

City of Roanoke

NO NEED TO SPEED[®]

PEDESTRIAN SAFETY CAMPAIGN

September 2021





EXECUTIVE SUMMARY

In Roanoke, as in many cities, pedestrians are overrepresented in serious and fatal crashes, and traffic speed is a major factor in determining the severity of pedestrian injuries. Nationwide, travel behavior has shifted due to the pandemic. An increase in driver speeding behavior correlates with an increase in pedestrian-involved crash incidence and severity.

To help combat this increasingly pressing issue, the City of Roanoke applied for and received a grant from the Virginia Department of Motor Vehicles (DMV) to build upon the success of a 2020 pedestrian safety campaign with a new campaign focused on traffic speed. Campaign activities included a mix of paid, donated, and earned media, as well as personalized community outreach and engagement activities. The campaign ran for eight weeks from June 21, 2021 to August 15, 2021. The goals of the campaign were as follows:

- Reduce speeding and speed-related crashes
- Increase awareness of speeding as a pedestrian safety issue

To evaluate the campaign's effectiveness and learn about public response to the campaign, the City tracked outcomes associated with campaign goals. The campaign evaluation showed that:

- The campaign exceeded the goal of reaching 65% of the population of the City of Roanoke
 - Campaign tactics are estimated to have reached 93% of the population of the City of Roanoke

- The campaign achieved the goal of increasing awareness of speeding as a pedestrian safety problem
 - There was a 4.5% increase in the number of people reporting it as "somewhat of a problem" or "a big problem" between the pre- and post-campaign public surveys
 - Three-fourths (75%) of partner survey respondents thought the campaign was very successful or somewhat successful at improving pedestrian safety in Roanoke
- Following the campaign, survey respondents felt more strongly that speeding is an issue and that the speed limit should not be exceeded
 - Almost all (97%) of public survey respondents think that people in Roanoke drive faster than the speed limit at least half the time, compared to just 79% before the campaign
 - Over 50% of public survey respondents strongly agreed that people drive too fast in their neighborhood, compared to just 30% before the campaign
 - The percentage of survey respondents who agree or strongly agree that people should not drive faster than the speed limit increased by nearly 13% following the safety campaign
- The 85th percentile speed decreased on the majority of observed roadways



CAMPAIGN OVERVIEW

Background

Speeding is a major factor in whether a crash will result in injuries and fatalities, especially when vulnerable road users such as pedestrians are involved. And in Roanoke, pedestrians are overrepresented in crashes that result in serious or fatal injuries. The City takes this safety crisis seriously and has prioritized pedestrian safety improvements across the city.

In 2020, the City launched its first Pedestrian Safety Campaign, building on planning, engineering, and enforcement efforts by raising public awareness of a key pedestrian safety issue: crosswalk compliance. This year's campaign builds upon the success of the first campaign by addressing the increasingly pressing issue for pedestrian safety: traffic speeds.

Funding, Project Management, and Consultant Team

The City of Roanoke received a second round of grant funding from the Virginia DMV to deliver the campaign. A representative from the City and from the Roanoke Valley-Alleghany Regional Commission were the project co-managers. The City contracted with Alta Planning + Design, a consulting firm that teamed with Access, a local Roanoke-based media and communications firm, to assist in the development, implementation, and evaluation of the campaign.

Campaign Goals and Objectives

The DMV grant established the following campaign goals:

- Decrease the number of speed-related crashes by 10% from the June-December period of 2020 to the same period of 2021 (during and after the campaign)
- Decrease the 85th percentile speed on selected corridors by 5 (MPH) from pre-campaign 85th percentile speed
- Evaluate the campaign to assess public awareness and attitudes
 - Increase awareness of speeding as a pedestrian safety issue by 50% from pre- to post-campaign survey, measured by the pre- and post-campaign public survey
 - 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 and promote a culture shift among focus audiences. It also included personalized outreach and activities intended to engage community members and lead to stronger intentions and behavior change. The campaign approach established the following objectives:

- **Behavioral:** Reduce speeding on neighborhood streets
- **Attitudinal:** Increase the community-wide perception that there are negative social and personal repercussions to speeding
- **Social Norms:** Positively impact the cultural norms around speeding in Roanoke

Traffic Speed Studies

City of Roanoke staff completed a traffic speed analysis to identify and prioritize locations to focus on in the No Need to Speed® campaign. Although the campaign aimed to reach residents citywide, the selected corridors served as a basis for the campaign approach and locations for traffic speed studies. The following ten corridors were selected:

1. 9th St SE
2. Brandon Ave SW
3. Dale Ave SE
4. Franklin Rd SW
5. Jefferson St SE
6. Liberty Rd NE
7. Melrose Ave NW
8. Shenandoah Ave NW
9. Westside Blvd NW
10. Williamson Rd NE



The City of Roanoke conducted pre- and post-campaign traffic speed studies at each location. Data was collected in both travel directions, resulting in 20 total data points. The City of Roanoke data analysis included four main points:

1. The average hourly vehicular traffic volume
2. Traffic speed for each flow direction by hour of the day
 - The 85th percentile speed in each direction
 - The difference between the 85th percentile speed and the posted speed limit
3. A summary of qualitative information provided by City of Roanoke staff (e.g., weather, proximate schools and school activities during study, travel conditions, pandemic-related travel restrictions)
4. A comparison of travel speed and qualitative information that may have affected it

Campaign Focus

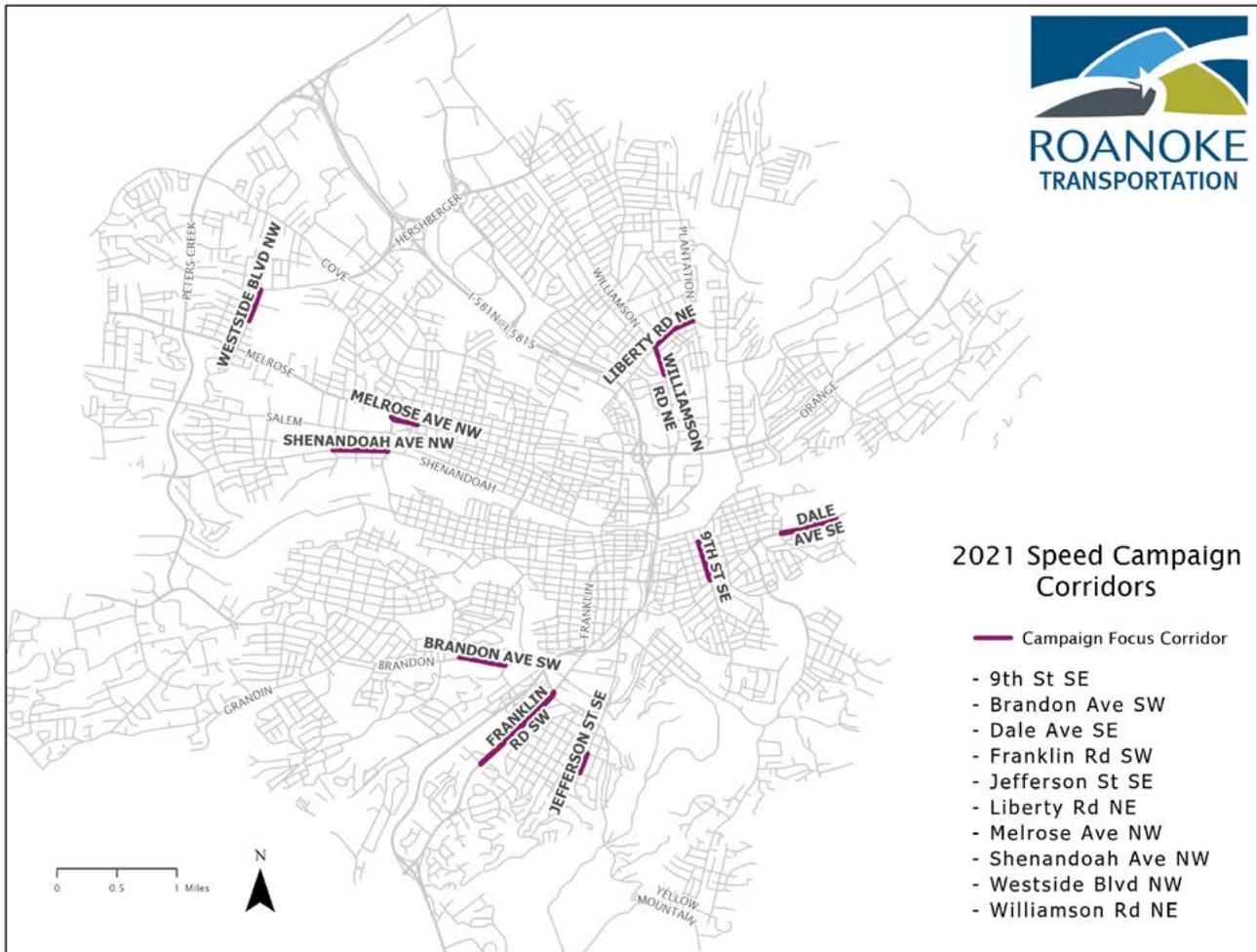
The campaign was implemented citywide, with an emphasis on neighborhood and local streets and particular attention to the 10 priority corridors, which are illustrated in **Figure 1**.

Campaign goals were to build and implement an impactful and cost-effective strategy. High-quality (i.e., peer-reviewed, government-sponsored) research studies can offer conclusions about strategies that do and don't

work. To that end, Alta reviewed studies about effective traffic safety campaigns, with a particular focus on anti-speeding campaigns, to help design a campaign based on evidence.

