

### **3.5 PROJECTED 2030 AND 2050 BASE TRAFFIC CONDITIONS (BASE 2030 NETWORK)**

This chapter discusses 2030 and 2050 Base traffic conditions, which are used as tools to identify 2030 and 2050 needs for the Central regions and other regions. Although 2050 is the planning horizon for this study, the interim horizon year of 2030 is used to help identify shorter-term transportation improvement priorities.

#### **2030 Traffic Conditions**

Figure 3-4 displays forecast 2030 statewide traffic conditions for the 2030 Base roadway network. As in Figure 3-3 for 2005 conditions, a cut-line analysis was used to indicate roadway corridors that are projected to be congested by 2030.

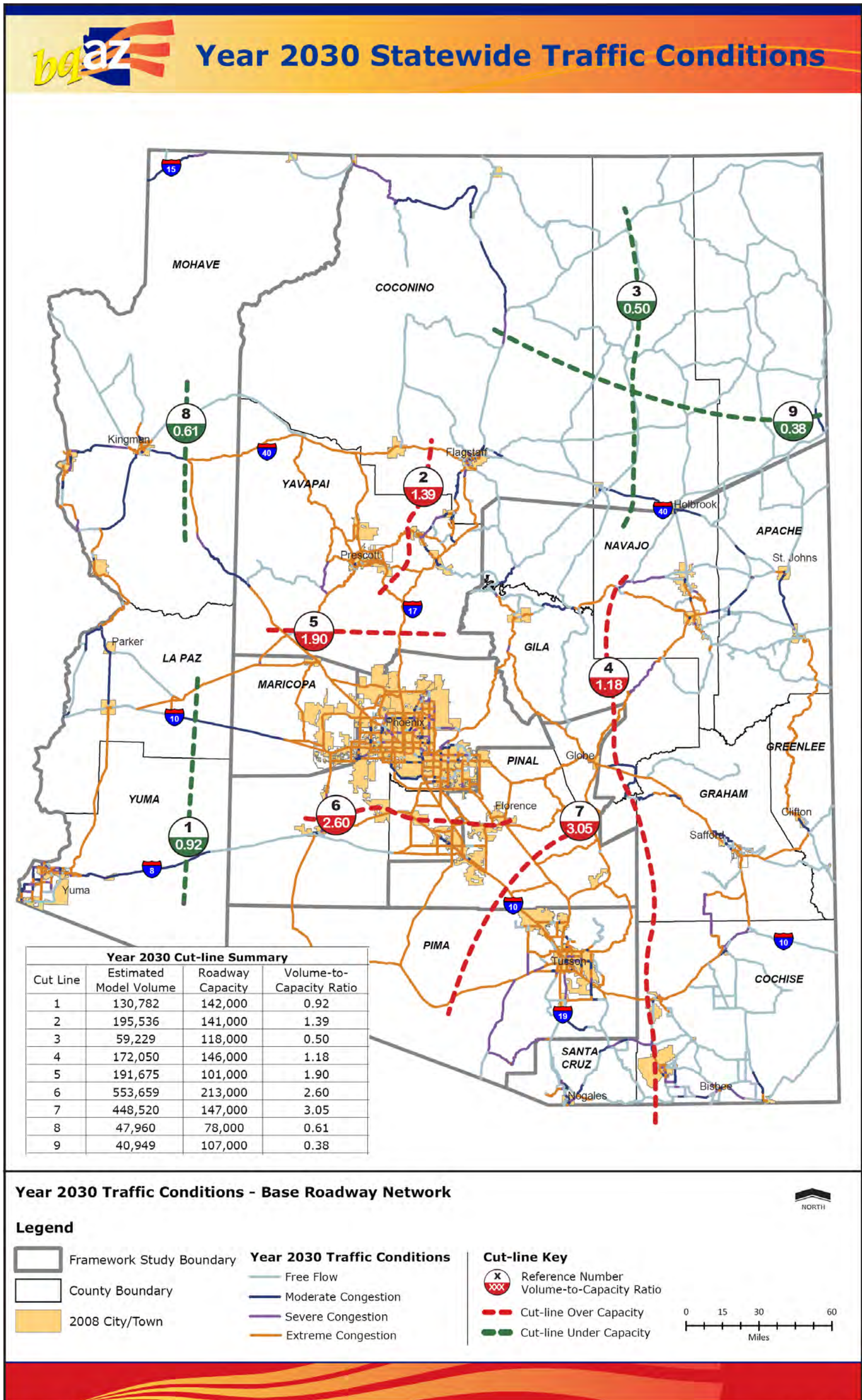
Cut-line 4 crosses roadways projected to carry 172,000 vehicles per day in 2030. The collective capacity of these roads is 146,000 vehicles per day. The V/C ratio of the roads crossing this cut-line is therefore 1.18, indicating extreme congestion.

Cut-line 6 crosses roads facing a travel demand of 554,000 vehicles per day. The daily capacity of these roads is 213,000. The V/C ratio of roads crossing this cut-line is 2.60, indicating extreme congestion.

Cut-line 7 crosses roads facing a demand of 449,000 vehicles per day. The capacity of these roads is only 147,000 vehicles per day, resulting in a V/C ratio of 3.05, representing extreme congestion.

Figure 3-4 shows projected 2030 traffic conditions on regionally significant roadways, which will generally experience demand volumes exceeding capacity.

