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Crash Data Analysis: What Your Fleet's History is Telling You

WEDNESDAY / JUNE 17 / 1-2PM CST



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Before We Begin

All attendees are in “LISTEN ONLY” mode.

You can type in questions by clicking on the question box on the top right of your GoToWebinar panel.

Q&A at the end of the webinar.

Additional questions can be emailed to: bwertz@smscsafety.com

A recorded copy of the webinar and slides will be made available to all attendees.



Turning crash history into practical safety and risk insights



Why Crash Data Matters

- Reveals where risk is building
- Supports proactive safety decisions
- Helps target training, routing, and equipment changes



Learning Objectives

- Identify the right data for meaningful analysis
- Use Excel to organize and analyze crash history
- Interpret patterns and trends with confidence
- Present findings clearly with charts and tables



Webinar Roadmap

- Why crash history matters
- What data to collect
- How to analyze it in Excel
- How to interpret results
- How to present the story behind the data
- Key takeaways and Q&A



What Your Fleet History Can Tell You

- Recurring crash types
- Time and day patterns
- Route and location hotspots
- Driver, vehicle, and operational trends
- Frequency vs. severity differences



“Your crash history is more than a record of what happened—it’s a roadmap to where risk is building next.” Unknown



Start with the Right Question

- What problem are you trying to solve
- Which crashes are driving cost or frequency?
- Are routes, shifts, vehicles, or behaviors involved?
- The question determines the data you need



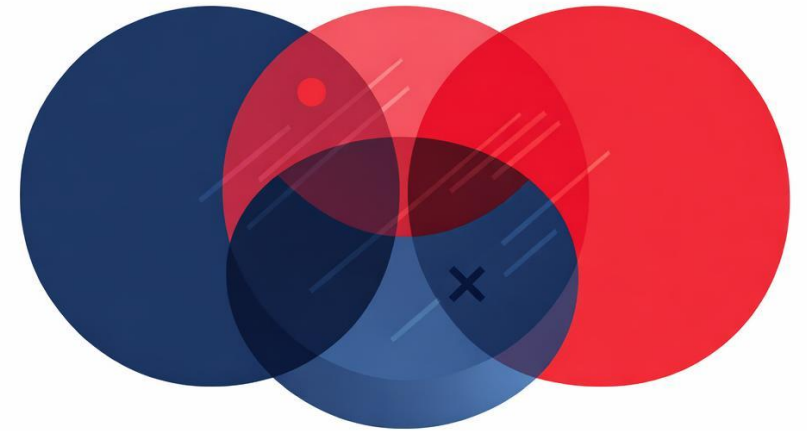
Core Crash Data to Collect

- Date and time
- Location
- Crash type and severity
- Preventability
- Vehicle or unit number
- Driver or driver group
- Claim cost and injuries
- Weather and road conditions



Exposure Data Adds Context

- Number of vehicles and drivers
- Vehicle miles traveled
- Routes, stops, or service calls
- Time period under review
- Rates often tell a better story than totals



Common Data Quality Issues

- Missing or incomplete fields
- Inconsistent classifications
- Duplicate records
- Limited event detail
- Open or delayed claim costs
- No standard naming conventions



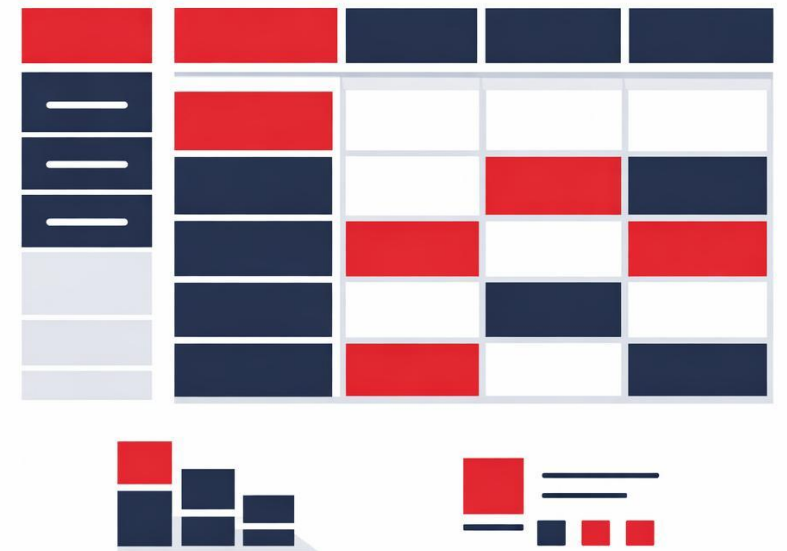
Build a Useful Dataset

- One row per crash event
- Clear, consistent column names
- Key fields: date, driver group, vehicle type, crash type, preventability, cost, and miles
- Clean structure supports sorting, filtering, and charting



