10.4 OFF-PREMISE SIGN AND SIGN SITE APPRAISAL

Appraisers are expected to have a thorough understanding of advanced appraisal techniques as well as an understanding of this chapter. Appraisers are also expected to follow the Uniform Standards of Professional Appraisal Practice (USPAP) on all appraisals done for WisDOT. WisDOT will identify a sign's category and status and the information will be shared with the appraiser. WisDOT must work with the appraiser so that the appraiser fully understands the significance of the category and status classifications.

10.4.1 Billboard Valuation Case Law

The Wisconsin Supreme Court addressed billboard valuation in two major cases. Vivid vs. Fiedler (219 Wis.2d 765; 580 N.W. 2d 644 (1998)) involved compensation for nonconforming signs removed for a highway project. Adams vs. City of Madison (Adams vs. City of Madison, 2006 WI 104) was a personal property tax case.

In Vivid, the justices agreed that WisDOT was required to acquire all right, title and interest in the nonconforming sign and the sign location, including any leasehold interest, when acquiring land containing a sign. While three justices thought that the gross income multiplier (GIM) method was appropriate, a majority of the court had doubts about the GIM. Their concern about the GIM was that it includes non-compensable items such as business value, profits and expectancy of lease renewals. The court held that the cost approach is a legitimate method although it might not be entirely satisfactory in these cases. All seven justices agreed that lost business profits and expectation of lease (or contract) renewals are non-compensable in determining just compensation for a nonconforming sign and location.

In the Adams case, it was the sign company that was advocating the cost approach, and it was the city assessor who was arguing for an income approach exclusively for valuation of a billboard as personal property. The focus in Adams was on the asset being valued. The majority held that the assessor's approach had improperly included the value of sign permits in the value of the billboard structure. This was held to be error because the majority held that sign permits are real property, not personal property. (Adams at pars. 61 - 64) The Adams court gave the following guidance regarding valuation of billboards in both the eminent domain and property tax settings:

There are three recognized valuation methods for billboards - cost approach; income approach; and, market approach. These three methods are equally applicable to establish fair market value in eminent domain cases… and to establish true cash value for personal property tax assessments. Although the same appraisal methods may be used to establish fair market value for condemnation purposes as may be used to establish true cash value for purposes of personal property tax assessments, the property valued differs depending upon the purpose.

In eminent domain, fair market value of a billboard is the price that "the aggregate asset - the lease, permit and sign - would bring in the marketplace [.]" Vivid, 219 Wis.2d at 780, 580

N.W.2d 644 (Bablitch, J., with two justices joining). Necessarily, this includes the value attributable to the location of the billboard. Id. at 803-04, 580 N.W.2d 644 (Bradley, J., with three justices joining, noting the value of the location is included in the value of the leasehold).*

In contrast, an appraisal for personal property tax assessment purposes includes only the value of personal property, and therefore excludes the value of the leasehold and billboard permit.

* (Adams, 294 Wis. 2d 441, ¶¶ 87-89 (some citations omitted))

The sign permit is now categorized by subsequent legislation as personal property for property tax purposes only. 2013 Wis. Act 20, s. 1278e and 1278g. (Amending Wis. Stats. §§70.03(2) and 70.04(3))

In general, the sign property to be considered in an eminent domain appraisal is the aggregate package of the sign structure and the sign site including any leasehold interest and the right to erect and maintain a sign pursuant to a permit or otherwise. These are the recognized property components that constitute the assets being acquired. Regardless of which valuation method is used, focus is kept on these assets. Whether and to what extent the sign contributes to the fee must be determined. The underlying fee owner and sign owner are treated as one, and their land interests are treated as a single unit. (The Lamar Company vs. Country Side Restaurant, 340 Wis. 2d 335, ¶28). WisDOT acquires the unit, and the division of compensation for that unit is left to the property owners to sort out with assistance from a court if needed.

* This description captures all aspects of the TOARP.

10.4.2 Appraisal Process Introduction

In Wisconsin, all real property appraised for eminent domain purposes is evaluated using the "unit rule," which requires property to be valued as a whole rather than as a sum of the values of the individual real estate components and interests. In the valuation of an off-premise sign (subject sign), the appraiser must value the total aggregate real property component of the permitted "sign site and sign structure" otherwise known as the Total Outdoor Advertising Real Property (TOARP). Typically, the land for an off-premise sign site is owned or controlled by a party that is different than the permit holder for that sign site use. The permit holder is usually an outdoor advertising company, who obtains the permit from WisDOT and/or the local municipality and then erects a sign structure.

These are key items of consideration in the valuation of a permitted off-premise sign site and sign structure:

- *Apportionment* – Once the fair market value of the subject sign is determined, it is the responsibility of the various interest holders to divide the proceeds of the transaction either as agreed to by each of the parties by apportionment, or with court assistance per Wis. Stat. §32.05(9)(a)3.
- *Business value* – WisDOT acquires only real property and real estate interests. WisDOT does not acquire businesses. Only the real property interests of an outdoor advertising location that would or could contribute real property value to an underlying fee ownership

are considered in the appraisal of the subject sign. Business value and lost profits are not part of the real estate and must be excluded from any real estate appraisal.

- *Hypothetical conditions* – According to Wisconsin case law, a *tenant-owned* sign structure is considered personal property and if it is being displaced by an eminent domain project, its owner may be eligible to receive relocation benefits. When the underlying land and sign structure owner are the same, the sign structure is considered a fixture to the land and is valued as such. In order to comply with the unit rule, when valuing *a tenant-owned* sign structure, the appraiser will use a hypothetical condition that the sign structure is considered a fixture to the land.
- *Property rights appraised* – The fee simple interests comprising a permitted or allowed billboard site improved with a sign structure (TOARP) or the total outdoor advertising real property component as a contributory part of the whole underlying fee property (larger parcel) in adherence to the unit rule.
- *Real estate interest of off-premise sign* – An off-premise sign typically occupies its site under one of four land tenure systems with the primary differences being the degree of control over the site and the value of the interest. The four possible interests are, the off-premise sign:

    1. Owner has fee ownership of the site.
    2. Occupies land owned by another with a permanent outdoor advertising easement (easement in gross).
    3. Is sited on land owned by another with a lease for a certain term and conditions.
    4. Is sited on land owned by another with a license.

