



ACCESS MANAGEMENT POLICY

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Adopted by Ordinance 10184

City of Midland
Engineering Services Department
Traffic Operations Division
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Midland, Texas 79701

Table of Contents

1	Introduction	2
1.1	Purpose of Policy	2
1.2	What is Access Management.....	2
1.3	Benefits of Access Management	2
1.3.1	Safety	2
1.3.2	Traffic Operations	3
1.3.3	Economics	4
1.3.4	Land Use.....	5
1.3.5	Environment	5
1.4	Applicability of Policy.....	5
1.5	Conflicts and Revisions	5
2	Roadway Classification and Jurisdiction	5
2.1	Functional Classification	5
2.2	Agency Jurisdiction	6
3	Access Design Standards.....	7
3.1	Residential Access (Single- and Two-Family Lots)	7
3.1.1	Residential Driveway Spacing Requirements	7
3.1.2	Residential Driveway Construction Details.....	8
3.1.3	Residential Driveway Width.....	9
3.2	Commercial Access	9
3.2.1	Commercial Access Spacing Requirements	9
3.2.2	Commercial Access Turn Restrictions.....	11
3.2.3	Auxiliary Turn Lanes.....	13
3.2.4	Commercial Shared Access	13
3.2.5	Alternate Commercial Access Locations.....	14
3.2.6	Commercial Driveway Construction Details	14
3.2.7	Commercial Driveway Geometric Design	15
3.2.8	Access Involving Traffic Signals	16
3.2.9	Drive-Thru / In-Vehicle Operations.....	17
3.3	Alleys.....	17
4	Access Permitting Process	18
4.1	Approval Requirements.....	18
4.2	Pre-Development Review	18
4.3	Permitting Process	18
4.4	Nonconforming Sites and Deviations from Standards	18
4.5	Appeals Process	19
5	Contact Information	19

1 Introduction

1.1 Purpose of Policy

This Policy is intended to manage vehicular access to the public roadway network from developed land in the City of Midland in a manner that provides reasonable access for residents and business owners, while also preserving the mobility, safety and capacity of the roadway network. The standards and practices included in this Policy are based on past city ordinances, as well as state and national engineering standards and access management guidelines.

1.2 What is Access Management

As per the Transportation Research Board's *Access Management Manual*¹:

Access management is the coordinated planning, regulation, and design of access between roadways and land development. It encompasses a range of methods that promote the efficient and safe movement of people and goods by reducing conflicts on the roadway system and at its interface with other modes of travel.

Some key components of access management include:

- Designing access points to minimize conflicts at site entries,
- Using median treatments to reduce interactions between left-turning vehicles and through traffic,
- Providing left-turn and right-turn lanes to separate slower moving turning vehicles from through traffic,
- Locating traffic signals to provide for improved signal coordination and efficient traffic progression, and
- Restricting driveways near traffic signals to reduce intersection crashes.

1.3 Benefits of Access Management

Sound access management creates benefits in safety, traffic operations, economics, land use, and the environment, as described in the following paragraphs.

1.3.1 Safety

There are two main components of access management that improve the safety of the roadway corridor on which they are applied: access density and turn lanes/medians.

One goal of this Policy, and most access management programs, is to reduce the number of access points on a roadway through improved site layouts, relocation of access to lower classification streets, and consolidation of the number of access points. Numerous studies have shown that crash rates on roadways increase as the density of access points increases. This is illustrated in Table 1 below.

¹ *Access Management Manual, Second Edition*. Transportation Research Board of the National Academies, Washington, D.C., 2014.

Table 1. Representative Crash Rates by Access Density and Median Type ²

Total Access Points Per Mile	Crash Rate (crashes per million vehicle-miles travelled)		
	Undivided	TWLTLT [†]	Non-traversable Median
≤ 20	3.8	3.4	2.9
20.01 – 40	7.3	5.9	5.1
40.01 – 60	9.4	7.9	6.8
> 60	10.6	9.2	8.2

[†] Two-way left turn lane

The use of turn lanes and medians is also a major component of access management. Studies conducted nationwide over many decades have consistently shown that undivided roadways without turn lanes have the highest crash rates. The addition of a two-way left turn lane (TWLTLT) to separate left-turn traffic from through traffic helps to improve the safety of the corridor, but does not address the conflicts with turning vehicles. As shown in Figure 1, a full access driveway has nearly twice as many potential points of conflict as a driveway that allows three of the four movements, but restricts the left-turn out of the site. Overall, left turn movements (entering and exiting) account for three-quarters of all driveway related crashes. The addition of a non-traversable (raised) center median to limit these conflicts, when designed to reasonably redirect turning movements to more appropriate locations, results in the lowest overall crash rate.

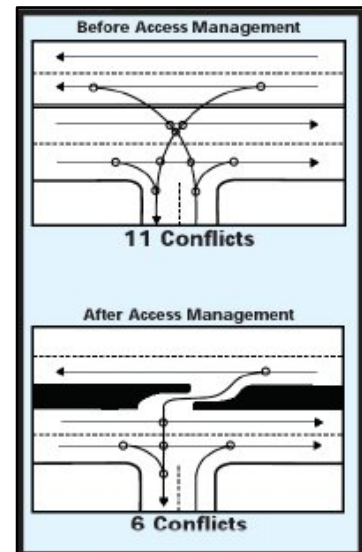


Figure 1.
Conflict Points at a Driveway

1.3.2 Traffic Operations

Increases in the number of access points and traffic signals along a corridor result in lower travel speeds, longer travel times, and increased overall delay. A summary of the reduction in free-flow travel speeds along roadway corridors due to a higher density of access points compiled from national studies is shown in Table 2 below.