Organize Data for Analysis

- Use one row per event
- Keep field names simple and consistent
- Avoid merged cells and blank rows
- Format dates, categories, and numbers consistently



Excel Tools That Surface Patterns

- Sort and filter
- PivotTables
- Conditional formatting
- Basic formulas for counts, averages, and rates



Use PivotTables to Answer Key Questions

- Compare crashes by month, vehicle, driver group, or location
- Summarize claim cost by crash type
- Identify concentration areas quickly
- Filter to high-severity or preventable events



Spot Trends and Outliers

- Track crashes over time
- Separate frequency from severity
- Flag unusual spikes by location, shift, or vehicle type
- Look for repeated conditions linked to events



Interpret What the Data Is Telling You

- Look beyond totals and counts
- Ask what conditions keep repeating
- Distinguish operational, behavioral, environmental, and equipment factors
- Focus on findings you can act on



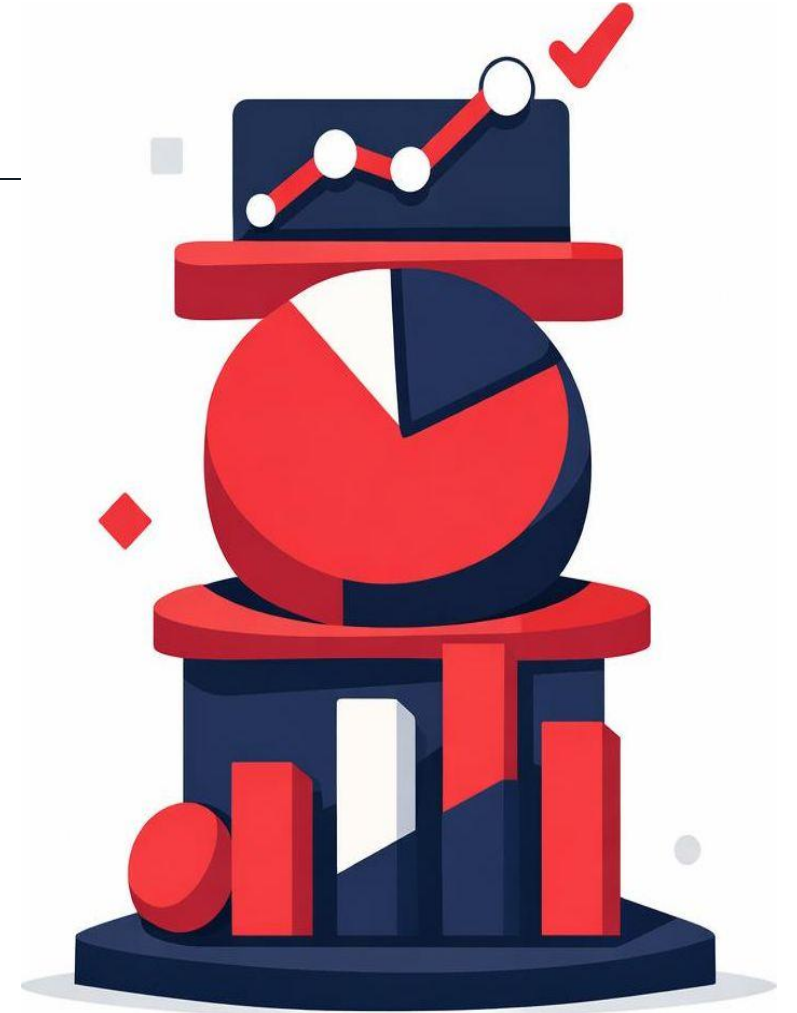
Turn Analysis into Action

- Target driver coaching and training
- Review routes, schedules, and operating conditions
- Evaluate vehicle and equipment fit
- Strengthen maintenance and inspection priorities
- Focus first on the highest-impact risks



Choose the Right Visual

- Bar charts for comparisons
- Line charts for trends over time
- Tables for exact values and detail
- Keep visuals simple and focused