- *TOARP (Total Outdoor Advertising Real Property)* – The fee simple real property interest of a permitted or allowed billboard site improved with a sign structure as a package or component of the underlying real estate, including all right, title and interests to the sign site at a location for outdoor advertising use.
- *Utilizing the unit rule* – The appraiser values the fair market value of all the real property interests for the larger parcel, including any lease and leasehold interests. If there are off-premise signs on the property, the fair market value of the larger parcel includes the contributory value, if any, of the off-premise sign structure and sign site.

The following key market data must be considered as part of the process of appraising a permitted sign site and sign structure:

1. Market sales of comparable properties that include a permitted or nonconforming sign site, with or without a sign structure, excluding any business value.
2. Market sales of vacant land that include a permitted sign site or a permit-table sign site location.
3. Sales of permanent outdoor advertising easements from a landowner on permit-table locations where there is open market competition. These sales should not include typical lease conversions where an existing and often nonconforming sign site lease is converted to an outdoor advertising easement where the current outdoor advertising company holds exclusive right to the permit or sign structure use from the regulating authorities.
4. The real estate lease of total off-premise sign packages (TOARP) from fee landowners that include the permitted sign site and sign structure, including all real property right, title and interests associated with the sign site location. These leases compare actual net advertising revenue to a dollar amount paid to lease the total sign site real property package.

    Note: When analyzing items 1 thru 4 above, consider that, due to the scarcity of new sign site locations and a *valuable business monopoly effect* for a location, resulting from the permitting process, a sale of a permitted sign site or nonconforming sign site in the form of an easement, or as part of a land sale, may *also* include a business value component. For this reason, market data for *leases*, of permitted or nonconforming sign sites with or without a structure, as an aggregate component, best represents the data to be used to value the TOARP of an off-premise sign, without a business component.

5. WisDOT has found transactions where this package of assets (TOARP) is leased by a fee owner to an outdoor advertising business entity. It is possible to analyze these transactions to derive market rental information for the TOARP. This market data can then be used to value the TOARP (subject sign) at a specific location on a property by applying an income capitalization approach.

10.4.3 Appraisal Problem Identification and Discussion

When defining the appraisal problem, it is necessary to determine the real property components of the TOARP in affected location. Under the unit rule, the real property components of the TOARP (subject sign) are analyzed to establish their contribution to the total market value of the larger parcel, on which the subject sign is located, as if all property components are owned by one entity.

WisDOT's regional office, in consultation with the appraiser, must correctly identify the real property interests to be acquired from the larger parcel. If a larger parcel includes an off-premise sign, the real property interests may include a sign site, sign permit(s) and a sign structure. When the sign structure is owned by the underlying fee owner, WisDOT treats the sign as a permanent fixture and considers it part of the real estate. If the sign structure is a tenant-owned improvement, it is generally considered personal property that can be moved, except if the sign is nonconforming to state law.

If the subject sign is a tenant-owned conforming sign, it is generally treated as moveable personal property. In this situation, the conforming sign will not be acquired, and moving the sign will be handled as a relocation issue. If the subject sign is nonconforming, §84.30(6) – (8) requires the department to acquire the permitted sign site and sign structure; therefore, it is treated as a permanent fixture, and as part of the real estate. In situations where a conforming sign is owned by the fee owner of the larger parcel, and will not be acquired, moving the subject sign will be handled as a relocation issue.

For the limited purpose of defining the scope of work consistent with the unit rule, the real property features for a property with an off-premise sign will include:

1. Sign structure, treated as a fixture;
2. Permit(s) for the sign (state and local);
3. Sign site;
4. Underlying fee simple title to land including all interests pertaining to the larger parcel; and,
5. Other improvements as they exist on the land.

The acquisition is defined per the schedule of interests on the plat for either:

1. Full acquisition of the larger parcel, or
2. Partial acquisition of the larger parcel.

When a partial acquisition occurs, the appraiser must answer the~~se~~ questions:

1. What real property features are left after the partial acquisition?
2. Does the acquisition cover all or a part of or the sign site?
3. What other real property is being acquired? (This is a consideration, whether under a partial acquisition or a total taking.)

By identifying the real property features to be included in the acquisition and by identifying the real property features to be included in the remainder property, the scope of work can be developed for the appraisal, along with details for solving the appraisal problem. Note: The value of the sign site and structure rental income streams cannot exceed the rent for the TOARP when rented as an aggregate unit.

10.4.4 Scope of Work

The scope of work is the amount and type of information researched and the analysis applied in an appraisal assignment. Scope of work includes, but is not limited to the type and/or extent of which:

- Analysis was applied to arrive at opinions or conclusions.
- Data was researched.
- Property is identified.
- Property is inspected.

That portion of the scope of work that is specific to the valuation of the total outdoor advertising real property (TOARP) component to be acquired, should consider the following analyses and reviews:

- A replacement cost new estimate (less depreciation) may be needed for the subject sign's structure.
- Data tables, prepared by WisDOT, based on known leases to outdoor advertising companies of TOARPs by fee landowners, that include the permitted sign site with structure and all real property associated with the sign location.
- Inspection of the subject sign and sign site, sign measurements and sign photos.
- Outdoor advertising easements sales on permit-table sites, as available, as a check to the rental income approach.
- Requests for information from outdoor advertisers regarding sign rents, advertising revenue data and land/easement sales.
- Sales comparison, cost and income approaches to value as they pertain to the TOARP to be acquired.
- Subject sign view from an adjoining highway to measure the "time of viewing" at normal vehicle speeds.
- Subject sign's site lease.
- WisDOT OASIS record system.