The evidence review helped to define the target audience. Research revealed that young people, men, and frequent drivers are the worst offenders when it comes to speeding, and that speeding is also more prevalent among people with higher income. While the campaign called

Figure 1: Priority Corridors for 2021 Pedestrian Safety Campaign



on all people in Roanoke to obey the speed limit, the media buy and outreach efforts prioritized reaching the following focus audiences:

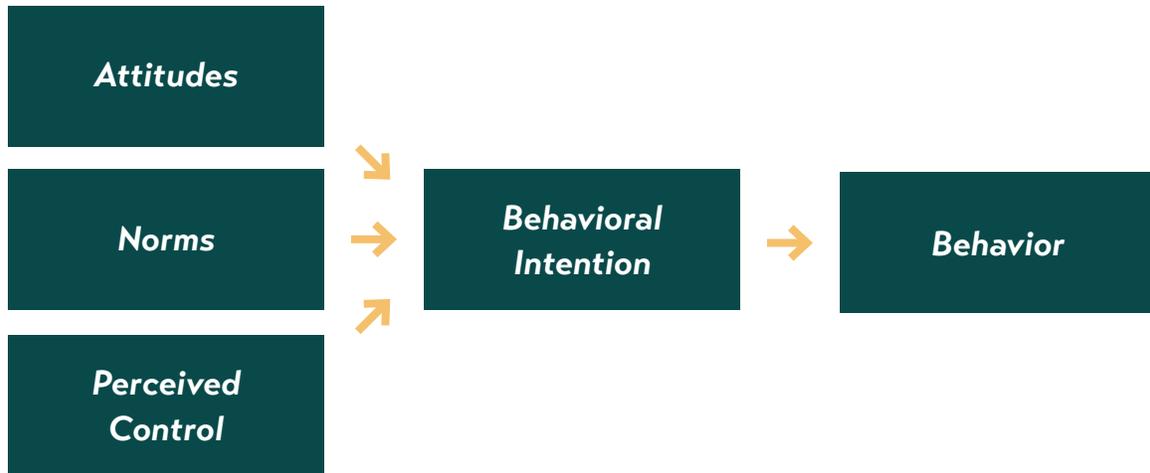
- Drivers under 25 years of age
- People who drive frequently in Roanoke, but are not professional drivers
- Men of any age who drive in Roanoke

The evidence review also helped to suggest tactics that were more likely to succeed at changing behavior. Specifically, the project team sought opportunities to co-locate campaign messages on streets where people are speeding (so they can modulate their behavior in response to the prompt), and created ways to incorporate personalized delivery of messages. Mass media was used as an ongoing complementary/supportive strategy, rather than a primary strategy.

The evidence review further provided insights into why people speed; understanding these beliefs is an important first step in changing them. The project team learned that:

- Many people, especially young drivers, believe speeding is the norm and has no negative social repercussions
- Many drivers, particularly young ones, do not believe that they will get caught for speeding
- Many drivers believe that government enforcement is a cash grab rather than evidence that the behavior is actually dangerous, so seeing enforcement actions does not successfully communicate that it is a serious societal issue
- Young men who speed report that they do so because they think it saves them time, helps keep up with the flow of traffic, is normal and widely accepted, that others approve of it, and that it is not actually dangerous. Furthermore, speeding gives them a sense of asserting control, and a sense of thrill when they are bored or frustrated

Figure 2: *The Theory of Planned Behavior*



Theory of Planned Behavior

The evidence review also suggested that the Theory of Planned Behavior (TPB) would be an appropriate framework for the campaign. The TPB (see **Figure 2**) is a behavior change theory that posits that behavior (in this case, speeding) is caused by behavioral intention (here, the intention [or lack thereof] to follow the speed limit). The behavioral intention in turn is influenced by three variables: attitudes (e.g. beliefs about benefits and consequences of speeding or not speeding, and whether we think those benefits/consequences are good or bad) beliefs around subjective norms (whether we believe other people would approve of our behavior, and how motivated we are to earn their approval), and perceived behavioral control (“I am able to obey the speed limit / I am able to successfully not speed if I wish to”).

The project team gathered information about current attitudes, norms, perceived control, and behavioral intentions through surveys and stakeholder work, and selected tactics that were intended to improve all of those factors. The evaluation was designed to test whether the campaign succeeded at changing these factors.

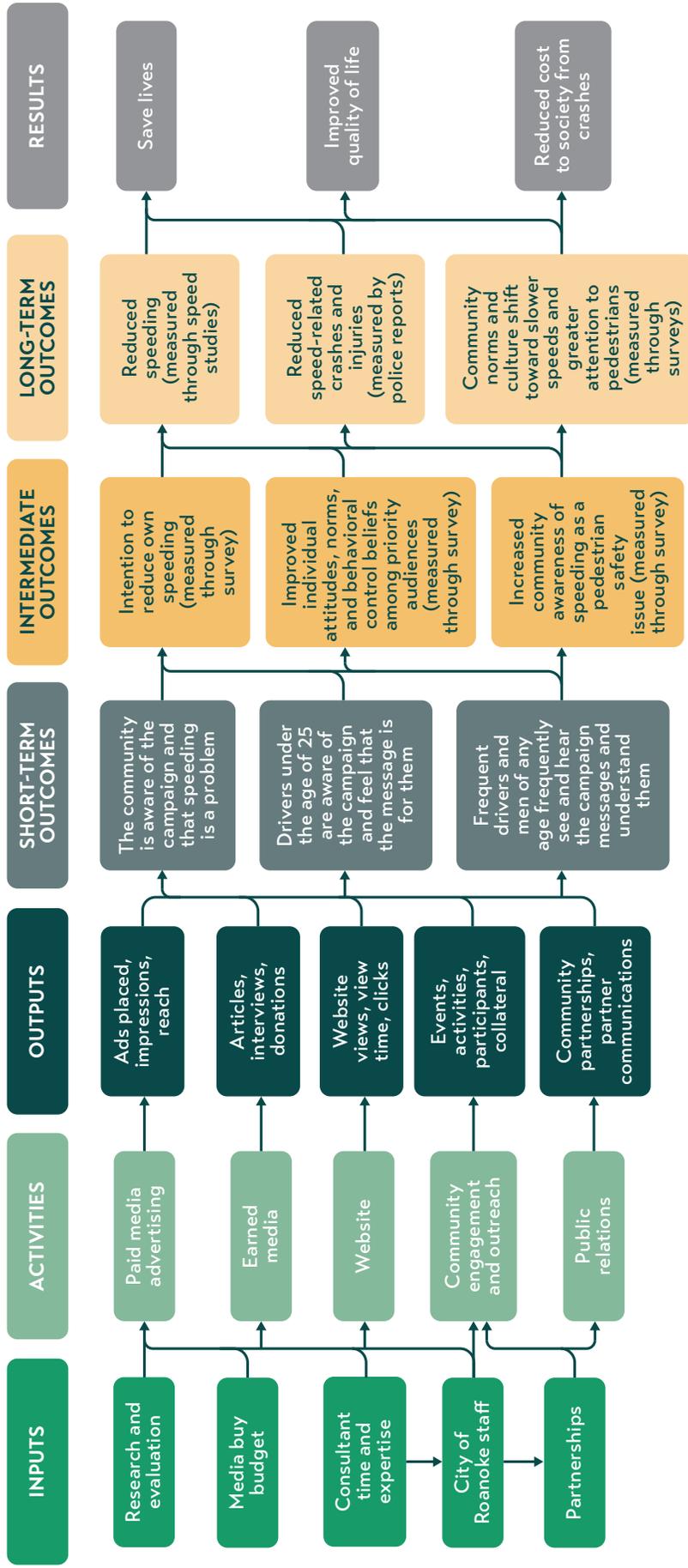
Theory of Change and Logic Model

This campaign’s theory of change¹ was that an eight-week campaign will decrease speeding among drivers on neighborhood streets by increasing community awareness of speeding as a pedestrian safety issue and changing community-wide attitudes, norms, behavioral control beliefs (that is, the belief that people are capable of reducing their vehicle speed), and behavioral intentions (that is, the intention to obey speed limits).

Alta built the following logic model² to summarize the rationale for the campaign by presenting the assumptions, assets, and actions included in the campaign approach. It integrates the Theory of Planned Behavior, and it draws on the evidence review for the target audience and the tactics chosen to prioritize.

¹ A “theory of change” explains how the campaign tactics lead to desired outcomes and results. It explains the mechanism by which change comes about, and reveals assumptions about how behavior change is accomplished.

² 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/intended result will be (outputs and outcomes). Logic models are commonly used in the public health field.



Contextual factors: City of Roanoke staff know that traffic speeds on neighborhood streets are on average 8 (MPH) higher than the posted speed limit, posing a danger to people walking and driving. Speeding is considered the social norm in Roanoke by many.

Evaluation Based on Logic Model

The logic model served as the framework for evaluation of the campaign. Outputs were tracked throughout the campaign, while surveys were designed to explore the short-term, intermediate, and long-term outcomes. The following section summarizes all campaign activities and outputs, and the final section of the report discusses the overall results and outcomes.

Messaging and Design Process

Once the campaign focus geography and audience were determined, the consultant team developed campaign messaging and graphics. The City wanted to build upon the look and feel of the 2020 Pedestrian Safety campaign, using the same visual illustration style but with fresh design elements such as a modified color palette and typography. The consultant team provided hand sketches for the City to choose from prior to completing the digital artwork. Emerging from this process, the City approved the following campaign message: No Need to Speed³. Campaign materials are illustrated in **Figures 3 & 4**, and are described in detail in the Community Outreach and Engagement section of this report.

³ The selected slogan of “No Need to Speed” had been 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.

Figure 3: No Need to Speed®, Webpage Banner with Bulldog



Figure 4: No Need to Speed®, Press Release Header with Person Using Walker





CAMPAIGN ACTIVITIES AND OUTPUTS

Paid Media Advertising

Alta partnered with Access, a local media agency, to manage paid and earned media for the duration of the campaign. Access' goals were as follows:

- 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 audience to determine appropriate channels and

selected the outlets described in the following sections. Paid media advertising alone achieved the goal of reaching 65% of the population of the City of Roanoke. The single tactic of radio reached 85% of the population of approximately 100,000 people. Combined with the other tactics, the estimated total reach was 93% of the population. All clickable ads linked to the campaign pledge, and non-clickable ads directed people to the campaign website to learn more. A summary of key metrics by outlet are provided in **Table 1**.

Table 1: Paid Media Metrics by Outlet

OUTLET	BUDGET	# OF SPOTS AIRED	IMPRESSIONS	VIEWS	CLICKS	REACH
Radio	\$40,000	1,719	6,128,000	-	-	85,000
Bus Ads	\$5,500	-	5,561,920	-	-	-
OTT ⁴ / Streaming	\$10,800	246,684 ⁵	250,191	-	-	-
YouTube	\$3,000	-	111,114	43,321	83	-
Mobile/Tablet Retargeting	\$5,000	-	415,151	-	1,055	-
Instagram/ Facebook	-	-	376,979	-	4,500	62,624

⁴ Over-the-top media service: A media service offered directly to viewers via the Internet.

⁵ Commercials aired in full

Radio

Two radio ads were created and 1,719 paid radio ad runs were scheduled on a mix of radio stations, including:

- WSLC-FM (Country)
- WXIK-FM (Top 40/Pop)
- WJJS-FM (Top 40/Pop)
- WROV-FM (Rock)

The gender breakdown of the combined radio audiences was 51.3% male and 48.8% female.

The radio ads helped to reach people while they were driving (a best practice based on evidence review) and resulted in a broad reach and frequency yielding 3,794,000 impressions. In addition, the stations collectively donated 1,058 bonus radio spots as well as live mentions at no cost, resulting in 2,334,000 additional impressions for a total of 6,128,000.

