COVERLAB
Panel Session

May 18, 2022

coverlab.org

DEMO

Command Staff Report

COMMERCIAL VEHICLE ENFORCEMENT UNIT EXECUTIVE SUMMARY
(MCSAP Goals)

Inspections Data: Oct 1, 2021 - May 9, 2022
Crash Data: Oct 1, 2021 - Mar 31, 2022

19.00%
OOS Rate(Statewide)

77.27%
Federal OOS Catch Rate
(Oct 1, 2021 - Mar 31, 2022)

127.3
Estimated Crashes Prevented(Statewide)

4.1
Estimated Lives Saved(Statewide)

Total Inspections

A — Inspections: 5,575 | Goal: 4,906
B — Inspections: 11,836 | Goal: 7,959
C — Inspections: 10,566 | Goal: 7,555
D — Inspections: 8,862 | Goal: 6,198
E — Inspections: 7,747 | Goal: 5,628
F — Inspections: 7,176 | Goal: 5,914
G — Inspections: 9,229 | Goal: 6,767
H — Inspections: 8,757 | Goal: 6,176
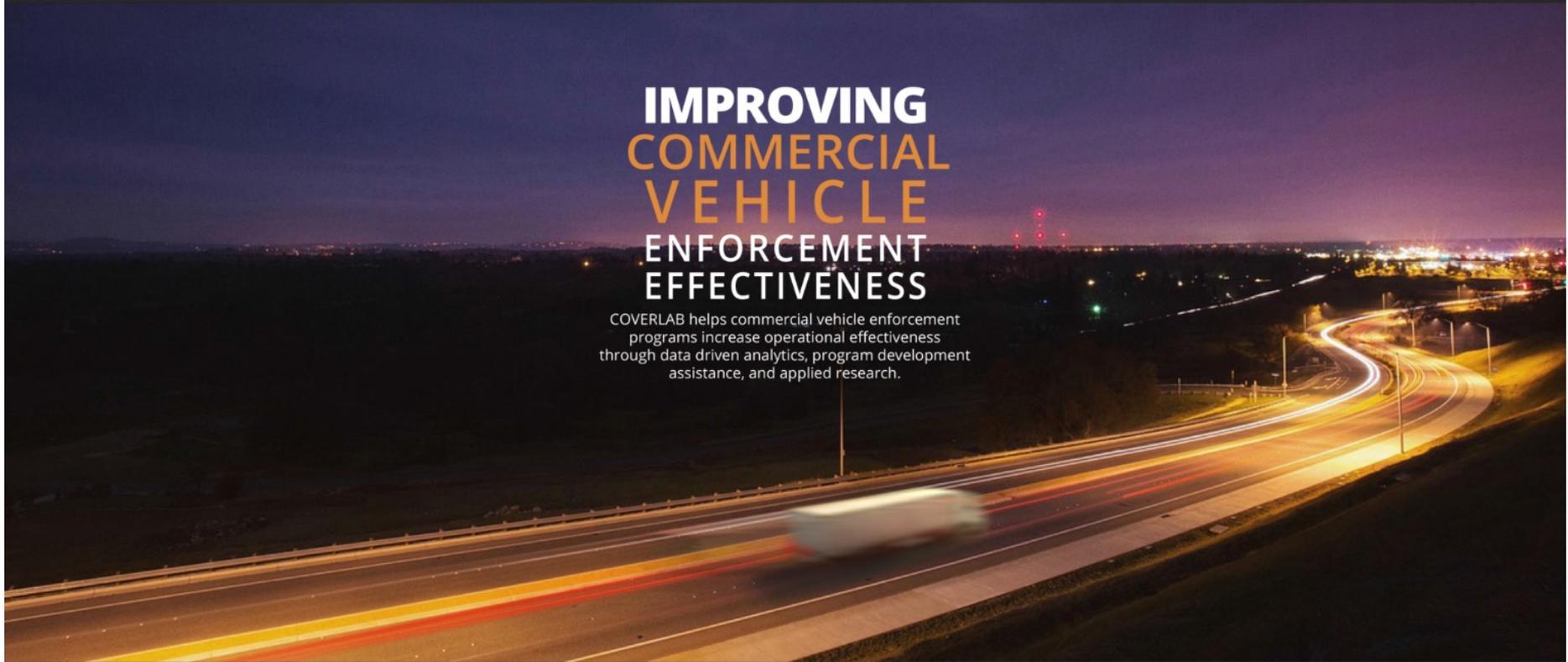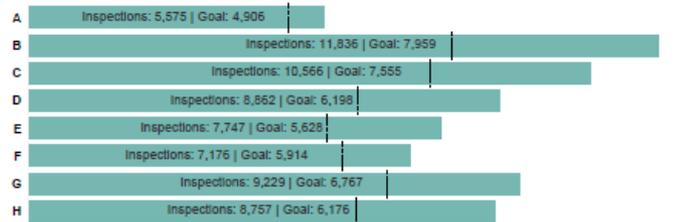
Inspection Goal Progress