Table 2. Access Points and Free-Flow Speed ³

Access Points per Mile	Reduction in Free-Flow Speed (mph)
0	0.0
10	2.5
20	5.0
30	7.5
≥ 40	10.0

² *Access Management Manual, Second Edition*. Transportation Research Board of the National Academies, Washington, D.C., 2014.

³ *Access Management Manual, Second Edition*. Transportation Research Board of the National Academies, Washington, D.C., 2014.

1.3.3 Economics

Although some business owners have pre-conceived notions that *any* restrictions to site access will be harmful to their business, this is not supported by extensive before-and-after studies that have been done with median installation and access management projects around the country. The Federal Highway Administration states:

*Studies of the business impacts of access management projects in Florida, Iowa, Minnesota, Kansas and Texas have consistently found that most businesses continue to do well when the project is completed. These results are particularly true for destination businesses. However, most drive-by oriented businesses are not unduly affected either.*⁴

In related studies:

*"Before and after" studies of businesses in Florida, Iowa, Minnesota, and Texas along highways where access has been managed found that the vast majority of businesses do as well or better after the access management projects are completed. The turnover rate (the proportion of businesses that close or move out each year) of businesses in Iowa and Minnesota was studied along newly access-managed corridors and was similar to or lower than that of the surrounding area.*⁵

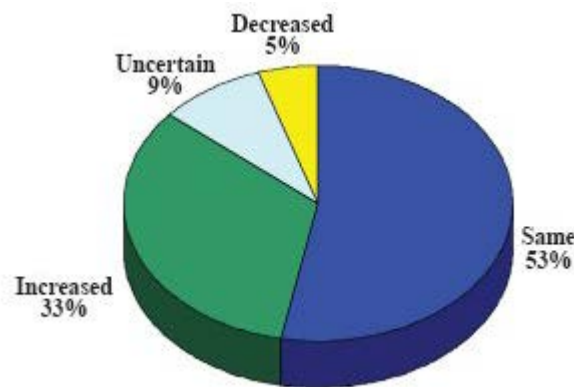


Figure 2. Business Owners' Reported Before-vs-After Sales Comparison⁶

Another economic concern of property owners regarding access management is the potential impact on property values. In general, most studies on this subject have found that property values are more a function of location and the local economy, rather than changes to access. Studies have repeatedly shown that most property values are unchanged following a new access management project, or that property values have increased. Although there may be some minor inconvenience associated with certain types of access restrictions, this is more than offset by the improved mobility and traffic flow in the corridor, as well as reduced crash rates and driver stress in trying negotiate difficult and potentially dangerous left-turns to enter or exit businesses during peak periods.

⁴ *Safe Access is Good for Business*, Federal Highway Administration, Pub. FHWA-HOP-06-107, Aug. 2006.

⁵ *Safe Access is Good for Business*, Federal Highway Administration, Pub. FHWA-HOP-06-107, Aug. 2006.

⁶ *Safe Access is Good for Business*, Federal Highway Administration, Pub. FHWA-HOP-06-107, Aug. 2006.

1.3.4 Land Use

A well-regulated access management program promotes more coordinated development along a corridor, with the potential for improved compatibility between adjacent land uses. In this manner, interconnected uses can feed off the customer traffic generated by adjacent businesses.

Reducing the number of driveways and locating them in safer locations also enhances aesthetics and presents a more pleasing, customer-friendly image of the development. The Urban Land Institute's *Shopping Center Development Handbook* states that "poorly designed entrances and exits not only present a traffic hazard but also cause congestion that can create a negative image of the center".⁷

1.3.5 Environment

Reductions in delay and travel time along corridors with well-managed access also mean less congestion, less idling of vehicles, and reduced fuel consumption and emissions.

1.4 Applicability of Policy

This Policy regulates vehicular access to all public roadways and alleys within the City of Midland, including city streets, state highways, and federal interstates. Vehicular access includes connections to public roadways from other public roadways, private roadways, alleys, and all types of residential and commercial driveways.

The City does not directly regulate access to private roadways, although other building, zoning or fire code issues may exist.

1.5 Conflicts and Revisions

While efforts have been made to ensure that this Policy does not conflict with city codes, zoning regulations, subdivision policies, engineering design standards, or other city, county, or state planning and design regulations or documents, there may be occasions where discrepancies between these policies exist. In such cases, the most recently adopted policy should apply.

2 Roadway Classification and Jurisdiction

2.1 Functional Classification

Roadways are generally classified by the function that they are intended to serve, and access design standards vary depending on these classifications.

- **Highways** – State highways provide for regional traffic circulation and are designed for high speeds and heavy volumes. These highways are typically limited access, with restrictions on the locations of driveways to adjacent properties, in order to preserve the safety and efficiency of traffic flow. Examples include Interstate 20, Loop 250 and SH 191.
- **Arterials** – These larger streets are meant to provide connections for traffic moving within the city, and typically move higher volumes of traffic at higher speeds, while also providing reasonable access to adjacent properties. Examples include smaller state highways such as Andrews Highway and Big Spring Street, as well as city roads like Midkiff Road and Wadley Avenue.

⁷ *Access Management Manual, Second Edition*. Transportation Research Board of the National Academies, Washington, D.C., 2014.

- **Collectors** – Medium-sized streets are meant to provide access for traffic in and out of neighborhoods, linking local streets with the surrounding arterial network. Collectors may be designed in various sizes, some with homes or businesses fronting directly on them, and some with more restricted access. Neely Avenue and Carver Street are examples in Midland.
- **Locals** – Local streets are the lowest classification of street and provide the highest level of access, with numerous driveways and on-street parking. The vast majority of streets in Midland are local streets.
- **Alleys** – Alleys provide local property access, service access (e.g., trash collection), and utility access (e.g., water, sewer, electric, telephone, etc.) to adjacent properties. There are relatively few restrictions on vehicular access to alleys, except as noted in Section 3.3.