Bus Ads

The project team designed and printed rear exterior bus ads for the local transit agency, Valley Metro. Rear ads were selected because they are mounted at eye level, with strong visibility by people driving and people walking. Ten exterior bus ads were placed over a two-month period. In addition, Valley Metro donated exterior bus ad placements at no cost. The 20 bus ads resulted in 5,561,920 impressions.



OTT/Streaming

Non-skippable video ads were placed through Smart TVs, streaming devices, and game consoles. OTT/streaming ads helped to reach the focus age group of the campaign, with an estimated 43% of OTT/streaming viewers being between the ages of 18 - 34. The video ads delivered 250,191 overall impressions for a view completion rate of 96.6%. 246,684 commercials aired in full.

YouTube

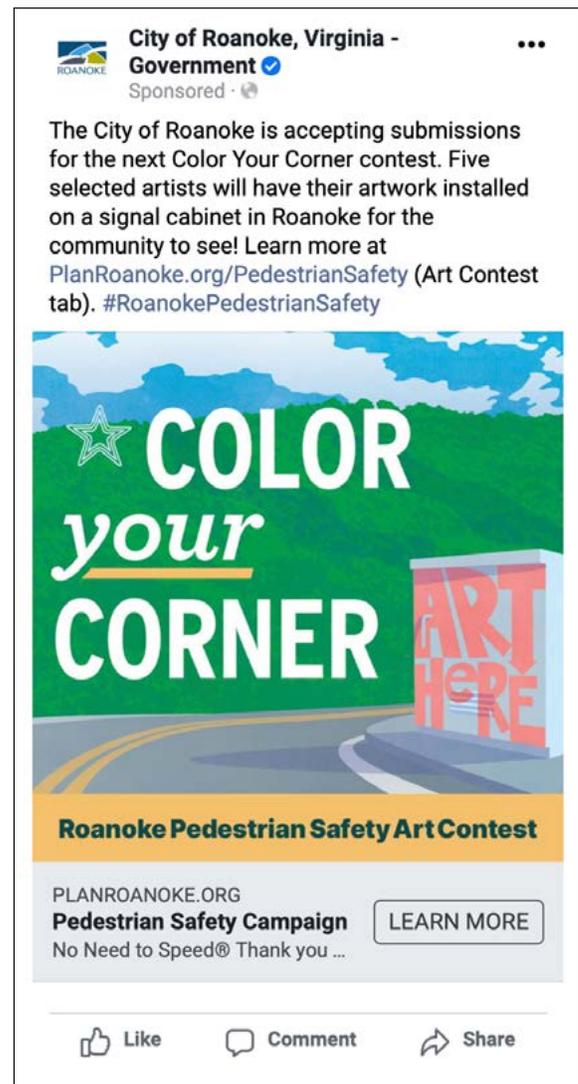
Three versions of the campaign video (:06, :15, and :30 seconds) were placed through YouTube. Ads placed on YouTube were targeted by age, gender, and zip code based on the campaign focus geography and demographics. The YouTube ads resulted in 43,321 views, 111,114 impressions, and 83 clicks.

Mobile/Tablet Retargeting

Mobile/tablet retargeting used location-based, demographic, and behavioral targeting to reach consumers with display and video ads on their mobile devices. Those who click on the ads were retargeted with up to six additional ads on sites they visit. The ads resulted in 415,151 total impressions and 1,055 clicks. The ads that targeted commuters and young drivers in the City of Roanoke produced more than 300 of the total clicks.

Instagram/Facebook

The project team developed Facebook/Instagram ads throughout the duration of the campaign to promote community engagement with the campaign pledge, surveys, an art contest, and more. The social media ads served 376,979 impressions, an overall reach of 62,624, and nearly 4,500 link clicks.



Facebook ad promoting the art contest



DONATED/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. Earned media was a particularly direct way to support the campaign

goal of increasing community awareness that speeding is a pedestrian safety issue. The initial campaign press release along with pitching creative aspects of the campaign (such as the art contest, walking tour, and op-ed by campaign co-manager Rachel Ruhlen) provided good hooks for news coverage. **Table 2** includes a summary of earned media coverage and estimated reach, where available, and **Figure 5** illustrates the types of media outlets that carried the story.

Figure 5: *Outlet Media Type*

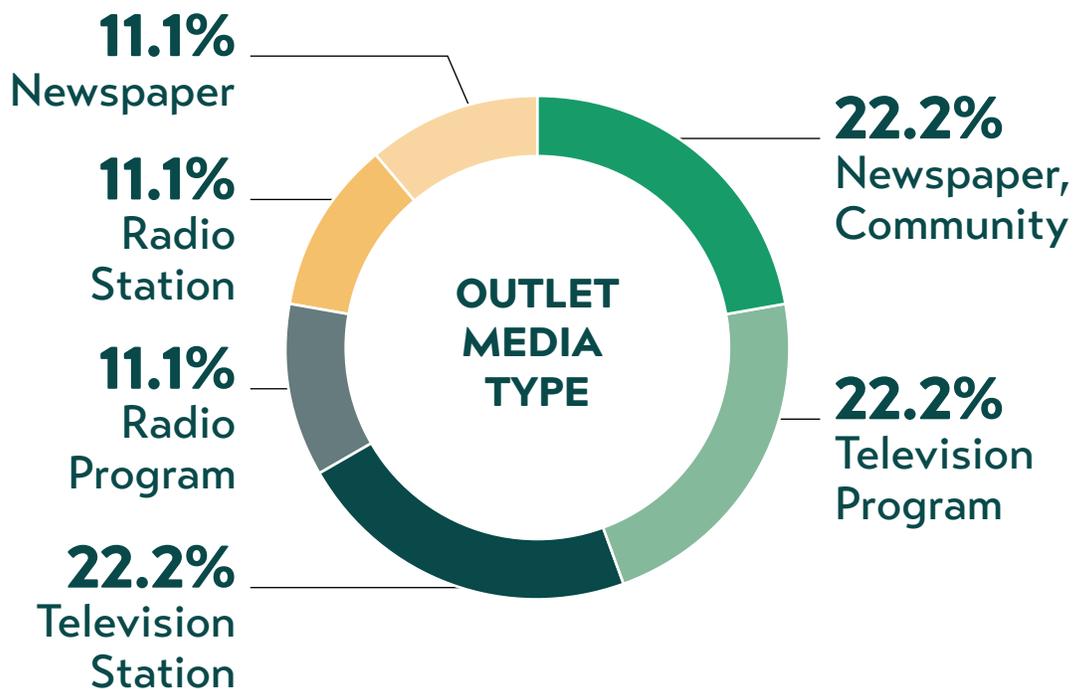


Table 2: Public Relations Coverage

NEWS OUTLET	ARTICLE TITLE	DATE	REACH/UVPM
Newsbreakers online	Roanoke City launching 'No Need to Speed' awareness	August 22, 2021	no data
WDBJ-TV	Roanoke uses public art to promote traffic safety	July 27, 2021	134,321
WFIR-AM	Artist wanted to spread pedestrian safety awareness in Roanoke	July 22, 2021	5,615
Roanoke Star-Sentinel	Awareness Through Art: Roanoke City Addressing Pedestrian Safety with Signal Box Art Contest	July 21, 2021	6,112
WXLK-FM	No Need to Speed	July 19, 2021	no data
Roanoke Valley Family	Pledge for Safer Streets!	July 1, 2021	no data
The Roanoke Times	Ruhlen: Faster Dangerous Traffic: What is Roanoke Doing About It?	June 27, 2021	45,390
Roanoke Tribune	Roanoke City Launching "No Need to Speed Campaign" With Walking Tour	June 24, 2021	6,000
WSLS-TV	No need to speed: Roanoke launches this year's pedestrian safety campaign	June 22, 2021	144,321
Daily Advent	Roanoke City launching 'No Need to Speed' awareness	June 22, 2021	no data
WDBJ-TV Online	Roanoke City launching 'No Need to Speed' awareness	June 21, 2021	134,321
WDBJ-TV Online	With pedestrian deaths up nationwide, Roanoke City looks to slow drivers down	June 3, 2021	134,321

Influencer Coverage

The campaign also included an effort to engage local social media influencers in promoting the campaign messages to their followers. Influencers are particularly credible messengers, and support the campaign strategy of using personalized delivery methods. Participating influencers used their own words and tone to promote the campaign, with an estimated total reach of 8,000 and a 6% engagement rate, which is calculated based on comments, views, likes, and shares. A 6% engagement rate exceeds the typical average of 1% to 3.5%. The following influencers posted about the campaign on social media:

- RunAbout Sports
- Fleet Feet
- Jonathan William Kelly
- Becky McKimmy
- Alek Patton



Influencer posts on social media

Donated Media

In addition to the donated radio spots and bus ads mentioned on **Page 13**, the Grandin Theatre donated pre-movie on-screen static ads and the Berglund Center donated marquee ads. RVTV also assisted in distribution of campaign videos on all channels at no cost, including:

- RVTV Cox Channel 3
- RVTV YouTube
- RVTV Facebook
- RVTV Instagram

In total, the campaign was given \$59,330 in donated media value. The total donated value for each is outlined in **Table 3**.

Donated Time

Roanoke City staff hours and RVTV production time contributed \$13,207 to the donated value of the campaign, as outlined in **Table 3**.

Summary Donated Media and Time Value

In total, over \$72,500 in value was donated to the campaign through donated media, staff time, and production services, exceeding the goal of \$50,000 in donated value.



