**City of Roanoke** 

# NO NEED TO SPEED® KEEP STUDENTS SAFE PEDESTRIAN SAFETY CAMPAIGN

September 2022



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There has been a rise in the number of pedestrians injured in car crashes near schools in the City of Roanoke. To help combat this increasingly pressing issue, The City of Roanoke applied for and received a grant from the Virginia Department of Motor Vehicles to build upon the success of previous pedestrian safety campaigns (in 2020 and 2021) with a campaign aimed to reduce speeding and improve pedestrian safety near school zones. Campaign activities included a mix of paid, donated, and earned media as well as personalized community outreach and engagement activities.

The campaign ran for six weeks from April 18, 2022 to May 27, 2022, and sought to:

- Increase awareness of traffic speed limits and the importance of crosswalk compliance near schools
- Develop programs to educate youth of the importance of traffic safety using the demonstration traffic garden
- Decrease the incidence of speeding in the City of Roanoke

To evaluate the campaign's effectiveness and learn about public response to the campaign, the City tracked outcomes associated with campaign goals. Key outcomes include:

- The campaign exceeded the goal of reaching 65% of the population of the City of Roanoke.
  - Paid media advertising alone exceeded the goal of reaching 65% of the population of the City of Roanoke. Radio reached 90% of the population of approximately 100,000 people. Broadcast reached 85% of the population, while social media reached 73%.
- The campaign achieved the goal of increasing awareness of traffic speed limits and the importance of crosswalk compliance near schools.
  - The campaign quiz was taken over 1,600 times, serving to educate the public on traffic safety issues, speed limits, and laws in and near school zones.
- The project achieved the goal of developing programs to educate youth on the importance of traffic safety.
  - The traffic garden was installed in September 2022.
  - A pilot Science, Technology, Engineering, and Math (STEM) event was held on September 8, 2022 to introduce students to scaled-down traffic safety elements. Twenty-five students and five educators attended.
- Survey results showed a small shift in selfreported behavior toward speeding less often.

# CAMPAIGN OVERVIEW

# Background

In 2019, the Roanoke City Council adopted an ordinance to decrease the speed limit on neighborhood streets in school zones to 15 mph. In 2021, Roanoke City recorded 50 crashes in school zones. These incidents pose significant risk to pedestrians, particularly the smallest walkers. Children's small size makes them less likely to be seen by a driver, and when they are involved in a crash as a pedestrian, they are at higher risk of injury or death than adults. The City takes this safety crisis seriously and has prioritized pedestrian safety improvements across the city.

The City launched its first pedestrian safety campaign in 2020, building upon the City's progress on planning, engineering, and enforcement by raising public awareness of a key pedestrian safety issue: crosswalk compliance. In 2021, the City launched a second iteration of the pedestrian safety campaign focused on speeding. The 2022 campaign builds upon the success of the first two campaigns by addressing traffic safety, including crosswalk compliance and traffic speed in school zones.

Due to the timing of grant funds and the campaign focus, the campaign ran while school was in session toward the end of the 2021/2022 school year. This timing enabled the project team to reach parents and students while they traveled to and from school and provided time for required evaluation methods including traffic speed studies and a public survey.

# Funding, Project Management, and Consultant Team

The City of Roanoke received grant funding from the Virginia Department of Motor Vehicles to deliver the campaign. A representative from the City was the project manager. The City contracted with a consulting firm, Alta Planning + Design, who teamed with Access, a local Roanoke-based media and communications firm, and Discover Traffic Gardens, a Virginiabased business specializing in the development of traffic gardens, to assist in the development, implementation, and evaluation of the campaign.

# Campaign Goals and Objectives

The grant from the Department of Motor Vehicles established the following campaign goals:

- Decrease the number of school zone-related crashes by 10% from the June-December period of 2021 to the same period of 2022 (during and after the campaign), measured by police crash reports and Traffic Records Electronic Data System (TREDS) data.
- Evaluate the campaign to assess public awareness and attitudes.
  - Increase the belief that driving the speed limit is the community norm by 10% preto post-campaign, measured by the preand post-campaign public surveys.
  - Reach a minimum of 65% of the population of the City of Roanoke, measured by metrics from the paid media buy and campaign activities.