Highways, arterials, and select collectors are illustrated on the City of Midland Thoroughfare Plan, which is a Council-adopted plan for existing and planned roadways within the city limits, as well as in the extra-territorial jurisdiction (ETJ).

Designs for the planned cross-sections (i.e., right-of-way width, number of lanes, width of pavement, etc.) of each class of roadway are shown in the latest Standard Details as published by the Engineering Services Department.

2.2 Agency Jurisdiction

Most roadways within the city limits are owned and operated by the City of Midland.

Most highways and some arterials within the city limits are owned by the State of Texas and operated by the Texas Department of Transportation (TxDOT). All roadways operated by TxDOT are generically referred to as “state highways”, regardless of the actual functional classification of the roadway. As per the Council-adopted *Municipal Maintenance Agreement* between the City and TxDOT, the City has permitting authority for access on all state highways within the city limits. City staff is the primary contact for such access and works in coordination with TxDOT during the review and approval process for access on state highways.

State highways are identified by state highway numbers, such as I-20, SH 191, FM 1788, BS 349, etc. Federal interstates (i.e., I-20), including the associated ramps and service roads, are operated by TxDOT and are considered to be state highways for the purpose of this Policy. Non-limited access state highways typically also have street names within the city limits, such as Andrews Highway, Big Spring Street, Cloverdale Road, etc. Since access design standards can vary significantly between city streets and state highways, it is important to verify the jurisdiction prior to designing access. Maps identifying state highways are available on the City’s website.

3 Access Design Standards

3.1 Residential Access (Single- and Two-Family Lots)

Residential access consists of driveways that serve single-family or two-family (duplex) dwellings. Other residential uses with three or more connected units, such as townhomes and apartments, are considered to be commercial for the purpose of this Policy.

3.1.1 Residential Driveway Spacing Requirements

Residential access spacing requirements are measured from the corner of an intersection to the nearest edge of the curb cut when measuring from an adjacent street intersection, or between the nearest edges of the curb cuts for adjacent alleys or driveways.

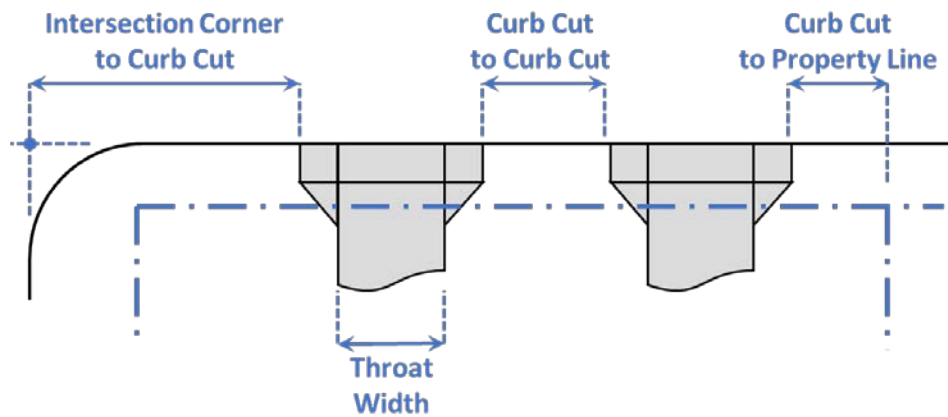


Figure 3. Residential Driveway Measurements

Direct vehicular access from a residential use to an arterial street or highway is prohibited, except as described in Section 4.4 of this Policy. Some neighborhoods may also have additional restrictions on access to other streets as described on their subdivision plat.

Driveways must be located such that the spacing criteria in all three of the tables below are satisfied.

Table 3 lists the minimum distance for curb cut placement from an adjacent intersection.

Table 3. Residential Driveway Curb Cut Distance from Intersection

Intersection Type	Distance for Curb Cut Placement (from corner of intersection)
Arterial Street / Other Street	Not Allowed / 60 ft
Other Street / Other Street	40 ft / 40 ft
Cul-de-sac† / Other Street	20 ft / 40 ft

†On blocks where cul-de-sac streets end and traffic from the cul-de-sac street is regulated at the intersection by a stop sign.

Table 4 lists the minimum distance for curb cut placement from an adjacent property line.

Table 4. Residential Driveway Curb Cut Distance from Property Line

Type of Property Line	Distance for Curb Cut Placement (from property line)
Property Line with Adjacent Parcel ‡	5 ft
Property Line with Alley Right-of-Way	10 ft

‡ Unless a notarized letter signed by both property owners is submitted with the permit application and site plan documenting that both owners have no objection to the driveway placement, or a development plan for a group of residential properties is approved by the Planning and Zoning Commission or City Council.

In some cases, two adjacent lots are proposed to have driveways that are closer to their common property line than the distance needed to allow for construction of the necessary pedestrian ramps and landings between the driveways. In such cases, it is permissible for the nearest edge of the throat of each driveway to be located at 5 ft from the property line, and for the pedestrian ramps and landings to be omitted on that side. Therefore, each driveway still has a pedestrian ramp on the outside, but the section between the driveways consists of a continuous laydown curb and sidewalk, 10 ft in length, with no ramps needed.

Table 5 lists the minimum distance between curb cuts for multiple driveways along one street located on the same parcel, or on lots which are developed as one single- or two-family dwelling. This includes circle driveways and similar types of connected driveways, as well as multiple independent driveways serving one property. If multiple driveways serving one property are to be located on different streets, then each street frontage is reviewed independently.