Screenshot from campaign video

Table 3: *Value of Donated Media and Time*

DONATED MEDIA	VALUE
Radio	\$47,780
Bus	\$4,500
Grandin Theatre	\$1,250
Berglund Center Marquee	\$4,000
RVTV placement: 6 week media runs on all distribution channels	\$1,800
Subtotal	\$59,330
DONATED TIME	VALUE
RVTV production of :06, :15, and :30 second videos	\$2,400
RVTV production of Pedestrian Safety Event Kickoff Video	\$960
RVTV production of corridor videos	\$3,840
Roanoke City staff hours January - September 2021	\$6,007
Subtotal	\$13,207
TOTAL	\$72,537

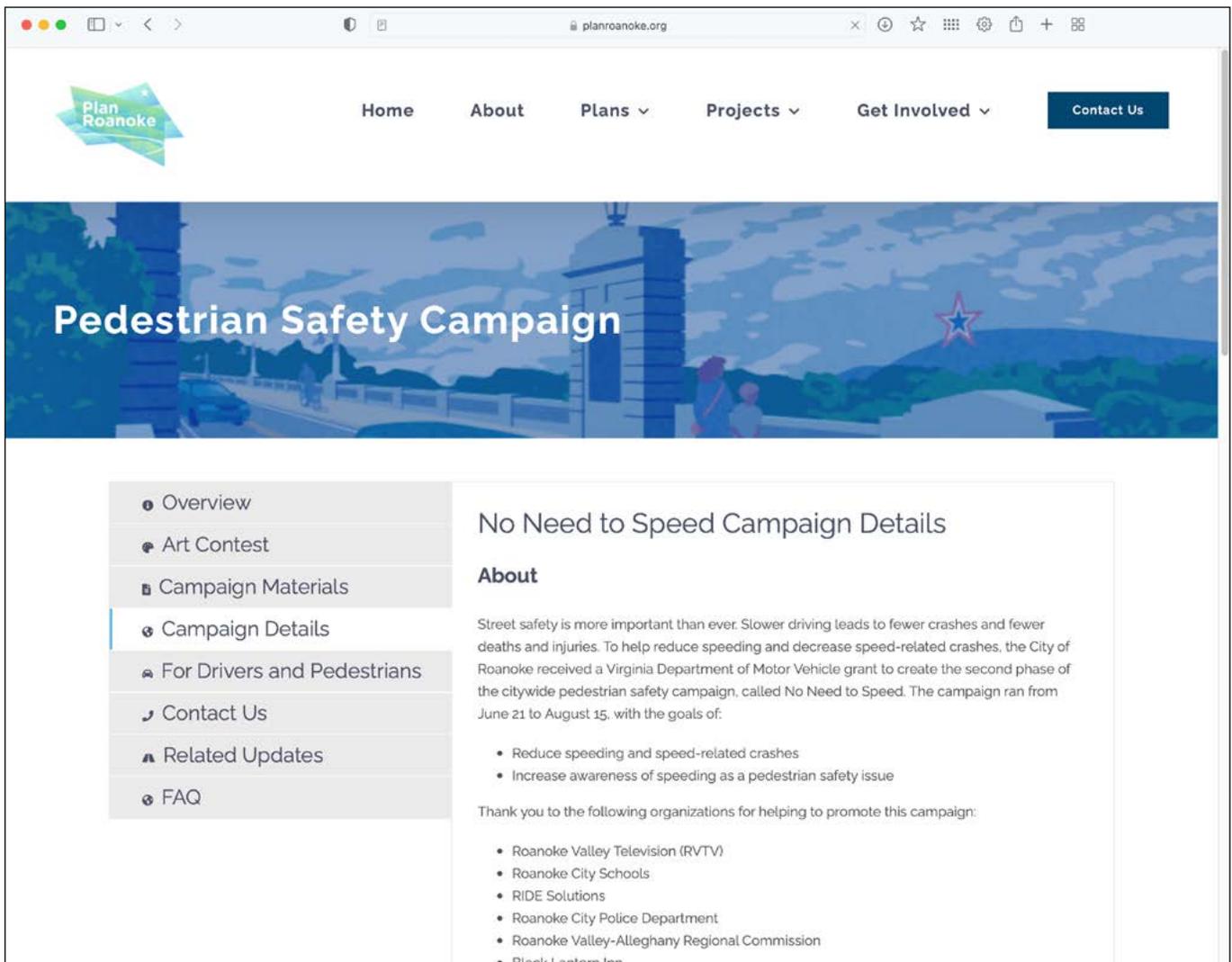


WEBSITE

All campaign information was housed on PlanRoanoke.org/PedestrianSafety, which is run by the City. The webpage included announcements, the campaign pledge, campaign materials, campaign details, information for drivers and pedestrians, and more.

Metrics

From June 21 - August 15, 2021, the campaign webpage received 2,726 views with an average view time of 2 minutes and 17 seconds, which is within the industry average view time of 2 to three minutes. During the same timeframe, the campaign pledge received 4,362 views with an average view time of 2 minutes and 13 seconds. Nearly 400 people filled out the pledge form.





COMMUNITY ENGAGEMENT AND OUTREACH

Community engagement was a key focus for this campaign. The evidence review concluded that personalized message delivery and establishing strong community norms supporting the campaign were effective strategies. Community engagement helped accomplish both of those tactics.

Print Materials

A suite of print materials was developed for the campaign, as described in **Table 4**. The various campaign illustrations were used to create multiple versions of collateral so that the audience would not become fatigued by repetition. Collateral pieces included posters, postcards, and yard signs that were distributed to partners, businesses, and community members.

Table 4: Poster, Postcard, and Yard Sign Details

COLLATERAL PIECE	DIMENSIONS	QUANTITY PRINTED	QUANTITY DISTRIBUTED
Poster	11"x17"	100	87
Postcard	4"x6"	1800	1500
Yard Sign	18"x24"	600	598



No Need to Speed® yard sign



Kickoff Event

The City of Roanoke hosted a kickoff event to celebrate the launch of the pedestrian safety campaign. The City invited community members and local leaders to discuss the issue of speeding during a neighborhood walk on one of the priority corridors. The event took place on Tuesday, June 22, 2021 at 5:30pm.

Elements

The event began with remarks from local leaders including City transportation staff, the vice mayor, Roanoke City Public Schools staff, City police, and more. After the remarks, City transportation staff led a group walk down 9th Street SE, from Montrose Ave. to Tazewell Ave., to discuss pedestrian safety improvements

and traffic speed issues on the campaign's priority corridors. The event ended with an ice cream truck and raffle drawing. Throughout the event, staff encouraged attendees to take the campaign pledge.

Video

RTVV documented the event and created a short recap video. The video can be viewed [here](#). The video was viewed 48 times.

Results

The kickoff event drew interest from community groups and members of the public, with 49 people RSVPing to the event registration form and 50 people attending. Five local leaders spoke at the event and City transportation staff led three walks along the same route.



Local officials speaking at the kickoff event

Campaign Pledge

The project team developed a pledge to build individual commitment to reduce speeding. The pledge was intended to strengthen attitudes and behavioral intentions around not speeding; to create visible community norms and culture shift; and to help people become a personalized messenger to others. In an effort to deepen engagement in the campaign, people who pledged received multiple emails, to remind them of their interest in the campaign, share campaign information, and invite them to get involved in other campaign activities. Residents who took the pledge were entered into a drawing for one of ten \$20 Downtown Roanoke Inc. (DRI) gift cards, provided by DRI. Pledge takers were required to make the following commitment:



AS A DRIVER, I WILL

- ✓ Travel the speed limit and at safe speeds for roadway conditions
- ✓ Follow slower speed limits in school zones, neighborhoods, and parks
- ✓ Speak up and speak out against speeding, as a passenger, friend, colleague, and neighbor

Activities

- Each person who signed the pledge and provided an email address received a thank you email within one week, inviting them to get more involved
- Four campaign emails were sent at regular intervals to people who took the pledge and to campaign ambassadors. Each email was sent directly from City of Roanoke staff with the intention of building relationships and a rapport between the City and members of the community
- The pledge invited participants to share a few words about why the campaign mattered to them, as an optional question. Over 154 people took the opportunity to provide comments. Some comments were used in campaign communications, including Facebook posts and Instagram stories

PLEDGE ENGAGEMENT:

- 393 pledge signatures received

Campaign Ambassador Program

To strengthen resident commitment to reduce speeding, the project team developed a community ambassador program to foster peer-to-peer conversations among residents and to encourage the distribution of campaign materials by community members and employers.

Activities

Community ambassadors who opted into the program had the opportunity to order up to five yard signs, request a speed feedback panel to be placed at their location of choice, and to receive ongoing campaign communications, including:

- A thank you email with confirmation that their yard signs would be delivered and talking points to use to spread the word about the campaign
- Three campaign update emails at regular intervals throughout the campaign

COMMUNITY AMBASSADOR ENGAGEMENT:

- 96 Community Ambassadors sign ups
- 66 Speed feedback panel requests
- 443 Yard signs distributed

Storytelling Series

A storytelling series was curated that included a speed feedback initiative and a video story share activity, with the goal of increasing the community-wide perception that there are negative social and personal repercussions to speeding. The videos featured local leaders, City police, and residents sharing personal stories, and included messaging and imagery intended to encourage citizens to reduce speeding on city streets.

Speed Feedback Initiative

The speed feedback initiative included the production of four videos, one specific to each quadrant in the City, to spread awareness about the dangers of speeding. The videos included facts about speeding from the speed study analysis of the ten focus corridors, and statements from neighbors across the city about why the campaign is important to them. The videos were posted on the City's YouTube channel and linked to on social media and in email communications. The links and the number of views for each video are below.

- [SE Roanoke](#) - 41 views
- [NE Roanoke](#) - 39 views
- [SW Roanoke](#) - 53 views
- [NW Roanoke](#) - 40 views

Video Story Share

The project team developed and hosted a story share activity that encouraged community members to submit a short video calling attention to what they love about walking in their neighborhood and why it is important to them that drivers go the speed limit. The project team offered a sample video and a chance to win a Grandin Theater prize pack (2 passes + swag) for anyone who submitted a video.

Reach

One partner, Carilion Clinic, submitted a video. However, the video story share activity did not receive any community submissions. For future activities such as this, the project team will consider the following lessons learned:

- Offer a more desirable incentive
- Dedicate more budget to promoting the story share/activity on social media
- Work closely with influencers or community organizations to encourage submissions

Art Contest

Overview

As part of the Roanoke Pedestrian Safety Campaign, the City hosted Phase 2 of a signal cabinet art contest. Phase 1 was completed during the 2020 pedestrian safety campaign, and the artwork was installed in Spring 2021. 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 2021 art contest kicked off in late June with submissions being accepted until the end of September. Five winners will be selected in Fall 2021, after the completion of this report, by a panel assembled by the Roanoke Arts Commission.

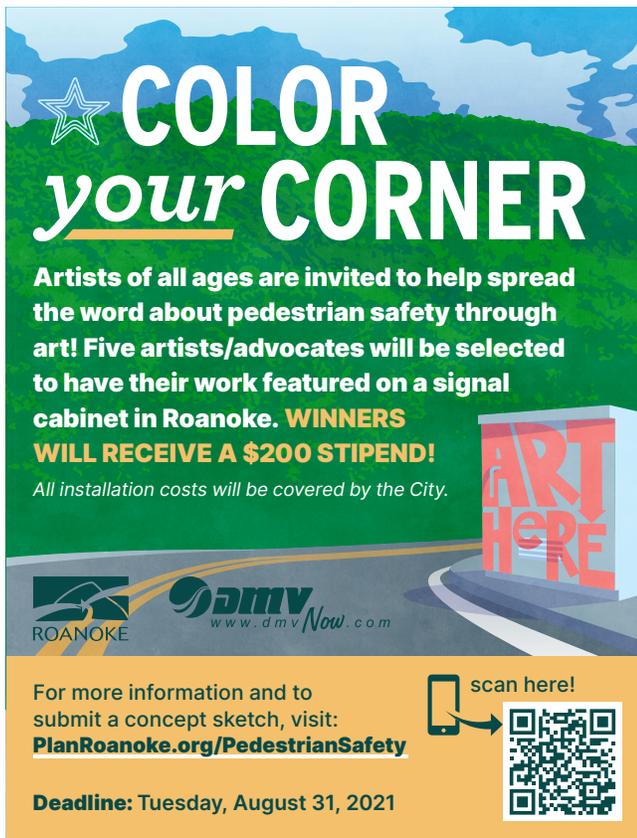


Winner from the 2020 art contest posing with the final art

Handout

A quarter-page handout was developed to promote the art contest, as seen in **Figure 6**. The handout was printed in house by the City and distributed by the Roanoke Arts Commission to partners and community members.

