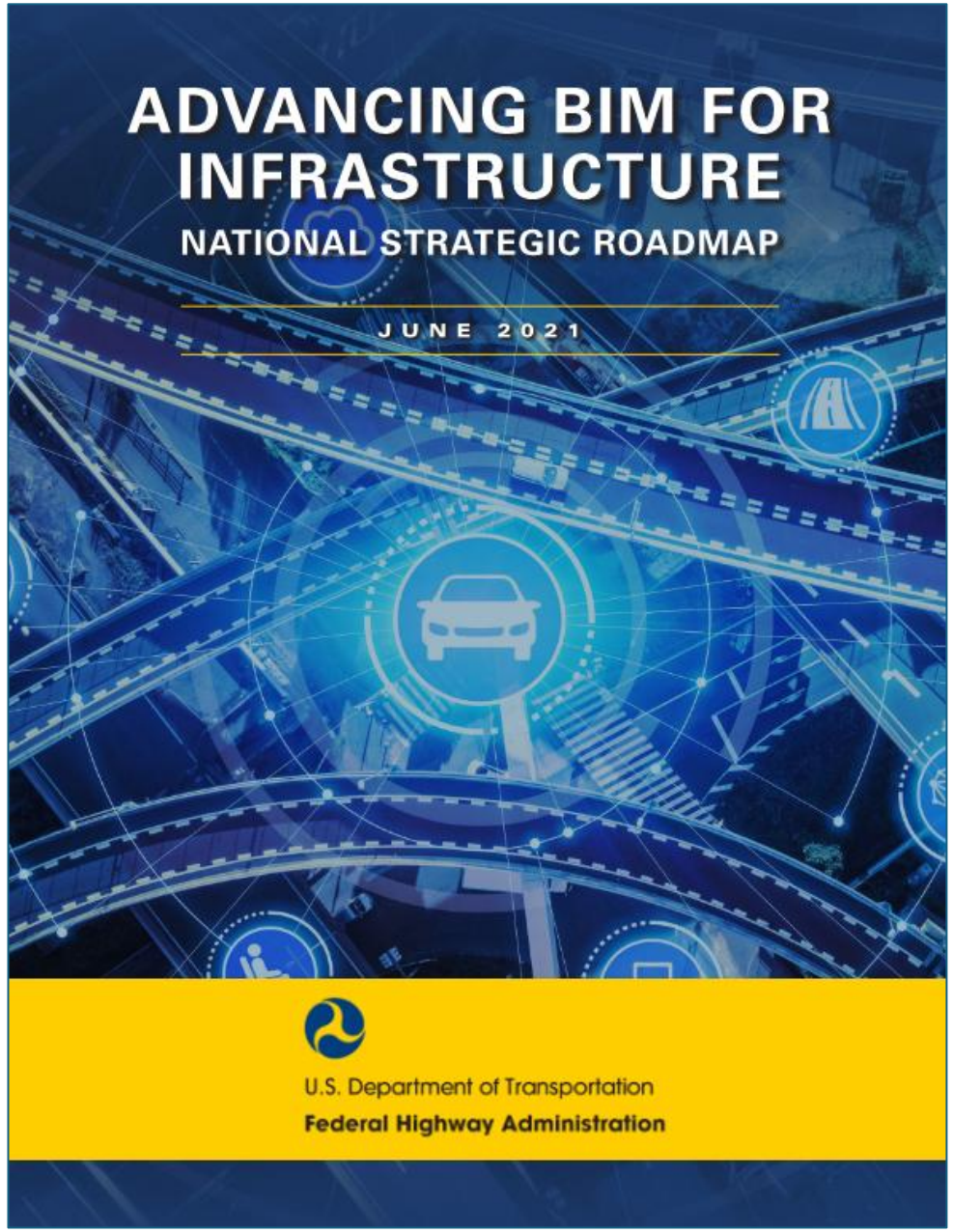
# What is the NSR?