- Zoning and permitting regulations established by WisDOT and local governing entities for conforming and nonconforming outdoor advertising sign use.

10.4.5 Highest and Best Use

Highest and best use is generally defined as the reasonably probable use of property that results in the highest value. The four considerations for highest and best use of a property are physical possibility, legal permissibility, financial feasibility, and maximum productivity. The following are the four criteria when considering the highest and best use of a larger parcel with an existing or possible off-premise sign use:

- *Physical possibility* – Off-premise signs are physically possible to erect on a wide variety of properties. Physical constraints include size, topography, utilities, visibility, and access.
- *Legal permissibility* – This concept deals with the availability of a site for billboard use. Off-premise signs are generally legally permissible on only a small number of properties as conforming or nonconforming uses. Legality of use is determined by local zoning codes and state law.
- *Financial feasibility* – The cost to erect a new sign is generally reasonable considering the return in outdoor advertising fees, although the sign may interfere with a variety of other property uses, possibly making some other property uses financially not feasible. For example, the highest and best use of high-end retail tends not to be compatible with outdoor advertising signs, and if the potential market value of a site is higher under a high-end retail use than as a sign site combined with some other compatible sign use, then the sign site use would not be financially feasible.
- *Maximum productivity* – The mix and location of real estate uses on a larger parcel that includes an off-premise sign will dictate the maximally productive uses on that property. In some cases, the sign is a benefit to the overall single real estate value of the property; and, in some cases, the sign may interfere with a particular property use.

An off-premise sign site on a property imparts value to the land where the sign is specifically placed. Sign sites are typically located on ground leases where one party owns the sign structure and a different party owns the underlying fee of the larger parcel. Additional uses of the larger parcel will have varying compatibility with the sign site use. As such, the sign site use typically adds a split highest and best use on the property where it is located and must be considered as part of the overall highest and best use of the property.

After estimating the contributory value (to the larger parcel) of the permitted sign site and sign structure, the appraiser needs to determine the nature of the sign site interest owned by the sign package owners. Depending on the highest and best use analysis for the property, the estimated net rental income to real property may be evaluated on a long-term basis, a short-term basis, or excluded from the appraisal as having no effect on market value, or the presence of the sign could be a detractor from the fair market value of the larger parcel.

If the highest and best use of the larger parcel indicates the best use of the property is to include long-term use of the sign site, then direct capitalization of the estimated net operating income to the real property is appropriate to determine the market value of the sign package, which should be equal to the sign package's contributory value to the larger parcel. The direct capitalization method for the calculating the market value of the sign package will be discussed in 10.7.4.3.

If the highest and best use of the entire property indicates a short-term sign package use, then a present value is determined based on the expected number of years of use, and a yield capitalization formula is utilized for the determined number of years. A highest and best use that includes a short-term sign package could exist, for example, if it is clear that an area will be redeveloped for a higher value purpose inconsistent with outdoor advertising in a few years and that the sign site will no longer contribute to the value of the property after that occurs. As with the direct capitalization method to be described in 10.7.4.3, using a hypothetical TOARP to estimate the necessary variables associated with the yield capitalization formula would be considered an appropriate method for estimating the sign package's contributory value to the larger parcel.

Capitalization is not appropriate where the sign site adds no value to the property. For example, WisDOT acquires an entire property that includes a leased sign site. The property would be valued higher as a vacant lot than with the sign in place. The property consists of a downtown lot which is currently vacant except for the sign, but which has a highest and best use as a high-rise commercial office development. The property, without the sign present, might be worth $1,000,000. However, if the property cannot be developed with the sign in place, the highest and best use of the larger parcel as improved may be such that the total property value of the lot improved with the sign site might be only $500,000. The sign does not contribute to the fair market value of the larger parcel in its highest and best use, and it would be inappropriate to add anything to the $1,000,000 value-as-vacant. For the permitted sign, site and sign structure to be acquired.

This is not to say that the sign package has no value. It is just that the value is not added to the property's fair market value for purposes of appraising the entire property. The sign owner may still be entitled to a portion of the $1,000,000 eminent domain award in this example, depending on the terms of the lease, and may receive value from the award for the sign site absent contrary provisions in the lease. However, when appraising the property as a whole, the value of the sign package is not added to the $1,000,000 value of the property in its highest and best use as vacant. The sign owner, if entitled to a share of the award, is paid from the $1,000,000 paid for the entire property.

In analyzing the highest and best use of the larger parcel, the appraiser makes an *initial* estimate of sign site value as a *possible* contributory component to the property's fair market value. The final step requires the appraiser to revisit this question and apply a highest and best use analysis to the property to determine whether the sign site actually contributes value to the larger parcel. As discussed above, it could be the case that the highest and best use of the property would be for development without a sign site. In that case, the sign site would not contribute to, or enhance, the value of the larger parcel.

The highest and best use analysis for the off-premise sign and sign site in its impacted location involves assessing the subject "as if vacant" and "improved" before and after the acquisition. REPM/Chapter 2 sets forth the process used for appraising real estate for eminent domain purposes.

10.4.6 Valuation Process – Approaches to Value

The valuation process involves the gathering of information and the analysis of data in order to develop an opinion of value for the subject property interest. There are three basic approaches to value as they relate to valuation: the cost approach, the sales comparison approach, and the income approach.

