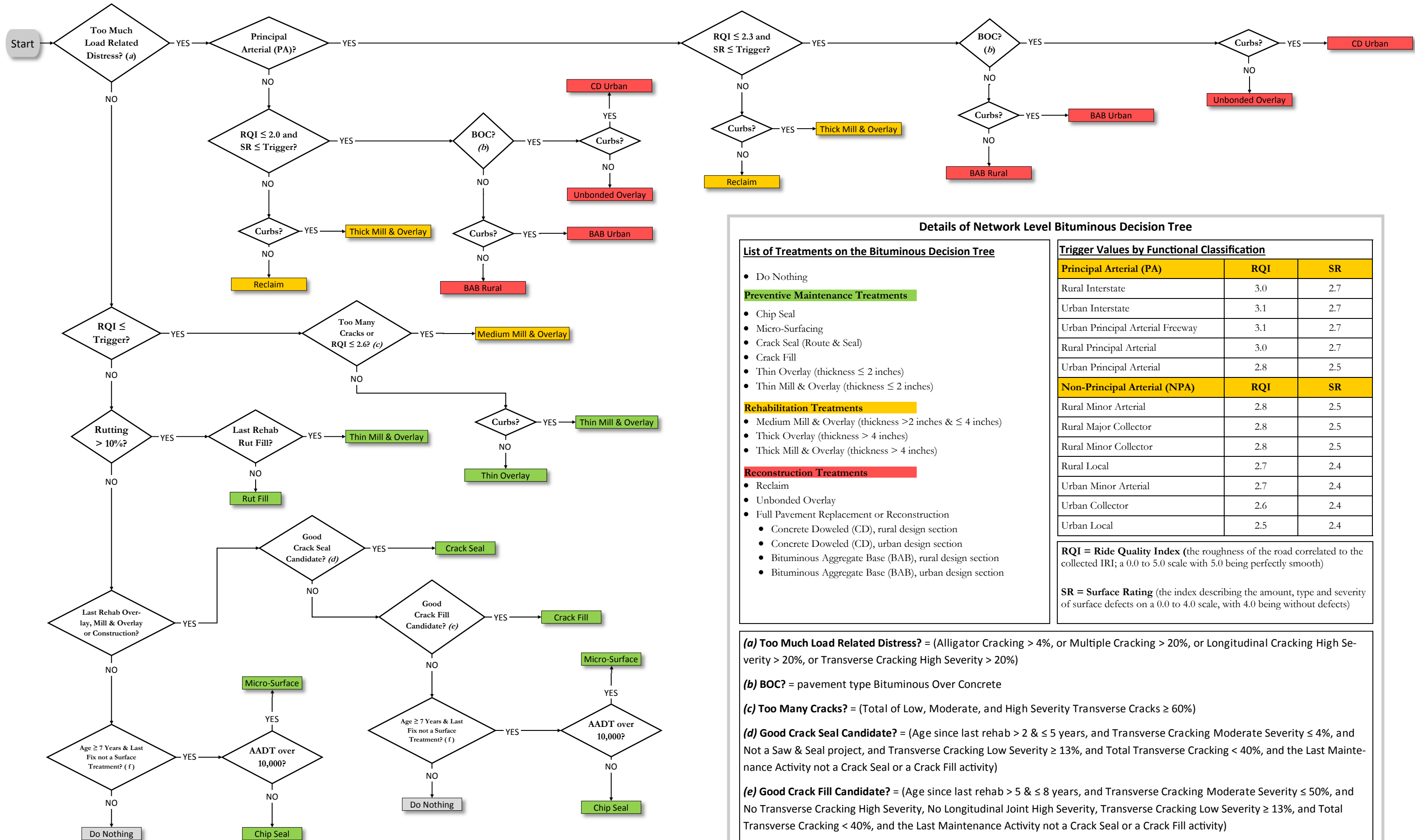


# Network Level Bituminous Decision Tree



## Details of Network Level Bituminous Decision Tree

### List of Treatments on the Bituminous Decision Tree

- Do Nothing
- Preventive Maintenance Treatments**
  - Chip Seal
  - Micro-Surfacing
  - Crack Seal (Route & Seal)
  - Crack Fill
  - Thin Overlay (thickness ≤ 2 inches)
  - Thin Mill & Overlay (thickness ≤ 2 inches)
- Rehabilitation Treatments**
  - Medium Mill & Overlay (thickness >2 inches & ≤ 4 inches)
  - Thick Overlay (thickness > 4 inches)
  - Thick Mill & Overlay (thickness > 4 inches)
- Reconstruction Treatments**
  - Reclaim
  - Unbonded Overlay
  - Full Pavement Replacement or Reconstruction
    - Concrete Doweled (CD), rural design section
    - Concrete Doweled (CD), urban design section
    - Bituminous Aggregate Base (BAB), rural design section
    - Bituminous Aggregate Base (BAB), urban design section

### Trigger Values by Functional Classification

Principal Arterial (PA)	RQI	SR
Rural Interstate	3.0	2.7
Urban Interstate	3.1	2.7
Urban Principal Arterial Freeway	3.1	2.7
Rural Principal Arterial	3.0	2.7
Urban Principal Arterial	2.8	2.5
Non-Principal Arterial (NPA)	RQI	SR
Rural Minor Arterial	2.8	2.5
Rural Major Collector	2.8	2.5
Rural Minor Collector	2.8	2.5
Rural Local	2.7	2.4
Urban Minor Arterial	2.7	2.4
Urban Collector	2.6	2.4
Urban Local	2.5	2.4

**RQI = Ride Quality Index** (the roughness of the road correlated to the collected IRI; a 0.0 to 5.0 scale with 5.0 being perfectly smooth)

**SR = Surface Rating** (the index describing the amount, type and severity of surface defects on a 0.0 to 4.0 scale, with 4.0 being without defects)

**(a) Too Much Load Related Distress?** = (Alligator Cracking > 4%, or Multiple Cracking > 20%, or Longitudinal Cracking High Severity > 20%, or Transverse Cracking High Severity > 20%)

**(b) BOC?** = pavement type Bituminous Over Concrete

**(c) Too Many Cracks?** = (Total of Low, Moderate, and High Severity Transverse Cracks ≥ 60%)

**(d) Good Crack Seal Candidate?** = (Age since last rehab > 2 & ≤ 5 years, and Transverse Cracking Moderate Severity ≤ 4%, and Not a Saw & Seal project, and Transverse Cracking Low Severity ≥ 13%, and Total Transverse Cracking < 40%, and the Last Maintenance Activity not a Crack Seal or a Crack Fill activity)

**(e) Good Crack Fill Candidate?** = (Age since last rehab > 5 & ≤ 8 years, and Transverse Cracking Moderate Severity ≤ 50%, and No Transverse Cracking High Severity, No Longitudinal Joint High Severity, Transverse Cracking Low Severity ≥ 13%, and Total Transverse Cracking < 40%, and the Last Maintenance Activity not a Crack Seal or a Crack Fill activity)

**(f) Last Fix Not a Surface Treatment?** = Last fix in pavement history not a chip seal or a micro-surfacing activity