

A Benchmark Analysis of Sight-Distance Ordinances in Three Platinum-Level Bike  
Friendly Cities and Ann Arbor's Practices  
November 2009

**Personal History:** In 1996, I asked City staff to enforce Chapter 40 of the City Code in my neighborhood where overgrown vegetation was obstructing visibility at school crosswalks and intersections. The City held a public hearing on June 5, 1996, after sending out 240 notices to households in the area. The relevant sections of the minutes are listed below:

- “Those at the meeting agreed that most home owners would probably bring their properties into compliance with the ordinance because it did create a safety hazard, and everyone wanted to do their part to make the neighborhood as safe as possible.
- Once the city has been informed of a corner clearance problem, liability exists. Once the property owner is notified they also hold some liability.”
- This ordinance does not have leeway from deviation.”
- Other questions concerning view obstructions at major intersections were asked. ... William Lawrence [city forester, manager of forestry and horticulture] agreed that these locations would be inspected and acted on within two weeks.”

In 2005, Chapter 40 of the City code was revised, eliminating the restriction on vegetation over 36” within a 25’ sight-distance triangle at intersections and replacing it with a reference to the American Association of State Highway and Transportation Officials (AASHTO) specifications. Unfortunately, these specifications are not available online, are very technical and vary by type of intersection, thus voluntary compliance is impossible. The City eliminated a relatively easy to understand ordinance (and diagram) with a reference to a manual that is difficult to understand and not available.

**Current Status:** From 2005 through 2009, the problem of obstructed sight distance has worsened and is a major safety hazard for cyclists and pedestrians as well as drivers. In addition to the confusing ordinance, the process for reporting a violation requires that one know to contact the community standards unit within the police department. The Citizen Request System on the City’s home page does not have a category for overgrown vegetation or other sight distance obstructions.

**Benchmark Analysis:** In 2009 the League of American Bicyclists awarded the City of Ann Arbor a Bike Friendly Cities award at the silver level. What do the platinum award winning cities do to maintain safe sight distance? A benchmark analysis of the cities of Davis, California; Boulder, Colorado and Portland, Oregon reveals that they place a priority on sight distance. They have ordinances with well-defined sight-distance specifications and a link from their home page for reporting violations. In addition, per a phone call to the City of Boulder, they employ a fulltime employee to work with the utility companies to ensure that utility “boxes” are not placed in the line of sight.

**Conclusion:** Ann Arbor needs to examine the pre-2005 ordinance, improve upon it based on the language in the following City ordinances, adopt it and aggressively enforce it. Two recommendations are to reduce the vegetation height from 36 inches to 30 inches and to discontinue the complaint-based aspect.

## **Boulder, Colorado**

[http://www.bouldercolorado.gov/index.php?option=com\\_content&task=view&id=3118&Itemid=1423](http://www.bouldercolorado.gov/index.php?option=com_content&task=view&id=3118&Itemid=1423)

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## Sight Obstructions

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Visibility is essential for public safety at intersections where a driveway intersects a public street or property abuts the intersection of two public streets, landscaping, structures, or fences may not obstruct visibility. ([Boulder Revised Code 9-9-7](#)) Traffic/Intersection - right-of-way (ROW)  
Inspection: 303-441-3240

Last Updated ( Wednesday, 19 September 2007 )

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[http://www.colocode.com/boulder2/chapter9-9.htm#section9\\_9\\_7](http://www.colocode.com/boulder2/chapter9-9.htm#section9_9_7)

### **9-9-7 Sight Triangles.**

(a) Sight Triangle Required: Where a driveway intersects a public right-of-way or where property abuts the intersection of two public rights-of-way, unobstructed sight distance as described in subsection (c) of this section shall be provided at all times within the sight triangle area on the property adjacent to the intersection in order to ensure that safe and adequate sight distance is provided for the public use of the right-of-way.