10.4.6.1 Sales Comparison Approach

The process of deriving a value indication for the subject property by comparing sales of similar properties to the property being appraised, identifying appropriate units of comparison, and making adjustments to the sale prices (or unit prices, as appropriate) of the comparable properties based on relevant, market-derived elements of comparison. The sales comparison approach may be used to value improved properties, vacant land, or land being considered as though vacant when an adequate supply of comparable sales is available. When market sales are available, the sales comparison approach is considered the most reliable indicator of market value.

As noted by the Supreme Court in the Adams Case, finding comparable sales of billboard real property assets can be difficult. Billboards are often erected on leased land; consequently, when a billboard sells, they are transferred by assignment of lease or bill of sale, rather than by warranty deed recorded in the public record. Therefore, many appraisers are not aware of billboard transfers nor do they have access to sales data for billboard transactions, so they are unable to apply the sales comparison approach. (Adams at pars. 46 to 47)

When determining whether comparable property sales can be used in the valuation of a property with an off-premise sign site, the appraiser needs to pay attention to the interests conveyed in that sale. Often, the permit or right to place the sign on the property is owned by a third party outdoor advertising business and is not an interest conveyed with the sale of the property. In such a case, the value of the permit as part of the “permitted sign site” or the right to have the sign on the property is not included in the sale of the property and would not be directly comparable to the property WisDOT intends to acquire.

10.4.6.2 Cost Approach

The cost approach is used for valuation and allocation of the sign structure as separate from the sign site. The reason for allocation of the sign structure relates to statutes dealing with possible relocation of a structure to another market location or the purchase of that structure by the condemning authority.

The regional RE project manager or negotiator must inform the appraiser if WisDOT will be buying the sign structure as part of its acquisition. That will determine if the appraiser should leave the structure in the appraised valuation for the TOARP or remove the structure value from that figure. If it is unclear, then the in-place sign structure value is included in the report for use by the acquiring agency and if necessary deducted later if the region determines the sign will not be acquired.

As with any other site improvements or buildings, the appraiser may utilize a cost service, or estimates from qualified sign fabricators, to establish the replacement cost of the affected sign structure. Often, with newer signs, the outdoor advertising business will disclose the cost of construction for a sign. Whatever method is used to estimate the replacement cost of the affected sign structure, the cost to build a new structure must be adjusted for depreciation.

If the sign structure is not being acquired as part of the real estate, then its value must be removed from the valuation of the sign package (TOARP).

Consider a typical situation, wherein an outdoor advertising business owns and maintains a sign structure on a site owned by another individual(s), and the sign structure is considered the personal property of the tenant, which is removable by the tenant. Unless WisDOT is acquiring the sign structure, the sign structure should not be included in the appraisal. The sign owner may qualify for relocation benefits for reimbursement to move the sign to a new location. The sign's value must be deducted from the estimated contributory value of the sign package (TOARP). This is done using the depreciated replacement cost of the subject sign structure, and is identified using the cost approach. Example, if the cost approach determines that a sign structure is valued at $25,000, that amount is subtracted from the present value of the sign package (TOARP) as follows:

Estimated sign package value (TOARP)	$50,250
Minus sign structure value	– $25,000
= Estimated sign site value	$25,250

The estimated sign site value represents the value of the sign site including all leasehold and real property interests. This amount excludes the structure, as the structure was not bought in this example. The sign owner will incur moving costs in relocating the sign; however, these costs do not contribute to the value of the real estate and are not considered in the appraisal. As previously stated the sign owner may be eligible for reimbursement of relocation costs for realigning the subject sign on the same site under Wis. Stat. §32.195(4) or relocating to a new, conforming site under Adm 92.64.

10.4.6.3 Income Approach

This "income approach" discussion is from The Dictionary of Real Estate Appraisal 6th Edition published by the Appraisal Institute, and based upon the direct capitalization method. *"A method used to convert an estimate of a single year's income expectancy into an indication of value in one direct step, either by dividing the net income by an appropriate capitalization rate or by multiplying the income estimate by an appropriate factor. Direct capitalization employs capitalization rates and multipliers extracted or developed from market data. Only one-year's income is used. Yield and value changes are implied, but not explicitly identified."* The basic formula for direct capitalization is:

$$\text{Value (V)} = \frac{\text{Net Operating Income (I)}}{\text{Overall Capitalization Rate (R)}}$$

Use of the income approach in the valuation of the permitted sign site and sign structure (TOARP) is not dissimilar from its use on any other type of improved property. The difference comes in the methods used to establish the net operating income and the overall capitalization rate.

Appraisal valuation steps using the income approach:

A combination of market data, billboard industry standards, and estimated capitalization rates as well as other relevant information that is applicable to billboards are used to estimate the value of the subject sign structure with the sign site (the TOARP). This is a summary of the valuation steps:

1. *Determine potential gross and net market advertising revenue generated by subject sign*
2. *Determine TOARP ratio applicable to subject sign*
3. *Determine net rental income for subject sign**
4. Determine overall capitalization rate (R)
5. Calculate market value of TOARP (V)

* (Completing steps 1 thru 3 will identify the net operating income [I] for the TOARP).

In a traditional income approach analysis, each comparable sale provides a market capitalization rate to support a capitalization rate for the subject. However, because sales of a TOARP are rare, alternative methods must be used to establish a capitalization rate. The appraiser can use permanent easement sales, land lease rates and the band of investment method to calculate a rate. Calculation of the market value is the fee simple value of the TOARP, as an indication of just compensation of assets taken.

