

INTRODUCTION

Bridge Inspection & Maintenance System (BIM)



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BIM System Functions

- Ensures appropriate levels of **safety** and **service**.
- Helps to **maximizes life** and utility of bridge structures.
- Assists service life **prediction** of bridge elements or structure types.
- Identifies the need for continued **monitoring**.
- Provides an electronic system for managing **inspection** information and collecting and verifying **inventory** data.
- Provides data for setting **priorities**.

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BIM System Definition

A comprehensive inventory management system with the ability to process inspection and component information to support:

- Inspection management
- Maintenance programming
- Strategic & Life Cycle planning
 - Rehabilitation programs
 - Replacement programs
 - Budget development

Section 1.2 in Manual



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BIM System Functions (cont'd)

- Assists with the **allocation of resources**.
- Provides information to develop **maintenance costs** (.i.e., materials, quantities).
- Provides a system to **track the status** of maintenance recommendations.
- Facilitates **information exchange** with others.
- Provides a framework for training and evaluation of **inspectors**.
- Provides information for **evaluating** design, construction and maintenance standards.

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Bridge Structure Categories

- 3 MAIN categories are Standard Bridges, Culverts, and Major Bridges

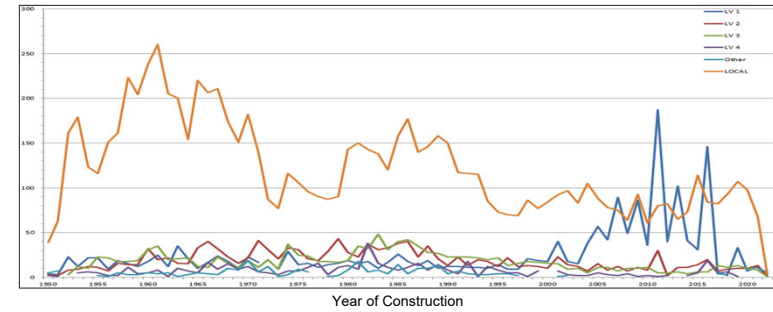
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Bridge Structures Statistics

Number of Bridge Structures Built per Year by Road Type

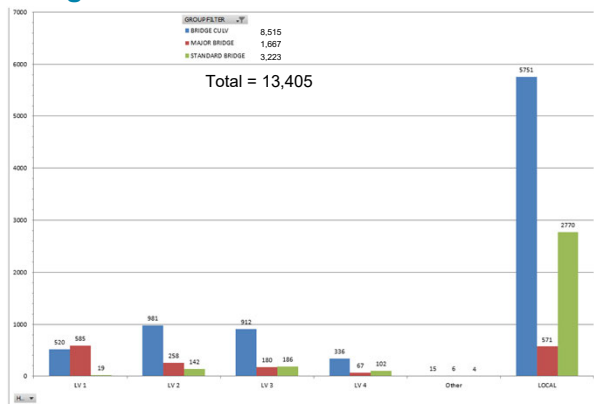


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BIM – Bridge Structure Statistics



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BIM System – Critical Considerations

- The accuracy of the information contained within the BIM system directly impacts the effectiveness of the system.
 - Consistency of inspection standards
 - Inspection accuracy
 - Inventory accuracy
 - Maintenance accuracy
- The bridge inspector must adhere to the highest standard at all times.

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