

# **Retail Gas Properties** **and the Economics of Access**



**For many retail businesses, ease of street access can make or break the bottom line.**

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Emerging research conducted by several transportation authorities indicates that vehicle-oriented businesses, such as gas stations, car washes and fast-food restaurants often suffer a higher degree of economic damage than other types of businesses as a result of access management takings. These economic impact studies show a higher economic loss to retail gasoline properties than any other property type. In some cases, impaired access can make the business unviable and the property unmarketable as a gasoline outlet. The potential for severance damages from access management takings should be regarded with greater scrutiny by stakeholders and the courts when retail gasoline properties are involved.

Access management is a denotative term widely used in transportation planning and refers to the practice of coordinating the location, number, spacing and design of access points to minimize site access conflicts and maximize

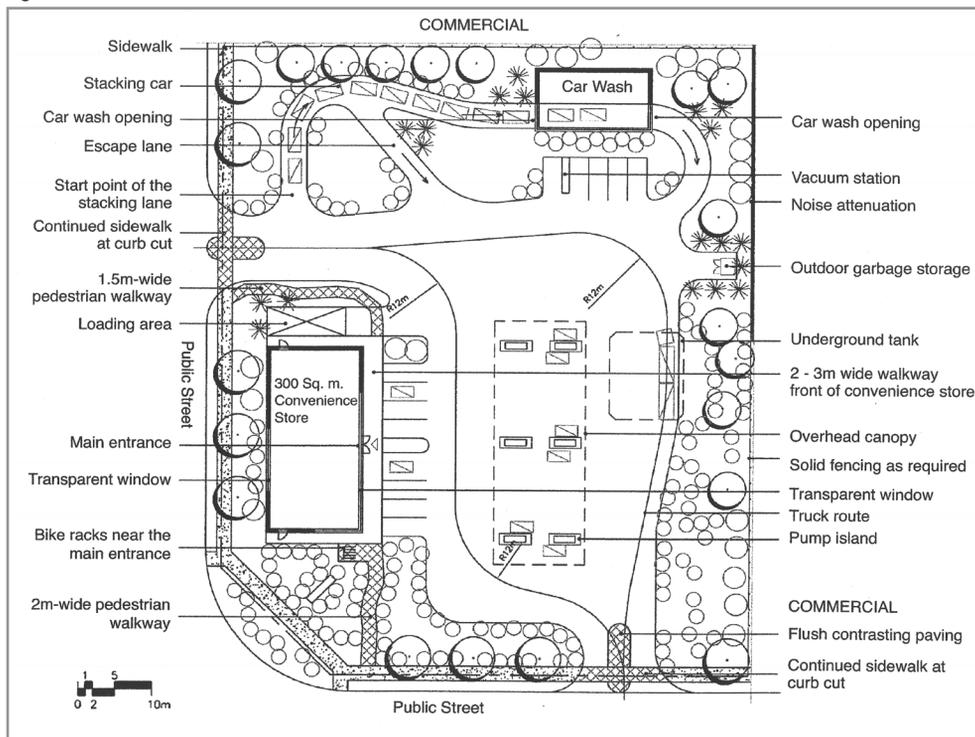
the traffic capacity of a roadway. According to the American Association of State Highway and Transportation Officials (AASHTO), “Access management involves providing or managing access to land development while simultaneously preserving the flow of traffic on the surrounding road system in terms of safety, capacity and speed.”

## **HEIGHTENED SENSITIVITY**

The heightened role that access plays for retail gasoline properties may not be widely recognized. For example, when access management projects are implemented by transportation agencies, the focus may be more on enhancing safety and reducing traffic congestion than providing adequate access to retail properties. As a result, they may seek to limit the number of access points, as well as lengthen turn radii and limit left-turn maneuvers.

**Typical Site Plan  
Figure 1**

Since gasoline businesses require an increased need for accessibility both to and across their sites, access management issues are usually more complex than for most other types of properties. One of the reasons why these properties are particularly sensitive to access management issues is that the sale of motor fuel requires retail dispensing improvements, such as underground tanks, dispensers and canopies that are situated on-site, but separate from the main building. The placement of the fuel dispensing improvements, car wash and other profit centers involves more intensive use of those portions of the site outside the building footprint, as shown in Figure 1.



## COSTS AND BENEFITS

Transportation agencies cite several public benefits from their access management practices, such as improving overall roadway safety, reducing the number of vehicle trips, decreasing interruptions in traffic flow, and minimizing traffic delays and congestion. The central tenet of access management is that numerous access points along a corridor create conflicts between turning and through traffic, which causes delays and accidents. In essence, it seeks to reduce the number of access points while improving design quality.

