4.0 PROJECTED CONDITIONS FOR THE YEAR 2030

In addition to analyzing the existing traffic conditions it is important understand future planning horizons in developing recommendations for the ACP. The year 2030 was selected as the long range planning horizon for this project. Before the future intersection and roadway operational analyses could be performed, future traffic volumes for the year 2030 were developed.

4.1 YEAR 2030 TRAFFIC VOLUMES

In an effort to remain consistent with concurrent projects like the SH 392 EOS, future traffic volumes for the horizon year 2030 were obtained from the future traffic analysis performed as part of the SH 392 EOS project. Future volumes were obtained from the no-build EOS alternative analysis using a regional transportation model provided by the North Front Range Metropolitan Planning Organization (NRFMPO). The volumes obtained from the model were used as the baseline values for the future conditions analysis in the ACP study.

In addition to the baseline volumes, research efforts were conducted to identify additional recent or planned development along or near the SH 392 corridor that were not included as part of the long range model. Traffic studies were obtained from these identified developments from which projected traffic and distribution patterns were obtained and used to add additional traffic to the traffic model of SH 392 to generate total future traffic volumes. Traffic studies used to generate additional traffic volumes include:

- Jacoby Farms Subdivision Fifth Filing Traffic Impact Study, September 2005
- Windsor West Access Study, December 2003
- Poudre Ridge Traffic Study
- Victorview Annexation (draft site plan)

4.2 YEAR 2030 NO-ACTION LEVEL OF SERVICE

Total future traffic volumes were input into the SH 392 traffic model so intersection and arterial LOS could be determined. For comparative purposes, no changes to the existing roadway network were assumed for the future condition analysis. In the horizon year, almost every major signalized and un-signalized intersection within the study limits operates at LOS levels D or worse during both AM and PM peak hours. As for arterial LOS, a large portion of SH 392 from I-25 to 7th Street operates at LOS D or worse for both westbound and eastbound traffic in the AM and PM peaks. On the east end of the corridor, from WCR 19 to US 85, the arterial LOS is still within the acceptable range of B or better during both AM and PM periods, but most of the intersections in this section operate at LOS F. These results indicate congestion levels on SH 392 will continue to increase in the future and will result in poor operations, long delays, and an increase in the number of accidents. As traffic volumes increase, these conditions will only be worse if the number, design, and location of access locations along the corridor are not controlled through the development of an ACP.

Figure 8 and Figure 9 summarize the results of the intersection and arterial levels of service analyses. Detailed analysis of the future LOS, with no changes to the existing access configuration and laneage of the roadway, is provided in Appendix J.

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Figure 8 2030 No-Action Intersection and Arterial LOS (0.38 mile west of I-25 to $7^{\rm th}$ Street) 1 BEAB 1340 B १५ का १६ क्या 15 8171 15 9721 (E) (E) (E) 18/10/11 13/11/81 1140 775 330 520 801 242 18 4151 225 0/5 100 390 1005 1325 ᆵ 850 432 238 mm WCB 13 410 061 Œ œ 985 230 **580** 312 PM PEAK HOUR AM PEAK HOUR 1225 1500 1130 925 300 522 549 520 œ 552 542 Ptarmigna Country Club Plarmigan Country Clab 1130 1630 820 432 160 SLOT TCB 2 LCR 5 œ œ 09t "" **G19** 942 mm 1685 1555

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= Level of Service D = Level of Service E = Level of Service F

= Level of Service A = Level of Service B

X = Intersection/Critical Movement LOS

XXX = Peak Hour Traffic Volume

= Arterial Level of Service

Legend

= Level of Service C

Figure 9 2030 No-Action Intersection and Arterial LOS (WCR 19 to US Highway 85) WCR 39 ACB 38 WCB 33 WCR 37 u. CLI Off = Lavel of Service E = Lavel of Service F = Level of Service D ACB 32 WCR 35 MCB 33 WCR 33 = Level of Service A = Level of Service B = Level of Service WCR 31 WCR 31 PM PEAK HOUR AM PEAK HOUR WCR 29 MCB 56 = Intersection/Critical Movement LOS XXX = Peak Hour Traffic Volume WCR 27 MCB 33 MCB 33 WCR 27 220 × MCB 32 MCB 32 O = Arterial Level of Service WCB 23 WCR 23 WCR 23 WCR 23 Œ = Signal MCB 31 WCR 31 SIT Legend III WCB 19 WCR 19

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