bar or Pareto
  - Bars proportionate in length or height to counts
- Pie
  - Divided into slices to illustrate numerical proportion.
  - No more than 6 categories
- Line graph
  - Trend in data over intervals of time
Data Visualization

More advanced

- Trendlines
- Multiple elements and axis
- Area chart
- Scatter plot

Data Visualization

Even more advanced!

- Incorporating graphics - true data visualization
The Good, the Bad, and the Ugly

Telematics speed alerts per 1M miles driven

Month

10/8/2018 Data Analytics – You Can Dot It!
Minnesota Department of Administration | mn.gov/admin
The Good, the Bad, and the Ugly

<table>
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<th>Year of Closure</th>
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<th>Return to Work: Different Employer (%)</th>
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Excel Features Demonstration

Excel features

- Table features - Sort and filter
- Functions
- Pivot table - Arrange and summarize complex data
- Charts
- Trend lines and projections
More information

- Internet search engines such as Google
- YouTube
- Co-workers who excel at Excel (sorry, couldn’t resist)
- Safety and Loss Control

Thank you!

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