Until recently, the most current literature on access management was from the 1990s, when transportation authorities teamed up with local universities in Florida, Iowa, New Hampshire and Texas and conducted a significant amount of research on the subject. However, that initial research focused primarily on the design and implementation programs. The economic impact of access management was not included.

Current economic impact studies analyze corridors before and after the installation of access management improvements. The methodology often involves surveys,

and less frequently, statistical analysis of land values. William Eisele, who wrote about methodologies for determining the economic impacts of raised medians, ranked various property types according to the survey results. This study analyzed retail gasoline properties as a separate category and found that they suffered the most when raised medians were installed as compared to all other property types in the study. Eisele found there was a 17.6% decline in customers per day, a 2.4% decline in gross sales and a reduction of 5% in the number of full-time employees.

## ACCESS MANAGEMENT AND COMPENSABILITY

According to the National Association of Convenience Stores, retail gasoline properties derive roughly 50 percent of their gross sales from selling motor fuel. Degradation of the existing access to the property can have negative consequences for the business that are directly related to the diminished real estate quality. Therefore, both the business and the real estate are affected.

Gas stations are single-purpose economic enterprises. Because of their specialty of design, they cannot be readily converted to other types of businesses without a significant loss in value. The fuel service dispensers, underground

tanks and canopy are so use-specific, that if it becomes unprofitable to sell motor fuel at a certain site, the contributory value of the fuel service will be zero or even negative. Unlike a generic retail store or office building, the fuel service can not be put to any other use.

In takings cases, this specialty of design and economic narrowness of use can result in an after value that is comparatively low. Since severance damages are essentially the difference between the before value and the after value, the amount of severance damages to retail gasoline properties can be significantly higher than those for the same set of circumstances applied to other types of property. The current position of the courts needs to evolve to a more informed and nuanced view of how access quality varies from differing property types, such as light-industrial to commercial to retail, when determining compensability.

For example, New York and many other states hold that access impaired by guard rails, one-way regulations, prohibition of left turns and U-turns, median strips and other traffic regulations is not compensable. In Missouri, the court cited *Filger v. State Highway Commission*, 355 S.W. 2d 425 (Mo., 1962), stating, “This change (reduction of access) may result in some inconvenience respecting ingress and egress... They must stand the loss... so long as their access rights are not materially altered or destroyed.”

In deciding access-related cases, the courts deny compensation based on the fact that that access limitation is an exercise of police power, not eminent domain, and police power actions by the government are not a compensable loss to a property owner. The installation of a raised median where none existed before, for example, is regarded as a police power action in many states and is not compensable. In other instances, the court may rely on an ephemeral process to arrive at their conclusion about reasonable access.

In his paper on Real Estate Valuation in Litigation, James D. Eaton noted, “In defining the limits of a property owner’s access rights, the courts have referenced reasonable access, suitable access, and free and convenient access... In other words, case law indicates that an abutting property owner is entitled to reasonable, convenient and adequate access for proper use and enjoyment of his property for its present and for its reasonable uses in the foreseeable future.”

The mistake the courts are making in these cases is that they view access without distinction as to property type.

It is apparent that access issues are much more important to vehicle-related businesses, such as car washes, retail gasoline properties and fast food restaurants, and yet these businesses are not compensated accordingly.

## CONVENIENCE VS. DESTINATION

The reduced access to a destination concept, such as a movie theatre, may be reasonable in the after condition. For a convenience concept, such as a retail gasoline business, the same reduction in access may be unreasonable. The courts in the cited cases do not make any such distinction. Yet, the real world makes the distinction.

According to *The Site Book*, written by Richard M. Fenker, “If your business is convenience oriented, drop-in access will have a significant impact on sales, ranging from 10 to 30 percent, as construction or ingress/egress problems make access a challenge. Convenience stores, gas stations, fast-food restaurants, and many other convenience concepts have made a science of defining and measuring drop-in access and constructing sites that rate high on this measure. On the other hand, if your business is destination oriented and has good visibility, poor access will not matter a great deal, possibly impacting your business only two to five percent.”

Measuring the importance of access to convenience properties, as opposed to destination properties, appears to have been completely lost on the courts. This unrecognized difference is a disservice to many convenience-related property owners in cases involving takings, as their claims have been ignored in the past. The majority of the cited cases in access-related severance damage claims involve retail gasoline properties, thereby illustrating the high degree of sensitivity these types of uses experience in property access changes, as well as the owners’ willingness to go to court over the issue. Stakeholders, transportation officials, the courts, attorneys and appraisers need a better understanding of the importance access plays to various property types. A better understanding of how access requirements vary from one property to another will lead to better conclusions of law regarding compensability.

