



# City of Sachse, Texas

Sachse City Hall  
3815-B Sachse Road  
Sachse, Texas 75048

## Meeting Agenda City Council Workshop

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Monday, January 4, 2016

6:30 PM

Council Chambers

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*The Mayor and Sachse City Council request that all cell phones be turned off or set to vibrate. Members of the audience are requested to step outside the Council Chambers to respond or to conduct a phone conversation.*

The City Council of the City of Sachse will hold a Workshop Session on Monday, January 4, 2016, at 6:30 p.m. in the Council Chambers at Sachse City Hall, 3815-B Sachse Road, Sachse, Texas to discuss the following items of business:

1. Discussion Items.

[16-3172](#)

Discuss agenda items on the regular meeting pertaining to speed limits and school zones.

**Attachments:** [Ranch Road Speed Limit Presentation](#)

[Pleasant Valley Speed Limit Presentation](#)

[Ranch Road School Zone Speed Limit Presentation](#)

2. Discuss any City Council meeting agenda items.

*Please note: These items are for discussion purposes only and no Council action will be taken. The workshop session is for City Council and staff discussion. Citizen input is not permitted on this agenda.*

3. Adjournment.

As authorized by Section 551.072(2) of the Texas Government Code, this meeting may be convened into closed Executive Session at any time during the City Council workshop or regular meeting for the purpose of seeking confidential legal advice from the City Attorney on any workshop or regular meeting agenda item listed herein.

Posted: December 22, 2015; 5:00 p.m.

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Michelle Lewis Sirianni, City Secretary

If you plan to attend this public meeting and you have a disability that requires a special arrangements, please contact Michelle Lewis Sirianni, City Secretary at (972) 495-1212, 48 hours prior to the scheduled meeting date.



Legislation Details (With Text)

<b>File #:</b>	16-3172	<b>Version:</b>	1	<b>Name:</b>	WK: Speed Limits
<b>Type:</b>	Discussion Item	<b>Status:</b>		<b>Status:</b>	Agenda Ready
<b>File created:</b>	12/17/2015	<b>In control:</b>		<b>In control:</b>	City Council
<b>On agenda:</b>	1/4/2016	<b>Final action:</b>		<b>Final action:</b>	
<b>Title:</b>	Discuss agenda items on the regular meeting pertaining to speed limits and school zones.				
<b>Sponsors:</b>					
<b>Indexes:</b>					
<b>Code sections:</b>					
<b>Attachments:</b>	<a href="#">Ranch Road Speed Limit Presentation</a> <a href="#">Pleasant Valley Speed Limit Presentation</a> <a href="#">Ranch Road School Zone Speed Limit Presentation</a>				

Date	Ver.	Action By	Action	Result
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Title

Discuss agenda items on the regular meeting pertaining to speed limits and school zones.

Background

The following items are on the regular agenda for the City Council Meeting:

- 15-3161 Pleasant Valley Road Speed Limit
- 15-3162 Ranch Road Speed Limit
- 15-3163 Ranch Road School Zone Speed Limit

Policy Considerations

None at this time.

Budgetary Considerations

None.

Staff Recommendations

None.



