# ACCESS CONNECTIONS: RULE & POLICY

Kimberly D. McDaniel, PE, PTOE
LaDOTD Access Management Engineer

## Rule VS Policy

#### The Rule

- Enforcement power of state law
- Part of the Louisiana Administrative Code
- Very specific, strict, "black and white"

#### The Policy

- Provides decision-making authority for "exceptions" to the rule
- Less strict, more adaptable to various situations

## Categories of Access Connections

## The Rule

Defines 4 categories for access connection requests (single-family residential, non-commercial agriculture, traffic generator, and temporary)

## The Policy

Provides examples for each category and assigns typical design vehicles for each

Permit Category	Examples of Property or Development Types	Typical Design Vehicle
Single-Family Residentia	Access Connections	
Single Family Residential	1-5 single family homes on a single access connection	Passenger Car (P)
Residential Sporting and Recreation Camps	Full-time residential or part-time residential camps used for hunting, fishing, etc. (1-5 on a single access connection)	Passenger Car and Boat Trailer (P/B)
Non-Commercial Agricult	tural Operations	
Unimproved Land	Farm, pasture, or wooded; passenger vehicle or farm equipment access and use only	Varies (up to WB-40)

Permit Category	Examples of Property or Development Types	Typical Design Vehicle
<b>Traffic Generator Access</b>	Connections	
Place of Business	Retail Outlets, Banks, Restaurants, etc.	Varies (up to WB-15)
Medical Facilities	Medical Facilities Doctors' Offices, Hospitals, Urgent Care Facilities, Assisted Living Homes, etc.	
Religious Facilities	Churches, Synagogues, Etc.	Passenger Car (P)
Multi-Family	Subdivisions, Condominiums,	
Residential	Apartment Complexes, Trailer Parks,	Single Unit Truck (SU)
Developments	Etc.	
Educational Facilities	Schools, Colleges, Daycares, After- School Care Facilities, Etc.	Large School Bus (S- BUS-40)
Lodging Facilities	Hotels, Vacation Rentals, Motels, RV Parks, Etc.	Varies (up to MH/B)
Recreational Facilities	Sports Fields, Public Swimming Pools, Parks, Golf Courses, Bowling Alleys, Theme Parks, Etc.	Passenger Car (P)

Permit Category	Examples of Property or Development Types	Typical Design Vehicle					
Traffic Generator Access C	Traffic Generator Access Connections (cont'd)						
Private Clubs	Country Clubs, Golf Clubs, Yacht Clubs, Etc.	Single Unit Truck (SU)					
Emergency Services	Fire Station, EMS Stations, Police Stations, Etc.	Varies (up to BUS-40)					
Mixed-Use Developments	Any Combination of the Above-Listed Uses	Varies					
Public Facilities	Libraries, Court Houses, City Halls, Jails, Conference/Convention Centers, Etc.	Single Unit Truck (SU)					
Commercial Agricultural Operations	Processing and/or wholesale operations (cotton gin, rice mill, sugar mill, etc.)	Interstate Semitrailer (WB-20/WB-65/WB-67)					
Natural Resource Harvesting Operations	Oil, Natural Gas, Logging, Etc.	Interstate Semitrailer (WB-20/WB-65/WB-67)					
Utility Company Access	Phone, Electricity, Gas, Etc., Access to Meters	Single Unit Truck (SU)					

Permit Category	Examples of Property or Development Types	Typical Design Vehicle	
Temporary Permits (Oper	rations lasting up to 1 year)		
Short Term Natural Resource Harvesting	Oil, Natural Gas, Logging, Etc.	Interstate Semitrailer (WB-20/WB-65/WB-67)	
Short Term Haul Road	Haul Road for Construction Operations	Interstate Semitrailer (WB-20/WB-65/WB-67)	
Short Term Construction Access	Short Term Construction Access to a Building Site until an Access Connection is Approved; Location of Short Term Construction Access Does Not Guarantee the Location for Permanent Access	Interstate Semitrailer (WB-20/WB-65/WB-67)	

#### Permit Process

## The Rule

"...process for acquiring an access connection permit shall be defined in DOTD policies..."