October 2021 — Inspections:10,377 | Goal: 6,388
November 2021 — Inspections:21,114 | Goal: 12,776
December 2021 — Inspections:30,773 | Goal: 19,163
January 2022 — Inspections:39,355 | Goal: 25,551
February 2022 — Inspections:48,696 | Goal: 31,939
March 2022 — Inspections:59,457 | Goal: 38,327
April 2022 — Inspections:69,233 | Goal: 44,715
May 2022 — Inspections:69,748 | Goal: 51,103

Level 1 Inspections

A — Inspections: 1,412 | Goal: 1,226.5
B — Inspections: 2,722 | Goal: 1,989.7
C — Inspections: 2,317 | Goal: 1,888.8
D — Inspections: 2,062 | Goal: 1,549.4
E — Inspections: 2,116 | Goal: 1,406.9
F — Inspections: 1,531 | Goal: 1,478.4
G — Inspections: 1,962 | Goal: 1,691.9
H — Inspections: 1,838 | Goal: 1,544.0

Level 2 Inspections

A — Inspections: 2,281 | Goal: 2,061
B — Inspections: 4,997 | Goal: 3,263
C — Inspections: 4,718 | Goal: 3,098
D — Inspections: 3,465 | Goal: 2,541
E — Inspections: 2,845 | Goal: 2,307
F — Inspections: 3,126 | Goal: 2,425
G — Inspections: 3,497 | Goal: 2,775
H — Inspections: 4,301 | Goal: 2,532

Level 3 Inspections

A — Inspections: 1,869 | Goal: 1,619
B — Inspections: 4,004 | Goal: 2,626
C — Inspections: 3,473 | Goal: 2,493
D — Inspections: 3,303 | Goal: 2,045
E — Inspections: 2,724 | Goal: 1,857
F — Inspections: 2,443 | Goal: 1,952
G — Inspections: 3,705 | Goal: 2,233
H — Inspections: 2,529 | Goal: 2,038

Total Fatalities

A — Fatalities: 8 | Goal: 4.95
B — Fatalities: 18 | Goal: 13.20
C — Fatalities: 7 | Goal: 11.88
D — Fatalities: 5 | Goal: 4.95
E — Fatalities: 8 | Goal: 11.22
F — Fatalities: 9 | Goal: 7.59
G — Fatalities: 3 | Goal: 2.97
H — Fatalities: 24 | Goal: 10.89

Fatalities Goal Progress

October 2021 — Fatalities:15 | Goal:14.0
November 2021 — Fatalities:29 | Goal:25.0
December 2021 — Fatalities:39 | Goal:32.0
January 2022 — Fatalities:55 | Goal:41.0
February 2022 — Fatalities:68 | Goal:52.0
March 2022 — Fatalities:82 | Goal:55.0
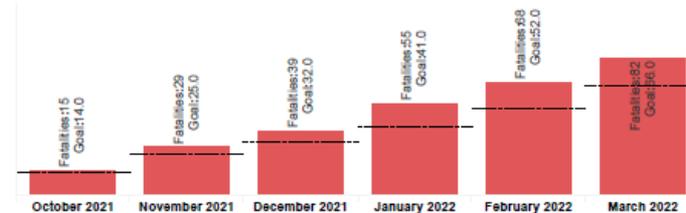
COVERLAB Evolution

- **Incremental**
  - Started with geocoding crashes
  - Crash map deliverables
  - Added online maps
  - Added grant writing assistance
  - Added Analytics

- **Funding Model**
  - **Retainer-based**
  - **60 / 40**

Partnership Benefits

- **Extends the reach of CVE programs without the commitment of an FTE**

- **Provides Business Continuance**
  - Complex program has steep learning curve
  - Command staff turnover decreases efficiency
  - Critical business services are continued while command staff gets up to speed

- **Inexpensive relative to consultants**

- **Non-profit / education adds credibility to program**

- **Extends CVE capabilities – incrementally at first**

Getting Started

- **Identify the most important needs**
- **Identify internal resources**
- **What don't you have?**
- **What is your budget?**

- **Do you have a University Transportation Center?**
- **If not, reach out to data science, GIS, stats, etc. dept.**

Getting Started

- **Start small**
- **Excel**
- **Geolocate crashes**
- **Fixed deliverable to establish trust**