(b) Obstruction Prohibited: No person shall place or maintain any structures, fences, landscaping, or any other objects within any sight triangle area described in subsection (c) of this section that obstructs or obscures sight distance visibility through such structures, fencing, landscaping, or other objects by more than twenty-five percent of the total view in the vertical plane above the sight triangle area between a height of thirty inches and ninety-six inches above the roadway surface, except for the following:

(1) Landscaping, structures, or fences that protrude no more than thirty inches above the adjacent roadway surface may be permitted within the sight triangle area.

(2) Trees may be planted and maintained within the sight triangle area if all branches are trimmed to maintain a clear vision for a vertical height of ninety-six inches above the roadway surface and the location of the trees planted, based on the tree species expected mature height and size, does not obstruct sight visibility by more than twenty-five percent of the sight triangle area.

(c) Sight Triangle Area: For purposes of this section, the sight triangle area is:

(1) Driveways: The area formed at a corner intersection of public right-of-way and a driveway, whose two sides are fifteen feet, measured along the right-of-way line of the street and the edge of the driveway, and whose third side is a line connecting the two sides (see [figure 9-16](#) of this section);

(2) Alleys: The area formed at a corner intersection of an alley public right-of-way and a street right-of-way whose two sides are fifteen feet, measured along the right-of-way line of the alley and the right-of-way line of the street, and whose third side is a line connecting the two sides (see [figure 9-16](#) of this section); or

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**Figure 9-16: Sight Triangle at the Intersection of a Driveway or Alley and a Street**

*The shaded area is required to be kept free of all structures, landscaping, fences, and other materials. The triangle is measured from the property line within alleys and the edge of pavement for driveways, as in this example.*

(3) Streets: The area formed at a corner intersection of two public rights-of-way lines defined by a width of dimension X and a length of dimension Y as shown in [table 9-8](#) and [figure 9-17](#) of this section. The Y dimension will vary depending on the speed limit and configuration of the intersecting street, and is outlined in the table below. The X distance shall be thirteen feet measured perpendicular from the curb line of the intersecting street. This triangular area is significant for the determination of sight distance requirements for right angle intersections only.

**Figure 9-17: Sight Triangle at Intersection of Streets**

*The shaded area is required to be kept free of all structures, fences, landscaping and other materials. The size of the sight triangle is based on the size of the road and speed limit, as shown in the table below.*

**TABLE 9-8: SIGHT TRIANGLE REQUIREMENTS**

<b>Lane Usage</b>	<b>Additional Facilities</b>	<b>Speed Limit</b>	<b>Y Distance (Left)</b>	<b>Y Distance (Right)</b>
2 lanes	None	25 mph	155 feet	105 feet
		30/35 mph	210 feet	145 feet
	Bike lane or on-street parking	25 mph	110 feet	85 feet
		30/35 mph	150 feet	115 feet
	Bike lane and on-street parking	25 mph	90 feet	75 feet
		30/35 mph	125 feet	100 feet
3 or 4 lanes	None	25 mph	155 feet	80 feet
		30/35 mph	210 feet	110 feet
		40/45 mph	265 feet	135 feet
	Bike lane or on-street parking	25 mph	110 feet	65 feet
		30/35 mph	150 feet	90 feet

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		mph		
		40/45 mph	195 feet	115 feet
	Bike lane and on-street parking	25 mph	90 feet	60 feet
		30/35 mph	125 feet	80 feet
		40/45 mph	160 feet	100 feet
5 or more lanes	None	25 mph	155 feet	60 feet
		30/35 mph	210 feet	85 feet
		40/45 mph	265 feet	110 feet
	Bike lane or on-street parking	25 mph	110 feet	55 feet
		30/35 mph	150 feet	75 feet
		40/45 mph	195 feet	95 feet
	Bike lane and on-street parking	25 mph	90 feet	50 feet
		30/35 mph	125 feet	65 feet
		40/45 mph	160 feet	85 feet

(d) Modifications: The requirements of this section may be modified by the city manager, pursuant to [section 9-2-2](#), "Administrative Review Procedures," B.R.C. 1981, if accepted engineering practice would indicate that a modified visibility distance, either greater or lesser, would be acceptable or necessary for the safety of pedestrians, motorists, and bicyclists.