Table 5. Multiple Residential Driveway Curb Cut Spacing

Minimum Distance between Curb Cuts	
For Multiple Driveways (serving the same parcel or dwelling)	20 ft
For Driveways on Adjacent Parcels (serving separate parcels or dwellings)	None (See Table 4)

3.1.2 Residential Driveway Construction Details

Residential driveways shall be constructed in accordance with the appropriate standards in the latest edition of the Standard Details as published by the Engineering Services Department.

Driveways on streets with existing curb, or with new curb being constructed as part of the same project, shall include pedestrian ramps on both sides of the driveway approach. Ramps are required regardless of whether sidewalk is existing or planned in order to accommodate future sidewalk construction. Driveways on streets with no existing curb, and no curb planned as part of the same project, may omit the pedestrian ramps and shall include flares instead.

Driveways on streets with mountable (or roll-over) curb do not typically need to include flares or pedestrian ramps. However, all other design and spacing standards still apply.

3.1.3 Residential Driveway Width

The curb cut is measured as the distance between the outside edges of the vertical curb that must be removed to construct the driveway, including any required flares or pedestrian ramps. In most cases, the ramp length is five feet, so two ramps typically add ten feet to the length of the curb cut, and the remaining distance is the width of the throat.

The minimum width of a residential driveway throat shall be 10 feet.

In order to allow for improved access to the larger multi-bay garages that are becoming more common in modern homes, the maximum width of a residential driveway is directly tied to the size of the garage it serves, if the garage faces the street that the driveway is on and is within 75 ft of the curb.

The throat of the driveway may not exceed the width described in Table 6 below. These values are calculated as 12 feet per garage bay, plus an additional 12 feet for an adjacent parking pad when the garage has four or fewer bays. So the maximum widths range from 24 feet to 60 feet.

Table 6. Residential Driveway Throat Width

Number of Garage Bays	Maximum Driveway Throat Width
No Garage	24 ft
1 bay	24 ft
2 bays	36 ft
3 bays	48 ft
4 or more bays	60 ft

3.2 Commercial Access

Commercial access consists of all vehicular access connections except those described as residential (single- or two-family dwellings). This includes all other forms of driveways, as well as alleys, private streets, and public streets.

3.2.1 Commercial Access Spacing Requirements

Access spacing requirements are measured as shown in Figure 4. Spacing related to driveways is measured from the nearest edge of the throat of the driveway to the nearest edge of the throat of the adjacent driveway, or to the curb or edge of pavement of the adjacent roadway. Spacing between public roadways, signalized intersections, or median openings, is measured between the centerlines. For commercial access, all measurements are always made from the projected extension of the curb or edge of pavement; not from the radius or curb cut.

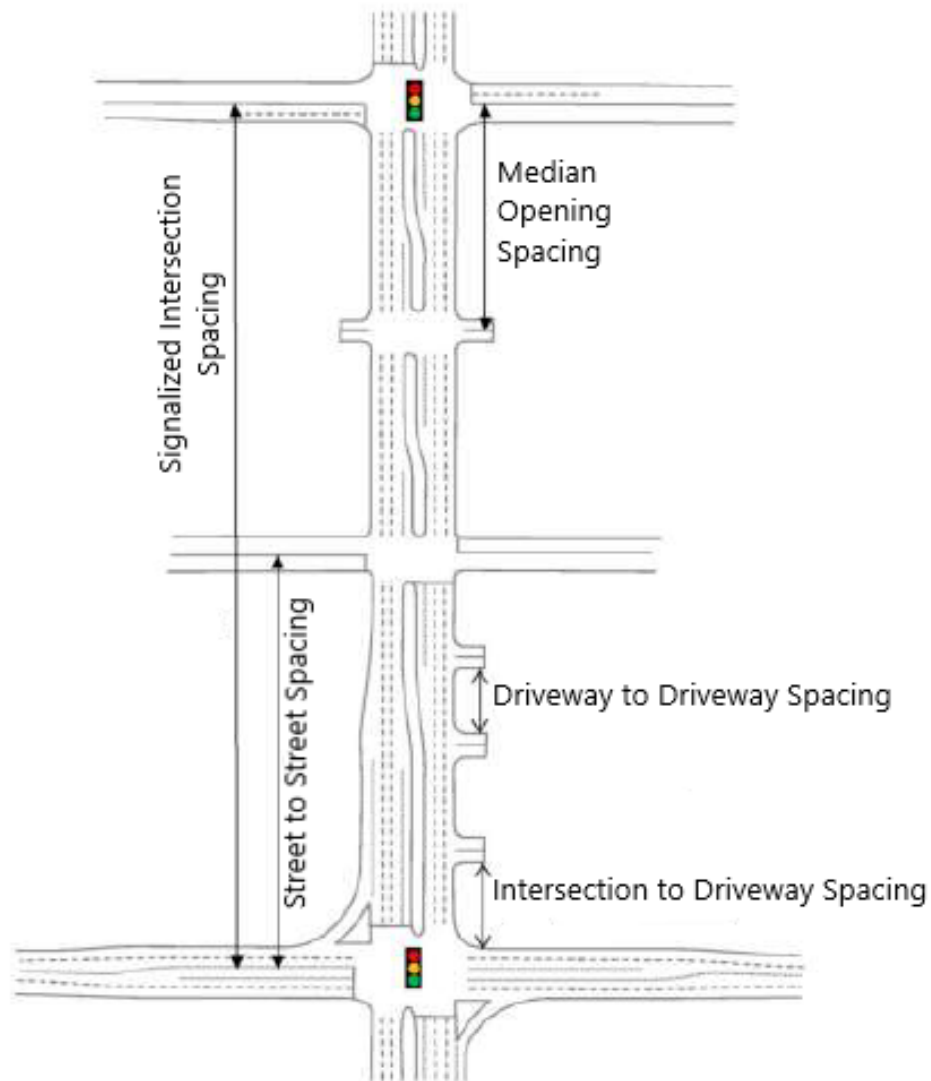


Figure 4. Spacing Requirement Measurements

New driveways, streets, median openings, or traffic signals must be located such that the spacing criteria described Table 7 below are satisfied. Alleys are treated as driveways for the purpose of this Policy.

