Keeping Up with the Rapid Evolution of New Mobility
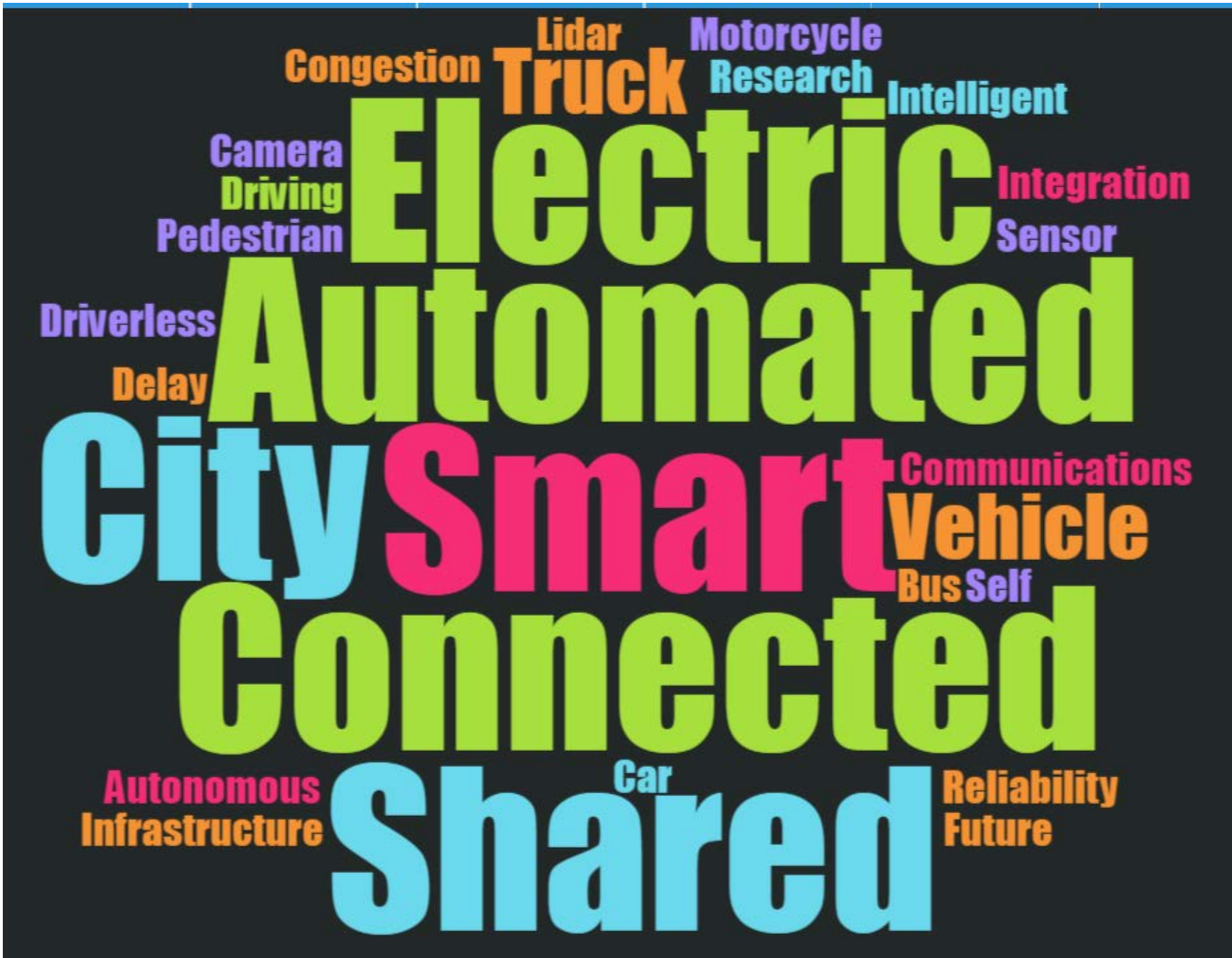
National Rural ITS Meeting

October 2018

Change is Inevitable…

→ New technology in vehicles and carry -on/mobile

→ Attitude shifts regarding driving, car ownership, ride sharing, car sharing: new mobility

→ Changes impacting Suburban and Rural communities as well

→ Rapid evolution of computing & telecommunications technology

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Keys to Managing Change

1. Dialogue

2. Pilot Test

3. Document

Examples in Action….DIALOGUE

— Multi -Agency Working Groups

— A number of agencies have formed multi -disciplinary working groups to explore the future of CAV