To reach these goals, the campaign approach included a mix of paid, donated, and earned media intended to raise awareness of the campaign citywide and promote a culture shift among adult and parent drivers. The campaign also offered personalized school engagement activities intended to engage parent and teenage drivers and lead to stronger intentions and behavior change.

# **Campaign Focus**

The media campaign was implemented citywide, while community engagement efforts emphasized school zones by focusing on parent and student drivers. The City partnered with Roanoke City Public Schools to reach parents and student drivers at all 24 public schools in Roanoke.

# Theory of Change and Logic Model

This campaign's theory of change<sup>1</sup> was that a six-week campaign will decrease speeding among drivers in and around school zones by increasing community awareness of speeding as a pedestrian safety issue and changing communitywide attitudes, norms, behavioral control beliefs<sup>2</sup>, and intentions.

Alta built the following logic model<sup>3</sup> to summarize the rationale for the campaign by presenting the assumptions, assets, and actions included in the campaign approach. The logic model served as the framework for evaluation of the campaign.

<sup>&</sup>lt;sup>1</sup> A "theory of change" explains how we think our campaign tactics lead to our desired outcomes and results. It explains the mechanism by which we believe change comes about, and reveals our assumptions about how we accomplish behavior change.

<sup>&</sup>lt;sup>2</sup> "Behavioral control beliefs" express how easy or hard people believe it would be for them to comply with the proposed behavior change.

<sup>&</sup>lt;sup>3</sup> A "logic model" maps out, in a diagram form, the theory of change. It shows what resources are available, how they will be used, and what the assumed or intended result will be (outputs and outcomes). Logic models are commonly used in the public health field.



#### Table 1: Logic Model

				OUTCOMES			
INPUTS/ RESOURCES	ACTIVITIES	OUTPUTS	SHORT- TERM (DURING CAMPAIGN)	MID-TERM (BY END OF CAMPAIGN)	LONG- TERM (UP TO 3 YEARS FROM CAMPAIGN)	RESULTS	
Media buy budget	Paid media advertising	# of ads placed; impressions; reach	Community awareness of the campaign and that speeding near	Increased sense that driving the speed limit is a community	Reduction in number of school zone-related crashes	Saved lives and reduced injuries	
Consultants and City of Roanoke Staff	Earned media	# of articles and interviews; donated media placement	schools is a problem Current driver (adults and teenagers) awareness of the campaign and feeling that the message is for them	problem Roanoke (measured by (measured police reports Current driver through	and injuries (measured by police reports) Continued	Improved quality of life Improved	
	Website	# of website views; view time; clicks		teenagers) awareness of Increased the campaign community and feeling awareness that the traffic safe message is for Issues and them Iaws relate school zone (measured through que	community awareness of	increase in the community- wide sense that driving the speed limit is a community norm in Roanoke	rinproved pedestrian safety near schools Reduced cost to society from
	Community engagement and outreach	<pre># of events; activities; participants; collateral</pre>			ge is for issues and laws related to school zones		
	Influencer campaign	# of posts; impressions; reach			Reduced	through quiz) Reduced speeding in	(measured through future surveys)
Partnerships	Public relations	# of community partnerships; partner communications		school zones (measured through speed studies)			

# Messaging and Design Process

The consultant team built upon the look and feel of the 2O21 No Need to Speed<sup>®</sup> campaign,<sup>4</sup> using the same visual illustration style but with fresh design elements that emphasized school zones. Through a collaborative process, the City approved the following campaign messages:

- **Headline:** No Need to Speed<sup>®</sup>, Keep Students Safe
- Subheadline: School routes are everywhere

Campaign materials are described in detail in the Community Engagement and Outreach section.

Figure 1: No Need to Speed<sup>®</sup>, Keep Students Safe Original Artwork

NO NEED De Speed Keep Students Safe Steal routes are everywhere

<sup>&</sup>lt;sup>4</sup> The slogan, "No Need to Speed," is trademarked by Keep Kids Alive Drive 25, who graciously granted the City of Roanoke permission to use the slogan. See KKAD25.org for more information.