STEP 1 – Determine Market (Gross and Net) Advertising Revenue

Typically, the land for an off-premise sign site is owned or controlled by a party that is different from the permit holder for that sign site use. The permit holder is usually an outdoor advertising company, who obtains the permit from WisDOT and/or the local municipality and then erects a sign structure. Determining market value of the subject sign and sign site assumes that the acquired real property is not, in and of itself, the producer of the outdoor advertising business income; rather that it is solely the “operational” location, site and structure used by the billboard business firm in production of its advertising service and resulting business revenue upon the location. The income approach is based on an analysis of the net operating income, or rental income to the fee landowners generated by a hypothetical lease of the “*permitted sign site and structure*” or TOARP as a package to an outdoor advertising business. The amount of rent paid for a specific TOARP is typically stated as a percentage of the net market advertising revenue, to the outdoor advertising company, generated by the permitted sign site and sign structure.

Advertising rates for individual billboards will vary depending on a number of factors that should be considered. Determining market advertising revenue attributable to the subject sign’s TOARP involves the following concepts, or factors, some of which are unique to the outdoor advertising industry:

- *AADT (annual average daily traffic)* – Traffic counts are measured as annual average daily traffic (AADT) and typically are done on state of Wisconsin highways on a three-year cycle. This number typically represents traffic in two directions but in certain highway, ramp or flyover layouts, may represent only one.
- *Load factor* – The advertising industry uses the term “load factor” to represent the average number of people, 18 years or older, riding in a vehicle. These numbers are obtained from the Federal Highway Administration’s National Household Travel Survey (NHTS). Based on 2010 NHTS data, the average “load factor” is estimated to be 1.50 people per vehicle in a 24-hour period.

The load factor is then adjusted based on one or more of the following:

- If sign is illuminated and has 24-hour exposure (load factor is 1.50).
- If sign is illuminated, but only from 6 a.m. to 12 a.m. NHTS estimates that 95% of traffic volume occurs during the 18-hour, 6 a.m. to 12 a.m. timeframe. (An 18 hour period; load factor is 1.50 X 95% = 1.425.)
- If sign has no lighting at all. The NHTS estimates that two-thirds (67%) of traffic volume occurs during the 12-hour, 6 a.m. to 6 p.m. timeframe. (A 12 hour period; load factor is 1.50 X 67% = 1.0.)
- *Traffic* volumes at certain times of the day.

Exposure time/period: When used in reference to sign advertising, exposure time refers to the amount of time a vehicle occupant would typically be able to view an advertiser's message. An optimum eight-second exposure to the advertising is desired, but is not always achievable. A less than optimal exposure time may require an adjustment to the exposure factor as presented in the chart below.

The exposure factors calculated in the following example assume that the sign being analyzed is a single faced structure with an optimal 8-second exposure period. Because the sign is one sided the load factors need to be divided by 2.

Daily Effective Circulation Exposure Factors			
Exposure Period	**Load Factor ÷ 2**		**Exposure Factor**
24-Hour	1.50 ÷ 2	=	0.75
18-Hour	1.425 ÷ 2	=	0.7125
12-Hour	1.00 ÷ 2	=	0.50

DEC (daily effective circulation): The sign industry uses DEC as its advertising rating standard and is described as the average number of persons potentially exposed to an advertising display for:

- 12 hours (unlit sign – 6:00 a.m. to 6:00 p.m.)
- 18 hours (unlit sign – 6:00 a.m. to 6:00 p.m. and illuminated from 6:00 p.m. to 12:00 a.m.)
- 24 hours (illuminated – 6:00 a.m. to 6:00 a.m.)

The DEC incorporates traffic counts along highways and roads adjacent to billboard sign sites tempered with other outdoor advertising demand factors. These counts are used to calculate daily effective circulation (DEC) and give an indication of the number of viewers having an opportunity to see an advertiser's message (ad impressions). The DEC is often reported as DEC-monthly, which usually represents the number of ad impressions per 30-day cycle divided by 1,000. In some cases, a 28-day cycle is used.

DEC is relevant to billboard appraisal as it provides a means of comparing the relative worth of sign locations, which is a factor in advertising potential for a site and correlates positively with site rent (when considered with other demand factors for the market).

Example: Calculating the DEC of a sign
(assuming one sign face on a road with a 14,500 AADT)

Daily Effective Circulation (DEC)			
AADT	**Exposure Period**	**Exposure Factor**	**DEC per day**
14,500	24-Hour	0.75	10,875
14,500	18-Hour	0.7125	10,331
14,500	12-Hour	0.50	7,250

If sign were lit 18 hours per day, the DEC for one sign face on a 28-day ad billing cycle would be:

- 14,500 (AADT 2-way traffic) x .7125 (1/2 of 1.425 load factor* due to 1-way traffic) = 10,331 DEC (one sided daily)**
- 10,331 x 28 days = 289,268 DEC (DEC per billing cycle)
- 289,268 divided by 1,000 = 289 DEC (in thousands per billing cycle, rounded).

* This represents the 1.5 load factor adjusted downward for reduced lighting hours.

** When a sign can be viewed in only direction, the industry will typically adjust the load factor rather than the AADT. Another way to calculate it is 7,250 (1/2 of 14,500 AADT 2-way traffic) x 1.425 (load factor) = 10,331 DEC.

CPM (cost per thousand): In sign valuation, this refers to a number derived from dividing a sign's advertising revenue by the sign's DEC. It is the cost to deliver an advertisement to 1,000 people (18 or over) in a vehicle passing by an off-premise sign.

> *The income generated through the hypothetical rental of a TOARP to an outdoor advertising company (gross income for the TOARP) is based on a percentage of the net advertising revenue to the outdoor advertising company resulting from their use of the sign structure.*

It is preferred that the advertising revenue, used to calculate the income to the TOARP, be obtained from either actual data on the subject sign, a survey of advertising revenues from nearby signs under the same general influence, or a combination of both. If a survey of nearby signs is used, factors such as location, lighting, sign size, sign face direction, traffic count (AADT), CPM, DEC, and vinyl wrap inclusion are considered.

