Next Generation Approaches to CMV Analytics

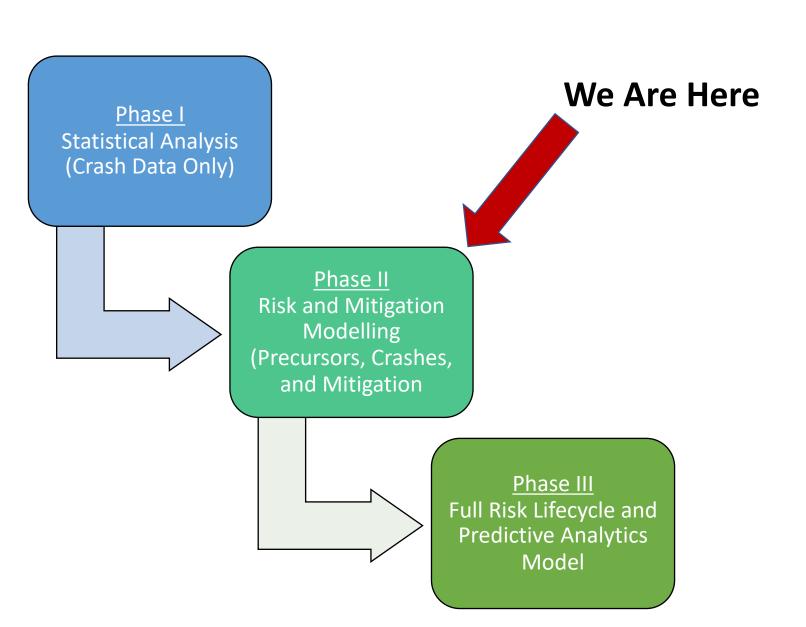
Clinton Seymour (FMCSA) Jeremy Pate (UA)