# CAMPAIGN ACTIVITIES AND OUTPUTS

# Paid Media Advertising

Access, a local media agency, managed paid and earned media for the duration of the campaign. Access worked to reach the following campaign goals:

- Reach a minimum of 65% of the focus audience
- Successfully solicit at least \$50,000 in donated and earned media

Access analyzed the media usage of the focus audiences to determine appropriate channels, which resulted in the outlets described in the following sections. Paid media advertising alone exceeded the goal of reaching 65% of the population of the City of Roanoke. Radio reached 90% of the population of approximately 100,000 people. Broadcast reached 85% of the population, while social media reached 73%. A summary of key metrics and a description of each outlet is provided in **Table 2**.

OUTLET	OVERVIEW	BUDGET	# OF ADS OR SPOTS AIRED	IMPRESSIONS	CLICKS	REACH
Radio	Spots scheduled on eight stations to reach people while driving	\$41,446	1,825 paid spots 772 donated spots	5,843,495	Not applicable	90% of the population
Bus Ads	Rear exterior bus ads for the local transit agency, Valley Metro, to reach people driving and walking	\$5,500	10 purchased rear exterior posters 10 donated exterior posters	5,561,920	Not applicable	No data
Broadcast	Two 15-second video bookend⁵ spots on WSLS and MeTV	\$5,204	296 paid spots 123 donated spots	2,375,699	Not applicable	No data

#### Table 2: Paid Media Metrics by Outlet

<sup>&</sup>lt;sup>5</sup> "Bookending" is when you buy two :15 spots within the same commercial break. The first one runs as the first spot in the break, and the second one is the last spot in the same commercial break.

OUTLET	OVERVIEW	BUDGET	# OF ADS OR SPOTS AIRED	IMPRESSIONS	CLICKS	REACH
Digital	15-second video pre-roll and display ads via WSLS Display ads via Wheeler Broadcasting	\$3,850	Not applicable	403,886	911 (Wheeler Digital only)	No data
Influencer Marketing	Beth Bell's Macaroni Kid Roanoke e-blast, website/weekly newsletter article, and eight social media posts	\$600	Not applicable	6,858	279 with an open rate of 75%	No data
Instagram/ Facebook	Ads and boosted posts to promote community engagement, including the campaign quiz, surveys, and 2021 art contest	\$4,000	15	643,058	4,500	72,688

All ads directed people to PlanRoanoke.org/ PedestrianSafety, which is run by the City. The webpage included announcements, the campaign quiz, campaign materials, campaign details, information for drivers and pedestrians, and more.

## **Metrics**

From April 18 to May 27, the campaign webpage received 1,382 views with an average view time of 1 minute and 23 seconds. During the same

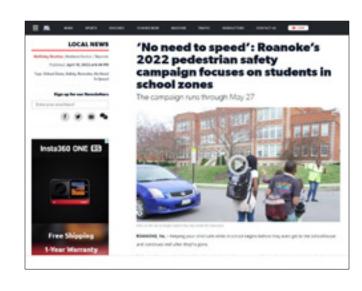
timeframe, the campaign quiz received 2,616 views with an average view time of 2 minutes and 20 seconds. The quiz was taken 1,618 times.

# **DONATED AND EARNED MEDIA**

The campaign earned media coverage from a variety of local television, radio, and online news channels. Additionally, some media vendors donated media coverage at no cost.

# **Earned Media**

Earned media was a productive part of the campaign, helping to raise the campaign profile on a variety of news outlets. Media relationships focused on specific reporters to cover the primary outlets viewed by Roanoke City audiences. Five earned media stories resulted from this outreach, which earned 1.58 million media impressions. **Table 3** includes a summary of earned media coverage.



#### Table 3: Earned Media Coverage

NEWS OUTLET	ARTICLE TITLE	DATE
WSLS-TV Broadcast & Online Placements	'No need to speed': Roanoke's 2022 pedestrian safety campaign focuses on students in school zones	April 18, 2022
WFIR-AM Broadcast & Online Placements	Pedestrian safety tips, importance highlighted by accident	May 11, 2022
patch.com/virginia/roanoke Online Placements Only	City School Zone Speed Initiative + Ridge View Bank Breaks Ground	May 18, 2022
WDBJ-TV Broadcast & Online Placements	Roanoke works to curb speeding, raise awareness of pedestrian safety in schools zones	May 18, 2022
Macaroni Kid Roanoke Online Placements Only	Help Keep Roanoke Kids Safe, Take the Pedestrian Safety Quiz!	May 26, 2022

