



# TRAFFIC STUDIES/CALMING OPTIONS

DS-22-140

November 29, 2022

# Background

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- ❑ City Council has requested that staff perform a traffic and speed count analysis on various roadways throughout the city.
- ❑ City Staff performed speed and traffic analysis on 53 roadways during FY 22.
- ❑ The 85<sup>th</sup> percentile is: The speed at or below which 85% of the vehicles are traveling in non-heavy traffic conditions.
  - ▣ Used to determine the posted speed limit
  - ▣ Affects how defensible enforcement is (Speed Trap Argument)

# Background Cont.

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- Twenty-two (22) of the roadways, approximately 41%, reported the 85<sup>th</sup> percentile speed in excess of 5 mph or more than the posted speed limit.
- Current posted speed limits range from 30 MPH to 45 MPH.
- Data on traffic violations was provided by the Killeen Police Department for the last 12 months for each of the 22 roadways.

# Speed/Traffic Analysis

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Street Name	ADT	Posted Speed Limit	85 <sup>th</sup> Percentile	Violations 12 months	Accidents 12 months
Little Rock Dr.	1981	30	37	19	14
Hitchrock Dr.	1072	30	35	23	8
Cody Poe Rd.	3454	30	43	39	15
Edgefield St.	2221	30	37	62	24
Windfield Dr.	3599	30	37	56	18
Bachelor Button Blvd.	1807	30	36	6	2
Golden Gate Dr.	5121	30	37	30	18
Bridgewood Dr.	2846	30	35	23	10

# Speed/Traffic Analysis cont.

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Street Name	ADT	Posted Speed Limit	85 <sup>th</sup> Percentile	Violations 12 months	Accidents 12 months
Vahrenkamp Dr.	2363	30	36	2	5
Desert Willow Dr.	3706	30	37	16	14
Old FM 440	12192	30	38	73	16
Roy J Smith Dr.	1788	30	47	1	6
Westcliff Rd.	4255	30	44	520	23
W S Young Dr.	7300	30	37	2149	480
E. Rancier Ave.	6584	30	37	364	293
Lake Rd.	2716	30	39	298	52

# Speed/Traffic Analysis cont.

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Street Name	ADT	Posted Speed Limit	85 <sup>th</sup> Percentile	Violations 12 months	Accidents 12 months
Rosewood Dr.	2645	35	47	1056	175
Bunny Trail	2218	35	44	195	56
East Elms Rd.	5203	40	45	515	106
Stagecoach Rd.	2589	40	48	899	99
Chaparral Rd.	3931	40	46	48	82
Onion Rd.	129	45	59	64	7

# Phase 1 - Traffic Calming Measures

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- Phase 1 focuses on passive, less-restrictive measures:
  - ▣ 85<sup>th</sup> Percentile – review to establish if it is logical to increase speed
  - ▣ Signage – The posting of appropriate traffic control signs
  - ▣ Striping – Can help reduce the driver's perceived width of the roadway
  - ▣ Rumble Strips – Encourages the motorist to slow down both upstream, downstream and over the strips

# Phase 1 cont.

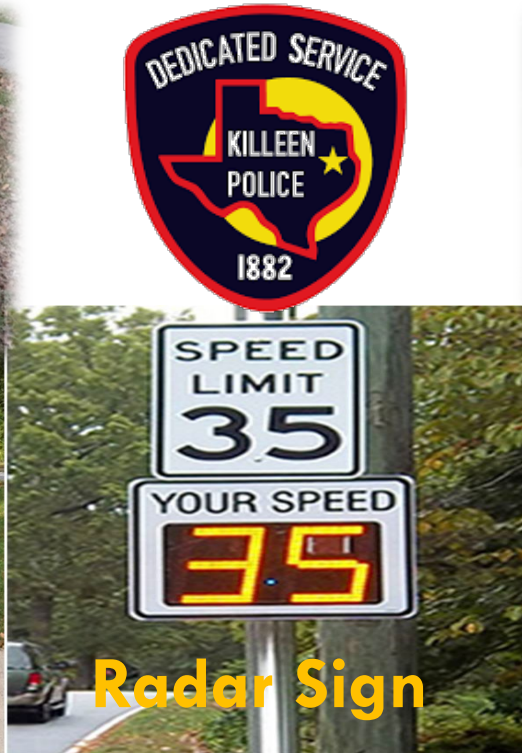
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- ▣ Target Enforcement – Increased enforcement by Killeen Police Department
- ▣ Traffic Trailer – A portable trailer equipped with a radar unit that displays actual speed compared to posted speed limit and encourages compliance



# Phase 1 - Examples

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# Phase 2 – Traffic Calming Measures

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- Phase 2 consists of methods and physical devices that may be considered if Phase 1 measures prove ineffective. Examples include:
  - ▣ Speed Cushions – series of small speed humps installed across the width of the road
  - ▣ Traffic Circles – raised island placed in intersections
  - ▣ Raised Center Medians – constructed along the center of the street to create narrowed lanes and encourage motorists to slow through the narrow section
  - ▣ Chicanes and Chokers – narrows lanes on existing roads

# Phase 2 - Examples

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# Summary

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- ❑ Each road needs to be analyzed individually to determine needs
- ❑ Develop and implement a City-wide Traffic Control Program. Example of items included in the program would be:
  - ▣ Education and Outreach
  - ▣ Speed and Warrant Studies
  - ▣ Capacity Analysis
  - ▣ Traffic Calming Measures