## COMMON APPLICATIONS AND THEIR IMPACT

There are several types of improvement projects that have the potential to hamper access to a retail convenience business and result in damages that warrant compensation.

## RAISED MEDIANS

Traffic count in front of the retail gasoline property is a fundamental criterion in location decisions for national oil companies. Traffic count is so important to the success of retail gasoline properties that a minimum traffic count threshold may be specified before a site will be considered for construction. ExxonMobil, for example, stipulates that traffic counts must be a minimum of 20,000 vehicles per day. A site that meets this criteria in the before condition can be rendered below this standard in the after condition when a raised median is installed as part of an access management project along a corridor.

When installed after initial construction, raised medians can reduce the number of potential drop-in or convenience customers by 50 percent.

## THREAT FROM COMPETITORS

New medians often alter existing traffic configurations. When combined with nearby competitors, the economic viability of a retail gasoline property can be significantly reduced.

Consider a newly-installed raised median that routed traffic coming from the freeway further west than before. The new traffic flow required the Sinclair gas station's customers to travel west and make a U-turn at the next intersection in order to access it. However, at the U-turn, customers first passed by an existing Shell station. The raised median made it easier (and faster) for the customers to stop at the Shell location. The Sinclair store closed within six months as a result of the new

median. The underground fuel tanks, canopy and dispensers (all classified as real property) were subsequently removed at a substantial cost and loss in value. To date, the property remains unoccupied and unused, while other retail properties along the corridor remain.

## LOSS OF TURNING RADIUS

Another common example that results in severance damages is a widening project. When a portion of the frontage is taken, the remainder parcel has less physical depth than before, and the result creates diminished customer accessibility to the fuel service.

This type of severance damage is often found in takings projects resulting from the creation of new right turn lanes or new taper lanes at intersections. In both these cases, the takings require additional land from the abutting properties at the intersection.

The loss of site depth can create a problem that stems from the minimum turning radius for a standard-size car. Most oil company engineers specify 15 feet of minimum depth between the property line and the edge of the outside fuel spanner, or island. Depths that are reduced significantly from 15 feet can make it difficult or impossible for customers to access the outside fuel position rendering it less useful. Clifford Johnson addresses this problem in his article on Appraising Successful Service Stations, stating, "Any compromise of the minimum dimensions because of right of way acquisition tends to place the property in a less competitive position and thereby causes a decline in its value."



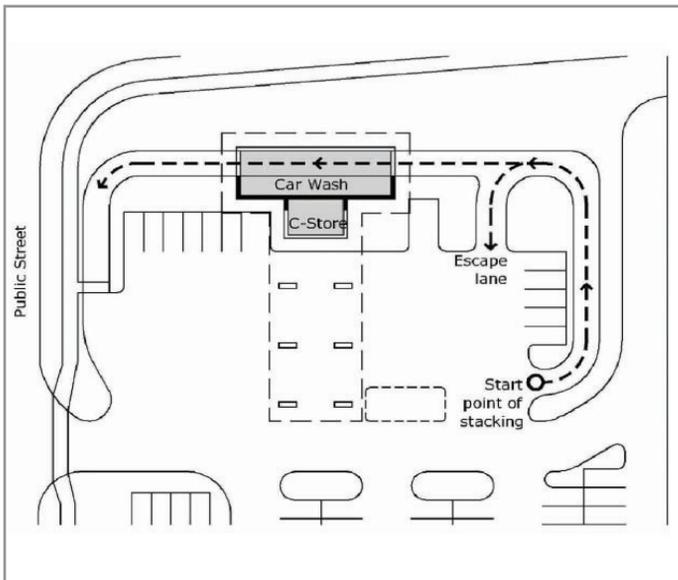
This retail gasoline business in Ontario, Oregon closed within six months of the median installation. The underground fuel tanks, dispensers and canopy have been subsequently removed.

Johnson showed that even a three foot reduction in the distance between the property line and the outside edge of a fuel spanner can so reduce the turning radius that a standard automobile would not be able to readily access the fuel positions on that side of the site. He goes on to measure the loss in property value using a reduction in gallonage. Loss of side distance is especially acute for small sites of about 15,000 square feet.

## LOSS OF STACKING DISTANCES

Takings that reduce the size of the remainder parcel can also affect the stacking distance. Stacking distances measure the lanes dedicated to customer vehicles using a drive-up window or other vehicle related service. The specified distance is usually number of cars rather than linear feet.

