



# Helping Transportation Agencies Capitalize on Modern Data System Design and Management

## We help agencies recognize shortcomings of traditional data systems

Emerging transportation technologies generate new data with the potential to improve system operations, infrastructure preservation, and agency efficiency.

To take advantage of this data, agencies must evolve towards modern data systems and practices. AEM helps transportation agency leaders navigate, select, and implement the systems and strategies that maximize the value of data.

## We champion modern data systems and management

New and emerging data move quickly and are too large and varied to be handled by the database management systems traditionally used by transportation agencies. These systems were architected for predetermined purposes.

Requirements rapidly change in the age of big data, challenging systems that are inflexible, difficult, and expensive to modify. AEM helps transportation agencies recognize potential barriers in their own systems and champion change.

**8**  
STEPS

### ADOPTION ROADMAP

AEM's 8-step adoption roadmap supports incremental transition.

**40**  
AGENCIES

### STATE TRANSPORTATION AGENCIES

AEM has helped over 40 state transportation agencies implement new data initiatives.

**>100**  
RECOMMENDATIONS

### RELEVANT RECOMMENDATIONS

AEM's modern data management framework offers more than 100 relevant recommendations based on industry best practices.



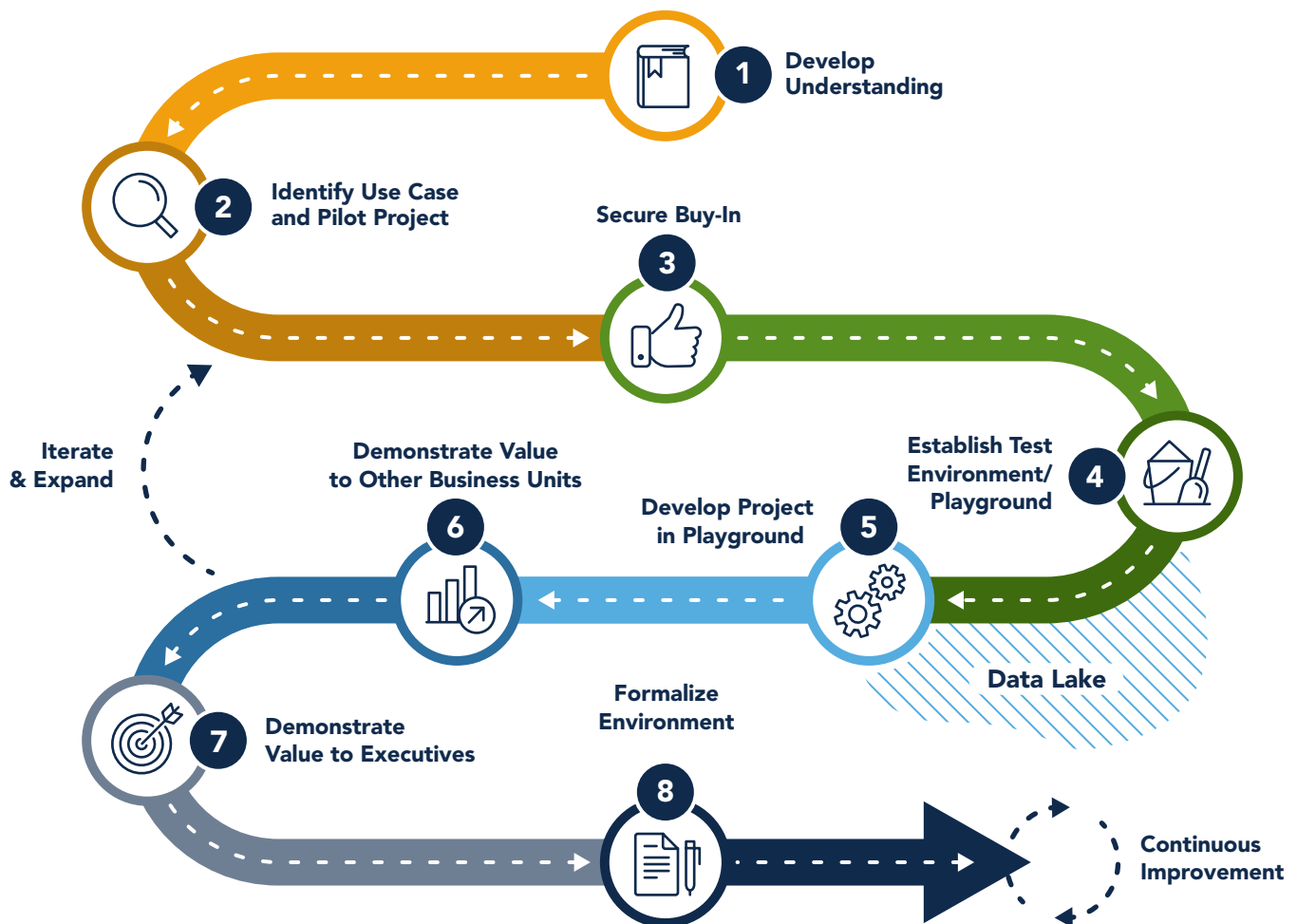
# Helping Transportation Agencies Capitalize on Modern Data System Design and Management

## We support each agency on their own path to adoption

We bring a unique understanding of the transportation sector after helping more than 40 state transportation agencies to implement new data initiatives. The reality is that technology know-how isn't enough: modernization of data systems must start at a strategic level.

Organizational change requires an understanding of resource requirements and a vision for how a departure from traditional data management will impact responsibilities within transportation agencies. We provide our knowledge and experience to support incremental transition at agencies, guided in part by AEM's eight-step adoption roadmap for transportation agencies.

## AEM's Modern Big Data Adoption Roadmap for Transportation Agencies



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***This guide is really nicely done and full of useful information. It should be required reading for all new executives and for anyone engaged in shared mobility efforts and DOT transformations.***

– NCHRP 08-116 panel member

## SPOTLIGHT

### Guidebook for Managing Data from Emerging Technologies for Transportation

We authored NCHRP Research Report 952 Framework for Managing Data from Emerging Technologies for Transportation. The guidebook introduces agencies to new concepts and best practices for managing data in a modern, flexible, scalable, and sustainable way.

Our modern data management framework offers more than 100 relevant recommendations based on industry best practices. It is backed by a roadmap that helps transportation agencies navigate common organizational hurdles to secure support and demonstrate long-term value for the modern approach to data management.

### AEM's guidance is also supported by a series of tools, including:

- A data management capability maturity self-assessment, which includes more than 100 questions across 15 data management focus areas
- A tool to catalog existing and potential data sources
- A tool for tracking big data governance roles and responsibilities within an agency

## AEM's Guidebook Components and Applications