After the estimated *gross* advertising revenue is determined, the net advertising revenue for the sign is calculated as the gross advertising revenue of the sign less a vacancy of advertisements, advertising agency commission/fees, production costs (vinyl wraps) and artwork to install the advertising on an outdoor advertising sign. This is an overview of the steps estimating the expected net advertising revenue on a sign:

1. Obtain advertising revenue information for similar comparable billboard advertisements on the subject or in the local market.
2. If the vinyl wrap was included in the advertising revenue, adjust the advertising revenue accordingly.
3. Calculate the DEC for the subject and each comparable advertising site.
4. For each comparable, divide the advertisement fee per month by its DEC, which results in the cost per thousand (CPM).
5. Evaluate the data to determine a market gross advertising revenue estimate for the subject sign.
6. Subtract the necessary costs, as indicated above, from the gross advertising revenue to estimate net advertising revenue.

Market advertising revenue estimate based on DEC and actual advertising income: Industry advertising rating standards are typically based on *daily effective circulation or DEC* and on traffic counts along highways and roads adjacent to billboard sign sites tempered with other outdoor advertising demand factors.

Example: An off-premise sign has a single side with the panel exposed to west bound traffic and an annual average daily traffic two way count of 6,600 (AADT). The sign face is not lit and as a result has an estimated exposure period of 12 hours (load factor of 1.00). The sign face has a minimum of 8 seconds exposure to traffic. Eight seconds of good viewing is considered optimum viewing. The viewing time will be considered in the expected advertising revenue estimate. The DEC (daily effective circulation) to those over age 18 going one way viewing is 3,300 (6,600 two-way AADT x (load factor of 1.00 ÷ 2 for one way viewing) = 3,300 one-way). The outdoor advertising industry generally reports DEC in thousands, so subject’s west side viewing location has a daily one way DEC of 3,300 and a 28 day month DEC of 92.4 (3,300 x 28 days = 92,400 ÷ 1,000 = 92.4) and a 30 day month one way DEC of 99.0 (3,300 x 30 days = 99,000 ÷ 1,000 = 99.0).

Advertising revenue comparables: Advertising revenues paid on a property can be compared to similar sized or located signs based on their traffic counts and view times. While certain advertising rates can vary on any specific sign face, an overall typical expected advertising rate can be reasonably estimated.

Example: Advertising Revenue in Grid Form

Comp.	Sign No.	Location	Advertiser	Ad Fee	Lights Yes/No	Sign Size	Sign Facing	AADT 2-Way	Approx. Visibility	CPM	DEC Monthly	Vinyl Wrap Yes/No
Subject	All Clear 1	STH 1	W's Ranch	$200/30 days	No	±8x16	EB	6,600	±8 sec.	$2.02	99	No
1	Marimar 1234	STH 2	West/East Credit Union	$200/30 days	No	±12x10	WB	7,000	±8 sec.	$1.90	105	No
2	Frontback 5678	USH 3	The Burger Shack	$150/30 days	No	±15x8	SE	3,200	±8 sec.	$3.13	48	No
3	Smiths 8910	STH 4	Biggie Burgers	$200/30 days	No	±9x20	WB	5,900	±8 sec.	$2.26	88.5	No

The comparable advertising rates ranged from $150 to $200 with an average of $183.33 for a 30-day month. The CPM for the sign comparables range from $1.90 to $3.13 and had an average CPM ad rate of $2.43 per thousand viewing impressions. Based on these numbers it would be reasonable to conclude a gross advertising rate of $200 per month, indicating a CPM ad rate of $2.02 per thousand viewing impressions.

As previously noted the net advertising revenue for a sign is calculated as the gross advertising revenue of the sign less a vacancy of ads, advertising agency commission/fees, production costs (vinyl wraps) and artwork to install the advertising on an outdoor advertising sign.

STEP 2 – Determine TOARP ratio

Because business value is not compensable under Wisconsin's eminent domain state statutes, the percentage of the net advertising revenue that correlates to the real estate rent component (the TOARP) must be determined. The amount of rent for a TOARP can be determined by starting with the net advertising revenue. The net advertising revenue resulting from the use of the TOARP by the outdoor advertising company includes the business services and acumen of the outdoor advertising business, cost of running the company and profits to the company. These elements of income are part of the business value of the outdoor advertising company, and not part of the real estate value of the TOARP. For this reason, the income capitalization analysis of the TOARP uses the hypothetical rental of the sign to the outdoor advertising company, rather than the net advertising rental income, to calculate the market value of the TOARP.

To establish the annual rental rate of the affected billboard real estate component, long-term leases of sign structures with sign site packages (TOARPs) to outdoor advertising companies can be analyzed. The rent the outdoor advertising company pays to the property owner represents the gross rent to the TOARP real estate component. When this rent is compared to the net advertising revenue (which is the business revenue) of those same signs, a ratio can be developed. This ratio is called the "TOARP ratio" and it will be applied to the estimated net advertising revenue for the subject sign to determine the percentage of its net advertising revenue that is attributable to the gross rental income for the affected real estate component (the TOARP).

In the following discussion, the "outdoor advertising business" refers to the company that is marketing and installing advertising on the billboard and the "TOARP owner" refers to the owner of a sign site where a landowner obtained a sign permit, erected a sign structure himself/herself, and leases the sign to an outdoor advertising business that markets and displays advertising on the structure.

To determine the TOARP ratio, appraisers will first look for signs owned by TOARP owners. The rent paid by the outdoor advertising business to the TOARP owner includes payment to the landowner for the entire package of sign rights including the land, the billboard structure, the permit (or right to have a sign), and the location.

