Billboard Cost Factors

Off-premise Outdoor Advertising

Series 150



Table of Contents

Billboard Property1
Billboards as Real Property1
Billboard Classification1
Common Configurations for Billboard Construction2
2007 Cost Data3
Component Cost Allocation for a Billboard
Billboard Depreciation6
Depreciation Schedule7
Recommendations7
Tri-Vision Billboards8
Digital Display Billboards9

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Billboard Property

Oregon Administrative Rule (OAR) 150-308.115 defines billboards as real property. Section 1 requires that the person paying taxes on the billboard "must file annually with the assessor's office a Real Property Return (RPR)." Real property return requirements are identified in ORS 308.290 requiring billboard owners to report using the RPR may eventually establish a statewide database connected to Oregon.

OAR 150-308.115(2) requires that each county create an A-1 account (improvement on land now owned) for each billboard property. The A-1 account will provide for a uniform statewide practice.

Following is the administrative rule, OAR 150-308.115, that sets the standards for the valuation of billboard properties in Oregon:

Billboards as Real Property

All billboards that are erected upon the land or affixed to buildings or other permanent structures shall be classified as **real property**.

(1) The person or persons who are responsible for paying the taxes on the billboard must file annually with the assessor's office a **Real Property Return** for all billboards within the county.

(2) Either of the following procedures may be used by the assessor in assessing billboards.

(a) Establish one "A-1 improvement only" account for each billboard based upon location; or

(b) Establish one "A-1 improvement only" account for each individual ownership in each tax code area where the billboards are located. This account lists the locations—by address, map/tax lot or both—of all billboards in the tax code area.

(3) Mobile billboards shall be classified as personal property. A mobile billboard is mounted on a frame so it can be carried by a person, on a flatbed, or in the back of a pickup.

Stat. Auth.: ORS 305.100 Stats. Implemented: ORS 308.115 Hist.: RD 8-1992, f. 12-29-92, cert. ef. 12-31-92

Billboard Classification

The department recommends that billboard properties be classed as commercial real property, requiring the maximum assessed valued (MAV) to be determined using the 2-X-X Changed Property Ratio (CPR). Normally, the more appropriate classification would be 0-2-1 (miscellaneous-commercial-improved) because most of these properties are improvement-only accounts (A-1). However, many counties do not calculate CPRs for their miscellaneous property classes. When coupled with pre-existing system limitations and prior classification practices, it may be more appropriate to class the billboard properties as a 2-0-1 to ensure that the 2-X-X CPR is used to calculate any changes to MAV.

Please note that reclassifying a billboard from personal property to commercial real property **does not** qualify as a MAV exception event. Billboard accounts that are reclassified from personal to real property result in a MAV balance. Only new property that meets the requirements of major improvements under ORS 308.146 will be added to the existing MAV using the 2-X-X CPR, according to the process described in OAR 150- 308.149(6).

Common Configurations for Billboard Construction





2007 Cost Data

These costs are current as of January 1, 2007. They have been adjusted using verified and reported costs of billboard built in 2006.

Monopole Single Face Center Mounted								
Size	25' Hgt	40' Hgt	50' Hgt	70' Hgt	100' Hgt			
20x50		\$82,600	\$91,000	\$107,900	\$131,000			
16x60		76,000	84,400	101,300	124,400			
14x48		65,500	73,900	90,800	105,700			
12x40		51,900	60,100	76,600				
10.5x36		40,800	49,900	68,100				
12x25		34,000	39,400	50,200				

Monopole Single Face Partial Flag

Size	25' Hgt	40' Hgt	50' Hgt	70' Hgt	100' Hgt	
20x50		\$85,900	\$94,700	\$112,200	\$136,300	
16x60		79,000	87,800	105,400	129,400	
14x48		68,100	76,900	94,500	109,900	
12x40		54,000	62,500	79,600		
10.5x36		42,500	51,900	70,800		
12x25		35,400	41,000	52,200		

Monopole Single Face Full Flag

Size	25' Hgt	40' Hgt	50' Hgt	70' Hgt	100' Hgt	
20x50		\$93,600	\$101,700	\$117,800	\$143,200	
16x60		85,900	94,300	111,200	135,400	
14x48		75,400	83,900	100,800	116,700	
12x40		68,900	76,200	90,900		
10.5x36		56,200	65,300	83,400		
12x25		49,400				

Monopole Double Face Center Mounted

Size	25' Hgt	40' Hgt	50' Hgt	70' Hgt	100' Hgt	
20x50		\$88,100	\$97,600	\$116,700	\$142,100	
16x60		81,500	91,000	110,100	135,400	
14x48		70,800	79,700	97,500	117,200	
12x40		60,400	68,600	85,100		
10.5x36		48,200	52,800	62,100		
12x25		44,200				

The Department of Revenue's 2006 cost factors were compared with actual reported costs for new billboards built in 2006. We adjusted the actual reported costs upward by 10 percent to account for profit.