Tell the Story Behind the Numbers

- Lead with the main takeaway
- Support it with one or two clear visuals
- Explain why the pattern matters
- Recommend a next step
- Tailor the message to the audience



Key Takeaways

- Good analysis starts with the right data
- Clean data makes Excel more effective
- Patterns should drive action, not just reporting
- Clear visuals help stakeholders respond



Next Steps

- Review your current crash data fields
- Standardize the dataset structure
- Build one PivotTable to identify top issues
- Compare frequency, severity, and exposure measures
- Share one chart and one recommendation with leadership

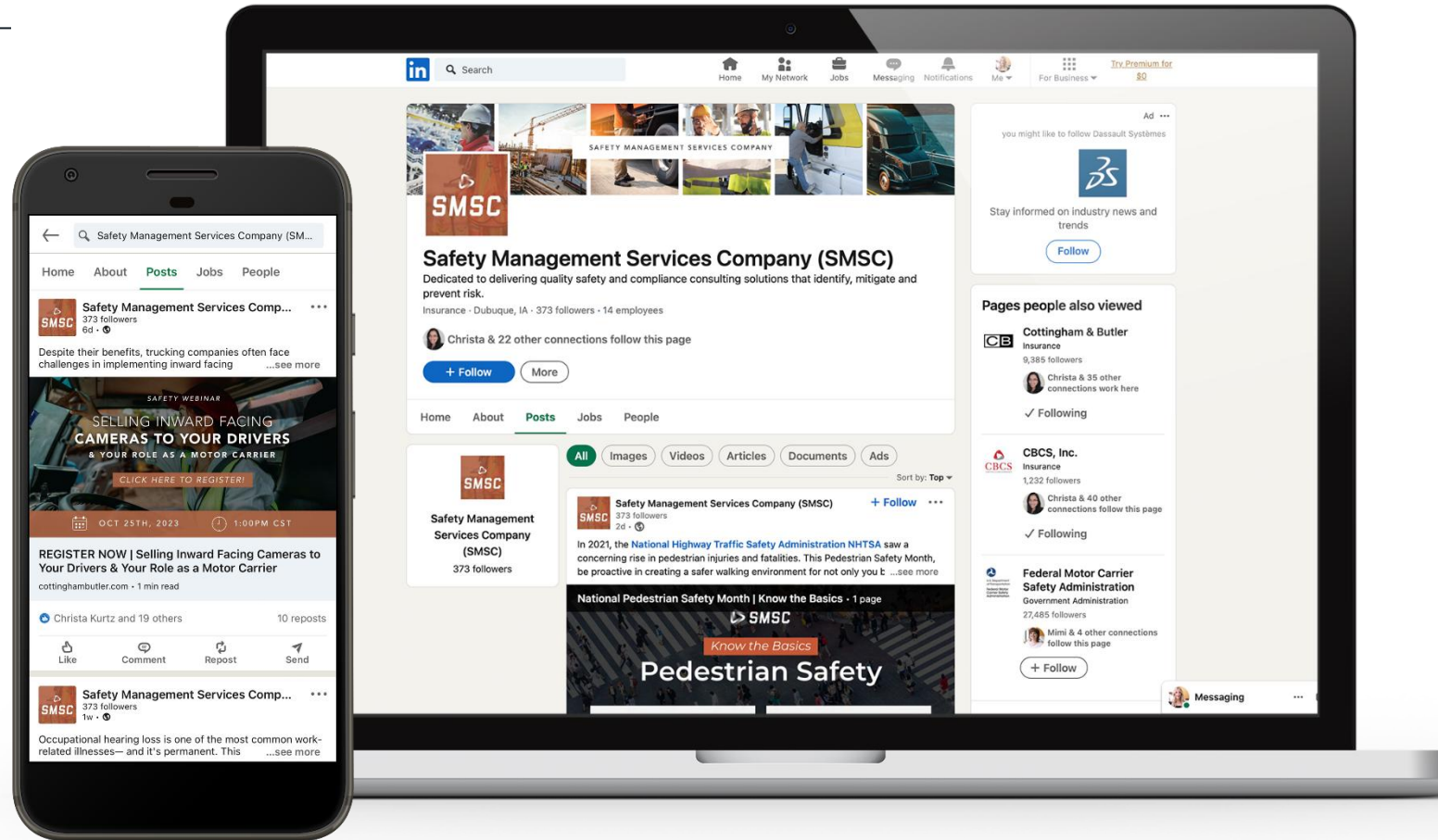




Questions



Let's Stay Connected



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