Appendix F: Access Management Spacing Standards for Approaches in an Interchange Area

This appendix includes tables and illustrative graphics summarizing the State's adopted minimum spacing standards for accesses in the vicinity of freeway and expressway interchanges, which can be found in section 734-015-0125 of the Oregon Administrative Rules, or OAR. As shown below, the standards for two-lane and four-lane crossroads are similar. OAR sections 734-051-0115 through 0155 provide additional detail, including:

- How the standards are integrated with the development process.
- Conditions under which a deviation to spacing standards can be approved.
- The type of mitigation measures that may be required of applicants, in proportion to the impact of a proposed access that does not meet applicable spacing standards.
- The purpose and role of Access Management Plans, Access Management Plans for Interchanges, and Interchange Area Management Plans. The County could select to prepare one or more of these plans for the Tower Road and I-84/US 730 interchanges.

Table F-1
Minimum Spacing Standards Applicable to Freeway Interchanges with Two-Lane Crossroads (OAR 734-051-0125)

Category of Mainline	Type of Area	Spacing Dimension	A	X	Y	Z
FREEWAY	Fully Developed Urban*		1 mile (1.6 km)	750 feet (230 m)	1320 feet (400 m)	750 feet (230 m)
	Urban		1 mile (1.6 km)	1320 feet (400 m)	1320 feet (400 m)	990 feet (300 m)
	Rural		2 miles			

(3.2 km)
1320 feet
(400 m)
1320 feet
(400 m)
1320 feet
(400 m)

Notes: 1) If the crossroad is a state highway, these distances may be superseded by the Access Management Spacing Standards, providing the distances are greater than the distances listed in the above table.
2) No four-legged intersections may be placed between ramp terminals and the first major intersection.
3) No application shall be accepted where an approach would be aligned opposite a freeway or expressway ramp terminal (OAR 734-051-0070(4)(a)).
4) Use four-lane crossroad standards for urban and suburban locations that are documented to be widened in a Transportation System Plan or corridor plan.

A = Distance between the start and end of tapers of adjacent interchanges
X = Distance to the first approach on the right; right in/right out only
Y = Distance to first intersections where left turns are allowed
Z = Distance between the last right in/right out approach road and the start of the taper for the on-ramp
* Fully Developed Urban Interchange Management Area: Occurs when 85% or more of the parcels along the developable frontage area are developed at urban densities and many have driveways connecting to the crossroad. See definition in the 1999 Oregon Highway Plan at page 181.

Figure F-1: Measurement of Spacing Standards for Table F-1

Table F-2
Minimum Spacing Standards Applicable to Freeway Interchanges with Multi-Lane Crossroads (OAR 734-051-0125)

Category of Mainline
Type of Area
Spacing Dimension
A
X
Y
Z

FREEWAY
Fully Developed Urban*
1 mile
(1.6 km)
750 feet
(230 m)
1320 feet
(400 m)
990 feet
(300 m)
Urban
1 mile
(1.6 km)

1320 feet
(400 m)
1320 feet
(400 m)
1320 feet
(400 m)
Rural
2 miles
(3.2 km)
1320 feet
(400 m)
1320 feet
(400 m)
1320 feet
(400 m)

Notes: 1) If the crossroad is a state highway, these distances may be superseded by the Access Management Spacing Standards, providing the distances are greater than the distances listed in the above table.
2) No four-legged intersections may be placed between ramp terminals and the first major intersection.
3) No application shall be accepted where an approach would be aligned opposite a freeway or expressway ramp terminal (OAR 734-051-0070(4)(a)).

A = Distance between the start and end of tapers of adjacent interchanges
X = Distance to the first approach on the right; right in/right out only
Y = Distance to first intersections where left turns are allowed
Z = Distance between the last right in/right out approach road and the start of the taper for the on-ramp
* Fully Developed Urban Interchange Management Area: Occurs when 85% or more of the parcels along the developable frontage area are developed at urban densities and many have driveways connecting to the crossroad. See definition in the 1999 Oregon Highway Plan at page 181.