(e) Violations: No person shall violate or fail to prevent or remedy any violation of the provisions of this section on such property. When a violation of this section is observed, the city manager will provide a written notice to correct the condition to the property owner or occupant, whichever is applicable. Personal service of such notice or mailing such notice to the last known address of the owner of the premises by certified mail shall be deemed sufficient service. Any such notice shall describe the violation, describe the corrective measures necessary, and set forth a time limit for compliance, dependent upon the hazard created, which time limit shall not be less than seven days from the service of the notice.

(f) Failure to Comply: In the event that there is failure to comply with the notice when the time limit prescribed therein has expired, the city manager may trim or cause to be trimmed, or otherwise remove the obstruction described in the notice. Such action shall not preclude any prosecution for violation of the terms of this section. The costs of such

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action shall be paid by the property owner, and, if not paid, may be certified by the city manager to the county treasurer for collection as taxes.

(g) Public Nuisance: Notwithstanding any other provision in this section, any landscaping, structure, fence or other obstruction which the city manager deems as an immediate and serious danger to the public, is hereby declared a public nuisance and shall be trimmed or removed within twenty-four hours after notification by the city manager. If the property owner or occupant fails to do so, the city manager may trim or remove the nuisance. The costs of such action shall be paid by the property owner, and, if not paid, may be certified by the city manager to the county treasurer for collection as taxes

Ordinance Nos. 5986 (1998); 7522 (2007)

\*\*\*\*\* **End of Boulder** \*\*\*\*\*

## **Portland, Oregon**

Work Request link on Home page requires sign on id  
Hotline and Work Request on Portland DOT home page

<http://www.portlandonline.com/auditor/index.cfm?c=28596&a=16316>

### **16.70.800 Visibility.**

(Amended by Ordinance Nos. 165987 and 173369, effective May 12, 1999.)

**A.** It is the responsibility of the owner or occupant of any property to prevent any vegetation or street tree on the property or the abutting public right-of-way from partially or wholly obstructing the visibility of traffic control devices, the visibility of or for drivers, bicyclists, or pedestrians, or in any way presents a safety hazard.

**B.** The person who owns or occupies said property is liable to any person who is injured or otherwise suffers damage by reason of the failure to remove or prune such vegetation as required by Title 16 or any other Title of the City Code. Furthermore, said person is liable to the City of Portland for any judgement or expense incurred or paid by the City, by reason of said person's failure to satisfy the obligations imposed by this or any other Title of the City Code.

**C.** Any street tree removal or pruning required by this Title must be done in accordance with the provisions of Title 20.

**D.** Any vegetation or street tree not removed or pruned as required in this Title is hereby declared to be a public nuisance and may be summarily abated as provided in Title 29.

**E.** Whenever the provisions of this section conflict with those of any other

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section of this code, including but not limited to Titles 16, 17, 18, 20, and 33,  
the stricter provisions shall govern.

<http://www.portlandonline.com/transportation/index.cfm?c=40513>

### **Pedestrian and Bicycle Safety**

Portland residents consistently identify concerns with traffic safety as one of their biggest neighborhood problems. In the annual Portland Citizen Survey, residents identified speeding, pedestrian safety, and bike safety as three of their top four neighborhood concerns. Between 1990 - 2000, 10% more Portlanders were killed in auto-related crashes than were murdered. 40% more Portlanders were injured in auto-related crashes than were injured from assaults. From 1985 - 2000, one out of every three traffic fatalities was a pedestrian or a bicyclist.

Utilizing engineering, education, enforcement, and encouragement strategies, Portland Transportation has programs and services to address pedestrian and bicycle issues including:

Pedestrian Safety

Bicycle Safety

Neighborhood Pedestrian and Bicycle Crash Maps

For additional information about Pedestrian Safety, please contact Sharon White at (503) 823-7100 or [sharon.white@pdxtrans.org](mailto:sharon.white@pdxtrans.org) .

For additional information about Bicycle Safety and Crash Maps, please contact Greg Raisman at (503) 823-1052 or [greg.raisman@pdxtrans.org](mailto:greg.raisman@pdxtrans.org) .