MAY 17-18, 2022

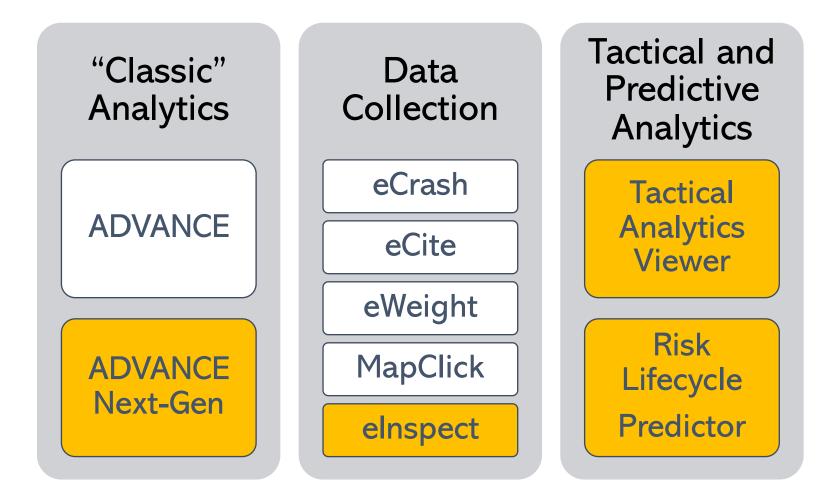


Progress Toward Full Prediction





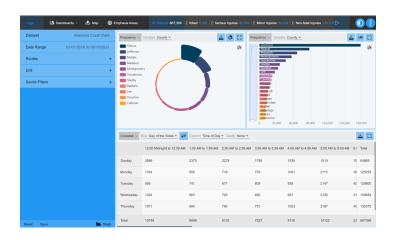
Tools in the Toolbox

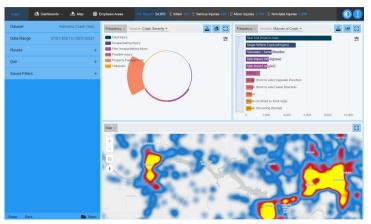


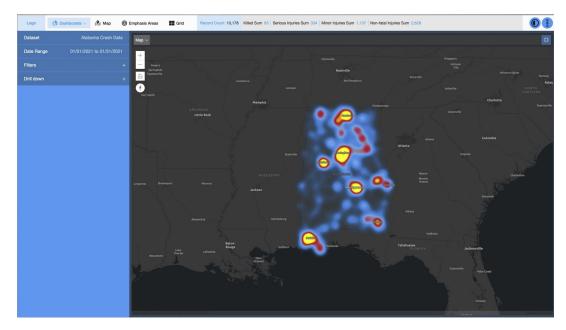




Next Generation of Traditional Analytics Tools

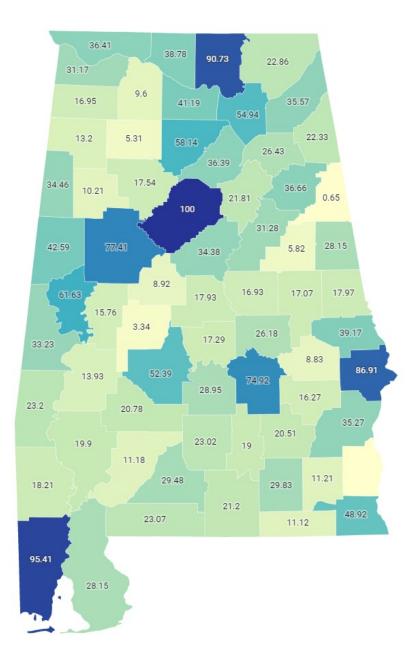






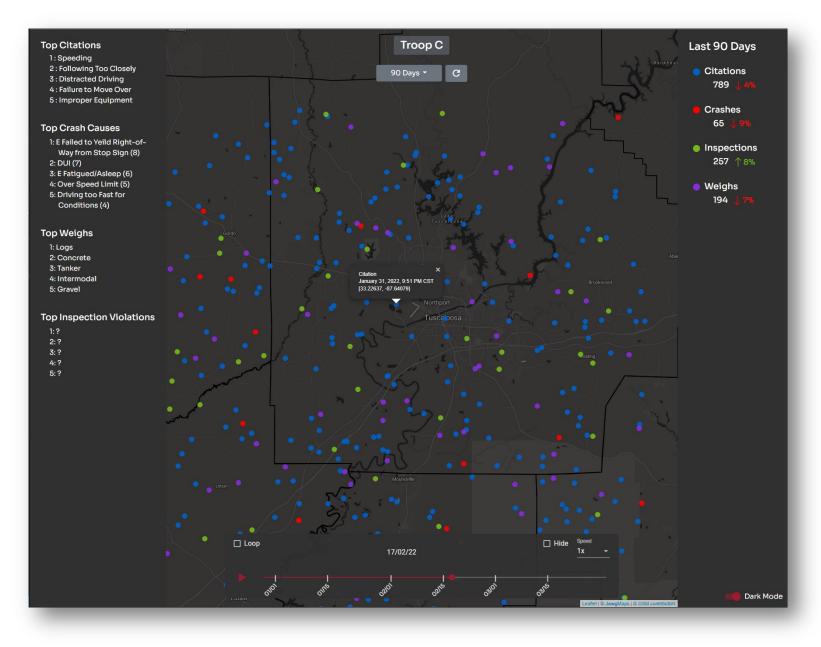


Sample Risk to Enforcement Calculation



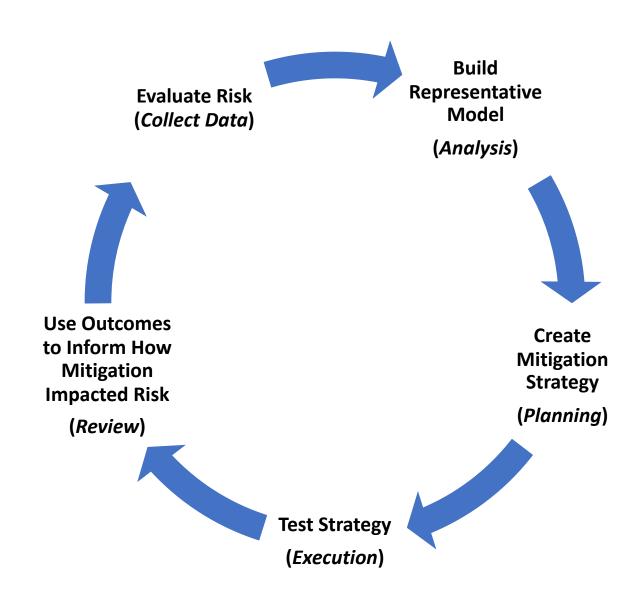


Tactical Enforcement View (Prototype)





Risk and Mitigation Loop





There are a Lot of Factors to Assessing Risk Including...

