

# APPENDIX C

## VOLUME GROUPS AND PRECISION LEVELS

**Table C-1. Standard Sample Volume Groups and Precision Levels**

RURAL AREAS				
AADT Volume Group	Interstate	Other Principal Arterial	Minor Arterial	Major Collector
	(90-5)	(90-5)	(90-10)	(80-10)
01	0- 9,999	0- 4,999	0- 2,499	0- 2,499
02	10,000- 19,999	5,000- 9,999	2,500- 4,999	2,500- 4,999
03	20,000- 29,999	10,000- 14,999	5,000- 9,999	5,000- 9,999
04	30,000- 39,999	15,000- 19,999	10,000-19,999	10,000-19,999
05	40,000- 49,999	20,000- 29,999	20,000-29,999	20,000-29,999
06	50,000- 59,999	30,000- 39,999	30,000-39,999	30,000-39,999
07	60,000- 69,999	40,000- 49,999	40,000-49,999	40,000-49,999
08	70,000- 79,999	50,000- 59,999	50,000-59,999	50,000-59,999
09	80,000- 89,999	60,000- 69,999	60,000-69,999	60,000-69,999
10	90,000-104,999	70,000- 84,999	70,000-79,999	70,000-79,999
11	105,000-119,999	85,000- 99,999	80,000-89,999	80,000-89,999
12	120,000-134,999	100,000-114,999	90,000-99,999	90,000-99,999
13	> or = 135,000	> or = 115,000	> or = 100,000	> or = 100,000

**Table C-2. Standard Sample Volume Groups and Precision Levels**

SMALL URBAN AREAS					
AADT Volume Group	Interstate	Other Freeways and Expressways	Other Principal Arterial	Minor Arterial	Collector
	(90-5)	(90-5)	(90-5)	(90-10)	(80-10)
01	0- 9,999	0- 9,999	0- 4,999	0- 2,499	0- 999
02	10,000- 19,999	10,000- 19,999	5,000- 9,999	2,500- 4,999	1,000- 1,999
03	20,000- 29,999	20,000- 29,999	10,000-14,999	5,000- 9,999	2,000- 4,999
04	30,000- 39,999	30,000- 39,999	15,000-19,999	10,000-14,999	5,000- 9,999
05	40,000- 49,999	40,000- 49,999	20,000-24,999	15,000-19,999	10,000-14,999
06	50,000- 59,999	50,000- 59,999	25,000-29,999	20,000-24,999	15,000-19,999
07	60,000- 69,999	60,000- 69,999	30,000-34,999	25,000-29,999	20,000-24,999
08	70,000- 79,999	70,000- 79,999	35,000-39,999	30,000-34,999	25,000-29,999
09	80,000- 89,999	80,000- 89,999	40,000-44,999	35,000-39,999	30,000-34,999
10	90,000-104,999	90,000-104,999	45,000-54,999	40,000-49,999	35,000-44,999
11	105,000-119,999	105,000-119,999	55,000-64,999	50,000-59,999	45,000-54,999
12	120,000-134,999	120,000-134,999	65,000-74,999	60,000-69,999	55,000-64,999
13	> or = 135,000	> or = 135,000	> or = 75,000	> or = 70,000	> or = 65,000