Note that meeting minimum access spacing requirements generally means that some form of access is permissible at that location, but does not guarantee that a driveway or street can be permitted full access turning movements at that location. See Section 3.2.2 for additional information.

A roundabout intersection shall generally be treated the same as a standard intersection as per Table 7, but such cases must be carefully assessed due to the unique geometric design features associated with approaches to roundabouts. Higher driveway spacing values may be required in these cases, as determined by the City Traffic Engineer or designee.

Table 7. Minimum Street and Access Spacing

Street Type	Typical Speed Limit (mph)	Typical No. of Travel Lanes	Driveway to Driveway Spacing	Intersection to Driveway Spacing	Signalized Intersection Spacing	Street to Street Spacing	Median Opening Spacing
Freeway Service Road	45-55	2 to 3	Per the latest edition of TxDOT's <i>Access Management Manual</i> .				
State Highway	40-55	4 to 6	Per the latest edition of TxDOT's <i>Access Management Manual</i> .				
Arterial	40-55	4 to 6	150 ft	150 ft (typ.) 500 ft ‡	1,320 ft	660 ft	500 ft
Collector	30-40	2 to 4	60 ft	60 ft	See Note†	270 ft	See Note†
Local	25-30	2	40 ft	60 ft	See Note†	130 ft	See Note†
Limited Access Parkway ◊	45-50	4 to 6	425 ft	425 ft	Pre-determined at roadway design.		

† NOTE: These situations occur infrequently and must be designed on a project-specific basis.

‡ NOTE: New development of full access driveways or street intersections shall not be permitted on arterials within 500 ft of a freeway service road intersection unless it is determined by the City Traffic Engineer or designee that no other reasonable access to the property is possible, including potential joint or cross access arrangements, and that the access does not create unreasonable safety or operational problems.

◊ NOTE: Fairgrounds Rd north of Loop 250 is planned and designed as a Limited Access Parkway with special access management provisions.

In addition to the above requirements, commercial driveways must also be located at least 10 feet from the nearest property line with an adjacent parcel or alley right-of-way, as measured from the nearest edge of the curb cut. This requirement applies only to driveways that will exclusively serve one property and is waived if shared access is existing or planned and is documented with an easement.

3.2.2 Commercial Access Turn Restrictions

There are four potential turning movements that are considered when designing commercial access: right turns entering and existing, and left turns entering and exiting. As noted previously, left turn movements account for about 75% of all driveway related crashes, so restricting and/or redirecting those movements is a particularly beneficial access management technique with regard to safety.

Regardless of whether any turn movements are restricted or not, minimum access spacing standards still apply because all turning movements, including rights, create some amount of disruption and risk on the roadway. Turn restrictions may be necessary even for some access points that meet minimum access spacing standards. However, the use of a turn restriction may allow for an access point to be permitted that would otherwise not be allowed or might otherwise create unreasonable safety or operational concerns.

- **Full Access** means that there are no physical or regulatory restrictions on the four primary turning movements.

- **Three-Quarter Access**, also referred to as a hooded left, typically has a physical median or barrier on the roadway that restricts the left turn exiting the site, while allowing left turns in, as well as both right turns. See Figure 5.
- **Half Access**, also referred to as right-in/right-out, typically has a physical median or barrier on the roadway that restricts all left turn movements.

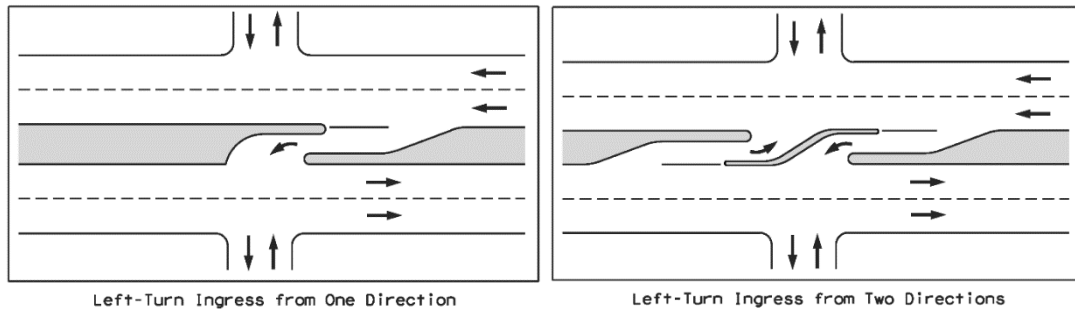


Figure 5. Examples of Hooded Left (3/4 Access) Median Designs⁸

Experience has shown that a physical median or barrier on the roadway is needed in most cases to implement any form of left turn restriction. Construction of a splitter island on the driveway, sometimes called a “porkchop” island, to try to restrict turning movements may provide the benefit of visually reinforcing the intended movement to the driver, but has been shown to be largely ineffective at physically stopping those deliberately making unpermitted left turns. Motorists can easily drive around the island or enter or exit on the wrong side of the island when making left turns. The use of regulatory signs, alone or in combination with a splitter island, is also largely ineffective. Therefore, raised medians or barriers on the roadway are typically needed in order to limit conflicting turn movements.

