

lessen that congestion. Both the East and West Bypass Alignments do not help that congestion. They are forecast to marginally worsen congestion in the northern part of I-581, marginally lessen congestion in the southern part of I-581 and make essentially no change in congestion along US-220. The Central Alignment would provide added capacity on I-581, more than offsetting the additional traffic it would bring. As a result, congestion along much of I-581 would be somewhat reduced. The Central-East option would also take traffic off of US-220 and reduce its congestion. The Central-West option could have I-73 veer off of US-220 south of Wonju or continue on US-220, in which case it would marginally worsen congestion on that route. (See Appendix C for a discussion of "Level of Service" and current ratings.)

Table 2-3. Traffic Level of Service (Year 2020)

| Location | Level of Service 2020 | | | | |
|---------------------------------------|-----------------------|--------|----------------|----------------|--------|
| | 0-No Build | 1-East | 2-Central-East | 3-Central-West | 4-West |
| Interstate 581 | | | | | |
| 4) I-581 South of I-81 | C | D | D | C | D |
| 5) I-581 North of US-460 | D | D | D | C | D |
| 6) I-581 US-460(Orange) to VA-11 | F | E | D | D | E |
| 7) I-581 VA-11 to VA-24(Elm) | F | D | E | E | D |
| US-220 | | | | | |
| 8) US-220 VA-24(Elm) to Wonju | E | E | E | E | E |
| 9) US-220(Wonju) to VA-419 (Franklin) | C | C | B | D* | C |

* not applicable under the southwest (Tanglewood Mall) routing option

Source: VDOT Traffic and Transportation Technical Memorandum, draft, 1999

(E) Disruption of Existing Business Activities – The addition of travel lanes and reconfiguration of interchanges on I-581 and US-220 with the Central Alignment would mean that some existing business activities would have to be closed or relocated. For the two bypass alignments, the new right-of-way and new interchanges would also require some land takings, though much of that land is now undeveloped.

❖ 2.2 City and Metro Area Economy

Over the past ten years, employment in the Roanoke Metropolitan Statistical Area (MSA) has grown by 18.5%, nearly equal to the statewide growth rate. That reflects a combination of two rates – a job growth rate of just 10.6% in the City of Roanoke and a job growth rate of 30% experienced in the rest of the MSA. The City is thus concerned that the alternative alignments for I-73 could potentially worsen (or lessen) those differences.

As shown in Table 2-4, the City of Roanoke's most dominant industries are wholesale trade, transportation, FIRE (finance, insurance, and real estate), and services. Roanoke's proportion of these industries is 16% to 44% above the state average. Within the manufacturing sector, primary metals, textiles, and electronics are most highly concentrated in the city. Instruments manufacturing, with over 2700 jobs in the MSA, has almost six times the state average proportion of employment in