# **Influencer Coverage**

The campaign also included an effort to reach out to local influencers to promote the campaign messages to their followers. Influencers are particularly credible messengers, and they support the campaign strategy of using personalized delivery methods. Participating paid and unpaid influencers used their own words and tone to promote the campaign, with an estimated total of 12,980 social media impressions. The following influencers posted about the campaign on social media:

- Macaroni Kid Roanoke
- Presbyterian Community Center
- Roanoke Diversity Center
- Council Member Joe Cobb
- League of American Bicyclists
- Carilion Clinic



Meet The Moms Roanoke Beth Boyd Bell - 3d - 🖾

#### Hey Mamas,

How many times have you gotten alarmed at cars zipping by your bus stop or in a school zone? More than you can count, probably!

...

I'm helping the City of Roanoke spread the word about pedestrian safety. Today is the last chance to take a quick, 5 question quiz, and be entered to win a Blue Cow Ice Cream gift card. Share it...so hopefully those "people" will also see the reminders.

Also, there's going to be a really fun new permanent traffic garden coming soon to the City! Check it out:



rosnoke.macaronikid.com Help Keep Roanoke Kids Safe, Take the Pedestrian Safety Quiz! | Macaroni KID Roanoke

# **Donated Media and Time**

In addition to the donated radio spots and bus ads mentioned on **Page 8**, the Grandin Theatre donated pre-movie on-screen static ads, and the Berglund Center donated marquee ads. In total, the campaign was given \$46,750 in donated media valu eand \$9,127.12 in donated time. The campaign exceeded its match goal of \$50,000 with over \$55,000 in donated value, as outlined in **Table 4**.

#### Table 4: Value of Donated Media and Time

DONATED MEDIA	VALUE
Radio	\$33,000
Bus	\$4,500
Grandin Theatre	\$1,250
Broadcast	\$3,000
Berglund Center Marquee	\$4,000
Earned Media	\$1,000
Subtotal	\$46,750
DONATED TIME	VALUE
RVTV production of two :15 videos and two :30 second radio ads	\$3,120
Roanoke City staff hours January - July 2022	\$6,007
Subtotal	\$9,127
TOTAL	\$55,877

# COMMUNITY ENGAGEMENT

Community engagement was a key focus for this campaign. This included materials distribution, Roanoke City Public Schools partnership and collaboration, a campaign quiz, and more.

# **Print Materials**

Print materials developed for the campaign included a flyer and yard sign, as described in **Table 5**. Community members requested yard signs through an online form, and campaign staff distributed them upon request and during community events. The school district also distributed three yard signs to each of 24 public schools in the district, for a total of 72 yard signs, and distributed flyers to elementary school parents in take-home folders and to high school driver education students.



Table 5:	Flyer and	Yard Sign	Details
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COLLATERAL PIECE	DIMENSIONS	QUANTITY PRINTED	QUANTITY DISTRIBUTED
Flyer	8.5″x11″	8,181	8,181
Yard Sign	18"x24"	600	519

# **Campaign Quiz**



The project team developed an online quiz to educate the public on traffic safety issues, speed limits, and laws in and near school zones. The flyers distributed to parents and students included traffic safety information directly related to the quiz questions. Residents who took the quiz were:

- Assigned a "safety score" based on the answers they got correct and invited to share it on social media
- Sent an email with correct answers and information on how to get involved with the campaign
- Entered into a raffle for one of fifteen \$10 Blue Cow Ice Cream Co. gift cards, provided by Blue Cow

### METRICS

**The quiz was taken 1,618 times.** Quiz takers received the following safety scores:

- Safety Superhero (5 out of 5 correct answers): **630**
- Safety Sidekick (3 or 4 out of 5 correct answers): **907**
- Safety Understudy (0, 1, or 2 out of 5 correct answers): **81**