# Speed Limit Ordinance Ranch Road

City Council  
January 4, 2016

## Overview

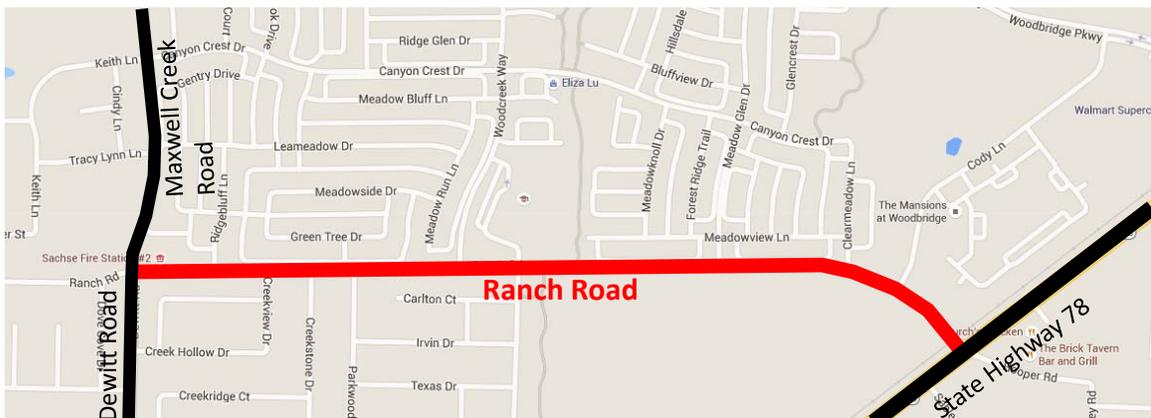
- MUTCD Guidelines
- Road Location
- Current Speed Limit
- Traffic Count Data
- Road Composition & Geometry
- Comparison Roads
- Speed Study Findings
- Staff Recommendations
- Ordinance Language
- City Council Consideration

## MUTCD Guidelines

Chapter 2 of the Manual on Uniform Traffic Control Devices, Section 2B.13, provides guidelines for determining speed limits on public roads:

- States and local agencies should conduct engineering studies to reevaluate non-statutory speed limits on segments of their roadways that have undergone significant changes since the last review, such as the addition or elimination of parking or driveways, changes in the number of travel lanes, changes in the configuration of bicycle lanes, changes in traffic control signal coordination, or significant changes in traffic volumes.
- When a speed limit within a speed zone is posted, it should be within 5 mph of the 85th-percentile speed of free-flowing traffic.
- Other factors that may be considered when establishing or reevaluating speed limits are the following:
  - **A. Road characteristics, shoulder condition, grade, alignment, and sight distance;**
  - **B. The pace;**
  - **C. Roadside development and environment;**
  - **D. Parking practices and pedestrian activity;** and
  - E. Reported crash experience for at least a 12-month period.

## Road Location



## Current Speed Limit



- Ranch Road currently has a speed limit of 30 miles per hour from Maxwell Creek Road to State Highway 78.

## Traffic Count Data

- New traffic counts on Ranch Road have been taken
  - December 17, 2015 – 5,418 vehicles/day, 85% Speed – 44 mph
- The 85% speed is the speed at which 85% of traffic is moving at or below. This statistic is commonly used to determine speed limits.

## Road Composition & Geometry

- Ranch Road is classified as a minor arterial road in the City.
- The road was recently completed as a four-lane concrete road with curbs and a median. The road surface is in very good condition.
- The road has one significant curve near the intersection with State Highway 78.

## Road Composition & Geometry



View of Ranch Road looking west near Woodcreek Way

## Comparison Roads



- Bunker Hill Road
  - Between Miles Road and State Highway 78
  - Speed Limit: 40 mph
  - Minor arterial
  - 4-lane concrete road
  - ~6000 vehicles/day



- Dewitt Road
  - Between 5<sup>th</sup> Street and Ranch Road
  - Speed Limit: 40 mph
  - Minor arterial
  - 4-lane concrete road
  - ~8600 vehicles/day

## Road Characteristics

- Ranch Road does have an elementary school, Whitt Elementary, on the north side of the road, at the intersection with Woodcreek Way.
- During school opening and release, a 20 mph school zone is in place in front of the school, for pedestrian safety.
- Outside of school hours, Ranch Road has regular pedestrian activity, especially along the north side of the road.
- The road is lined with brick screen walls on each side for the majority of the length of the road. These brick screen walls limit pedestrian movements away from the pavement surface.