University Challenges

- **Access to data and PII, security, etc.**
- **Can't directly apply for grants due to competition**
- **Discretionary based on commander**
- **Integration of systems**
- **Retention of long term employees**
- **Need relationship building skill sets**

- **Upsides**
  - Established trust = extension of staff
  - Partnership = recurring funding
  - Flexibility if trust is gained

CVE Challenges

- **How to allocate part of your funds for university assistance**

- **Budget constraints needed to justify**

- **Access to raw data**

- **Technical capabilities to manipulate and analyze data**

- **Lack of technical personnel dedicated to CVE**

Skill Sets

- **Data Science**
- **GIS**
- **Statistics**
- **Computer Science**
- **Analytics**
- **Information Technology**

Lessons Learned

- **Accessible = Simple**
  - Invest in data visualization best practices
  - Invest in UI/UX
- **Command Staff Buy-In**
- **Require reporting of outcomes and strategies**
- **Actionable Intelligence**
- **Leverage pre-existing technologies**

Types of Analytics

Behind the Scenes

SQL Server	Multi-Dimensional Data Model	Tableau Server / ArcGIS Server	Embedded Analytics

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Web / Analysis Services

Analytics

Data	Information	Knowledge	Intelligence
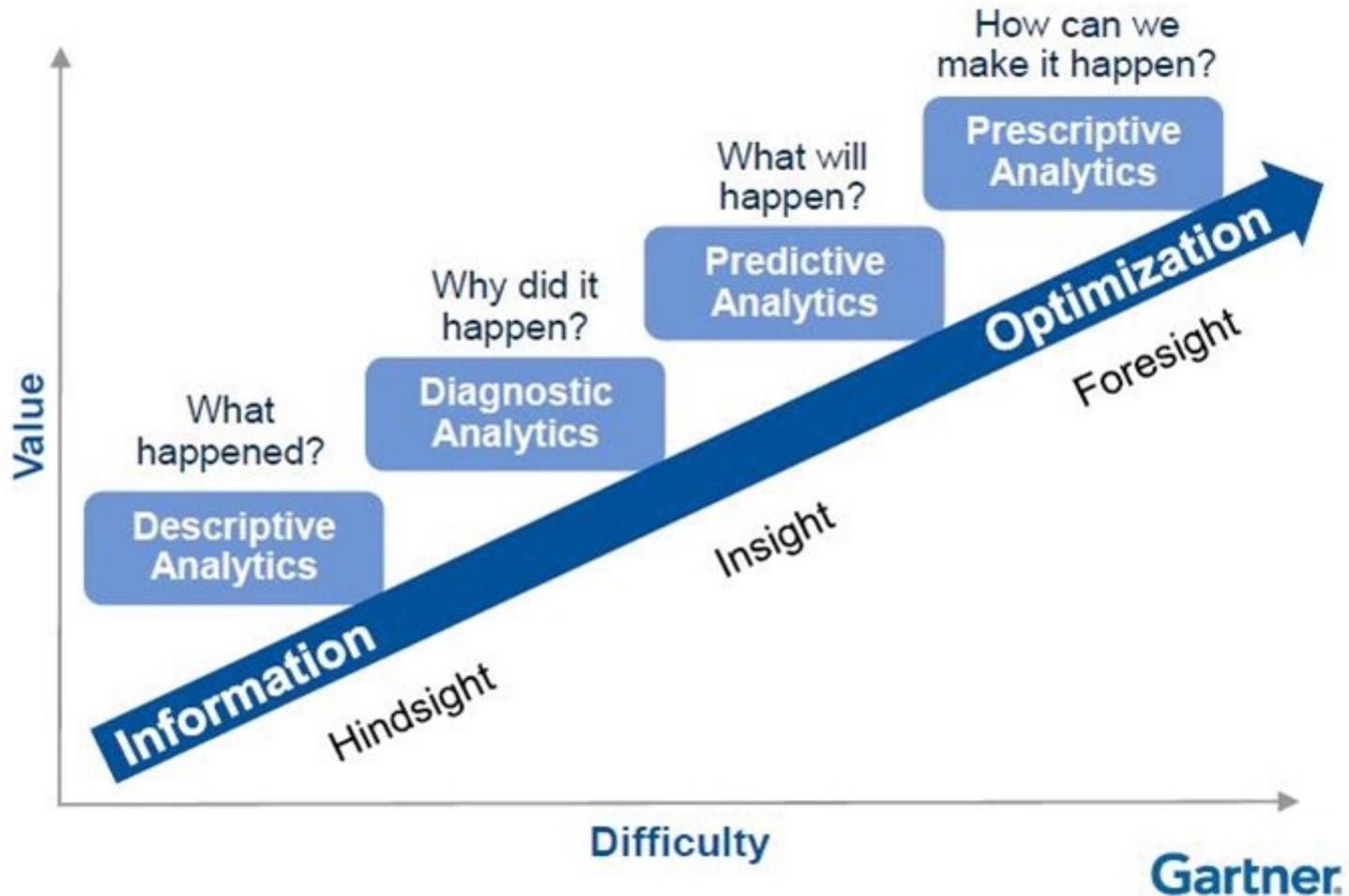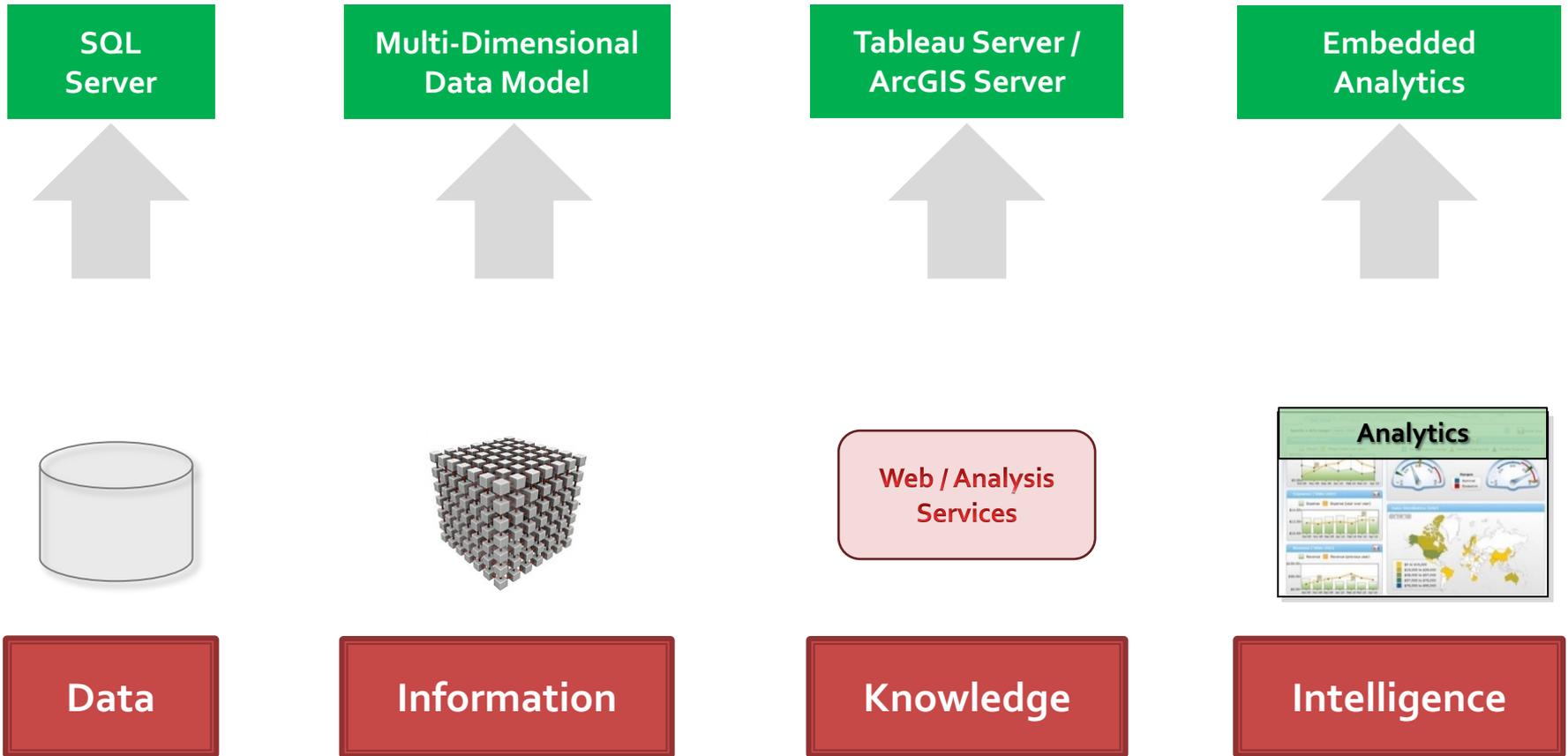
What's Next?

Effectiveness

Develop Smart Strategies

- **Are We Being Effective?**

- **Specific Targeted Enforcement**
  - who, what, where, why how

- **Specific Alternative Interdictions**
  - When and where are NCDOT treatments needed?
  - Where and when is teaming effective? Local/Traditional
  - Identifying and engaging high risk carriers