### Summary of Concrete Overlays

#### Bonded Concrete Overlays of Concrete Pavements

- **Overlay and existing concrete pavement act as one monolithic pavement**

  **Applications**
  - Where increase in traffic loads requires more structural capacity
  - To eliminate surface defects such as scaling and spalling
  - To improve friction, noise, and rideability
  - Where vertical clearances must be met

  **Keys to success**
  - Existing pavement condition
    - Good structural condition; some surface distress OK
  - Fair or better structural condition with severe surface distress

#### Bonded Concrete Overlays of Asphalt Pavements

- **Overlay and existing concrete pavement act as one monolithic pavement**

  **Applications**
  - Where increase in traffic loads requires more structural capacity
  - To eliminate surface defects such as rutting and shoving
  - To improve friction, noise, and rideability
  - Where vertical clearances must be met

  **Keys to success**
  - Existing pavement condition
    - Good structural condition; some surface distress OK
  - Fair or better structural condition with severe surface distress

#### Bonded Concrete Overlays of Composite Pavements

- **Overlay and existing concrete pavement act as one monolithic pavement**

  **Applications**
  - Where increase in traffic loads requires more structural capacity
  - To eliminate surface defects such as scaling and spalling
  - To improve friction, noise, and rideability
  - Where vertical clearances must be met

  **Keys to success**
  - Existing pavement condition
    - Good structural condition; some surface distress OK
  - Fair or better structural condition with severe surface distress

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#### Unbonded Concrete Overlays of Composite Pavements

- **Overlay serves as a new full-depth pavement on a stable base**

  **Applications**
  - To increase pavement life equivalent to full-depth pavement
  - To improve surface friction, noise, and rideability

  **Keys to success**
  - Existing pavement condition
    - Poor condition, including materials-related distress, but stable and uniform

#### Unbonded Concrete Overlays of Asphalt Pavements

- **Overlay serves as a new full-depth pavement on a stable base**

  **Applications**
  - To increase pavement life equivalent to full-depth pavement
  - To eliminate rutting and shoving problems

  **Keys to success**
  - Existing pavement condition
    - Poor condition, including materials-related distress, but stable and uniform

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#### Unbonded Concrete Overlays of Concrete Pavements

- **Overlay serves as a new full-depth pavement on a stable base**

  **Applications**
  - To increase pavement life equivalent to full-depth pavement
  - To improve surface friction, noise, and rideability

  **Keys to success**
  - Existing pavement condition
    - Poor condition, including materials-related distress, but stable and uniform

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