Figure 6: Art contest handout



Submissions

Initial submissions were rough sketches submitted through an online form that included contact information, the artist's preference for placement (northeast, southeast, downtown, etc.), a description of their artwork, and an opportunity to share about their pedestrian experiences in Roanoke.

Winners will have the opportunity to refine their sketch upon selection. Eligible selections were required to meet the following criteria:

- Original artwork
- Incorporates the message "No Need to Speed" in a positive way
- Highlights the diversity of Roanoke's neighborhoods and people
- Cannot mimic a regulatory sign
- No offensive wording or images
- No nudity or violence
- No promotion of any business or product

Each of the winners will receive a \$200 stipend to support their work.

Installation

The installation of the artwork will be fully paid for by the City. Winners will be asked to provide a final digital file of their artwork and the City will manage the printing and placement of the design. One piece of artwork will be installed in each quadrant of the city and downtown in summer of 2022.



PUBLIC RELATIONS

Partner Communications

Before the campaign started, the City established a list of nearly 90 partners to engage in the campaign, including public institutions and city departments, social service organizations, community-based organizations, faith-based organizations, and community hubs. The City sent the identified partners a DIY Pedestrian Safety Kit order form to make it easy for partners to order materials (postcard, poster, and/or yard sign). The City received 27 orders and delivered materials to each partner. The City also sent partners regular emails throughout the eight-week campaign and gave them the opportunity to be recognized on the campaign website.

Activities

Five emails were sent to partner organizations throughout the campaign. Each email included pre-written communications to share in their social media, e-newsletters, and websites, and was sent directly from City of Roanoke staff.

PARTNER ENGAGEMENT:

- 27 DIY Pedestrian Safety Kit requests
- 52 posters distributed
- 640 postcards distributed
- 163 yard signs distributed

Partner organizations included:

- Roanoke Valley Television (RVTV)
- Roanoke City Schools
- RIDE Solutions
- Roanoke City Police Department
- Roanoke Valley-Alleghany Regional Commission
- Black Lantern Inn
- Roanoke Public Libraries
- Greater Deyerle Neighborhood Association
- Southeast Action Forum
- Noble Neighborhood Watch
- Greater Grandview Neighborhood Association
- OSW, Inc. Neighborhood Organization
- FarmBurguesa
- Woodrow Wilson Middle School
- Noel C. Taylor Learning Academy
- Lincoln Terrace Elementary School
- Fairview Elementary School
- Monterey Elementary School
- Fishburn Park School
- Carilion Roanoke Memorial Hospital



EVALUATION

Traffic Speed Studies

City of Roanoke staff completed a traffic speed analysis to identify and prioritize locations to focus on in the No Need to Speed® campaign. The following ten corridors were selected:

- 9th St SE
- Liberty Rd NE
- Brandon Ave SW
- Melrose Ave NW
- Dale Ave SE
- Shenandoah Ave NW
- Franklin Rd SW
- Westside Blvd NW
- Jefferson St SE
- Williamson Rd NE

The City of Roanoke conducted pre- and post-campaign traffic speed studies at each location to evaluate the campaign goal of decreasing the 85th percentile speed by 5 (MPH). Traffic speed studies were also conducted during the campaign to analyze the impact of real-time feedback on driver's speeds.

The section below summarizes the results from the pre- and post-campaign speed studies. Data was collected in both directions on all priority streets with the exception of Melrose Avenue, which was undergoing construction at the time of the post-campaign speed studies, resulting in 18 total data points. One street, Brandon Avenue, underwent a lane reconfiguration during the campaign that reduced it from a with a center turn lane. The speed differential on Brandon Avenue was likely due to a combination of encouragement, education, and engineering.

Key Results: Pre-Campaign to Post-Campaign Traffic Speed Study Comparison

- There was very little change in 85th percentile speeds across all observed roadways
 - On average, the 85th percentile speeds decreased by 1 (MPH)
 - Exceptions include Brandon Avenue where there was an 8 (MPH) drop in both directions, southbound 9th Street where there was a 6 (MPH) decrease, and eastbound Shenandoah Ave where there was an 8 (MPH) increase in speeds
- The 85th percentile speed decreased on the majority of observed roadways
 - All but five study locations showed a decrease in the 85th percentile speed between the pre- and post-campaign traffic speed studies, as seen in **Chart 1**
 - 85th percentile speeds remained 6-8 (MPH) over the posted speed limit, as seen in **Chart 2**

Chart 1: Change in 85th Percentile Speeds, Before and After the Campaign

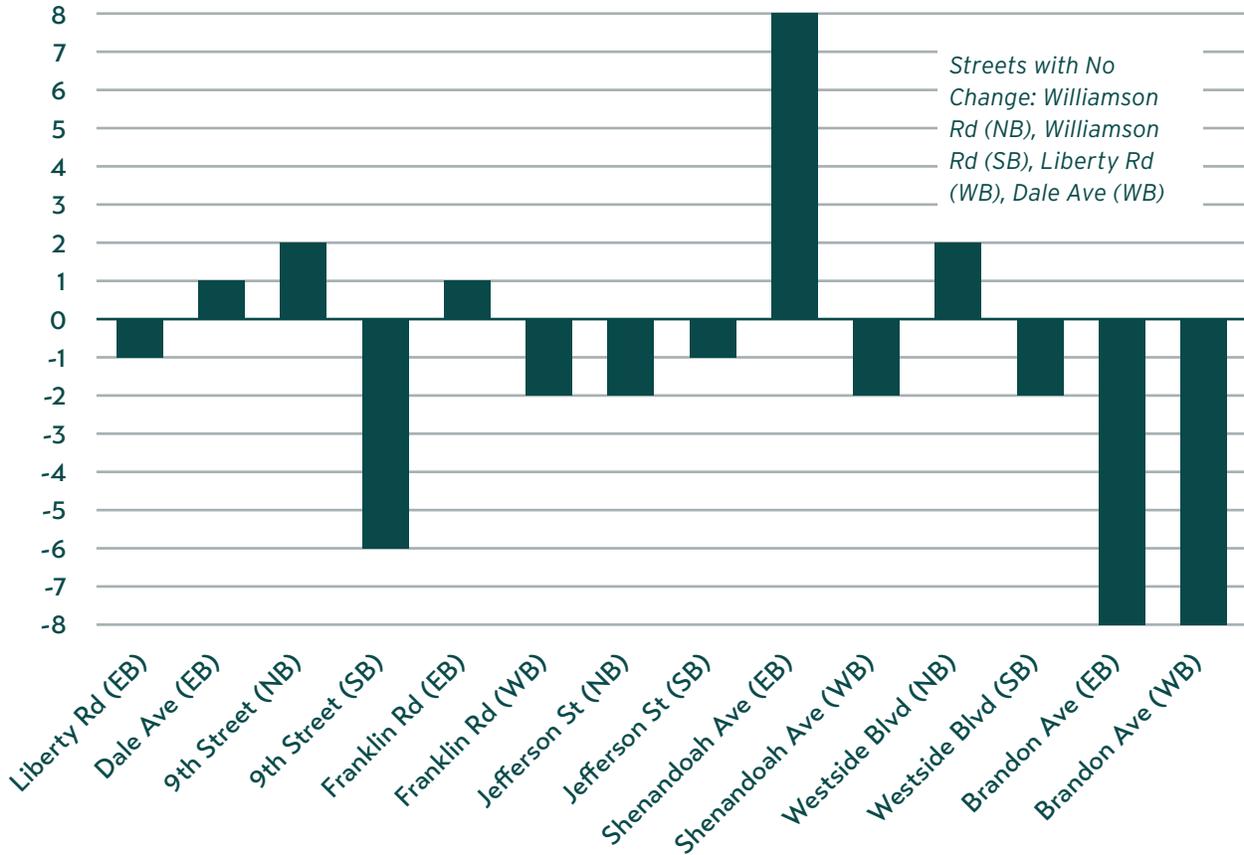
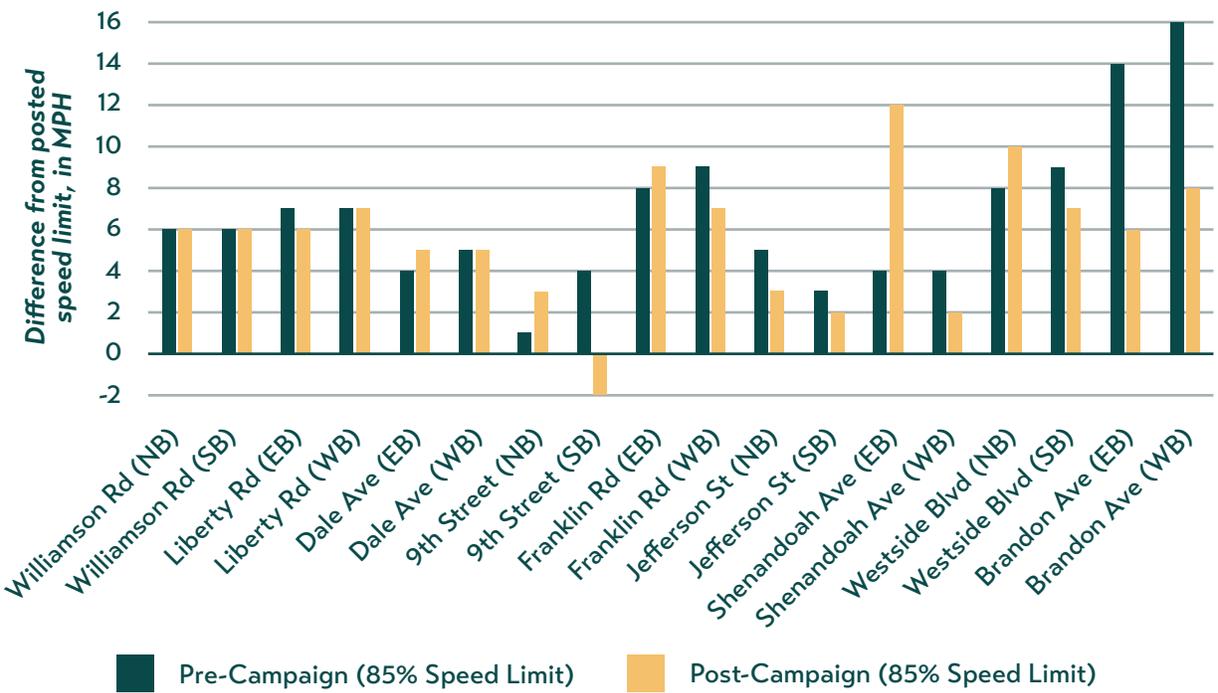