## The Policy

Defines a multi-step process including a prepermit meeting with district staff, studies which may be required, and approval and permit issuance processes.

PRELIMINARY
ACCESS
CONNECTION
REQUEST
MEETING

WHAT
WOULD OR
WOULD NOT
REQUIRE ONE?

# Situations which would most likely NOT need a meeting:

- Single family residential access connection applicants
- Non-commercial agricultural operations access connection applicants
- Traffic generator access connection applicants with low trip generation
- Temporary access connection applicants

PRELIMINARY
ACCESS
CONNECTION
REQUEST
MEETING

WHAT
WOULD OR
WOULD NOT
REQUIRE ONE?

# Situations which might require a preliminary access connection request meeting:

- Owner's request for clarification of DOTD policies, processes, and procedures
- Multiple uses for a development
- More than 100 peak hour trips expected
- Unknown use for property
- Commercial nature of proposed development
- More than one access connection requested

PRELIMINARY
ACCESS
CONNECTION
REQUEST
MEETING

WHAT
WOULD OR
WOULD NOT
REQUIRE ONE?

# Situations which might require a preliminary access connection request meeting:

- New signal or median opening requested
- Property in a known congested area
- Access connection requested in closeproximity to an existing signal
- Access connection requested in closeproximity to an existing median opening
- Known need for coordination with other developments nearby

#### **Mandatory Attendees**

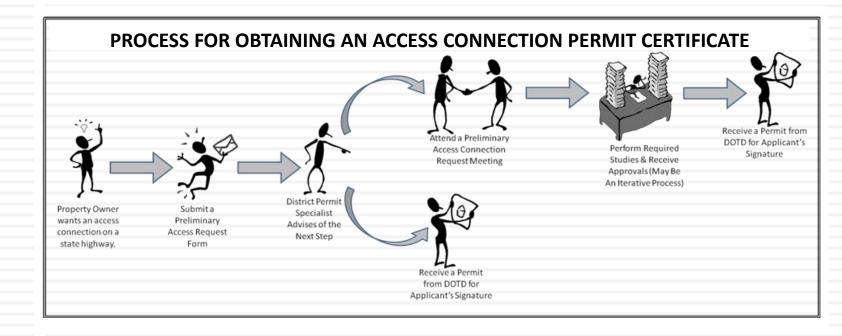
- Applicant for the permit (prop. owner)
- DOTD District Permit Specialist
- DOTD District Traffic Operations Engineer
- DOTD District Hydraulics Engineer
- Local Government Permitting or Zoning Officials

#### **Optional Attendees**

- Applicant's Engineer,
   Architect, etc.
- Other DOTD Staff

THINGS
WHICH MAY
BE DISCUSSED
AT THE
PRELIMINARY
ACCESS
CONNECTION
REQUEST
MEETING

- Other developments in the area
- Proposed or planned work on roadways impacted
- Quantity and location(s) of access connection(s) and how internal circulation would be affected
- Preliminary trip generation
- Need for studies (Traffic Impact Study, Traffic Signal Study, others)
- Establish a tentative review schedule
- Design vehicle (if varies from typical)
- Requirements for work zones



#### Acquiring an Access Connection Permit

All Steps Completed → Permit Certificate Issued

## Bonding Requirements

## The Rule

"...may be required to post a bond in order to secure an access connection permit...sufficient to cover the expenses of all work or improvements required within the DOTD right-ofway as a condition of an access connection permit..."

## The Policy

Further discusses that DOTD may require a bond when improvements are being done in the right of way as a permit condition (i.e. mitigation). If a bond is required, post-construction inspections are mandatory for release of the bond.