**Typical Stacking Lane**  
**Figure 2**



Oftentimes, a co-branded retail fuel site must meet the site criteria of the food operation, which include specifications for size, traffic count, zoning-related issues and stacking distances. A McDonald's, for example, will require a stacking distance of at least eight vehicles for drive-up window lanes.

Other businesses like car washes, which are designed specifically to keep customers moving with minimum delay, may also require stacking distances, which can be affected by features like reader boards and payment terminals and designed. Figure 2 shows a typical stacking lane for a car wash on a retail gasoline site.

## DRIVEWAY SLOPE

Driveway slope (vertical alignment) can also be problematic when street levels have been elevated as a result of a public improvement project. If the slope of the driveway is too steep, this may force customers to unduly slow their speed when entering or existing a driveway. A customer slowing to negotiate a steep driveway may block a street's through traffic and cause traffic to slow. Access driveways on major streets should allow the customer to maneuver smoothly and comfortably at a minimum speed of 10 miles per hour. In all cases, there must be adequate clearance between the surface and the vehicle.

## REDUCED SITE DISTANCES

Even visual improvements can reduce accessibility by compromising sight distance, the length of roadway visible to a driver. A safe sight distance is the distance needed by a customer exiting the driveway to verify that the road is clear and to avoid conflicts with other vehicles. Safe site distances for a vehicle exiting a driveway will vary according to the speed of the street traffic.

For example, the Iowa Department of Transportation recommends these Safe Site Distances:

Posted Speed Limit	Desirable Distance	Minimum Distance
35 mph	395	265
45 mph	560	395



The inadequate site distance is demonstrated here, showing how the street appears to a customer exiting the driveway. The need for site distance from driveways increases with higher traffic speeds on the street being entered.

The concept of site distances is illustrated below. In Figure 3a, a customer is exiting a driveway onto the main street. In this case, adequate site distance is preserved. The situation in Figure 3b shows how a street bench (to the left) and landscaping improvements (on the right) can interfere with site distance, which is a form accessibility degradation.

### Site Distances Figure 3a

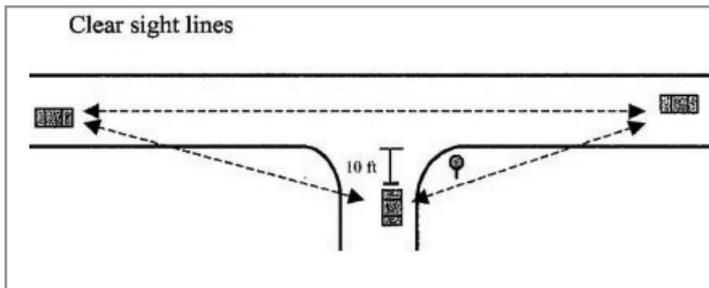
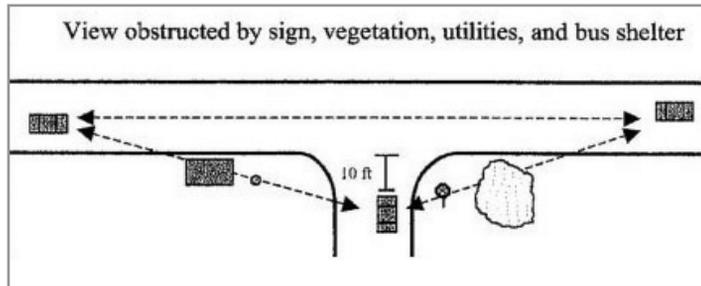


Figure 3b



The hierarchical structure of access sensitivity for various property types can be categorized as follows:

#### Retail Uses – Most Sensitive

- Gas Stations
- Convenience Stores
- Fast Food Restaurants
- Neighborhood Grocery Stores
- Sit Down Restaurants
- General Merchandise
- Specialty Retailers

#### Non-Retail Uses - Least Sensitive

- Office
- Automotive Services
- Light Industrial
- Single-Family Residential
- Multifamily Residential

### CONCLUSION

Current research is finally beginning to recognize the differing effects of access degradation. The earliest indication of this difference is found in economic impact studies that

analyze the before and after condition. It is apparent that the economic loss to retail gasoline properties is greater than for any other property type.

The logical conclusion when comparing the differences in economic loss is that adequate access for one property type may be inadequate access for another type. This has long been recognized by retail property owners and users. Since the courts have frequently decided compensation claims based on “reasonable” and “convenient and adequate” access, the legal system also needs to recognize these differences if fairness is sought in severance damage claims.

Additional studies in locations across the country would no doubt confirm the validity of these early studies. However, economic impact studies should distinguish the different impacts on various property types. As further research on the economic impact of access management is conducted, the courts may one day find that degradation in access may be compensable for some property types and not for others.

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