— Some have created strategic plans, others have facilitated a process for companies that wish to test AVs on their roadways

— Federal Grant requests and unique programs (like Smart City Challenge) have helped push these working groups by giving them targets of opportunity
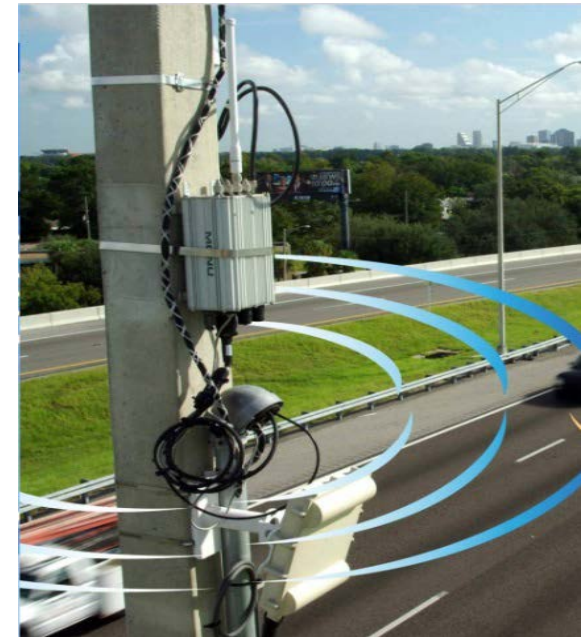
Examples in Action....PILOT TESTING

— Traffic Signal Data Sharing

— A number of municipal and county agencies are now sharing traffic signal data with one of several new companies that have approached them.

— The general preference is for the vendors to access the data at a centralized location to access more intersections at once.

— Third party vendors are sharing data with applications and vehicle manufacturers

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Examples in Action….PILOT TESTING

— National   SPaT Challenge

— Challenge state and local public sector transportation Infrastructure Owners & Operators (IO&Os) to   deploy DSRC infrastructure   with   SPaT broadcasts   in at least one coordinated corridor or network (approximately 20 signalized intersections) in each state by January 2020.

— Will better prepare each agency for future, more complex V2I deployments

— Message of commitment to automakers

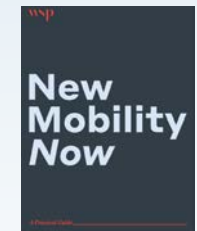# Examples in Action….DOCUMENT

- US DOT publications from CV Pilots

- Strategic Plans from agencies

- Leveraging TSM&O plans for CAV planning and documentation

- Publishing best practices –SPaT Challenge, NOCoE website

- CAT Coalition white papers

New Mobility Now   - A Practical Guide

— What is really changing?