Monopoles, which represent all of the new signs built in 2006 for which we received data, were adjusted as follows: 14x48 and larger adjusted upward using a median ratio of 0.85. Billboards 12x40 and smaller were adjusted using the median ratio of 0.55. We adjusted up the remaining steel-constructed cost indicators using the 0.55 ratio because these costs were in the same range as those for the smaller sized monopoles.

We adjusted all wood-frame factors upward using Marshall's comparative 2007 cost indices by comparing the index to the 2006 index. This resulted in a 0.929 ratio. We adjusted all factors by dividing the prior year's factor by the ratio and rounding to the nearest 100. The cost factors represent a ratio of 0.68 or an index of 1.47 percent for the steel structures, and a ratio of 0.929, or an index of 1.08 percent for wood frame.

Monopole Double Face Partial Flag

Size	25' Hgt	40' Hgt	50' Hgt	70' Hgt	100' Hgt	
20x50		\$91,600	\$101,500	\$121,400	\$147,700	
16x60		84,700	94,600	114,500	140,900	
14x48		73,600	82,900	101,400	121,900	
12x40		62,800	71,400	88,500		
10.5x36		50,100	54,900	64,600		
12x25		46,000				

Monopole Double Face Full Flag

Size	25' Hgt	40' Hgt	50' Hgt	70' Hgt	100' Hgt	
20x50		\$99,100	\$109,000	\$128,800	\$156,400	
16x60		92,500	102,000	121,100	148,700	
14x48		79,600	90,300	111,800	128,200	
12x40		73,200	83,100	103,000		
10.5x36		64,700	69,200	78,300		
12x25						

Tri-sided Center Mounted

Size	25' Hgt	40' Hgt	50' Hgt	70' Hgt	100' Hgt
20x50					
16x60					
14x48		\$121,100		\$156,400	\$221,300
12x40					
10.5x36					
12x25					

Tri-sided Stacked Center Mounted

Size	25' Hgt	40' Hgt	50' Hgt	70' Hgt	100' Hgt
20x50					
16x60					
14x48		\$113,200			
12x40					
10.5x36					
12x25					

Multi Mast Steel Single Faced

Size	25' Hgt	40' Hgt	50' Hgt	70' Hgt	100' Hgt
14x48	\$43,400				
12x40	36,600				
10.5x36	31,500				
12x25	26,400				

Multi Mast	Steel V Built				
Size	25' Hgt	40' Hgt	50' Hgt	70' Hgt	100' Hgt
14x48		\$85,100			
12x40		71,500			
10.5x36		63,000			
12x25		51,100			
Multi Mast	Steel Double Fac	ed			
Size	25' Hgt	40' Hgt	50' Hgt	70' Hgt	100' Hgt
14x48		\$68,100			
12x40		57,900			
10.5x36		51,100			
12x25		42,500			
A-frame Ste	eel Single Faced				
Size	25' Hgt	40' Hgt	50' Hgt	70' Hgt	100' Hgt
10.5x36		\$31,500			
12x25		26,400			
A-frame Ste	eel V Built				
Size	25' Hgt	40' Hgt	50' Hgt	70' Hgt	100' Hgt
10.5x36		\$63,000			
12x25		52,800			
A-frame Ste	el Double Faced				
Size	25' Hgt	40' Hgt	50' Hgt	70' Hgt	100' Hgt
10.5x36		\$44,200			
12x25		35,700			
A-frame Wo	ood Single Faced				
Size	25' Hat	40' Hat	50' Hat	70' Hat	100' Hat
14x48	\$17,100	J -	<u> </u>		<u> </u>
12x40	12,600				
10.5x36	10,100				
12x25	8.600				
	-,- • •				
A-frame Wo	ood Double Face	d			
Size	25' Hgt	40' Hgt	50' Hgt	70' Hgt	100' Hgt
14x48	\$34,300				

Mult: Mast Ctaal V/ Duile

25,200

20,200

17,100

12x40

10.5x36

12x25

Component Cost Allocation for a Billboard

For a typical 30- to 50-foot monopole

The following chart shows the general costs associated with new billboard construction. The costs are based on a 10x30 on a 30- to 50-foot high monopole as measured from the top of the sign. The data was provided by a major media group and supplemented by an Oregon billboard owner/operator. Both companies were involved in the construction, management, and ownership of billboards. It is difficult to determine a singled cost factor due to the range in billboard sizes, designs, and site factors.

Category		Cost		% of Total
Installation		\$12,000		0.200
Electricity Set Up		4,200		0.070
Delivery		3,000		0.050
Foundation Work		2,000		0.033
Hole Excavation		3,000		0.050
Sign Structure		20,000		0.334
Lights (2-3 per face)		2,700	\$450 ea	0.045
Light Brackets		400		0.007
Faces		5,000	\$2,500 ea	0.083
Permits & Fees		1,715		0.029
Miscellaneous		500		0.008
Entrepreneurial Profit	10%	5,452		0.091
	Total	\$59,967		1.000

Additional Adjustment Factors Height adjustment: Add about 5 percent for every 15-foot increase. Due to wind load issues, the costs significantly increase for billboards 75 feet and taller.

Billboard Depreciation

As part of the revision process for 2007, DOR re-examined the depreciation recommendation because of an interview with a longtime Oregon-California billboard owner/builder.