Figure F-2: Measurement of Spacing Standards for Table F-2

Table F-3
Minimum Spacing Standards Applicable to Non-Freeway Interchanges with Two-Lane Crossroads (OAR 734-051-0125)

Category of Mainline
Type of Area
Speed of Mainline
Spacing Dimension
B
C
X
Y
Z

Expressways, Statewide, Regional and District Highways

Fully Developed Urban*

45 mph
(70 kph)
2640 ft
(800 m)
1 mile
(1.6 km)
750 feet
(230 m)
1320 feet
(400 m)
750 feet
(230 m)

Urban

45 mph
(70 kph)
2640 ft
(800 m)
1 mile
(1.6 km)
1320 feet
(400 m)
1320 feet
(400 m)
990 feet
(300 m)

Rural

55 mph
(90 kph)
1 mile
(1.6 km)
2 miles
(3.2 km)
1320 feet
(400 m)
1320 feet
(400 m)
1320 feet
(400 m)

Notes: 1) If the crossroad is a state highway, these distances may be superseded by the Access Management Spacing Standards, providing the distances are greater than the distances listed in the above table.

2) No four-legged intersections may be placed between ramp terminals and the first major intersection.

3) No application shall be accepted where an approach would be aligned opposite a freeway or expressway ramp terminal (OAR 734-051-0070(4)(a)).
4) Use four-lane crossroad standards for urban and suburban locations that are documented to be widened in a Transportation System Plan or corridor plan.
5) No at-grade intersections are allowed between interchanges less than 5 miles apart.

B = Distance between the start and end of tapers
C = Distance between nearest at-grade and ramp terminal intersections or the end/start of the taper section
X = Distance to the first approach on the right; right in/right out only
Y = Distance to first intersections where left turns are allowed
Z = Distance between the last right in/right out approach road and the start of the taper for the on-ramp
* Fully Developed Urban Interchange Management Area: Occurs when 85% or more of the parcels along the developable frontage area are developed at urban densities and many have driveways connecting to the crossroad. See definition in the 1999 Oregon Highway Plan at page 181.

Figure F-3: Measurement of Spacing Standards for Table F-3

Table F-4
Minimum Spacing Standards Applicable to Non-Freeway Interchanges with Multi-Lane Crossroads (OAR 734-051-0125)

Category of Mainline	Type of Area	Speed of Mainline	Spacing Dimension B	C	X	Y	Z
Expressways, Statewide, Regional and District Highways	Fully Developed Urban*	45 mph (70 kph)	2640 ft (800 m)	1 mile (1.6 km)	750 feet (230 m)	1320 feet (400 m)	990 feet (300 m)
	Urban	45 mph (70 kph)	2640 ft				

(800 m)
1 mile
(1.6 km)
1320 feet
(400 m)
1320 feet
(400 m)
1320 feet
(400 m)

Rural

55 mph
(90 kph)
1 mile
(1.6 km)
2 miles
(3.2 km)
1320 feet
(400 m)
1320 feet
(400 m)
1320 feet
(400 m)

Notes: 1) If the crossroad is a state highway, these distances may be superseded by the Access Management Spacing Standards, providing the distances are greater than the distances listed in the above table.
2) No four-legged intersections may be placed between ramp terminals and the first major intersection.
3) No application shall be accepted where an approach would be aligned opposite a freeway or expressway ramp terminal (OAR 734-051-0070(4)(a)).
4) Use four-lane crossroad standards for urban and suburban locations that are documented to be widened in a Transportation System Plan or corridor plan.
5) No at-grade intersections are allowed between interchanges less than 5 miles apart.

B = Distance between the start and end of tapers
C = Distance between nearest at-grade and ramp terminal intersections or the end/start of the taper section
X = Distance to the first approach on the right; right in/right out only
Y = Distance to first intersections where left turns are allowed
Z = Distance between the last right in/right out approach road and the start of the taper for the on-ramp
* Fully Developed Urban Interchange Management Area: Occurs when 85% or more of the parcels along the developable frontage area are developed at urban densities and many have driveways connecting to the crossroad. See definition in the 1999 Oregon Highway Plan at page 181.

Figure F-4: Measurement of Spacing Standards for Table F-4