<http://www.portlandonline.com/transportation/index.cfm?c=40515>

### **Transportation Safety & Neighborhood Livability Hot Line**

823-SAFE

(823-7233)

To help guide the public to real solutions to traffic safety problems, we created a **Transportation Safety and Neighborhood Livability Hot Line (823-SAFE)**. Requests are phoned in or emailed [safe@pdxtrans.org](mailto:safe@pdxtrans.org). Calls are generally answered within one working day, Monday through Friday. Emails are generally responded to within one week.

The Safety and Livability Hot Line helps us respond to the following transportation safety issues:

<b>Traffic Safety Issue</b>	<b>Examples of Service Requests</b>
Intersection Safety	Pavement Markings / Signals / STOP Signs
Pedestrian Safety	Crosswalks / Curb Ramps / Signals / Visibility / Enforcement
School Safety	Safe Routes / School Drop-Off and Pick-Up Operations / Crosswalks / Bus Zone / Education
Speeding	Enforcement / Speed Zones / Residential Speed Bump Purchase

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	Projects
Visibility	Lighting / Pruning / Signage
Bicycle Safety	Bike Lanes / Parking / Signals / Visibility
Parking	Limited On-Street Parking / No Parking
Capital Project Requests *	Sidewalks / Bike Lanes / Signals / Intersection Improvements

<http://egov.oregon.gov/ODOT/HWY/ENGSERVICES/docs/2003m/2003M-Ch11.pdf>  
From Oregon DOT training document, page 14

**Sight Distance**

One of the greatest factors determining the safety of a pedestrian crossing is visibility. Every effort should be made to remove or relocate objects that could obscure the view of and by pedestrians. These include signs, traffic control boxes, tall vegetation, kiosks, etc. Efforts should also be made to ensure that objects that could be a distraction to drivers are not located close to a crossing point.

These include neon and other illuminated signs which are located on private property.

**\*\*\*\*\* End of Portland \*\*\*\*\***

**Davis, California**

<http://cityofdavis.org/cmo/citycode/detail.cfm?p=37&q=1548>

**CHAPTER 37 TREE PLANTING, PRESERVATION AND PROTECTION\***

**37.01.120 Public nuisance--Certain conditions designated.**

The following are declared public nuisances.

- (a) Any tree or other plant or part thereof growing upon private property but overhanging the street or interfering with the use of any street, which in the opinion of the park and grounds superintendent endangers the life, health, safety or property of the public.
- (b) The continued existence of any tree or other plant on private property within the city that is infested or infected with insects, mites, fungus, bacteria, virus or growths which constitute a threat to or may be injurious to trees or other plants in the surrounding area.
- (c) Any tree or other plant more than thirty-six inches in height measured from the curb gutter grade and planted in a triangular area measured twenty-five feet along the inside face of the sidewalk in either direction from the sidewalk intersection.
- (d) Any plant which does interfere with, impair or destroy any street improvement, sidewalk, curb, gutter, sewer, street trees or any public

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improvement.

(e)Vines or climbing plants growing into or over any street tree or any public hydrant, pole or electrolier. (Code 1964, § 7-9.13.)

**CHAPTER 22 MOTOR VEHICLES AND TRAFFIC\***

**22.01.090 Shrubbery obstructing visibility at intersection.**

Whenever the city traffic engineer finds that any hedge, shrub or tree obstructs the view of any intersection, or obstructs the view of the traffic upon a street approaching any intersection in such a manner as to constitute a hazard to public safety and travel, he/she may in writing request the owner or occupant of the property on which such hedge, shrub or tree is located to prune the same. If such hedge, shrub or tree is not pruned as requested within ten days thereafter, the city traffic engineer may cause such hedge, shrub or tree to be pruned in such a manner that it will not constitute a hazard to public safety and travel. If the city traffic engineer twice requests in writing that an owner or occupant prune a hedge, shrub or tree, and the owner or occupant fails to do so each time, the city traffic engineer may, following the third such written request, remove the hedge, shrub, or tree. (Code 19643 § 4-3.1307.)