**Table C-3. Standard Sample Volume Groups and Precision Levels**

<b>For URBANIZED AREAS &lt;200,000 Population that are NOT in NAAQS Nonattainment Areas</b>					
AADT Volume Group	Interstate	Other Freeways and Expressways	Other Principal Arterial	Minor Arterial	Collector
	(80-10) <sup>1</sup> (90-5) <sup>2</sup>	(80-10) <sup>1</sup> (90-5) <sup>2</sup>	(80-10) <sup>1</sup> (90-5) <sup>2</sup>	Varies <sup>3</sup> (90-10) <sup>2</sup>	Varies <sup>3</sup> (80-10) <sup>2</sup>
01	0- 24,999	0- 24,999	0- 2,499	0- 2,499	0- 999
02	25,000- 49,999	25,000- 49,999	2,500- 4,999	2,500- 4,999	1,000- 1,999
03	50,000- 74,999	50,000- 74,999	5,000- 9,999	5,000- 9,999	2,000- 4,999
04	75,000- 99,999	75,000- 99,999	10,000-14,999	10,000-14,999	5,000- 9,999
05	100,000-124,999	100,000-124,999	15,000-19,999	15,000-19,999	10,000-14,999
06	125,000-149,999	125,000-149,999	20,000-24,999	20,000-24,999	15,000-24,999
07	150,000-174,999	150,000-174,999	25,000-34,999	25,000-34,999	25,000-34,999
08	175,000-199,999	175,000-199,999	35,000-44,999	35,000-44,999	35,000-44,999
09	200,000-224,999	200,000-224,999	45,000-54,999	45,000-54,999	45,000-54,999
10	225,000-249,999	225,000-249,999	55,000-69,999	55,000-69,999	55,000-69,999
11	250,000-274,999	250,000-274,999	70,000-84,999	70,000-84,999	70,000-84,999
12	275,000-299,999	275,000-299,999	85,000-99,999	85,000-99,999	85,000-99,999
13	> or = 300,000	> or = 300,000	> or = 100,000	> or = 100,000	> or = 100,000

1 ? Precision levels for **individual** urbanized areas.

2 ? Precision levels for **collective** urbanized areas.

3 ? For **individual** urbanized areas, use (70-15) precision level for States with 3 or more individual urbanized areas. Use (80-10) precision level for States with less than 3 individual urbanized areas.

**Table C-4. Standard Sample Volume Groups and Precision Levels**

<b>For URBANIZED AREAS <math>\geq 200,000</math> Population and Smaller Urbanized Areas that ARE in NAAQS Nonattainment Areas</b>					
AADT Volume Group	Interstate	Other Freeways and Expressways	Other Principal Arterial	Minor Arterial	Collector
	(90-10)	(90-10)	(90-10)	(90-10)	(80-10)
01	0- 24,999	0- 24,999	0- 2,499	0- 2,499	0- 999
02	25,000- 49,999	25,000- 49,999	2,500- 4,999	2,500- 4,999	1,000- 1,999
03	50,000- 74,999	50,000- 74,999	5,000- 9,999	5,000- 9,999	2,000- 4,999
04	75,000- 99,999	75,000- 99,999	10,000-14,999	10,000-14,999	5,000- 9,999
05	100,000-124,999	100,000-124,999	15,000-19,999	15,000-19,999	10,000-14,999
06	125,000-149,999	125,000-149,999	20,000-24,999	20,000-24,999	15,000-24,999
07	150,000-174,999	150,000-174,999	25,000-34,999	25,000-34,999	25,000-34,999
08	175,000-199,999	175,000-199,999	35,000-44,999	35,000-44,999	35,000-44,999
09	200,000-224,999	200,000-224,999	45,000-54,999	45,000-54,999	45,000-54,999
10	225,000-249,999	225,000-249,999	55,000-69,999	55,000-69,999	55,000-69,999
11	250,000-274,999	250,000-274,999	70,000-84,999	70,000-84,999	70,000-84,999
12	275,000-299,999	275,000-299,999	85,000-99,999	85,000-99,999	85,000-99,999
13	> or = 300,000	> or = 300,000	> or = 100,000	> or = 100,000	> or = 100,000

**Table C-5. Donut Area Sample Volume Groups and Precision Levels**

<b>For DONUT AREAS of NAAQS Nonattainment Areas (Small Urban and Rural Systems, Combined)</b>		
AADT Volume Group	Minor Arterial	Major Collector, Collector
	(90-10)	(90-10)
1	0- 2,499	0- 2,499
2	2,500- 4,999	2,500- 4,999
3	5,000- 9,999	5,000- 9,999
4	10,000-14,999	10,000-14,999
5	> or = 15,000	> or = 15,000