**Table 6** summarizes the quiz results. The correct answers are highlighted.

#### Table 6: Quiz Results

#### Q1: What should you do when you're driving and you see the sign in the photo below? [photo of a 15 mph school zone speed limit sign in Roanoke]

a.	Slow down and maintain a speed of 15-20 miles per hour until you exit the school zone	6%
b.	Slow down to 15 mph when indicated by flashing lights or by	<mark>86%</mark>
	the hours posted on the sign	
c.	Slow down to 15 mph anytime school is in session	7%

d. Slow down to 15 mph if you see kids 1% around

**Q2:** When a person walking is hit by a driver traveling at 20 mph, nine out of ten survive. When a person walking is hit by a driver traveling at 40 mph, \_\_\_\_\_ survive.

a. Two out of ten	64%
<b>b.</b> Four out of ten	24%
c. Six out of ten	8%
<b>d.</b> Eight out of ten	4%

#### Q3: What is a speed limit?

a.	A recommendation for how fast you should drive on a given road, but it's OK if you go 5-10 MPH faster	2%
b.	The maximum speed you can legally drive at on a given road	<mark>88%</mark>
	legally arive at on a given road	
c.	The exact speed you should drive at on a given road under any conditions	11%
Q4	: Virginia law says that:	
a.	Drivers must stop for pedestrians	<mark>71%</mark>
	at every intersection whether	
	there are crosswalk markings	
	or not	
b.	Drivers must stop for pedestrians only if there are crosswalk markings	20%
c.	Drivers must stop at every crosswalk whether there is a	8%
	pedestrian waiting to cross or not	
	: What is the proper way to pass a s	
scr	nool bus that has a stop sign extende	ed?
a.	Yield, then pass slowly	0.3%
b.	Allow at least three feet of space when passing	0.5%
c.	As quickly as possible	0.3%

d. None of the above, it's never legal 99%
 to pass a stopped school bus that
 has a stop sign extended

Quiz respondents did well on questions 1, 3, and 5, but fewer got the correct answer for questions 2 and 4. The quiz results suggest that more public education about the dangers of speeding and crosswalk laws may be needed.

# **Email Updates and Stories**

To continue to engage individuals and partners who were part of previous phases of the Roanoke pedestrian safety campaign and those who took the quiz, the project team sent email updates throughout the campaign, including the following:

- Survey promotions
- General campaign information
- Information about traffic safety in school zones
- Quiz promotion
- Request for testimonials

In addition to the email request for testimonials, residents were also invited to share their experience with they think speeding in or near school zones, and share why it's important for drivers to obey the speed limit in the precampaign survey..

Between the email request and pre-campaign survey, **311 people shared their experiences and stories.** 

# Art Contest and Signal Wrap Installation

As part of the 2021 pedestrian safety campaign, the City hosted a signal cabinet art contest as another way to raise awareness. The artwork was installed in spring 2022. The official name of the contest was *Color Your Corner | Roanoke Pedestrian Safety Art Contest*. Residents of all ages were invited to submit designs to have their artwork placed as a vinyl wrap over a signal cabinet.

The project team leveraged the art installations to promote the 2022 campaign, including artist interviews, social media posts, and newsletter articles.

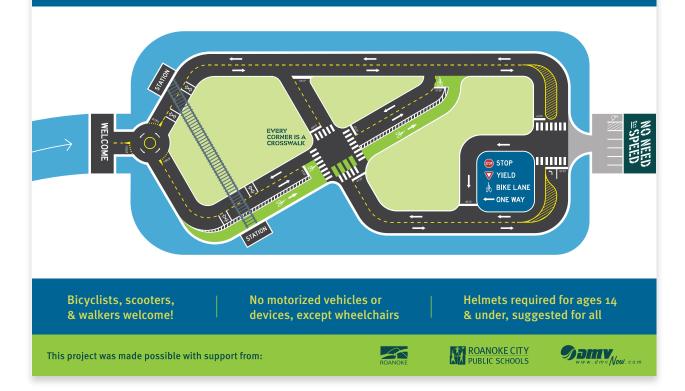


Cody Stadler, one of the art contest winners.



Discover Traffic Gardens, a Virginia-based company, led the design of the demonstration traffic garden and pilot event. A traffic garden is a small-scale network of connected streets with scaled-down traffic features and other roadway elements for educational programs, skills building, and active engagement. The Roanoke traffic garden was designed for permanent installation on an existing blacktop at Westside Elementary School, and is intended to be used by educators, young people, and their families to educate young people on traffic safety rules and practices. Discover Traffic Gardens planned and hosted a Science, Technology, Engineering, and Math (STEM) workshop for twenty-five elementary school students and five educators in a format intended to be replicated by educators for other students.