## Single Family Residential

COMPONENTS
OF A SINGLE
FAMILY
RESIDENTIAL
ACCESS
CONNECTION
REQUEST

- Completed Access Connection Request
   Form
- Location map showing the property
- Site plan or property layout
- Legal description of property (if available)
- Description of requested improvements
- Power of Attorney (if applicable)

# Non-Commercial Agriculture

OMPONENTS
OF A NONCOMMERCIAL
AGRICULTURE
ACCESS
CONNECTION
REQUEST

- Completed Access Connection Request Form
- Location map showing the property
- Site plan or property layout
- Legal description of property (if available)
- Description of requested improvements
- Power of Attorney (if applicable)

## Traffic Generator

COMPONENTS
OF A TRAFFIC
GENERATOR
ACCESS
CONNECTION
REQUEST

- Completed Access Connection Request Form
- Location map showing the property
- Site plan or property layout
- Legal description of property (if available)
- Description of requested improvements
- Trip generation information
- Traffic Impact Study and/or Letter of Compliance (if required)
- Traffic Signal Permit (if applicable)
- Subdivision Plat (if applicable)
- Power of Attorney (if applicable)

## Remodeled/Reconstructed/Redeveloped

## The Rule

"If the property is reconstructed/remodel ed/redeveloped, the owner shall submit a new application for an access connection permit."

## The Policy

"Any changes to a property that could result in changes to traffic patterns, trip generation, or functional operation fot he site will result in the requirement for a new access connection permit as well as changes to the means of access to the highway."

## Remodeled/Reconstructed/Redeveloped

**DEFINITIONS** 

**RECONSTRUCTED** 

**REMODELED** 

**REDEVELOPED** 

#### **Reconstructed Property**

A property that has any portion of the structure(s) demolished and new structure(s) built on the site. The use of the property may change or remain the same.

#### **Remodeled Property**

A property that undergoes significant alterations (interior or exterior) that may result in a change in traffic generated by the property.

#### **Redeveloped Property**

A property that undergoes a complete change in use, but not necessarily a change in the structure(s).

## Retrofit Situations

A
DELICATE
BALANCING
ACT
THAT
CAN
ONLY
BE
ACCOMPLISHED
WITH
COMPROMISE

**TRANSPORTATION ADJACENT PROPERTIES SYSTEM** Uninterrupted Access to Property Flow **Business Climate Operations Property Values** Safety Mobility **Economic Interests** 

## Regulations & Geometric Requirements

Design criteria for the geometry, size, quantity, and location of access connections

## Classification & Type of Roadway

Location

Roadway Classification

**URBAN** 

**ARETERIAL** 

**SUBURBAN** 

**COLLECTOR** 

**RURAL** 

LOCAL

## Functional Area of the Intersection

## The Rule

"Full access shall not be granted within the functional influence area of the intersection."

## The Policy

- No AC on acceleration/deceleration lanes/tapers
- Median openings shall not be located here
- If in FA, must be RI/RO and be as far from intersection as possible

## Sight Distance

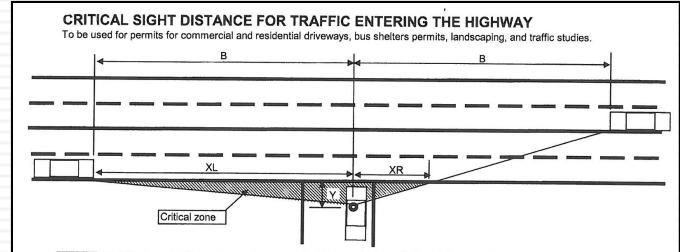
## The Rule

"All entrances and exits shall be located so that drivers approaching or using them will have adequate sight distance in all directions along the highway in order to maneuver safely and without interfering with traffic."

## The Policy

Provides chart of critical sight distances for traffic entering the highway based on the HCM.

## Sight Distance



	2-Lane (7.1 sec gap)		4-Lane (7.5 sec gap)		5-Lane (8.0 sec gap)						
Speed, mph	Speed, fps	Offset Y,	Distance "B"	Length XL	Length XR	Distance "B"	Length XL	Length XR	Distance "B"	Length XL	Length XR
20	29	9	208	208	89	220	220	60	235	235	47
25	37	9	260	260	112	275	275	75	293	293	59
30	44	9	312	312	134	330	330	90	352	352	70
35	51	9	364	364	156	385	385	105	411	411	82
40	59	9	417	417	179	440	440	120	469	469	94
45	66	9	469	469	201	495	495	135	528	528	106
50	73	9	521	521	223	550	550	150	587	587	117
55	81	9	573	573	245	605	605	165	645	645	129
60	88	9	625	625	268	660	660	180	704	704	141
65	95	9	677	677	290	715	715	195	763	763	153

#### Notes:

The critical zone should be free of obstructions which restrict sight (typically between 1 and 7 feet in height).