The use of a hooded left may be considered under select conditions, even if the median opening spacing standard cannot be satisfied. Median opening spacing refers to full access median openings. A more restricted opening may be permitted on a case-by-case basis as long as it does not interfere with other turn lanes for existing or planned intersections or driveways, and if the access does not create unreasonable safety or operational concerns. It shall be the responsibility of the City Traffic Engineer or designee to make all such determinations, and to coordinate with TxDOT and seek written concurrence for locations on state highways.

It is emphasized that this Policy only addresses requests made by developers or property owners for new or modified access to public roadways. The addition of any raised medians, turn restrictions, or similar access changes that may be considered by the City independent of such an access request must always be coordinated with the owners of any developed properties that would be impacted, either individually or through a broader public input process. Nothing stated in this Policy should be taken as authorization for any access management changes to be implemented without such advance coordination.

⁸ *Roadway Design Manual*, Texas Department of Transportation, April 2018.

3.2.3 Auxiliary Turn Lanes

The construction of auxiliary lanes for left or right turns may be required for commercial access points in accordance with Tables 8 and 9 below.

Table 8. Auxiliary Left-Turn Lane Requirements

Road / Median Type	Left Turn Lane
Any Road with Raised Median	Required if Left-Turn Permitted
Any Road with TWLTL †	Existing / No Change Required
Local Street, Undivided	No Turn Lane Required
Collector Street, Undivided	No Turn Lane Required
Arterial, Undivided	See Note ‡
State Highway, Undivided	Per TxDOT Roadway Design Manual, Table 3-11

† Two-way left turn lane

‡ NOTE: Most arterials under the jurisdiction of the City have existing raised median or TWLTL. For locations that do not, the addition of a left turn lane may be required based on vehicle speeds, roadway volumes, and projected site traffic volumes, at the discretion of the City Traffic Engineer or designee.

Table 9. Auxiliary Right-Turn Lane Requirements

Road Type / Characteristics	Right Turn Lane
Local Street	No Turn Lane Required
Collector Street, ≤ 3 Travel Lanes	No Turn Lane Required
Collector Street, ≥ 4 Travel Lanes	See Note †
Arterial, Speed Limit ≤ 40 MPH	See Note †
Arterial, Speed Limit > 40 MPH	Required if Right Turn Volume > 60 veh/hr ‡
State Highway, Speed Limit ≤ 45 MPH	Required if Right Turn Volume > 60 veh/hr ‡
State Highway, Speed Limit > 45 MPH	Required if Right Turn Volume > 50 veh/hr

† NOTE: Required only for very high traffic generating sites at the discretion of the City Traffic Engineer or designee.

‡ NOTE: Requirement may be waived based on roadway geometry, density of other access points, vehicle speeds, roadway volumes, and projected site traffic volumes, at the discretion of the City Traffic Engineer or designee.

3.2.4 Commercial Shared Access

Shared Access refers to cases where adjacent properties with unrelated development share the use of one or more common access points. Such properties are typically under different ownership, but they could simply be individual businesses on separate parcels with a common owner.

There are two types of shared access most often seen in commercial development:

- **Joint Access** refers to a single access point that is typically located on the common property line between two adjacent parcels. This access serves both parcels and usually requires a small easement on each parcel to ensure that neither property owner can obstruct the use of the common area needed for the joint access.

- **Cross Access** refers to an access point that is located on one parcel but can be used by traffic related to another parcel by allowing that traffic to cross through all or part of the property using an internal private roadway or parking drive aisle.

The use of either form of shared access is a very effective means of providing reasonable access for development of small to medium-sized sites while still limiting the number of access points needed on the public roadway network. Shared access also allows customers to circulate internally between different businesses without the need to repeatedly re-enter and exit the roadway.

Shared access is most commonly introduced when land is being platted or re-platted for new development and establishment of the needed easements can be readily handled within the platting process. Developers should expect that the City will require shared access easements with platting even if the physical construction of such access is not immediately feasible, as having such easements on the plat allows for connections to adjacent development in the future.

The addition of shared access to existing sites is also highly encouraged, although cooperation between adjacent property owners is needed to produce the best outcome for both sites.

3.2.5 Alternate Commercial Access Locations

It should be noted that access management standards along major roadways are often applied more stringently to corner parcels, or to parcels that have frontage on other, lower classification roadways.

As described elsewhere in this Policy, the City's goal is to allow reasonable access for business owners while balancing against the safety and operational needs of the roadway network. When direct frontage or cross access to a side street or backage road behind a property allows for site traffic to circulate to and from a business without the need for as much direct access on a major roadway, this is often the most reasonable compromise between the competing needs of the business owner and the travelling public.

When selecting or designing commercial sites, developers are strongly encouraged to look for opportunities for alternate access to lower classification roadways, which then allow their customers indirect access to the main roads in a safer manner.

3.2.6 Commercial Driveway Construction Details

Commercial driveways shall be constructed in accordance with the appropriate standards in the latest edition of the Standard Details as published by the Engineering Services Department.

Driveways on streets with existing curb, or with new curb being constructed as part of the same project, shall include pedestrian ramps on both sides of the driveway approach. Ramps are required regardless of whether sidewalk is existing or planned in order to accommodate future sidewalk construction. Driveways on streets with no existing curb, and no curb planned as part of the same project, may omit the pedestrian ramps and shall include flares instead.

Driveways on streets with mountable (or roll-over) curb do not typically need to include flares or pedestrian ramps. However, all other design and spacing standards still apply.

3.2.7 Commercial Driveway Geometric Design

Throat Width – When driveways are too narrow, entering drivers must slow excessively to make their turn into the site, creating delays for traffic behind them and increasing the potential for rear-end crashes. Conversely, when driveways are too wide, drivers may tend to cross the driveway at an angle or drive on the wrong side of opposing traffic, creating additional conflicts.