# Welcome to the Westside Traffic Garden Follow the course to practice safe street skills





# **Public Survey Results**

### Methodology

To evaluate the campaign's effectiveness and learn about respondents' experience with the campaign, the project team conducted two online community surveys: one before the campaign began (March 16 - April 1) and one after the campaign's active phase completed (June 1 - June 15). The pre- and post-campaign surveys included many of the same questions so that the project team could analyze changes in the respondents' attitudes and knowledge.

Both surveys were distributed electronically and promoted through City of Roanoke communications, other public agencies, campaign partners, and Facebook ads. To encourage survey participation, respondents were entered in a prize drawing to win one of 25 \$20 Downtown Roanoke gift cards (10 for the pre-campaign survey and 15 for the postcampaign survey), provided by Downtown Roanoke, Inc. The pre-campaign survey received 646 individual responses, and the post-campaign survey received 306 responses.<sup>6</sup>

### Demographics

The majority of pre- and post-campaign survey respondents lived in the southwest quadrant of the city, followed by the north/northeast quadrant. Both surveys also had a majority of female respondents (it is common in surveys for women to be over-represented.) and primarily reached respondents ages 26-64.

## Participation

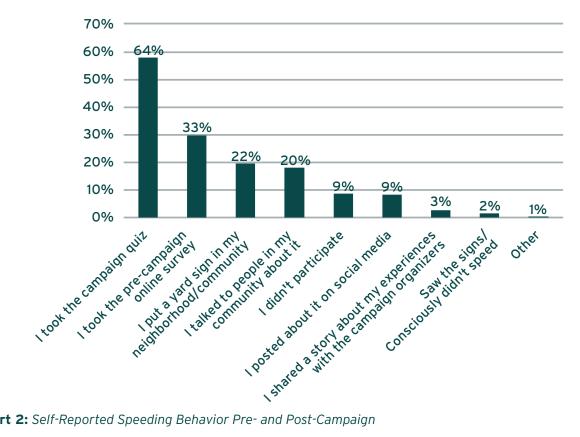
# The top ways survey respondents heard about the campaign were yard signs (76%),

social media (52%), and campaign emails (27%). Survey respondents participated in the campaign in a variety of ways, outlined in **Chart 1**.

## Behavior and Community Norms

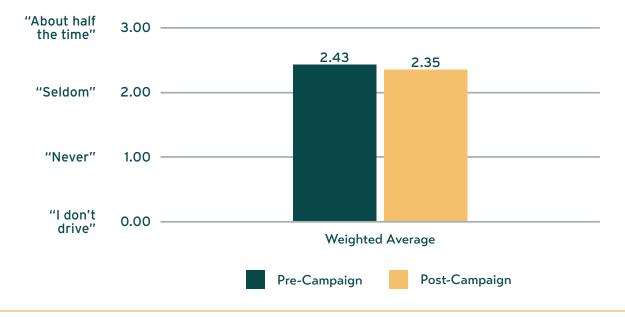
Survey respondents were asked to state how often they drive faster than the posted speed limit. After the campaign, there was a small shift in self-reported speeding behavior toward speeding less often. This was calculated by assigning numeric scores to each of the answers and taking the weighted average of the responses. The pre- and postcampaign surveys comparison can be seen in **Chart 2**. Due to the number of factors that can affect speeding behavior, this improvement can't be attributed solely to campaign efforts, but it is encouraging nonetheless.

<sup>&</sup>lt;sup>6</sup> The post-campaign survey received responses from 387 people in total, but 81 respondents said they had not seen the campaign before, which disqualified them from completing the survey.



#### **Chart 1:** Where Survey Respondents Reported Seeing or Hearing about the Roanoke Pedestrian Safety Campaign (N=800)

Chart 2: Self-Reported Speeding Behavior Pre- and Post-Campaign



To assess community norms, the surveys asked respondents about their perception of speeding in Roanoke and in school zones specifically. The surveys allowed respondents to rate their level of agreement with the following statements:

- I think Roanoke drivers should not drive faster than the posted speed limit.
- Most people think Roanoke drivers should not drive faster than the posted speed limit.
- Most people in our community see value in Roanoke drivers obeying the posted speed limit.