- 60-page PDF document published in June 2021
- Collaborative work involving numerous organizations
- Provides a template for DOTs to use to advance BIM for Infrastructure
- Approach is flexible to allow for multiple project workflows
- A ten-year plan, with defined milestones, procedures, recommendations and expectations
- A clear definition of BIM Maturity Levels 0-3
- Available for download at: https://www.fhwa.dot.gov/publications/research/infrastructure/pavements/21064/21064.pdf



# What are the NSR's most important features?

Clear definition of BIM for Infrastructure

Clear definition of the benefits and challenges to implement BIM for Infrastructure

Clear definition of BIM Maturity Levels 0-3

Goal to have all US DOTs reach BIM Maturity Level 1, by 2026

Goal to have all US DOTs reach BIM Maturity Level 2, by 2031

# What is BIM for Infrastructure / Digital Project Delivery?

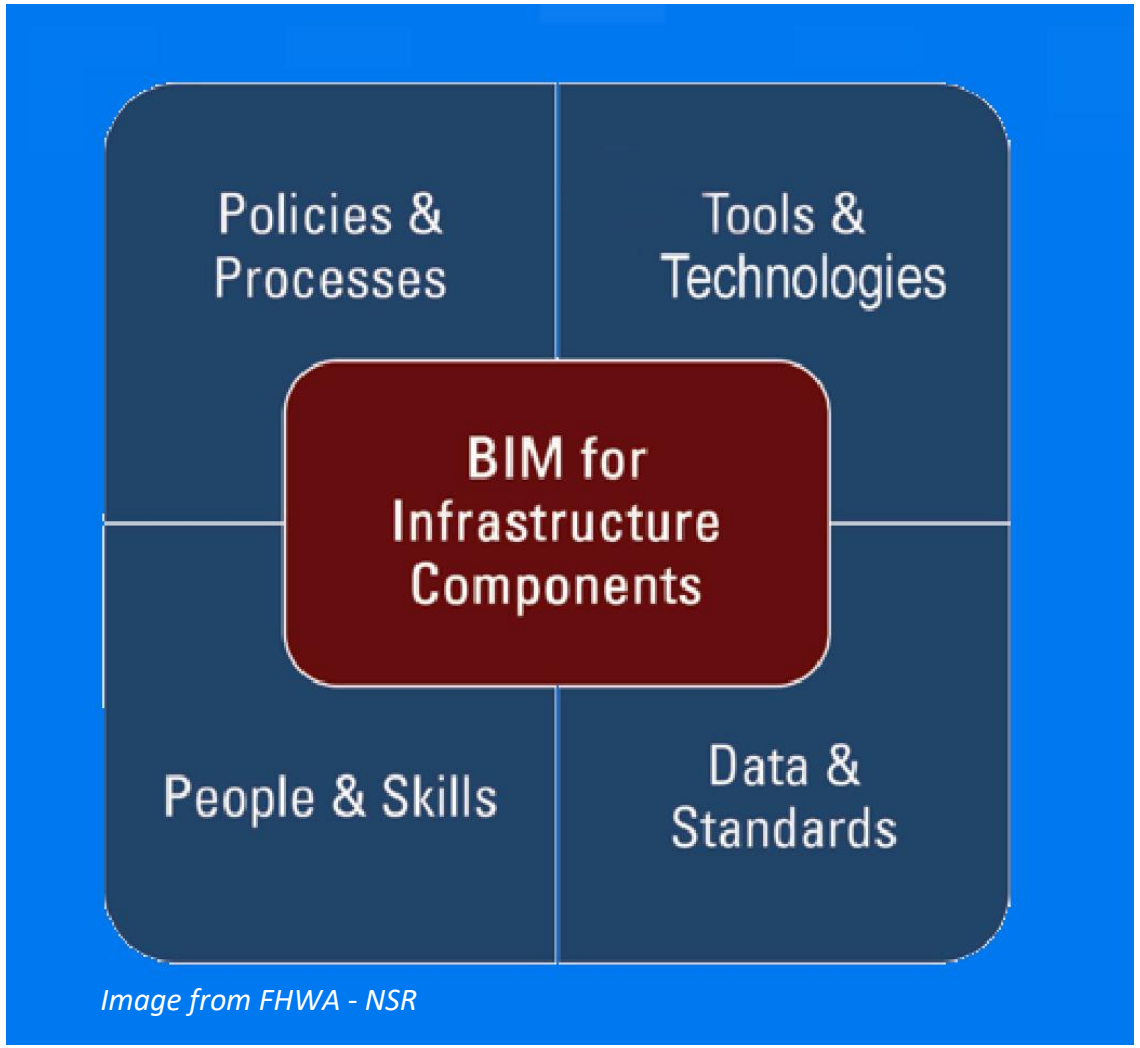
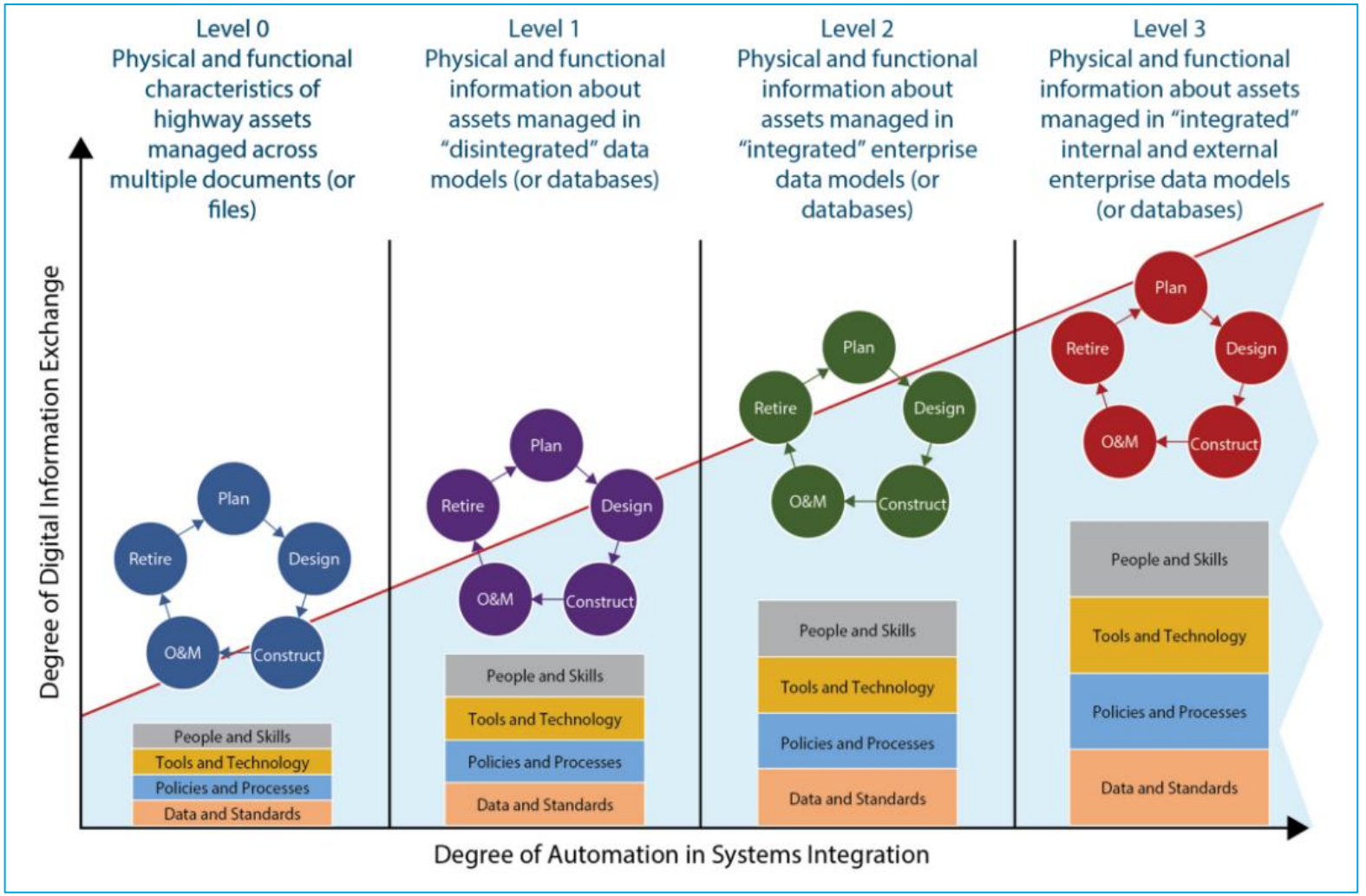