## Speed Study Findings

- Staff has completed a speed study for Ranch Road between Maxwell Creek Road and State Highway 78.
- The findings include:
  - The 85% Speed shows that motorists are comfortable traveling at 44 miles per hour
  - The road geometry includes one 45-degree curve which has a calculated design speed of 55 mph.
  - The pavement condition was found to be a 9 on the PASER Rating system. (Scale of 1-10, with 10 being new pavement)

## Staff Recommendations

- Staff recommends that the speed limit on Ranch Road be increased based upon the improved road conditions resulting from the completion of the road as a 4-lane divided roadway.

Option 1



A 40 mph speed limit is consistent with MUTCD guidelines, and reflective of the speed at which motorists are comfortable traveling. In addition, similar roads in Sachse have a speed limit of 40 mph.

Option 2



A 35 mph speed limit is reflective of the pedestrian characteristics of the road corridor. The combination of brick screening walls and an active pedestrian environment in a narrow corridor limits pedestrian movement away from the pavement.

## Ordinance Language

- AN ORDINANCE OF THE CITY OF SACHSE, TEXAS, AMENDING THE CODE OF ORDINANCES BY AMENDING CHAPTER 9 TITLES "TRAFFIC REGULATIONS" BY AMENDING SECTION 9-4 TITLED "SPEED LIMITS" TO CHANGE THE MAXIMUM PRIMA FACIE SPEED LIMIT TO 40 MILES PER HOUR FOR RANCH ROAD FROM MAXWELL CREEK ROAD TO STATE HIGHWAY 78; PROVIDING A REPEALING CLAUSE; PROVIDING A SAVINGS CLAUSE; PROVIDING A SEVERABILITY CLAUSE; PROVIDING FOR A PENALTY OF FINE NOT TO EXCEED THE SUM OF TWO HUNDRED (\$200.00) DOLLARS FOR EACH OFFENSE; AND PROVIDING AN EFFECTIVE DATE.

City Council Consideration



# Speed Limit Ordinance Pleasant Valley Road

City Council  
January 4, 2016

## Overview

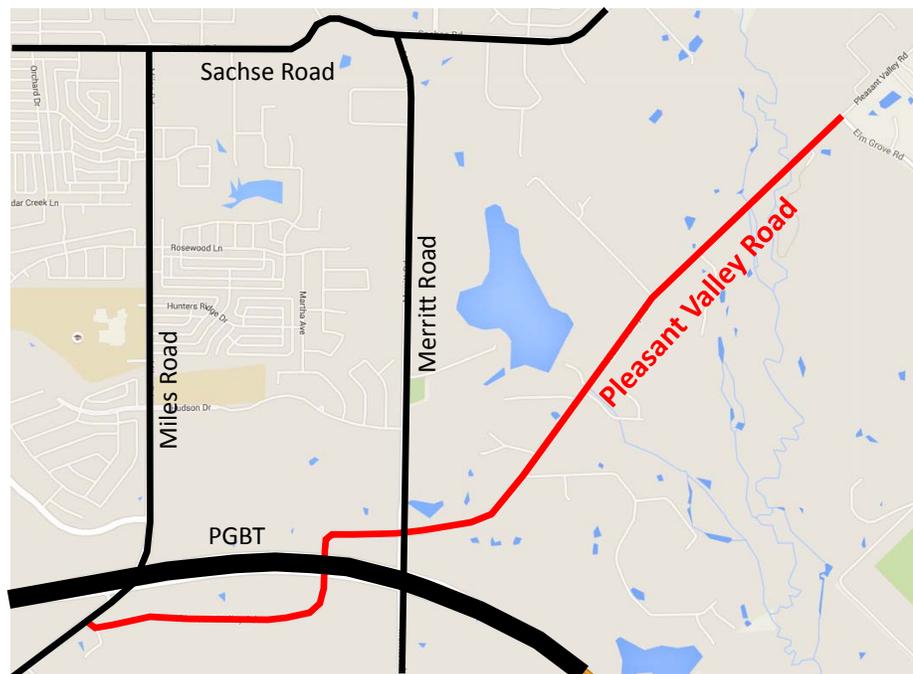
- MUTCD Guidelines
- Road Location
- Current Speed Limit
- Traffic Count Data
- Road Composition & Geometry
- Comparison Roads
- Speed Study Findings
- Staff Recommendations
- Advisory Speed Limits
- Ordinance Language
- City Council Consideration