Survey results indicate a slight increase in the belief that driving the speed limit is the community norm, both in school zones and citywide, as seen in Chart 3 and Chart 4. Specifically, post-campaign survey respondents expressed stronger agreement in the personal and community belief that Roanoke drivers should not drive faster than the posted speed

limit. Respondents also more strongly agreed that fellow community members value drivers obeying the speed limit. These results suggest that the campaign improved community norms, attitudes, and beliefs around speeding.

## Key Results

- Survey results indicate a slight increase in the belief that driving the speed limit is the community norm, both in school zones and citywide.
- Self-reported speeding behavior decreased slightly.

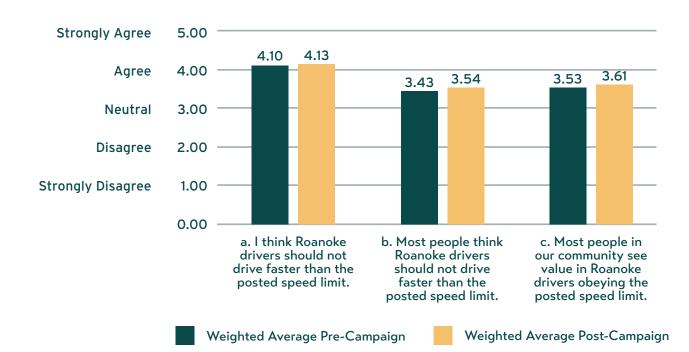
# **Traffic Speed Studies**

Between March 22, 2022, and March 24, 2022, traffic speed data was collected prior to the safety campaign activities in order to establish a pre-campaign baseline of traffic speeds and behaviors. Traffic speed data was then collected at the same locations after the 2022 No Need to Speed<sup>®</sup>, Keep Students Safe safety campaign was implemented.

City of Roanoke staff identified four priority school zones to serve as the locations for traffic speed studies:

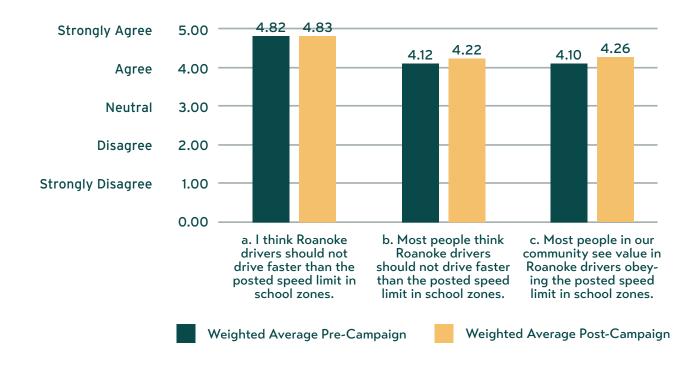
- Preston Elementary School and Breckenridge Middle School (Williamson Road near school zone flashers)
- Fishwick Elementary School (Ninth Street near school zone flashers)
- Westside Elementary School (Hershberger Road near zone flashers)
- Hurt Park Elementary School (Salem Avenue near school zone flashers)

Evaluation



#### Chart 3: Weighted Average Scores, Citywide Speed Limit Questions, Pre- and Post-Campaign

Chart 4: Weighted Average Scores, School Zone Speed Limit Questions, Pre- and Post-Campaign



Keep Students Safe Pedestrian Safety Campaign

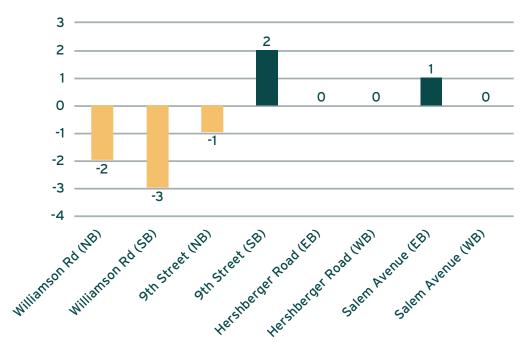
The City conducted speed studies to evaluate if traffic speeds in school zones changed following campaign activities in an effort to evaluate whether they had achieved the campaign goal of increasing by 10% the belief that driving the speed limit is the community norm. Following the safety campaign, the 85th percentile speeds were below the speed limit on Williamson Road, but still above the speed limit on the other study locations, as seen in **Chart 5**. The 85th percentile speeds decreased slightly at three study locations, but were the same or increased slightly at all other study locations, as seen in **Chart 6**.