The industry expert said that billboards show little if any depreciation and generally appreciate. He said a modern monopole billboard has a 100-year life expectancy.

The recommended schedules for California, Texas, New Jersey, and North Carolina suggested a life expectancy of 20 years for wooden structures and 40 years for steel. Nevada uses a 50-year straight-line depreciation schedule California's Board of Equalization Standards indicates billboards suffer little if any physical functional depreciation.

In recessionary times, or where a road project changes traffic patterns, external obsolescence may occur.

When DOR developed the reference book and training materials for the *Communication Site Valuation*, it used an age-life study by the U.S. Department of Energy-Western Area Power Administration.

The study showed that a steel or concrete pole had a service life of at least 50 years. At 50 years, 3 percent of poles had to be replaced. Wooden poles had a 14-percent replacement rate at 40 years.

Effective Age in Years	20-Year Life (Wood)	50-Year Life (Steel)
1	95	100
2	90	99
3	85	99
4	80	98
5	75	97
6	70	97
7	65	96
8	60	95
9	55	95
10	50	94
11	45	93
12	40	92
13	35	91
14	35	90
15	35	89
16	35	88
17	35	87
18	35	86
19	35	84
20	35	83
21	35	82
22		80
23		79
24		77
25		75
26		73
27		72
28		70
29		68
30		66
31		62
32		57
33		52
34		47
35		41
36		35
37		35
38		35
39		35
40-50		35

Depreciation Schedule

Recommendations

Based on a review of available data, DOR developed the billboard property depreciation schedules, effective January 1, 2007.

DOR recommends that the above schedules be used: 20 years for wooden structures and 50 years for steel. The schedules are based on effective age, not actual age.

The depreciation should not be lowered below 35 percent remaining good if the structure continues to produce a viable income stream.

For the vast majority of billboards, no negative or positive adjustment is appropriate for physical condition. As long as a billboard structure can support a sign face, the physical condition most likely has little effect on the income stream and therefore, the physical condition may not be particularly important. Only the worst structures and perhaps the very best billboards will fall outside of the recommended schedules.

Tri-Vision Billboards: Three Message Signs, One Board

2008 Supplement to Billboard Cost Factors

A Tri-Vision billboard is an outdoor advertising sign with a slatted face that allows three different copy messages that revolve at intermittent intervals. Enhancements may include a control board, louver alignment and options for rotating louvers in either eye-catching quick-turn or in a mesmerizing wave effect. These signs are typically controlled remotely. In Oregon, as of the date of this supplement, only the 8-foot high by 16-foot wide have been built. However, other standard and custom sizes are available.



2008 Cost Factors				
Height to top of sign	Cost per sign fact			
20' or less	\$40,000			
21' – 29'	42,000			
30' or more	44,500			

Digital Display: Multi-message signs

2009 Supplement to Billboard Cost Factors

A digital display billboard is an outdoor advertising sign with a light-emitting diode (LED) face. This allows multiple messages to be displayed for varying intervals on a single board. Messages can be changed from a remote location without the need to go to the sign or to print advertising copy. Display periods can range from a few seconds to a constant view. Displays are currently as large as 14 x 48 feet, but most are smaller. Frequency of message change and size are often authorized by the Oregon Department of Transportation and local authorities.



Cost and depreciation schedules provided here are for the digital display only. LEDs in the displays have a typical average useful life of about 100,000 hours, 11 years of continuous use. Light output of LEDs diminishes over time. Useful life is related to this loss of brightness. The standard is a 30- to 50-percent loss of original illumination level. Some LEDs may be replaced sooner; some have extended lives.

Steel support structures have a much longer life, typically 50 years or more. Their value should be computed using conventional billboard factors. For initial valuation and forward, the supporting structure should be computed and depreciated separate from the LED display. The two computations should be combined for an overall indication of value. Display costs identified in annual Real Property Returns (RPRs) should be added at full cost, then depreciated with the rest of the display.

Nondigital display faces typically weight about 500 pounds each. LED displays range from 2,000 to 6,000 pounds and require additional structural support. The cost factors for the conventional billboards include a basic display. Due to the additional strength required and associated cost, value the support structure with the conventional billboard cost factors using the appropriate configuration. Depreciate the steel structure based on a 50-year life (not to less than 35 percent good). Don't deduct for display or add for structure unless you have sound cost data to support the adjustment.

DIGITAL DISPLAY MULTI-MESSAGE SIGNS					
Cost data	LED display cost	Depreciation 9% per year (% good)	Year		
		91%	1		
Cost data is limited. Table shows a range of costs for multicolor displays. Additional data you can provide is appreciated.	Per square foot of display area: Range: \$450 to \$485 Average: \$465 to \$470 Cost facors derived from 300- to 700-sq. ft. displays.	83	2		
		76	3		
		69	4		
		63	5		
		57	6		
		52	7		
		47	8		
		43	9		
		39	10		
		35	11		
Apply depreciation after the first year, then annually through year 11. After that, % good should remain at 35 percent, subject to special circumstances.					