Chart 2: 85th Percentile Speed Compared to the Posted Speed Limit Before and After the Campaign



- When looking at two-lane roads versus roadways with three or more lanes, the results were varied
 - For two-lane roads, Liberty Rd and Jefferson St saw decreases in 85th percentile speeds. The other two-lane roadways, Shenandoah and Westside Blvd, had increased 85th percentile speeds in one direction, and decreased in the other direction
 - For roadways with three or more lanes, none of them had decreases in 85th percentile speeds in both directions, except Brandon Ave. The others either had an increase in one direction and no change in the other, or there was an increase in one direction and a decrease in the other
- The 85th percentile speed decreased on the majority of observed roadways
 - All but two study locations showed a decrease in the 85th percentile speed between the pre- and during-campaign traffic speed studies, as seen in **Chart 3**
 - However, the 85th percentile speeds remained an average of 5 (MPH) over the posted speed limit, as seen in **Chart 4**
- When looking at two-lane roads versus roadways with three or more lanes, there was a distinct difference between the pre- and during-campaign studies
 - Overall, the 85th percentile speeds decreased on all 2 lanes roads, with the largest decrease on Liberty Rd, in both directions. The other 2 lane roads (Jefferson, Shenandoah, and Westside) had small decreases in 85th percentile speeds, but only in one direction, while the 85th percentile speeds remained the same in the other direction
 - For roads with more than 2 lanes, the results were more varied. Williamson Rd saw a large increase in 85th percentile speeds in the southbound direction, but no change in the northbound direction. 9th Street had an increase in the northbound direction, but a decrease in the southbound direction. Dale Ave and Franklin Rd saw a decrease in 85th percentile speeds in the westbound direction, but no change in the eastbound directions. Melrose Ave saw a decrease in 85th percentile speeds in both directions

The section below summarizes the results of the pre- and during-campaign speed studies. Data was collected on all priority streets with the exception of Brandon Avenue, where no speed analysis occurred during the campaign, resulting in 18 total data points.

Key Results: Pre-Campaign to During-Campaign Traffic Speed Study Comparison

- There was very little change in 85th percentile speeds across all observed roadways
 - On average, the 85th percentile speed decreased by less than 1 (MPH)

Chart 3: Change In 85th percentile Speeds, from Before to During the Campaign

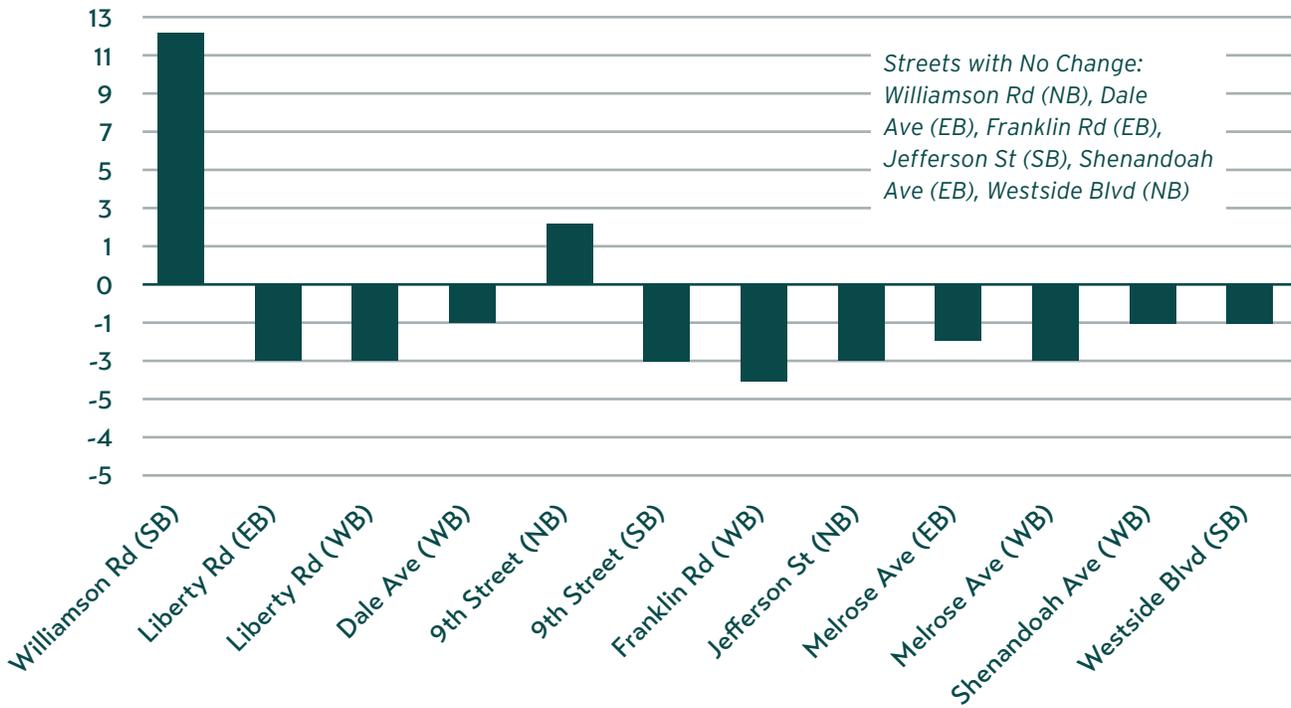
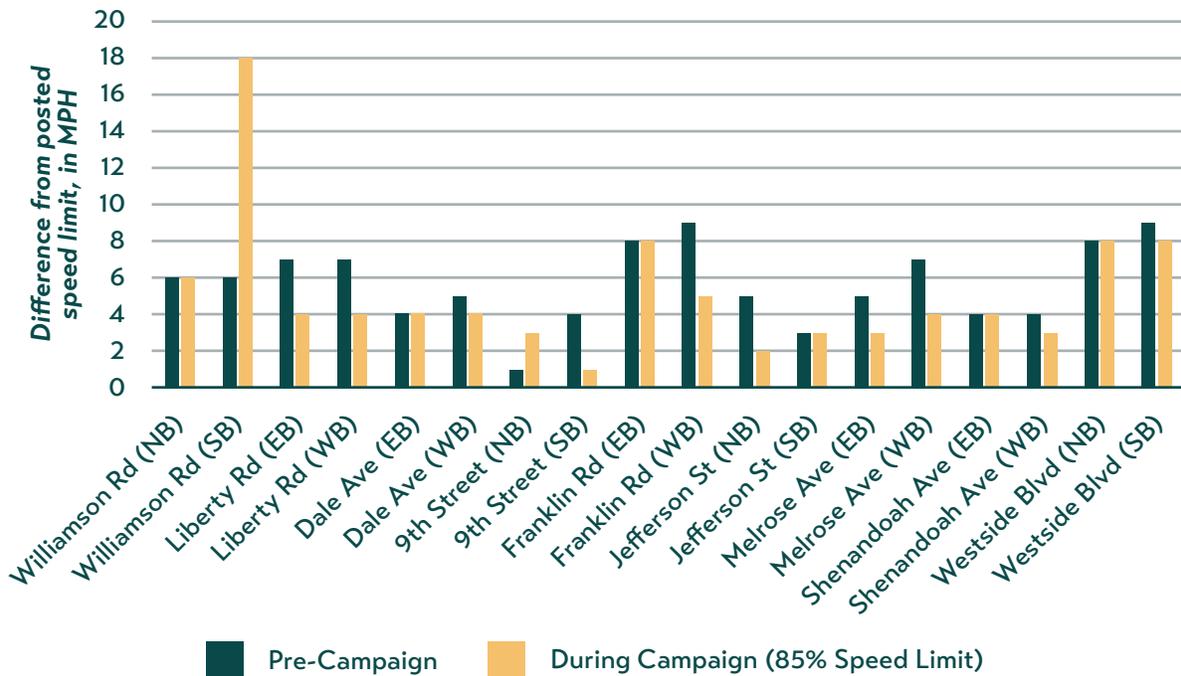


Chart 4: 85th Percentile Speed Compared to the Posted Speed Limit Before and During the Campaign



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 8 - March 22) and one after the campaign's active phase completed (August 18 - September 1). 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 geotargeted Facebook ads. To encourage survey participation, respondents were entered in a prize drawing to win one of ten \$20 Downtown Roanoke gift cards, provided by Downtown Roanoke Inc. 1,843 individuals responded to the pre-campaign survey and 800⁶ responded to the post-campaign.

Demographics

The majority of pre- and post-campaign survey respondents lived in the southwest quadrant of the city, followed by the northwest quadrant. Both surveys also had a majority of self-identified female respondents (a common occurrence in survey instruments). The survey primarily reached respondents ages 26-64, as seen in **Chart 5**. Survey respondents heard about the survey in a variety of ways which are outlined in **Chart 6**.

PUBLIC SURVEY ENGAGEMENT:

- 1,843 pre-campaign survey respondents
- 800 post-campaign survey respondents

⁶ 1,109 people responded to the survey, but 309 respondents said they had not seen the campaign before which disqualified them from completing the survey.