If, as part of the appraiser's market investigation, an actual TOARP is found, the appraiser must try to find the rent paid to the TOARP owner. Usually this will be found in a lease. The appraiser would then estimate the net advertising revenue received by the outdoor advertising business for displaying advertising on the identified TOARP. Net advertising revenue is the gross advertising revenue, minus advertising agency costs (e.g., commissions and production cost for ad displays). The companies whose advertisements appear on these signs should be contacted and asked what they are paying for the advertisement on that sign. The outdoor advertising business may or may not be willing to share data on its advertising revenue with the appraiser. Regardless, the data should be requested.

The market derived TOARP ratio for an existing package is then determined by dividing the rent paid to the TOARP owner by the net advertising revenue. For example, assume a landowner charges an outdoor advertising business $360 per month to rent the right to display advertising materials on the landowner's sign. Assume further that the outdoor advertising business markets and sells the advertising space on the sign and nets $800 per month advertising revenue after advertising agency costs (e.g., commissions and production cost for ad displays) are subtracted. The ratio for that property is then calculated as follows:

Example: Market Derived TOARP Ratio Calculation

Criteria	Monthly Amounts	Market Derived TOARP Ratio
Rent paid by outdoor advertising business to TOARP owner to rent entire package of sign structure and permitted sign site	$360/month	$360 ÷ $800 = 0.45 or 45%
Net advertising revenue received by outdoor advertising business	$800/month	

The appraiser does this calculation for a number of packages. The appraiser then compiles the data on similar packages to arrive at a market derived TOARP ratio. The appraiser must determine whether each package reflects an arm's length transaction between knowledgeable parties, whether each transaction is affected by unusual factors or circumstances, whether the locations and traffic are similar, and whether the data from that package should be used. The market derived TOARP ratio is then used, along with the net advertising revenue on the subject sign site, to estimate the gross rental income that the affected sign site and structure would be expected to generate to the subject's owner.

To do this, the appraiser must try to find the net advertising revenue collected by the outdoor advertising business for the sign on the subject property. Advertising revenue rates should be collected for other comparable billboards in the local advertising market area to estimate advertising rates in the local market. The market net advertising revenues are relevant to determining whether the net advertising revenues for the subject sign are at market rates. The appraiser should compare the net advertising revenues at the subject site to the market rates for similar sites, and decide whether local market rates are more appropriate for determining the value of the sign site. If so, the revenues at the subject site must be adjusted in the appraisal, using the local market rates. The resultant (final) net advertising revenue will be recognized as reflective of the market.

The final net advertising revenue for the subject sign is multiplied by the market derived TOARP ratio to estimate the gross rental income to the affected permitted sign site and sign structure. This figure represents that portion of the income stream that flows to the landowner, in terms of rent, and is attributable to the "entire package" of sign rights, including the sign structure (the TOARP).

For example, assume that the market TOARP ratio is 45% and the annual net advertising revenue for the sign is $9,600 or $800 per month. The gross rental income that flows to the real property at the sign is calculated as follows:

Example: Calculation of Estimated Gross Rental Income to Real Property

Net Market Advertising Revenue from Subject Sign per year			
($800 per month for 12 months)		$9,600	/ Year
Market Derived TOARP Ratio		x 45%	
Estimated Gross Rental Income to Real Property Interests		$4,320	/ Year

This estimated gross rental income to real property estimates the amount of money flowing from the outdoor advertising business to the sign site owners for use of the package of sign rights and sign structure (the TOARP).

In a typical case where a sign company rents land from a landowner, obtains a permit, and builds a sign, the landowner owns the underlying fee, but the outdoor advertising business owns the structure, the right to put up a sign at the location, and any permit. Because WisDOT is trying to value all of these rights as a bundle for unit rule purposes at the time of the acquisition, it is possible, and even likely, that this figure will vary from the rent paid to the landowner under the sign lease. The WisDOT appraisal is not used to determine how much money is 'due' either the landowner or the sign owner. WisDOT appraisals are intended to determine the value of the real estate, taking into account any contributory value from the sign site.

STEP 3 – Determine net rental income

Next, the appraiser must use the estimated gross rental income to determine net rental income to the affected real property. The landowner's operating expenses for maintaining and operating the real estate must now be deducted from the estimated gross rental income to the real property in order to arrive at a net rental income to the real property. Continuing the example given above and assuming the landowner spends $300 per year ($25 per month) on expenses and activities related to renting the sign package (off-premise sign structure with its permitted sign site), the net rental income to real property is calculated by simple subtraction:

Example Calculation of Estimated Net Income to Real Property

Estimated Gross Rental Income to Real Property Interests		$4,320	/ Year
Less Annual Operating Expenses		($300)	/ Year
Estimated Net Operating Income to Real Property Interests		$4,020	/ Year

The estimated net rental income to the real property is the amount of income that flows to the real property from the gross advertising revenue for the subject sign on an annual basis. This net rental income is equal to the net operating income (I) from the formula for calculating the value of real estate utilizing the direct capitalization method of the income approach.

STEP 4 – Determine capitalization rate (R)

An overall capitalization rate reflects a relationship between a single year's net operating income expectancy and the total property value. Capitalization rates for specific outdoor advertising assets are slightly atypical to the normal real estate market capitalization rates, due to the unique influences of the outdoor advertising business environment. The outdoor advertising industry's reluctance to divulge public sales and income information necessary to develop direct capitalization rates contributes to the difficulty of the process.

The derivation of market capitalization rates require a modified method of comparing limited sales data, which may vary as to the composition of the assets sold and the time of sale, with readily available market and economic indicators of alternative investment rates and yields. The most typical methods include derivation from the analysis of sales of comparable properties, published rates from surveys, and the band of investment method.