## MUTCD Guidelines

Chapter 2 of the Manual on Uniform Traffic Control Devices, Section 2B.13, provides guidelines for determining speed limits on public roads:

- **States and local agencies should conduct engineering studies to reevaluate non-statutory speed limits on segments of their roadways that have undergone significant changes since the last review**, such as the addition or elimination of parking or driveways, changes in the number of travel lanes, changes in the configuration of bicycle lanes, changes in traffic control signal coordination, or significant changes in traffic volumes.
- **When a speed limit within a speed zone is posted, it should be within 5 mph of the 85th-percentile speed of free-flowing traffic.**
- Other factors that may be considered when establishing or reevaluating speed limits are the following:
  - **A. Road characteristics, shoulder condition, grade, alignment, and sight distance;**
  - B. The pace;
  - C. Roadside development and environment;
  - D. Parking practices and pedestrian activity; and
  - **E. Reported crash experience for at least a 12-month period.**

## Road Location



## Current Speed Limit



- Pleasant Valley Road currently has a speed limit of 45 miles per hour from Elm Grove Road to the President George Bush Turnpike.

## Traffic Count Data

- Historical traffic counts on Pleasant Valley Road have been taken
  - October 2008 – 4418 vehicles/day, 85% Speed – 46 mph
  - July 2009 – 4001 vehicles/day, 85% Speed – 45 mph
  - June 2013 – 4743 vehicles/day, No speed data taken (volume only)
  - November 2013 – 4605 vehicles/day, 85% Speed – 47 mph
  - May/June 2015 – 4631 vehicles/day, 85% Speed – 45 mph
- The 85% speed is the speed at which 85% of traffic is moving at or below. This statistic is commonly used to determine speed limits.

## Road Composition & Geometry

- Pleasant Valley Road is classified as a minor arterial road in the City.
- The road is a two-lane asphalt road that is 24-feet wide. The road appears to have minimal subgrade treatment, and has been overlaid with asphalt multiple times throughout its history.
- The road has four significant curves, including:
  - One 45-degree curve at the intersection with Miles Road
  - One 90-degree curve between Miles Road and the PGBT
  - One 90-degree curve between the PGBT and Merritt Road
  - One 45-degree curve between Merritt Road and Eastview Drive

## Road Composition & Geometry



## Road Composition & Geometry



View of Pleasant Valley Road  
looking west, South of the PGBT

## Comparison Roads



- Merritt Road
  - Between Sachse Road and Pleasant Valley Road
  - Speed Limit: 40 mph
  - Minor arterial
  - 2-lane asphalt road
  - ~8000 vehicles/day



- Sachse Road
  - Between Miles Road & Merritt Road
  - Speed Limit: 40 mph
  - Minor arterial
  - 2-lane asphalt road
  - ~7,600 vehicles/day