Economic Development



Driver Behavior

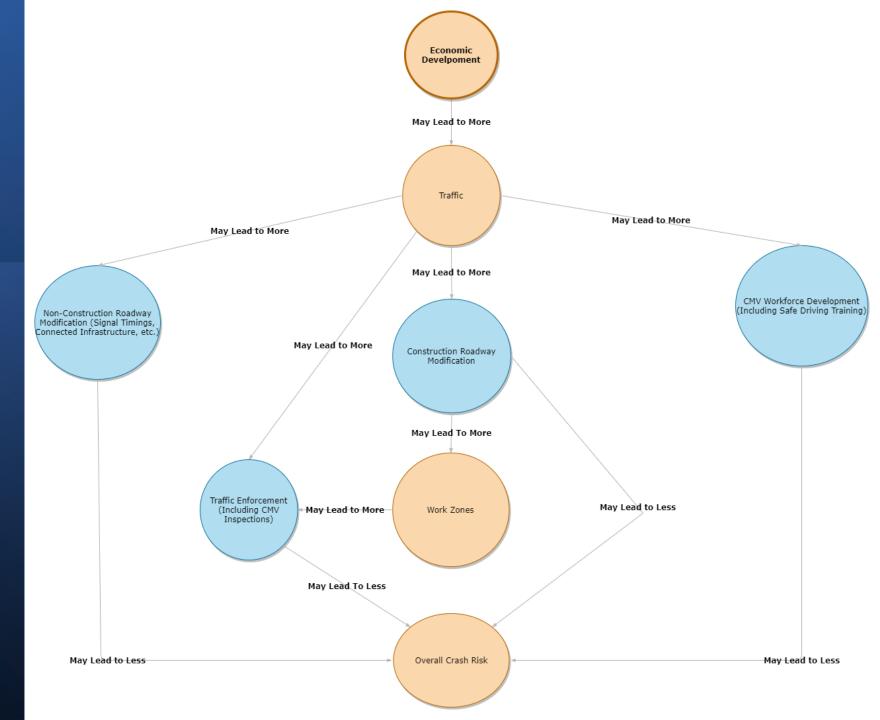




Road Construction and Work Zones

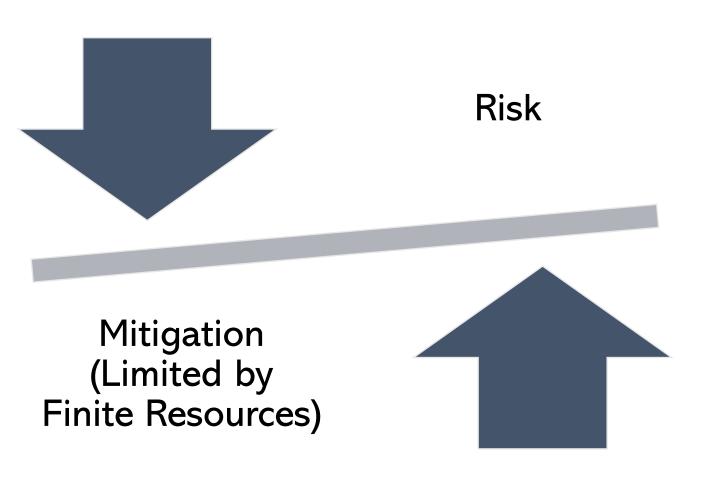


It Gets Even More Complicated...





Finding the Right Balance of Addressing Risk...





Our Strategy...



Tactical Data-Driven Enforcement



"Classic" Analytics (Traditional Strategic Planning)



Predictive Analytics

"Whole Picture" Planning



The Problem With Prediction...





Progress Toward Full Prediction Phase I Statistical Analysis (Crash Data Only)

> <u>Phase II</u> Risk and Mitigation Modelling (Precursors, Crashes, and Mitigation

> > <u>Phase III</u> Full Risk Lifecycle and Predictive Analytics Model

We Are Here





Measuring Our Progress (How Will We Know When We Get There?) Understanding and Participation in the Safety Picture From Everyone

Outcomes are Measured Based on Mitigation Strategies

Predictive Models are Demonstrated to be <u>Better</u> Than What We're Doing Now Data and Enforcement Tools In-Development and In-Place That Reflect All of This