Sight distance is based on the Highway Capacity Manual, Chapter 17, stop control on the minor roadways.

The 7.1 second acceptance gap is for passanger vehicles turning left onto a two lane roadway.

The 7.5 second acceptance gap is for passanger vehicles turning left onto a four lane roadway.

An additional one-half second is used for each additional 12 foot lane that is crossed.

The values presented are for tangent passanger vehicles and roadways with little or no horizontal or veritcle curvature.

## At-Grade Intersection Spacing

## The Rule

"...as defined in other DOTD policies..."

## The Policy

Provides a table of minimum spacing between at-grade public road intersections

## At-Grade Intersection Spacing

	URBAN**	SUBURBAN	RURAL
ARTERIAL	½ mile	½ mile	½ mile
COLLECTOR	½ mile	½ mile	³∕₄ mile
LOCAL	300 ft	300 ft	200 ft

<sup>\*\*</sup>In downtown urban areas, variances are allowed to meet typical block spacing at the discretion of the DTOE

## At-Grade Intersection Spacing

## The Rule

"...as defined in other DOTD policies..."

## The Policy

Provides a table of minimum spacing between traffic signals

# Traffic Signal Spacing

	URBAN**	SUBURBAN	RURAL
ARTERIAL	½ mile	½ mile	1 mile
COLLECTOR	¹∕₄ mile	¹∕₄ mile	1 mile
LOCAL	½ mile	¹∕₄ mile	½ mile

<sup>\*\*</sup>In downtown urban areas, variances are allowed to meet typical block spacing at the discretion of the DTOE.

## Median Opening Spacing

## The Rule

- "...access connections will not be permitted to align with median cuts or crossovers, and shall be located as far from these cuts and crossovers as possible..."
- "...may be restricted to right-in/right-out movements only..."
- "...shall be as defined in DOTD policies..."

## The Policy

- Differentiates between fullaccess and directional median openings and their locations
- Provides tables for spacing of median openings
- Outlines procedures for DOTD to consider openings that align with access connections (traffic study)

## Median Opening Spacing

#### **DIRECTIONAL\* MEDIAN OPENINGS – MINIMUM SPACING**

	URBAN	SUBURBAN	RURAL
ARTERIAL	800 ft	800 ft	1⁄4 mile
COLLECTOR	660 ft	660 ft	½ mile
LOCAL	800 ft	800 ft	800 ft

<sup>\*</sup>Signalized directional median openings may require greater spacing and must meet requirements for traffic signal spacing.

# Median Opening Spacing

#### **FULL-ACCESS\* MEDIAN OPENINGS – MINIMUM SPACING**

	URBAN	SUBURBAN	RURAL
ARTERIAL	½ mile	½ mile	1 mile
COLLECTOR	½ mile	½ mile	½ mile
LOCAL	400 ft	400 ft	400 ft

<sup>\*</sup>All full-access median openings shall meet signal warrant 1-A at 100%.

# **Access Connection Spacing**

## The Rule

- "...approved locations of access connections... so that the spacing between adjacent access connections is maximized..."
- "...minimum spacing as defined in DOTD policy shall be maintained between access connections..."
- "...frontage is not available...
  necessary to maintain the corridor
  and preserve mobility, adjacent
  property owners may be required...
  to share an access connection..."
- "...may require adjacent commercial applicant to share access... and/or provide connectivity between properties..."