## Speed Study Findings

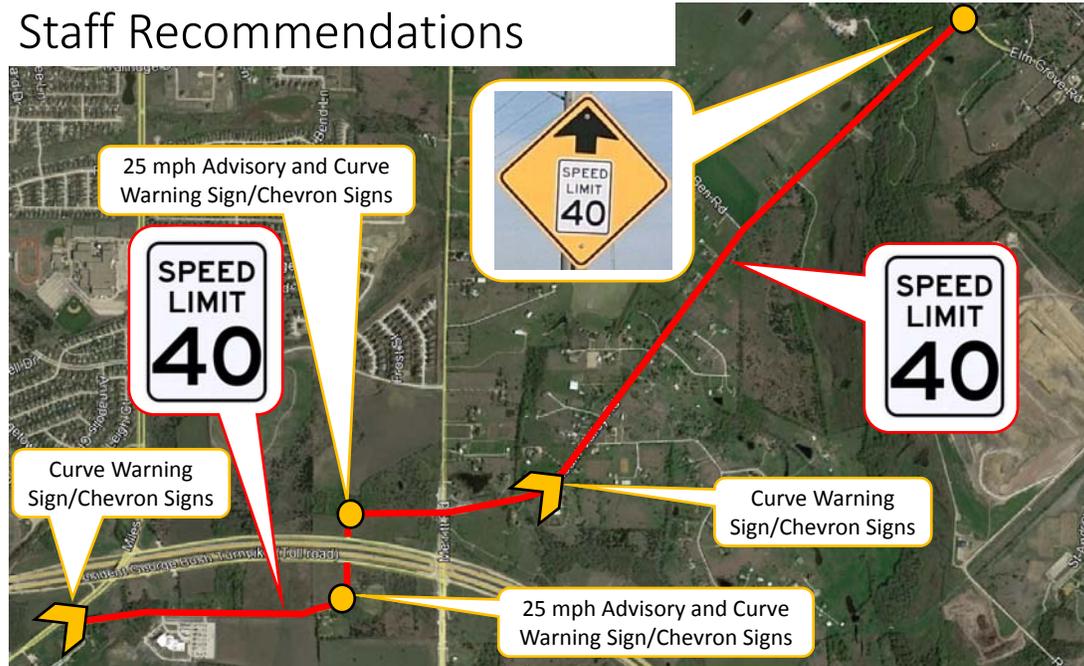
- Staff has completed a speed study for Pleasant Valley Road between Miles Road and Elm Grove Road.
- The findings include:
  - The 85% Speed shows that motorists are comfortable traveling at 45 miles per hour
  - Crash data for 2013-2015 includes 11 crashes on Pleasant Valley Road, of which two involved trash trucks.
  - The road geometry includes two 90-degree curves which have a calculated design speed of 25 mph.
  - The road geometry includes two 45-degree curves which have a calculated design speed of 40 mph.
  - The pavement condition was found to be a 2 on the PASER Rating system. (Scale of 1-10, with 10 being new pavement)
  - The road has no shoulders and has bar ditches on each side of the road, which vary in depth and width.

## Staff Recommendations

- Staff recommends:
  - A 40 mph Speed Limit for Pleasant Valley Road, from Miles Road to Elm Grove Road.
  - An advisory speed of 25 mph at the two 90-degree curves, in accordance with the recommendations of the Manual on Uniform Traffic Control Devices.
  - Additional warning signs and chevron signs at all curves



## Staff Recommendations



## Advisory Speed Limits

- Advisory Speed limits are shown on advisory signs.
- These speeds are recommended by the governing body, but not enforced
- Advisory speed limits are commonly enacted on short sections of a roadway (typically where curves exist), where the geometry is such that the speed limit for the road exceeds the design speed of that short section of road.

## Ordinance Language

- AN ORDINANCE OF THE CITY OF SACHSE, TEXAS, AMENDING THE CODE OF ORDINANCES BY AMENDING CHAPTER 9 TITLED "TRAFFIC REGULATIONS" BY AMENDING SECTION 9-4 TITLED "SPEED LIMITS" TO CHANGE THE MAXIMUM PRIMA FACIE SPEED LIMIT FROM 45 MILES PER HOUR TO 40 MILES PER HOUR FOR PLEASANT VALLEY ROAD FROM THE WEST CITY LIMITS TO THE EAST CITY LIMITS; PROVIDING A REPEALING CLAUSE; PROVIDING A SAVINGS CLAUSE; PROVIDING A SEVERABILITY CLAUSE; PROVIDING FOR A PENALTY OF FINE NOT TO EXCEED THE SUM OF TWO HUNDRED (\$200.00) DOLLARS FOR EACH OFFENSE; AND PROVIDING AN EFFECTIVE DATE.