Chart 5: Age of Survey Respondents

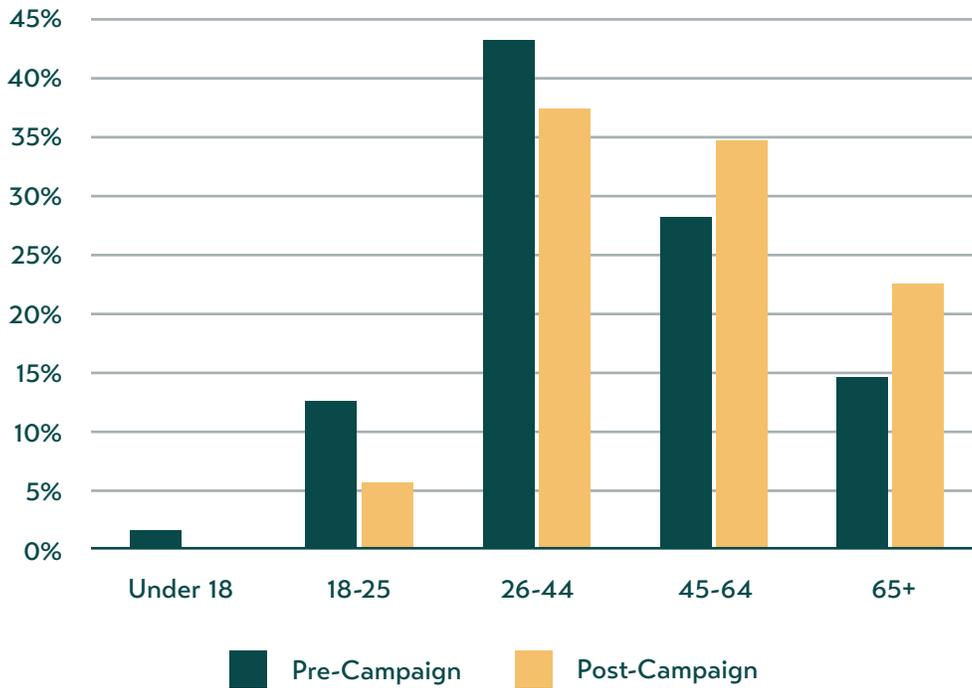
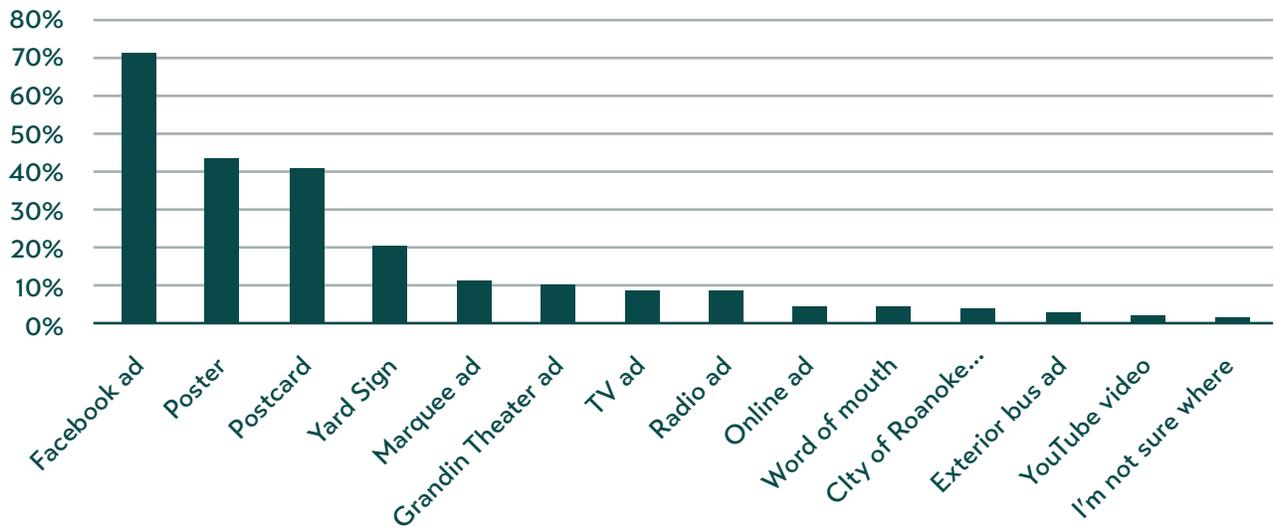


Chart 6: Where Survey Respondents Reported Seeing or Hearing about the Roanoke Pedestrian Safety Campaign (N=800)

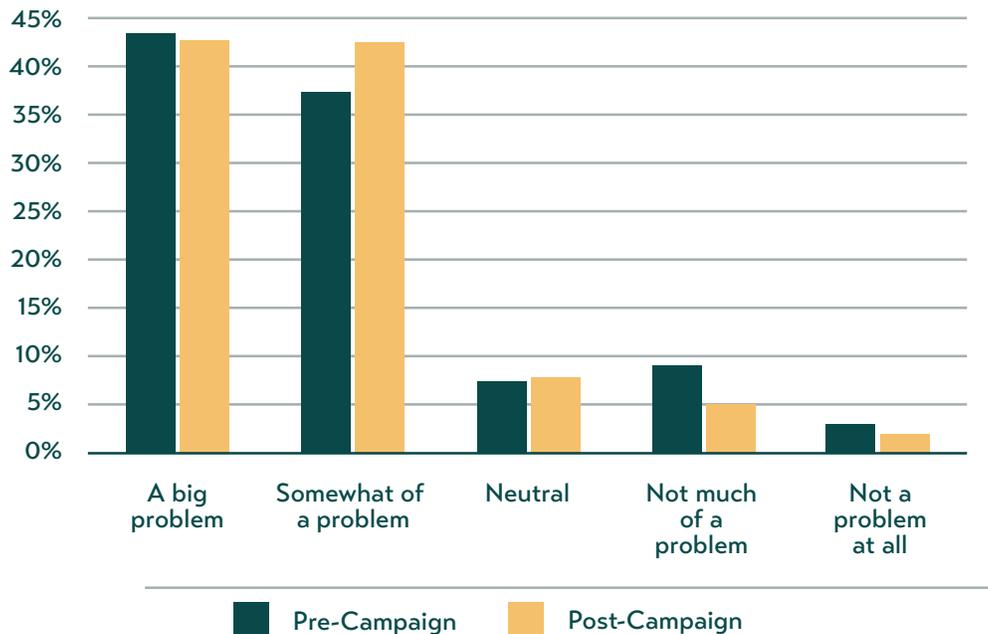


Perception of Speeding as a Pedestrian Safety Problem

Survey respondents were asked a question to evaluate the public **perception of speeding as a pedestrian safety problem** in Roanoke. The perception of speeding as a pedestrian safety problem in Roanoke increased by 4.5% from before to after the campaign. There was a noticeable increase in the percentage of respondents who report it as “somewhat of a problem” (increase from 37% to 43%) and a small decrease in the percentage reporting it as “not much of a problem” (9% to 5%), as seen in **Chart 7**.

The campaign achieved the goal of increasing awareness of speeding as a pedestrian safety problem, with a 4.5% increase in the number of people reporting it as “somewhat of a problem” or “a big problem.” However, with over 80% of people reporting speeding as a pedestrian safety problem in the pre-campaign survey, it was not possible to reach the DMV campaign goal of increasing awareness of this issue by 50%.

Chart 7: Where Survey Respondents Rated Speeding as a Pedestrian Safety Problem in Roanoke



Survey respondents were also asked to rate their level of agreement with the following statements:

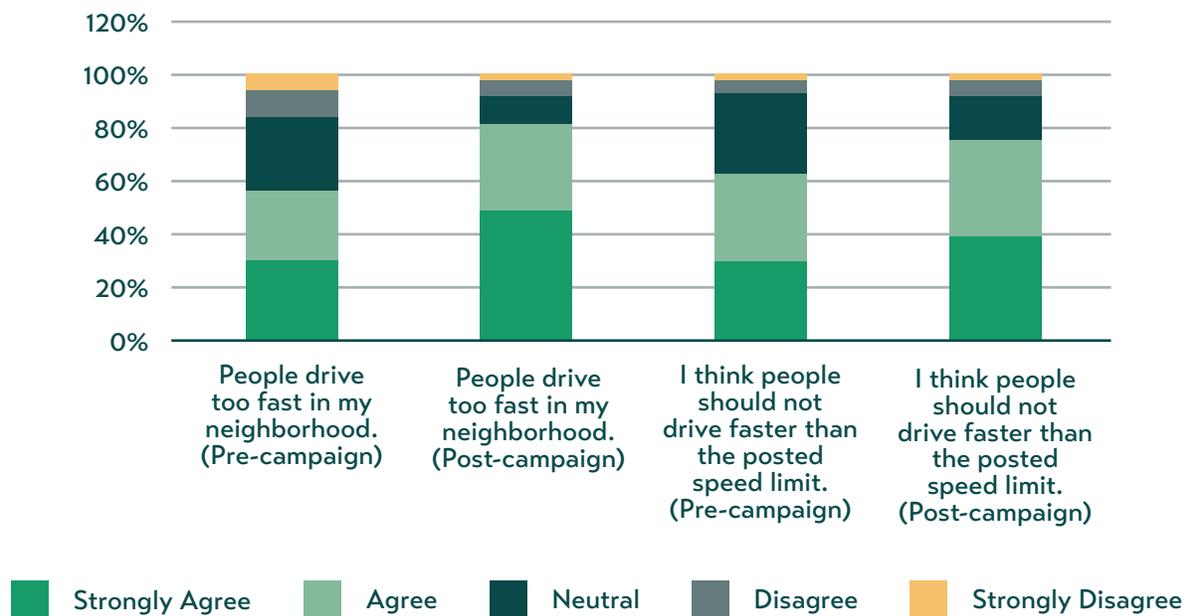
- People drive too fast in my neighborhood
- I think people should not drive faster than the posted speed limit

After the safety campaign, nearly 50% of respondents strongly agreed that people drive too fast in their neighborhood, compared to just 30% before the campaign. Additionally, the percentage of respondents who agree or strongly agree that people should not drive faster than the speed limit increased by nearly 13% following the safety campaign, as seen in **Chart 8**.

This shift suggests that respondents felt more strongly that speeding is an issue and that the speed limit should not be exceeded.

Respondents were asked how often they drive faster than the posted speed limit in the pre- and post-surveys. The percentage of respondents who report “seldom” or “never” driving faster than the posted speed limit remained constant around 63%, and those who report speeding half the time or more remained around 35%, both before and after the campaign.