### Conclusion

The impact of the safety campaign on the traffic speeds on the four roadways is inconclusive because of the mixed results, both in terms of absolute change in speeds and the change in speeds relative to the posted speed limits. Williamson Road was the only roadway where the 85th percentile speeds post-campaign were lower following the campaign and where the post-campaign speeds were below the posted speed limit. On the three other roads, the 85th percentile speeds remained unchanged or increased following the safety campaign, except for 9th St NB, which decreased slightly but remained higher than the posted speed limit.

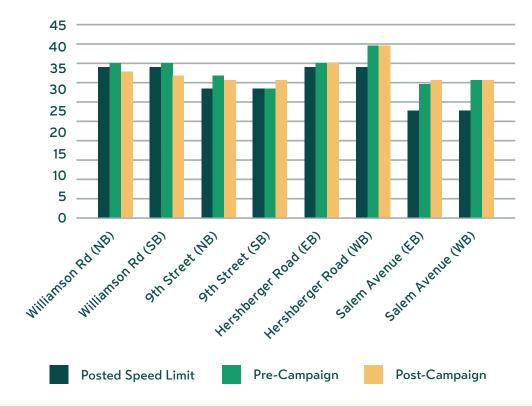
The limited change in traffic speed behavior following the safety campaign may be indicative of the fact that a one-time safety campaign is only one factor that can impact a driver's behavior. Traffic engineers have long understood that drivers gauge their speeds based on their own perception of safety, taking into account a multitude of factors, including the design of the roadway. Since the roadway design remained the same throughout the study, drivers' perception of a safe travel speed may not have changed significantly, despite many drivers seeing the campaign messaging. Ongoing campaigns or efforts to change driver behaviors and community norms around speeding, as well as changes to the design of these roadways, could be considered in order to reduce speeds to be more in line with posted speed limits and safety goals.

Evaluation



#### Chart 5: Change in the 85th Percentile Speeds, Pre- and Post-Campaign

Chart 6: 85th Percentile Speeds, Pre- and Post-Campaign



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# Short-term and Mid-term Outcomes

Given the campaign goals, and building on the evidence review and behavior change theory, we defined the following short-term and mid-term outcomes for the campaign (see the logic model on **Page 6**):

- Short-term:
  - Community awareness of the campaign and that speeding near schools is a problem
  - Current driver (adults and teenagers) awareness of the campaign and feeling that the message is for them
- Mid-term:
  - Increased sense that driving the speed limit is a community norm in Roanoke
  - Increased community awareness of traffic safety issues and laws related to school zones
  - Reduced speeding in school zones

Short-term outcomes were achieved during the active period of the campaign through the paid media, earned media, and public relations work. Paid media advertising exceeded the goal of reaching 65% of the population of the City of Roanoke and the post-campaign survey showed a slight decrease in speeding behavior and a slight increase in the belief that driving the speed limit is the community norm, both in school zones and citywide.

Mid-term outcomes were achieved during the campaign through community engagement and outreach work. The campaign quiz educated current and future drivers on safety issues, speed limits, and laws in and near school zones. It also gave them the opportunity to share their score and help engage others and foster positive community norms.

Collaborations with Roanoke City Public Schools helped to achieve both short-term and intermediate goals by directly reaching parents and students with campaign materials, messaging, and traffic safety information.

# Projected Long-term Outcomes and Results

The following long-term outcomes were established (see the logic model on **Page 6**):

- Reduction in number of school zone-related crashes and injuries
- Continued increase in the communitywide sense that driving the speed limit is a community norm in Roanoke

Long-term outcomes and results are intended to be measured following the completion of this campaign. Police crash data availability does not align with the Department of Motor Vehicles' grant cycle and was not available during the time of this evaluation. Because of this, reporting on the reduction of school zone-related crashes is intended to be led by the City once data is available. Ongoing shifts in community norms can be measured through future public surveys, comparing the subsequent results to this campaign's findings.