## The Policy

- Specifies for corner lots –
   access on minor roadway only
- Defines how spacing is measured
- Assigns minimum spacing
- Addresses state route VS nonstate route access
- Addresses process for acquiring more than one driveway

# **Access Connection Spacing**

#### MINIMUM ACCESS CONNECTION SPACING\*

	URBAN	SUBURBAN	RURAL
ARTERIAL	550 ft	550 ft	700 ft
COLLECTOR	300 ft	300 ft	400 ft
LOCAL	**	**	**

<sup>\*</sup> If a non-traversable median exists in within 200' of both sides of the access connection and a right-in/right-out access connection is installed, then spacing may be reduced by one-half.

<sup>\*\*</sup> Locate access connections with the greatest achievable spacing possible within given property constraints. Where possible, interconnectivity and driveway sharing should be used.

## The Rule

- "...all single-family residential and traffic generator access connections shall b constructed with permanent hard surface type materials..."
- "...adequate sigh distance in all directions..."

## The Policy

Provides guidance on radii, width, and throat distance

#### MINIMUM ACCESS CONNECTION RADII\*

TYPE OF ACCESS CONNECTION:	URBAN	SUBURBAN	RURAL
SINGLE-FAMILY RESIDENTIAL	10 ft	10 ft	25 ft
NON-COMMERCIAL AGRICULTURE		1 <i>5</i> ft	15 ft
TRAFFIC GENERATOR**	25 ft	35 ft	50 ft
INDUSTRIAL-TYPE FACILTITIES		dividually designed uck that uses the a	

<sup>\*</sup> Posted speed limit of the highway or chosen design vehicle may direct design of a larger radius.

<sup>\*\*</sup> See design vehicle guidance in Chapter 1.

#### MINIMUM ACCESS CONNECTION WIDTHS

ACCESS CONNECTION TRAFFIC CATEGORY	AVERAGE DAILY TRAFFIC USING ACCESS CONNECTION	PEAK HOUR TRAFFIC USING ACCESS CONNECTION	WITH TWO-WAY ACCESS	WITH ONE-WAY ACCESS
SINGLE-FAMILY RESIDENTIAL & NON-COMM. AG.	0-100	0-10	12 ft – 15 ft	not applicable
LOW-VOLUME COMM./ INDUST.	< 1,500	< 150	≤35 ft	≤16 ft
MEDIUM VOLUME COMM./ INDUST.	1,500 – 4,000	150 – 400	35 ft – 42 ft	20 ft – 26 ft
HIGH VOLUME COMM./ INDUST.	> 4,000	> 400	determined through a traffic study – preferably 46-54 ft	generally not applicable

NOTE: Striping of access connections should be required when more than one lane in any direction is present. The striping plans shall be in accordance with DOTD Pavement Marking Standards and shall designate the permitted movement(s) for each lane. Boulevard access connections have a maximum median width of 6 ft. Median widths are included in the overall widths listed in this chart.

#### MINIMUM ACCESS CONNECTION THROAT DISTANCES

ACCESS CONNECTION TRAFFIC CATEGORY	PEAK HOUR TRAFFIC USING ACCESS CONNECTION	MINIMUM THROAT DISTANCE
LOW-VOLUME COMM./ INDUST.	< 150	20 FT
MEDIUM VOLUME COMM./ INDUST.	150 – 400	60 FT
HIGH VOLUME COMM./ INDUST.	> 400	determined through a traffic study

NOTE: Striping of access connections should be required when more than one lane in any direction is present. The striping plans shall be in accordance with DOTD Pavement Marking Standards and shall designate the permitted movement(s) for each lane. Boulevard access connections have a maximum median width of 6 ft. Median widths are included in the overall widths listed in this chart.

## Implementation of the Rule & Policy

LOUISIANA ADMINISTRATIVE CODE

**TITLE 70** 

PART I

CHAPTER 15

- Rule became part of LAC in January 2011
- Implementation date: September 1, 2011
- DOTD Implementation Training in August
- Have not yet schedule other trainings

#### www.doa.louisiana.gov/osr/lac/books.htm

#### Kimberly D. McDaniel, PE, PTOE

Access Management Engineer

Louisiana Department of Transportation & Development

225.242.4633

kimberly.mcdaniel@LA.gov

#### **Contact Information**