*Image from FHWA - NSR*

Deliver an accurate, geospatially aware as-built representation of a project, to be maintained throughout the asset's lifetime

# BIM Maturity Levels 0-3 Defined

- **Level 0**
  Document Based
- **Level 1**
  Non-Integrated
  Data Models
- **Level 2**
  Integrated Data Models
- **Level 3**
  Enterprise Data Models

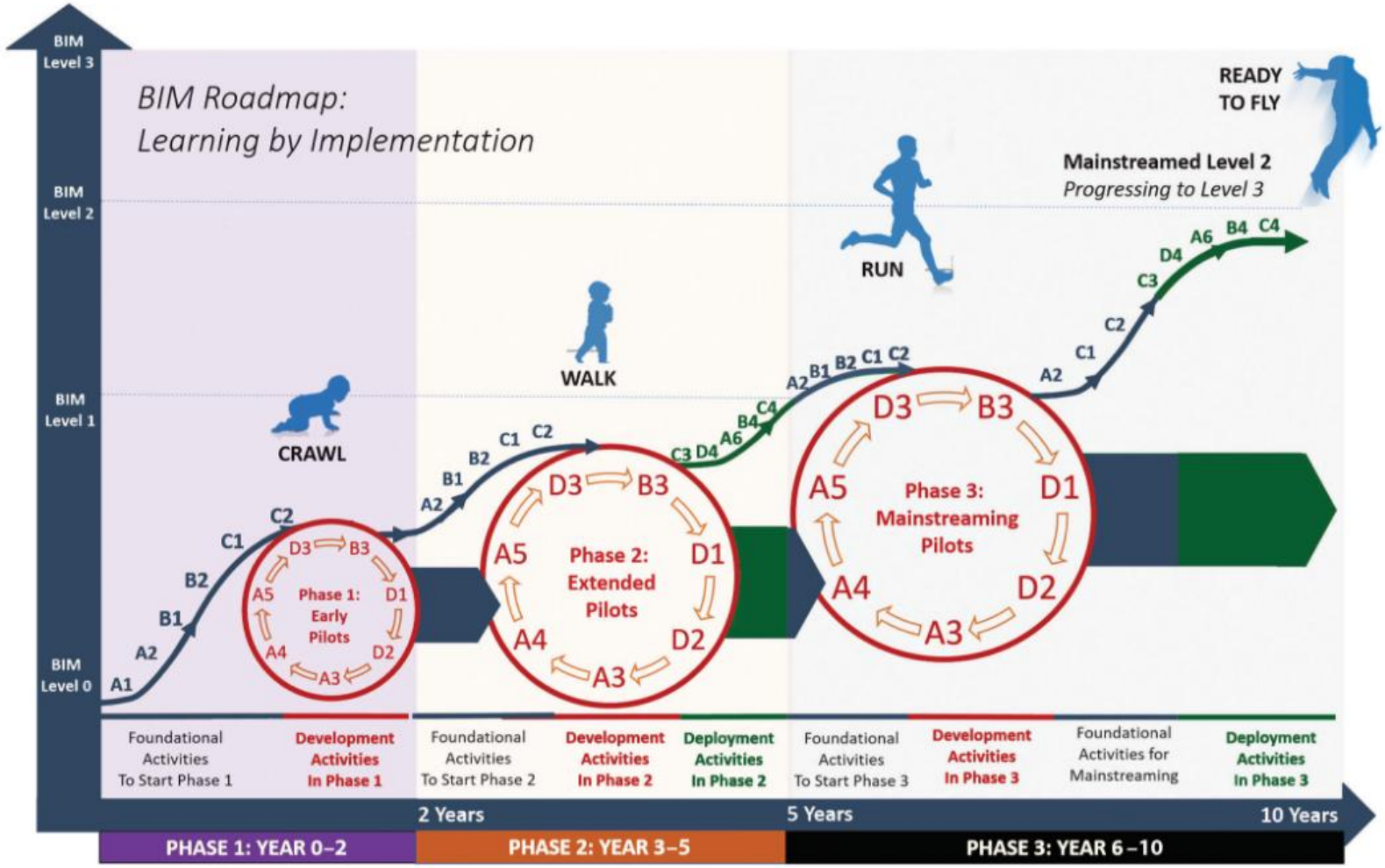


# Ten-Year Phased Timeline to reach BML 2

- **Years 0-2**
  Short Term:
  Pilot Projects Phase

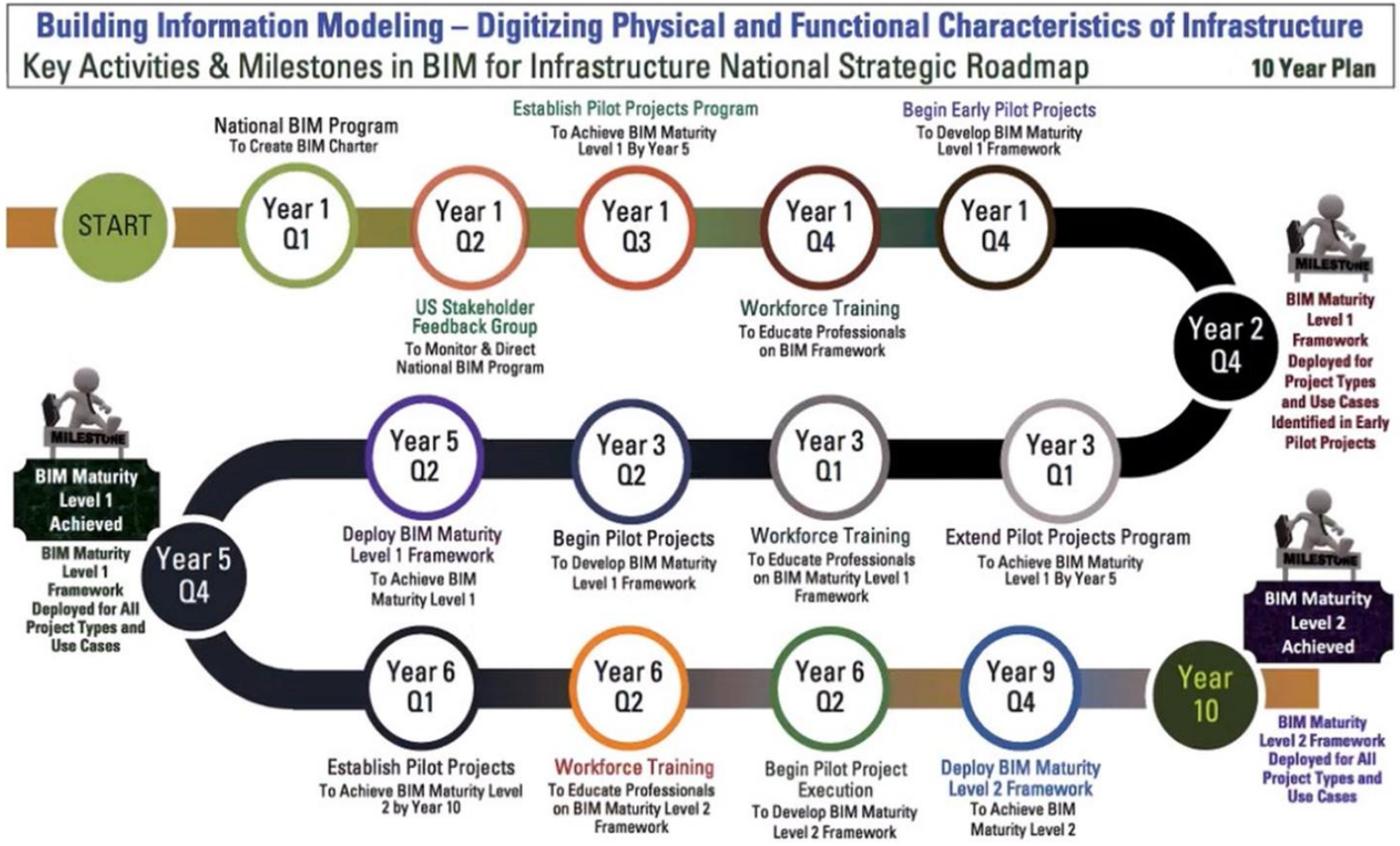
- **Years 2-5**
  Medium Term:
  Extended Pilot Projects Phase