Figure 3-4, Volume/Capacity across Selected Cut-Lines, Year 2030



Sources: ADOT Project Team, 2009

April 28, 2009

## 2050 Traffic Conditions

Figure 3-5 displays forecast 2050 statewide traffic conditions on the Base roadway network. The regionally significant roads across Cut-line 4 face a travel demand of 390,000 vehicles per day. The daily capacity of these roads is only 146,000, resulting in a V/C ratio of 2.67, indicating extreme congestion.

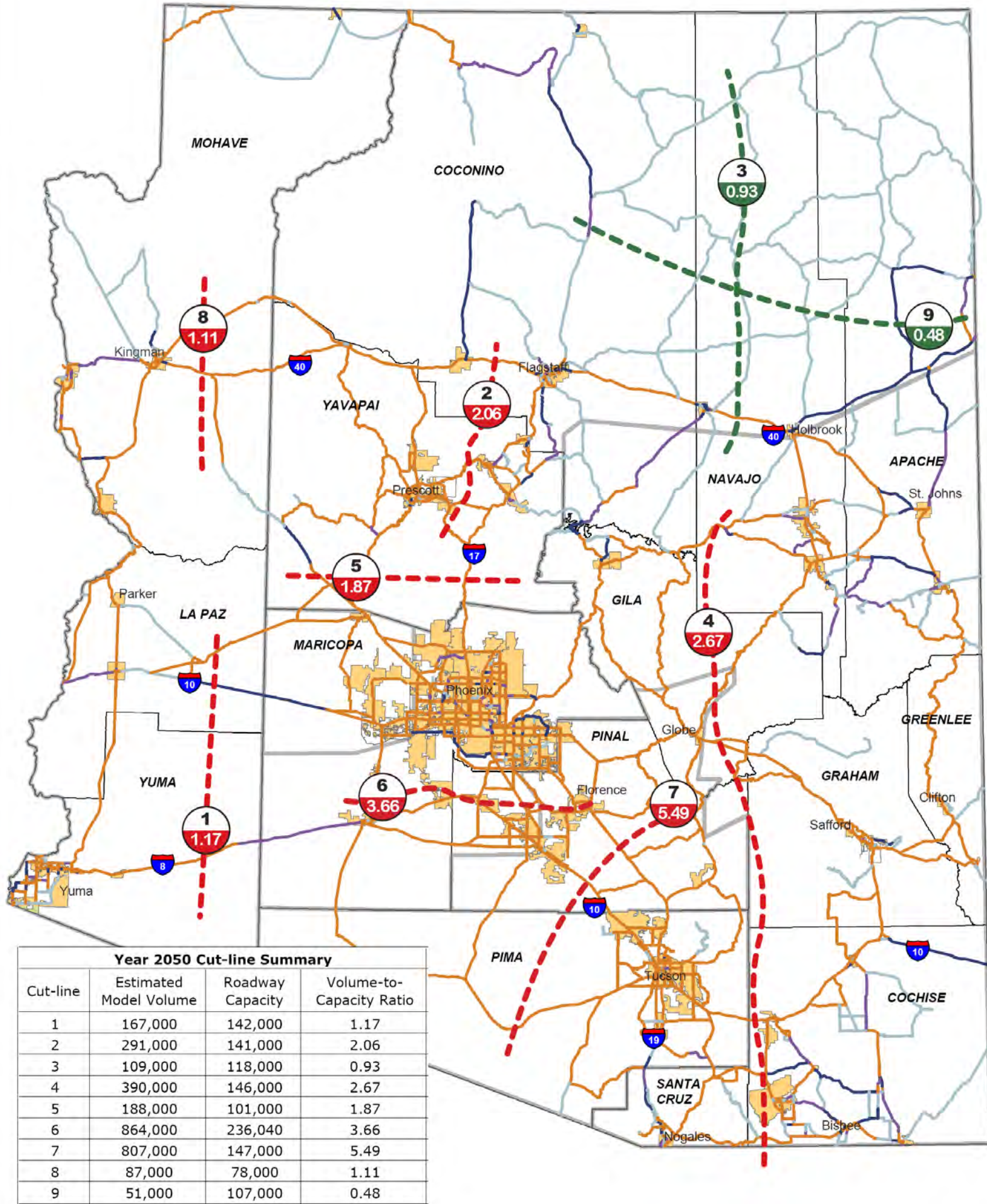
Cut-line 6 crosses roadways with a travel demand of 864,000 vehicles per day, but a capacity of only 236,000. The V/C ratio of the roads crossing this cut-line is 3.66, again indicating extreme congestion.

The major roads across Cut-line 7 face a 2050 demand of 807,000 vehicles per day, with a daily capacity of only 147,000. The V/C ratio of the roads crossing this cut-line was 5.49, indicating extreme congestion.

Figure 3-4 shows projected 2050 traffic conditions on regionally significant roadways, which will generally experience demand volumes exceeding capacity.

Figure 3-5 Volume/Capacity across Selected Cut-Lines, Year 2050

**Year 2050 Statewide Traffic Conditions**



**2050 Traffic Conditions - Base Roadway Network**

**Legend**

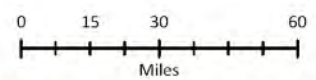
- Framework Study Boundary
- County Boundary
- 2008 City/Town

**Year 2050 Traffic Conditions**

- Free Flow
- Moderate Congestion
- Severe Congestion
- Extreme Congestion

**Cut-line Key**

- Reference Number Volume-to-Capacity Ratio
- Cut-line Over Capacity
- Cut-line Under Capacity



Sources: ADOT Project Team, 2009

April 28, 2008