The throat width is typically measured between the ends of the curb radii on the side farthest from the roadway. If the driveway cross-section is continuously varying and there is no obvious uniform-width throat to measure, then it shall be taken as the maximum width of the driveway where it crosses the right-of-way line.

The width of the throat of a commercial driveway shall be no less than 16 feet and no greater than 40 feet, except that a maximum width of 45 feet is permitted in accordance with TxDOT standards if the access is located on a state highway. If the driveway is forecast to serve at least 50% large truck or bus traffic, then a maximum width of 60 ft may be permitted at the discretion of the City Traffic Engineer or designee.

Median Divided Driveways – The construction of a physical median between entering and exiting traffic on a driveway is permitted at the option of the developer. If the median is less than 30 feet wide, measured between outside curb faces or edges of pavement, then the entry/exit pair shall be treated as one access point. For medians that are 30 ft or wider, each side shall be considered a separate access point for the purpose of this Policy.

If a median-divided driveway is used, the maximum width of the throat of each side shall be no less than 16 feet and no greater than 24 feet.

Throat Length – If the driveway throat is too short, then drivers entering the site may need to slow significantly or stop to wait for other vehicles in order to turn into an internal drive aisle or parking space, causing delays and conflicts with other vehicles on the roadway behind them. Also, a short driveway throat may not leave adequate room for queuing of exiting vehicles, causing additional on-site traffic congestion and encouraging drivers to take unnecessary risks to enter the roadway quickly. A short throat to a parking space creates additional safety concerns because drivers must back out into the driveway while other vehicles may be trying to enter from the roadway.

The throat length is measured as the distance from the roadway face-of-curb or edge of pavement on the exiting side of the driveway to the projection of the interior curb or edge of pavement for the nearest drive aisle or parking space which conflicts with traffic on either side of the driveway.

The minimum length of the throat of a commercial driveway shall be as shown in Table 10, although longer throats are strongly encouraged whenever the site layout allows.

Table 10. Minimum Commercial Driveway Length

Street Type	Minimum Driveway Throat Length
Local Street	20 ft
Collector Street (posted speed limit of 35 MPH or less)	30 ft
Collector Street (posted speed limit of 40 MPH or higher)	50 ft
Arterial Street or State Highway	50 ft
Any access directly served by a traffic signal (existing or planned)	As recommended by a traffic impact study (100 ft minimum)

Curb Radii – The curb radii on a commercial driveway shall be no less than 5 feet and no greater than 60 feet, with the following recommendations:

- Curb radii less than 10 feet are discouraged except in cases of very small, low traffic sites.
- Curb radii greater than 30 ft are discouraged on local and collector streets.

3.2.8 Access Involving Traffic Signals

Due to the unique issues associated with traffic signal operations, some special conditions apply to any access that proposes the new installation or modification of a traffic signal, as listed below. For the purpose of this Policy, modification of an existing signal refers to operational changes that impact traffic capacity or delay, such as the addition of new movements or signal phases. Physical changes to the infrastructure are typically not considered to be modifications requiring study, although approved engineering plans will be required for the work.

A traffic impact study must be prepared and submitted by a qualified professional engineer, licensed in Texas. For a new signal, the study must document that the location meets warrants as per the *Texas Manual on Uniform Traffic Control Devices* (TMUTCD). For signals that are either new or modified, the study must provide a capacity analysis to demonstrate that there will be no degradation in the Level of Service (LOS) in the peak hour periods below the existing LOS, or LOS ‘C’, whichever is lower. Such analysis must be provided for the subject intersection(s), the nearest adjacent intersection(s) along the major roadway, and any other intersections as determined necessary by the City Traffic Engineer or designee. The study must also consider the effect of signal spacing on queuing and progression along coordinated corridors.

For locations on state highways, the traffic impact study must also be approved by TxDOT. It shall be the responsibility of the City Traffic Engineer or designee to coordinate with TxDOT and seek concurrence.

For a new traffic signal to be approved, all approaches to the intersection must be constructed in accordance with either City or TxDOT standards for public streets. Typical commercial driveway approaches may not be signalized. Also, any approach to a proposed traffic signal must be designed to provide the minimum throat length and number of lanes as recommended by the traffic study. In no case,

however, may an access be signalized that has less than 100 feet of throat or less than two approach lanes (typically a left-turn and thru/right).

3.2.9 Drive-Thru / In-Vehicle Operations

The City of Midland Zoning Ordinance (Section 6, Table 7) states: “Site plans for all uses that will include drive-thru operations or in-vehicle services must be approved by the Planning Division Manager and the Engineering Services Director, or their respective designees.” Specific numbers of vehicles that must be accommodated in the queue prior to the service point are not identified in the ordinance because experience has shown that the actual demand varies significantly with each site, not just by the type of use, but also by the individual brand and/or operator of the business.

Therefore, prior to approval of any site plan for drive-thru or in-vehicle service type uses, including approval of the driveway access related to that use, it must be determined that the proposed design provides reasonable on-site vehicle queuing and circulation as compared to other similar uses in Midland or the surrounding region. It must also be determined that the site plan has been designed such that, if the anticipated queuing has been underestimated and the vehicle storage area overflows during peak periods, that such overflow will occur in the safest and least disruptive manner that is reasonably possible. This means that queue overflow will be contained within the site to the greatest extent possible, and if driveways to public roads are impacted, such impacts will be limited to local or minor collector streets only. Queue overflow onto arterials or state highways must be avoided at all times due to the significant safety and operational impacts associated with such occurrences.