- **Years 5-10**
  Long Term:
  Mainstreaming Phase



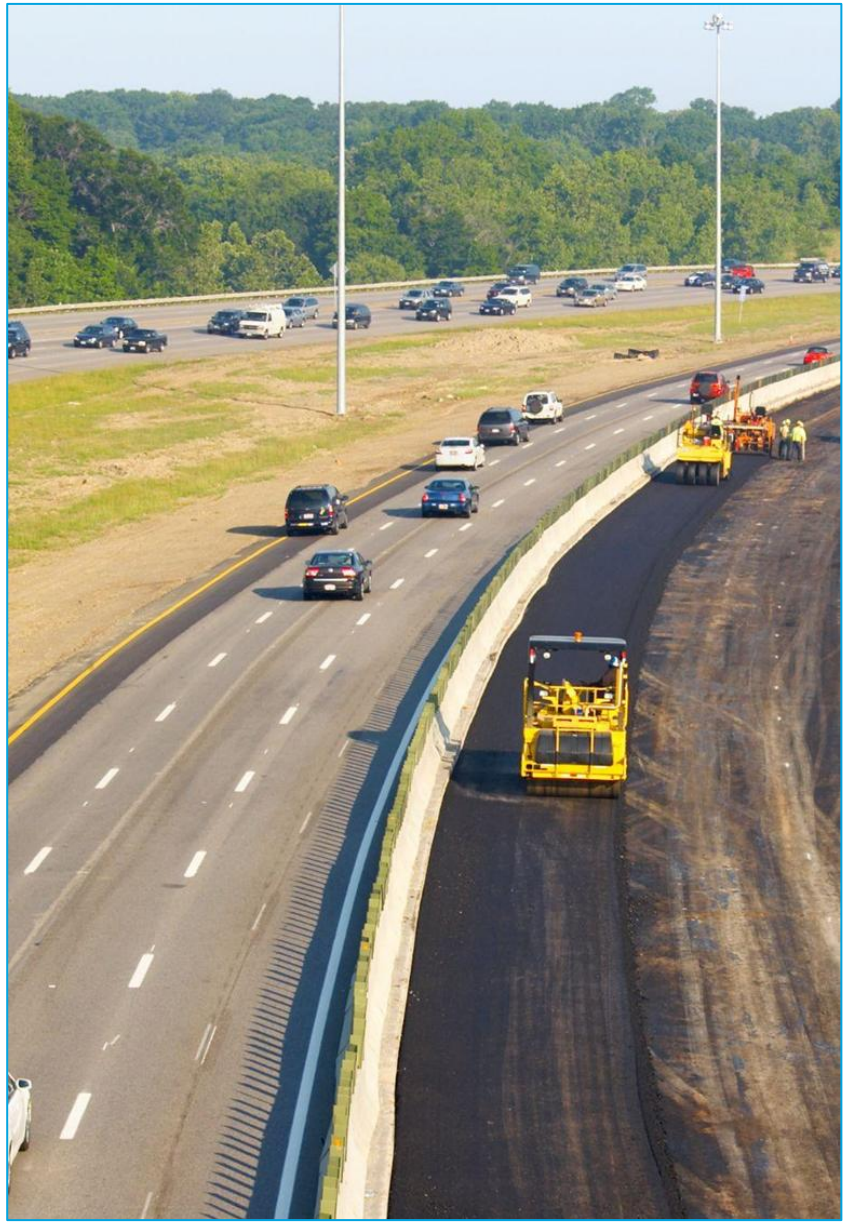
# Time-scaled Roadmap Established

- **Years 0-2**
  Short Term:
  Pilot Projects Phase
- **Years 2-5**
  Medium Term:
  Extended Pilot Projects Phase
- **Years 5-10**
  Long Term:
  Mainstreaming Phase



# Begin with the end in mind

*State DOTs, in cooperation with their external partners, will have mature BIM processes in place and trained and skilled personnel who use openBIM data standards, information-exchange specifications, and digital workflows to collaborate with each other to create, collect, store, process, share, analyze, and autonomously exchange data and information across a large number of key systems of record, including those related to planning, programming, surveying, design, engineering analysis, contract letting, construction management, asset and maintenance management, GISs, and linear referencing.*



## What can the DDSG do to help us get there?