| Improvement Type              | Improvement Concept Definition  | Improvement<br>Concept Code<br>[1]                                 | Safety<br>Certification<br>Documentation<br>Required? | Improvement<br>Strategy [2] | Cross Section<br>Revisions? [3] | Pavement design<br>meeting a structural<br>number (SN)? [4] | Evaluate bike & ped (outside of ADA curb ramps)? [5] | Improve Curb Ramps<br>for ADA compliance?<br>[5]   | Potential for R/W<br>Acquisition (other than<br>ADA, beam guard and<br>drainage needs)? | Encroachment<br>Report Required? |
|-------------------------------|---|--|---|-----------------------------|---------------------------------|---|--|--|---|----------------------------------|
| Preservation /<br>Restoration | Preservation/restoration of existing pavement to address cracks, joints and surface imperfections, seal and protect the road surface, improve friction and/or remove and apply a minimal riding surface.                        | PSRS10<br>PSRS20<br>PSRS30<br>PSRS40                               | PSRS40 only   | Perpetuation                | No                              | No  | Yes  | Yes  Based on work type defined as alteration [6]  | No  | No                               |
|                               |   |  |   | Rehabilitation              | S-2 areas only                  | No  | Yes  |  | S-2 areas only  | New R/W and S-2<br>areas only    |
| Resurfacing                   | Place a new surface on an existing pavement. May add surface layer or mill/replace or cold in-place recycle a portion of the existing pavement.   | RSRF10<br>RSRF15<br>RSRF20<br>RSRF25<br>RSRF30<br>COLD10<br>COLD20 | Yes   | Perpetuation                | No                              | RSRF30, COLD10,<br>COLD20 only                              | Yes  | Yes  | No  | No                               |
|                               |   |  |   | Rehabilitation              | S-2 areas only                  |   |  |  | S-2 areas only  | New R/W and S-2<br>areas only    |
| Pavement<br>Replacement       | Remove or mill/relay all paving layers from existing roadway and provide a new paved surface. Can include replacement or improvements to the base and subgrade. [7]   | PVRPLA<br>COLD30   | Yes   | Perpetuation                | No                              | Yes   | Yes  | Yes  | No  | No                               |
|                               |   |  |   | Rehabilitation              | S-2 areas only                  | Yes   |  |  | S-2 areas only  | New R/W and S-2<br>areas only    |
| Reconstruction                | Work in addition to perpetuation pavement replacement that can be justified by safety, operations, environmental or ancillary factors which alters the existing roadway type or footprint for the entire length of the project. | RECST  | Yes   | Rehabilitation              | Yes                             | Yes   | Yes  | Yes  | Yes   | Yes                              |
| Expansion                     | Construction of new a highway or structure, or reconstruction of existing highway that includes the construction of additional through travel lanes.  | RECSTE<br>BRNEW  | No  | Modernization               | Yes                             | Yes   | Yes  | Yes  | Yes   | Yes                              |
| Bridge Preventive             | Preservation of existing structure by treatments that decelerate future deterioration, and maintain or improve its functional condition   | BRPVTV   | No  | Perpetuation                | No                              | No  | May  | Based on work type<br>defined as alteration<br>[6] | No  | No                               |
| Bridge<br>Rehabilitation      | Preservation or restoration of the structural integrity of an existing structure, or work to correct safety defects on existing structure.  | BRRHB  | Yes [8]   | Perpetuation                | No                              | No  | Yes  | Yes  | No  | No                               |
|                               |   |  |   | Rehabilitation              | S-2 areas only                  |   |  |  | S-2 areas only  | New R/W and S-2<br>areas only    |
| Bridge<br>Replacement         | Removal and replacement of an existing bridge, or removal of an existing bridge without replacement.  | BRELIM<br>BRRPLE<br>BRRPL  | Yes   | Rehabilitation              | S-2 areas only                  | Yes [9]   | Yes  | Yes  | S-2 areas only  | New R/W and S-2<br>areas only    |

<sup>[1]</sup> WisDOT staff can refer to PMM 5-10-5 for details on Improvement Concept Codes. [2] Improvement strategies and design applications are correlated as follows:

| Improvement Strategy | Design Criteria Application S-1  |  |  |  |  |
|----------------------|--|--|--|--|--|
| Perpetuation         |  |  |  |  |  |
| Rehabilitation       | S-1 Design Criteria Application applies to project corridor  S-2 Design Criteria Application applies to specific areas with corrective actions as identified and justified through safety, operation, environmental or ancillary factor evaluations. |  |  |  |  |
| Modernization        | S-3  |  |  |  |  |

 <sup>[3]</sup> Other than widening for guardrail and end terminal grading, or drainage work per <u>FDM 13-1-30</u>.
 [4] See <u>FDM 14-15</u> pavement structural design and Life Cycle Cost Analysis

 <sup>[5]</sup> See FDM 11-46 Attachments 1.2 and 1.3 for pavement strategies meeting ADA alteration definition
 [7] Pavement replacement projects may include subgrade improvement. Consult with BPD oversight, region pavement engineer, and statewide pavement section.

<sup>[8]</sup> SCD is required at locations which widen, replace or overlay the entire deck or approach slabs with concrete or asphalt.
[9] Not required when replacing a short segment of pavement between a new or reconstructed bridge and an existing pavement.