Capitalization rates based on sales: Market capitalization rates derived from the sales of similar properties under similar market conditions, are appropriate in estimating market value. Experience has indicated comparable sales with a total billboard package included in the sale and owned in total by the fee landowner may not exist. The off-premise sign total package sale could be part of a land sale, as a permanent sign easement sale, or other long-term lease sale of the total sign package. Types of off-premise sign or sign site transactions to be considered for deriving overall capitalization rates may include:

1. Purchases of permanent outdoor advertising easements where comparisons can be made to their market land lease dollar amounts.
2. Market sales of land by a purchaser not involved in the outdoor advertising business that include a total sign package where the total sign package can be rented to an outdoor advertising business with market real estate lease dollar data available.
3. Market sales of land or a permanent sign easement that includes a permit-table sign site location that is then developed by a variety of landowners where there is lease data available.
4. Sales of outdoor advertising business concerns or individual outdoor advertising billboards or billboard groups where a capitalization rate can be derived for EBITDA (earnings before interest, taxes, depreciation, and amortization) cash flow as a measure of investment yield for an outdoor advertising business.
5. Alternative investments to total sign packages. An investor in a total outdoor advertising sign package needs to consider if he will invest in alternative investments with similar, less or more risk along with the investment yield required to make that investment. A total sign package may have a limited number of possible tenants in a given market that may increase the risk factor or investment yield requirements. A higher investment yield requirement would reduce the purchase price of a total off-premise sign package.

Caution must be used in considering and comparing permanent easement sales as those sales may also be "below market" in the case of a nonconforming location or above market for static use on select locations where the influence of possible digital use my be evident. The easement sale may also include "business value" beyond the real property. A business value component may be evident in the permanent easement sale due to the business monopoly effect of controlling a length of highway for outdoor advertising.

Capitalization rates based on surveyed rates: Market capitalization rates and investment yield requirement for a total off-premise sign package can be supported and reconciled with consideration of alternative investments. Real estate investor surveys, such as Realty Rates and Korpacz Real Estate Investor Survey, summarize overall cap rates and yield requirement rates for core real estate (retail, office, industrial, and apartments) properties; comprised of improved and vacant land leases.

Capitalization rates based on band of investment: The band of investment method is used to estimate an overall capitalization rate an investor would expect if a mortgage were taken on an investment property with a down payment made. In the band of investment technique, the capitalization rates attributable to the components of a capital investment are weighted and combined to derive a weighted (built-up) overall capitalization rate attributable to the total investment. For the "built-up rate," the appraiser first multiplies the percentage of the purchase price that will be financed times the mortgage constant (a function of the interest rate, the frequency of amortization, and the term of the loan).

In this example, the lender would require 30% down payment and issue a mortgage for 70% of the investment at the current cost of money. An interest rate of 6.65% over 20 years is the average surveyed interest rate of "special purpose properties." Using the average rate, term, and amortization frequency, a mortgage constant, otherwise known as a mortgage capitalization rate or a debt service constant, is calculated at 9.05% (0.09053).

The second part of the calculation involves multiplying the percentage of the purchase price that will be provided by the investors cash times the equity dividend rate. The investor would be expected to satisfy the 30% difference between the loan amount and the purchase price. The return (or equity dividend Rate) that investors expect to receive on this 30% cash investment is difficult to obtain from the market. A prudent investor would consider other forms of investment such as treasury bills or CD's and bonds as an alternative investment for the 30% down payment.

The return on equity percentage is based on alternative, similar-risk investments in the market. For this example the current reported discount rate for land leases, as reported by a real estate investor survey was utilized. The current average discount rate for similar land leases is reported to be 7.50% (0.07500).

BAND OF INVESTMENT					
Mortgage Interest Rate	6.65%				
Mortgage Term (Amortization Perio	20 Years				
Mortgage Ratio (Loan-to-Value)	70%				
Mortgage Constant	0.09053				
Equity Dividend Rate (EDR)	7.5%				
Mortgage Requirement	70%	x	0.09053	=	0.06337
Equity Requirement	30%	x	0.07500	=	0.02250
	100%				0.08587
Indicated OAR:					**8.60%**

STEP 5 – Calculate TOARP (V) market value

Once the appraiser has identified the net rental income (net operating income) from the TOARP (I) and the overall capitalization rate (R), it will be possible to solve the market value of the TOARP (V) using the following equation:

$$\text{Value (V)} = \frac{\text{Net Operating Income (I)}}{\text{Overall Capitalization Rate (R)}}$$

10.4.7 Severance Damage to TOARP

When a portion of a property is acquired in eminent domain and the fair market value of the owner's remaining land after the acquisition has a reduced value because of the partial taking, the condemner must pay "severance damages" to the landowner under Wis. Stat. §32.09(6)(e). (See Arents vs. ANR Pipeline Company, 2005 WI App. 61, 281 Wis.2d 173, 189, 696 N.W. 2d. 194 [Ct. App. 2005]). Severance damages are possible if a highway project acquisition affects the use of the property when an off-premise sign is moved to another location on the property. Whether the property value is affected either up or down by the movement of the sign on the property should be considered in the total valuation of the property in the before and after analysis of the appraisal. See REPM/Chapter 2- Appraisal for further discussion on severance issues.

10.4.8 Division of Proceeds

It is not unusual for landowners to ask WisDOT what they will receive from an acquisition or condemnation award. Where all property is owned by one landowner, that landowner will receive the entire award. However, where property is held by multiple parties, as occurs where a sign owner leases land from a landlord or owns an easement on another's property, WisDOT will not divide the award between the parties. That division does not involve WisDOT. The division of the proceeds is a private matter between the property owners, and either the parties or a court will have to decide how to conclude their private contractual arrangements. WisDOT's appraiser cannot be compelled to offer an opinion in the partition of proceeds. (Burnett vs. Alt, 224 Wis. 2d 72, 589 N.W.2d 21 [1998]).