City Council Consideration



# School Zone Ordinance Ranch Road

City Council  
January 4, 2016

## Overview

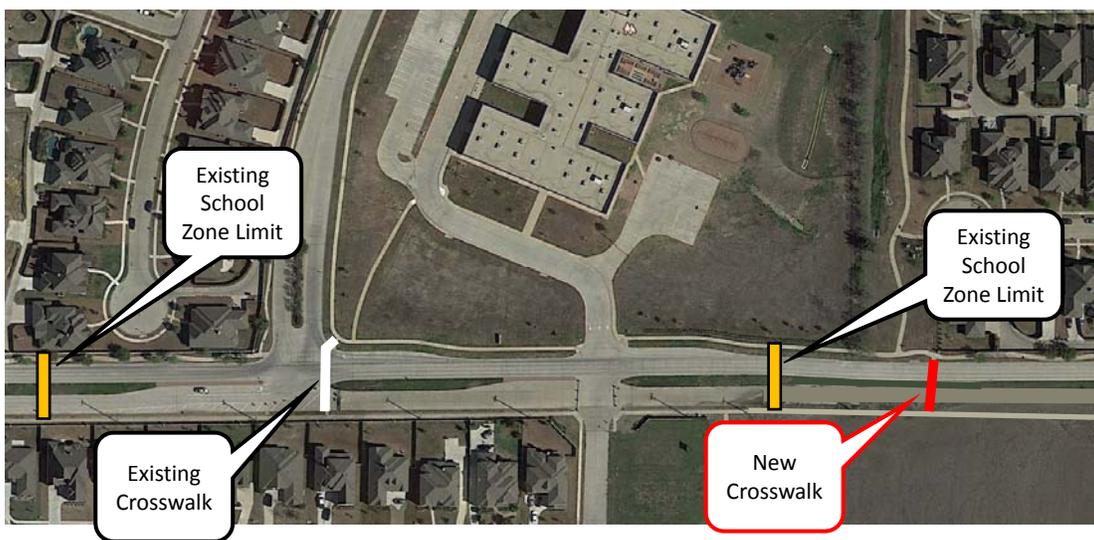
- ITE Guidelines
- Road Location
- Current School Zone
- Pedestrian Paths
- Staff Recommendations
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## Current School Zone Location



## Pedestrian Paths



## Staff Recommendations

- Staff recommends that the Ranch Road school zone be extended to adequately include the new crosswalk.
- Per the Institute of Transportation Engineers, the recommended distance from a crosswalk to a school zone limit is 200 feet for a 20 mph school zone.

## Staff Recommendations



## Ordinance Language

- AN ORDINANCE OF THE CITY OF SACHSE, TEXAS, AMENDING THE CODE OF ORDINANCES BY AMENDING CHAPTER 9 TITLED "TRAFFIC REGULATIONS" BY AMENDING SECTION 9-4 TITLED "SPEED LIMITS" TO AMEND THE SCHOOL ZONE ON A PORTION OF RANCH ROAD EASTBOUND AND WESTBOUND FROM A POINT THREE HUNDRED FEET WEST OF WOODCREEK WAY TO A POINT ONE THOUSAND AND TWENTY FEET EAST OF WOODCREEK WAY; PROVIDING A REPEALING CLAUSE; PROVIDING A SAVINGS CLAUSE; PROVIDING A SEVERABILITY CLAUSE; PROVIDING FOR A PENALTY OF FINE NOT TO EXCEED THE SUM OF TWO HUNDRED (\$200.00) DOLLARS FOR EACH OFFENSE; AND PROVIDING FOR AN EFFECTIVE DATE.

City Council Consideration