— Long term visions

— Next steps

— Action plans

— International

— Authored by practitioners

— Informed by best practice
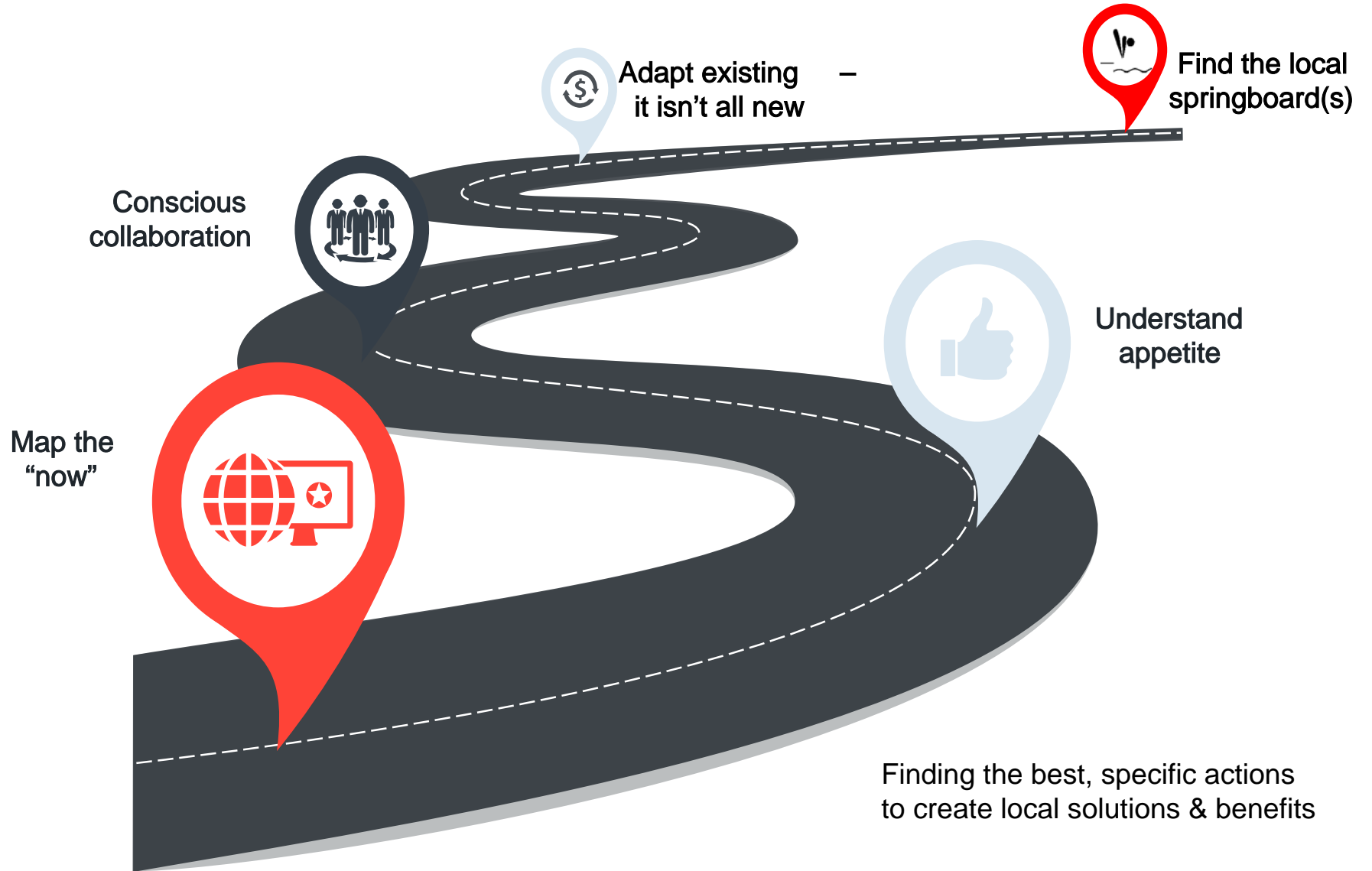
Challenges to being 'Future Ready'

— **Why** think about change?

— **What** might change, <u>how fast</u>, and **when** , <u>realistically</u> ?

— **What** do we <u>really</u> need to be worried about?

— **Why** are they <u>applicable</u> and **what** are the <u>risks</u>?

— **Where** <u>could</u> emerging solutions deliver benefits?

— **How** can we <u>improve</u> our services?

— **How** can we <u>improve</u> our networks and their operation?

— **How** can we <u>improve</u> the customer experience?

— **How** can we <u>improve</u> our housing, buildings and places?

— **How** can we <u>rebalance</u> space for people and vehicles?

Taking The Best Steps

New Mobility Now
A Practical Guide

Find the local springboard(s)

Adapt existing – it isn't all new

Conscious collaboration

Understand appetite

Map the "now"

Finding the best, specific actions to create local solutions & benefits

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Build on TSM&O Philosophy…

- ✓ Establish baseline/conduct self-assessment
- ✓ Understand motivation
- ✓ Establish clear definitions
- ✓ Identify champions/resources needed
- ✓ Engage key stakeholders
- ✓ Consider external forces

- ✓ Analyze and evaluate performance

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Steve's Lessons:
Don't Be Intimidated by the Unknown

— Public Sector: One size cannot fit all. Each town, city and country has a different start   -point and context. The details of legal, political, economic, technological, environmental, social and ethical considerations matter, and will affect what is possible and desirable.

— Private Sector: We should embrace the inevitable variability in capability and maturity levels of different state, county, and municipal DOT's when it comes to connected & automated vehicles.

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Steve's Lessons:
Accept the Inevitable

A graduated approach occasionally helps avoid the problem of the over-prescribing policy, design, and operations.

"When faced with great uncertainty, it is almost impossible to get it right the first time."

- Dr. Nidhi Kalra, Senior Information Scientist, Rand Corporation

If at first you don't succeed... skydiving isn't for you.

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Takeaways

✓ DIALOGUE: Some agencies are further ahead of others – mentor each other

✓ PILOT TEST: Don't let the unknowns and complexities paralyze us

✓ DOCUMENT: While still many unknowns, we need to start factoring CAVs into all of our daily processes and future plans

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Ready – Fire - Aim

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