These determinations shall be the responsibility of the City Traffic Engineer or designee, reporting to the Engineering Services Director, as per the Zoning Ordinance.

3.3 Alleys

Permissible access to alleys is not fully addressed in this Policy, but is described in greater detail in City Code Section 11-2-5.

Restrictions are generally more stringent for lots for which an application for final plat was filed with the City after June 30, 1994. For those lots, the alley must be improved to city standards, including paving, and meet various other conditions for access to be allowed. If the lot was platted prior to that date, residential access is generally permitted without restriction in most cases.

Vehicular access from a commercial use is only allowed if an alley has been improved to city standards, regardless of when it was platted. Such access connections shall have a permanent opening of not more than 25 feet per separately owned parcel (as per City Code Section 4-1-4).

For cases meeting the conditions as described in City Code, construction of a driveway connection to an alley does not require a permit if no substantive work is to be performed in the city right-of-way. If grading, paving, curb removal, or other work is required in the city right-of-way to build such a driveway, then the standard permitting process as described in Section 4 of this Policy shall apply.

All persons constructing access connections to city right-of-way, or otherwise working in city right-of-way, are responsible for adhering to all applicable codes and regulations. Therefore, it is best practice to contact the City to verify if a permit is needed before starting any work.

4 Access Permitting Process

4.1 Approval Requirements

Permitting by the City of Midland is required for all vehicular access regulated under this Policy.

Access approval is granted only for a specific site, with the specific scope and type of land use proposed when the permit application is submitted.

If the land use for which access was previously approved is permanently closed, or if the site is abandoned, then the approval of access automatically terminates. Access points which have been abandoned must be removed in accordance with City Code Section 9-4-8.

If the scope or type of land use is substantively changed, or if the size or nature of the site layout changes significantly, then approval of access automatically terminates, and a new approval must be obtained. There are some cases where the existing access may be re-approved and may remain in place after a review of the new or modified land use. However, there is no assumed right to “grandfathering in” any existing access.

4.2 Pre-Development Review

Formal access approval can be issued by the City only through the building or driveway permit process described below. However, the City encourages residents, business owners, and developers to coordinate with city staff early in the site selection or design process to determine what will be acceptable for access, and to seek input on possible alternative access scenarios that may be considered. Early consideration of access issues can save time and money for all parties involved.

Although strongly encouraged, all pre-development reviews are informational only, and an approved permit is the only official authorization from the City regarding access. Applicants are advised to keep documentation of any communication with city staff regarding access to assist in future discussions.

4.3 Permitting Process

Vehicular access to any public roadway under this Policy is formally authorized only through the building or driveway permit process, administered by the Development Services Department.

Building permit applications that include site plans, civil engineering plans, or similar drawings showing the details and dimensions of the proposed access also serve as the application for access approval. Following review, the approved building permit drawing set (displaying an Engineering Services Department approval stamp) serves as the City’s driveway permit. No separate permit document is issued.

If no building permit application is needed for other site or civil work, then a standalone driveway permit application can also be made through Development Services. The approved driveway permit drawing(s) (displaying an Engineering Services Department approval stamp) serves as the City’s driveway permit. No separate permit document is issued.

4.4 Nonconforming Sites and Deviations from Standards

As stated in the Introduction, the goal of this Policy is to preserve the mobility, safety and capacity of the roadway network, but also to provide reasonable access for residents and business owners. The City of Midland encourages infill development and the redevelopment of older, dilapidated, or underutilized

properties. In areas that are already substantially developed, it is often not possible to meet the minimum access spacing and other design requirements described in this Policy in order to allow such infill or redevelopment activity.

In such cases, the City Traffic Engineer or designee shall have the authority to approve specific cases that do not meet the minimum standards described herein, with the following conditions:

- No other reasonable access to the property is possible, including potential joint or cross access arrangements.
- Any deviation approved below minimum design standards shall be the minimum such deviation needed to allow for reasonable site access because of the nonconforming conditions on neighboring properties and/or the existing roadway.
- The access does not create unreasonable safety or operational problems as determined by the City Traffic Engineer or designee.
- Any deviations are approved only for that specific access point for that site and land use and should not be assumed to be acceptable in any other case.
- Any deviations below minimum standards on a state highway must have written concurrence from TxDOT prior to approval by the City. It shall be the responsibility of the City Traffic Engineer or designee to coordinate with TxDOT staff to review the site issues and seek concurrence prior to issuing any approvals. If TxDOT staff and the City Traffic Engineer or designee do not concur on the proposed deviation(s), access that fails to meet minimum standards shall not be permitted.

4.5 Appeals Process

If a driveway or building permit application is denied because the City Traffic Engineer or designee has determined that minimum access design standards have not been satisfied, and if the applicant is unable or unwilling to reach an agreement with the City Traffic Engineer or designee regarding acceptable alternative access, the applicant has the right to appeal the permit denial to the City Council.

In order to appeal a permit denial to the City Council, the applicant must submit a written request for an appeal within 30 days following receipt of notice of denial, and shall clearly document those hardships which make it impossible or impractical to meet the minimum access design standards required by City Code and/or Council-adopted interagency agreements. Staff will review the appeal request and coordinate with the applicant to schedule the item for a future Council agenda.

Notwithstanding any provision of this Section to the contrary, if the permit denial relates to an access location on a state highway, then written concurrence from TxDOT is required in order for the City Council to reverse the denial and grant the permit, in accordance with the Council-adopted *Municipal Maintenance Agreement*.

5 Contact Information

For additional information or to discuss an access issue with City staff, contact the City of Midland Traffic Operations Division by phone at 432-685-7287, or visit the City's website at www.midlandtexas.gov to locate the latest staff email addresses.