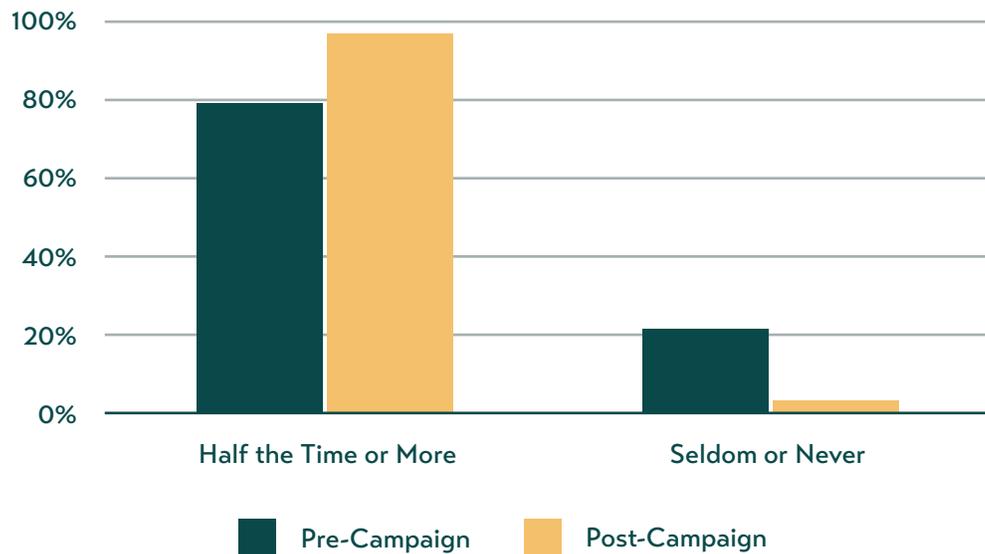
Chart 8: Where Survey Respondents Rated Their Level of Agreement with the Following Statements About Driver Behavior In Roanoke



Respondents were then asked how often they think most people in Roanoke drive faster than the posted speed limit. After the safety campaign, a higher percentage of respondents think that people drive faster than the speed limit (97% believe people speed half the time or more after the campaign, versus just 79% before the campaign), as seen in **Chart 9**. Post-campaign, only 3% believe people speed only seldom or never. **This shift in trend may suggest that respondents became more aware of speeding as a result of this campaign.**



Chart 9: Where Survey Respondents Reported How Often They Think Most People in Roanoke Drive Faster than the Posted Speed Limit



Respondents were given statements about driving behavior on their neighborhood streets in Roanoke and asked to rate their agreement. The statements included:

- Driving faster than 5 (MPH) over the posted speed limit will get me to my destination quicker
- Driving faster than 5 (MPH) over the posted speed limit increases the chances I will be in a crash
- When I drive at or below the speed limit, it helps make Roanoke streets safer
- Driving faster than 5 (MPH) over the posted speed limit makes driving more pleasant
- I speed because other drivers are speeding and it feels safer to go with the flow of traffic
- My spouse or partner does not care if I drive faster than the speed limit
- My closest friend does not care if I drive faster than the speed limit
- I am a person who drives at or below the speed limit when I drive
- If I regularly exceed the speed limit by more than 5 (MPH) over the next six months, I am likely to receive a ticket for speeding

Overall, there were mixed results in terms of the attitudes and agreement with the series of statements posed in this question.

Key Results

- There was some shift in attitudes toward the statement, “When I drive at or below the speed limit, it helps make Roanoke streets safer,” which reflects some **positive impact of the campaign in the recognition that driving speeds impact the safety of streets.**
- There was also a shift towards more agreement with the statement that, “I speed because other drivers are speeding and it feels safer to go with the flow of traffic,” revealing a **tension between beliefs that speeding is dangerous and driver lack of conviction that they are empowered to slow their speed no matter what others are doing.**

Partner Survey Results

At the end of the campaign, the City sent partners an online survey to learn how they engaged with the campaign and how the City could have improved collaboration. Eight partners took the survey.

Partner Survey Key Results

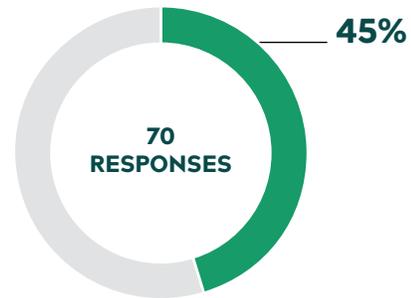
- The top three ways that survey respondents participated in the campaign were:
 - Promoting the campaign through social media
 - Promoting the campaign through an e-newsletter
 - Placing campaign yard signs
- According to the survey respondents, the top two most useful campaign materials that the City provided were:
 - The campaign press release
 - City of Roanoke social media posts
- **Three-fourths (75%) of respondents thought the campaign was very successful or somewhat successful at improving pedestrian safety in Roanoke.**

Reactions

Pledge Responses

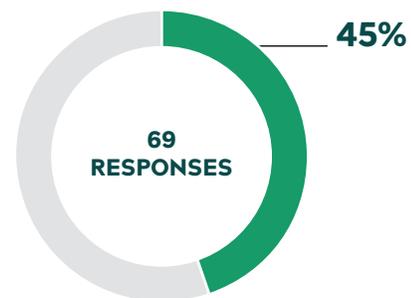
When taking the campaign pledge, participants had the opportunity to share why this campaign mattered to them. Comments were optional, and 154 of the 393 survey respondents took the opportunity to provide them. The main themes included:

Positive affirmations (e.g., “Thanks, awesome work”) / Agree with campaign



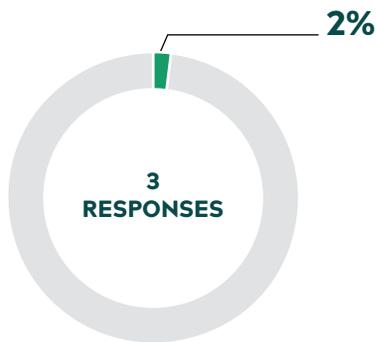
- Example: “It costs zero dollars to slow down. Zero dollars to protect kids playing in their neighborhood. Zero dollars to do your part to make sure that every pedestrian gets to their destination safely. Take the pledge and make a difference.”

Fear of a loved one getting seriously injured or dying / see people speeding a lot



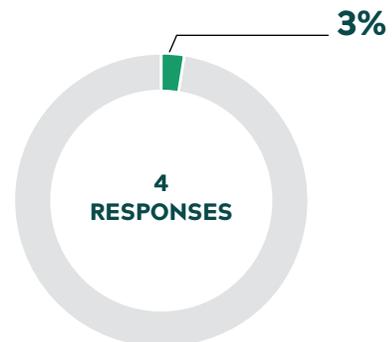
- Example: “Too many people speed through neighborhoods and risk hitting children that may be playing in the street or someone’s pet that may have gotten away from them.”

Motor vehicle operators are responsible



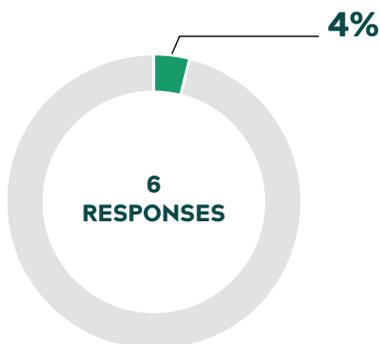
- Example: "It is incumbent upon motor vehicle operators to improve road safety. Programs to increase pedestrian and cyclist safety need to begin with that premise."

Police enforcement



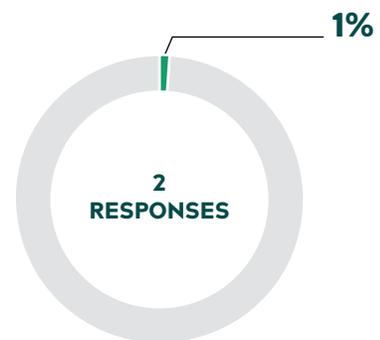
- Example: "I've witnessed people speeding over the speed limit and driving recklessly way too often. There need to be traffic light cameras and speed camera zones that tickets violators. This would make individuals more aware of their driving habits and be more responsible."

Need traffic calming measures/better pedestrian infrastructure



- Example: "I've almost been hit by people speeding on the hill at Carlton and Northview. Our elderly neighbors only walk in our cul de sac because they fear being hit on Carlton. Installing better signage and speed bumps would be a relatively cheap solution."

I drive slow



- Example: "I am a very safe conservative driver and always follow the speed limit to the point that I get made fun of by others and get called a "grandma" driver. I wholeheartedly believe that we all need to slow down and be more concerned about driving slower."

Pledge Takeaways

The campaign pledge helped to build individual commitment to reduce speeding by asking people to change their behavioral intention, that is, the intention to obey the speed limit. Sharing the pledge, encouraging participants to share the pledge, and sharing the comments people made about why the pledge was meaningful to them, created positive community norms and encouraged accountability.

The strong community response to the pledge indicates that this campaign's long-term community impact will be stronger than it would have been without the activity. The people who took the time to share a comment about why the pledge was meaningful to them are more likely to have a deeper commitment to the campaign goals because they chose to take time to share their thoughts, making an emotional investment.



OUTCOMES

Short-term and Intermediate Outcomes

Given the campaign goals, and building on the evidence review and behavior change theory, the following short-term and intermediate outcomes for the campaign were identified (see the logic model on **Page 9**):

- Short-term:
 - The community is aware of the campaign and that speeding is a problem
 - Drivers under the age of 25 are aware of the campaign and feel that the message is for them
 - Frequent drivers and men of any age see and hear the campaign messages several times and understand them
- Intermediate:
 - Individuals increase their intention to reduce their own speeding
 - Improved individual attitudes, norms, and behavioral control beliefs among priority audiences
 - Increased community awareness of speeding as a pedestrian safety issue

Short-term outcomes were achieved during the active period of the campaign through the paid media, earned media, and public relations work. Those efforts reached an estimated 93% of the population of the City of Roanoke, with emphasis on reaching the campaign's focus audiences, and with the goal of raising community awareness of the campaign and the issue of speeding. The post-campaign survey showed that more people

were both aware of the campaign and aware that speeding was a problem. The media analysis confirms that the target audience (young drivers, frequent drivers, and men of any age) did see the campaign more often.

Intermediate outcomes were achieved during the campaign through community engagement and outreach work. Community engagement was a key focus of the campaign. The evidence review concluded that strategies that help people hear about the campaign through a trusted personal relationship are much more likely to cause people to engage meaningfully with the campaign, which in turn makes them more likely to remember and act on the campaign into the future. Community engagement activities affected the intermediate outcomes in the following ways:

- **The campaign pledge** helped to build individual commitment to reduce speeding by asking people to change their behavioral intention, that is, the intention to obey the speed limit. Sharing the pledge, and sharing the comments people made about why the pledge was meaningful to them, helped to foster positive community norms. The number of people who signed the pledge, and the thoughtful comments they shared about why the campaign mattered to them, confirmed that the pledge enhanced their commitment to the goal.

- **The community ambassador program** helped to build collective commitment to reduce speeding and establish social norms through peer-to-peer conversations among residents. Ambassadors also helped to increase community awareness of the campaign through distribution of yard signs and other communications channels, increasing campaign visibility and reach. Nearly a hundred Roanoke residents voluntarily took on this community leadership role, affirming that the campaign resonated with the community.

- **The kickoff event and speed feedback initiative** helped to draw attention to the issue of speeding and communicate that there are negative social and personal repercussions to speeding. They also communicated that the City takes speeding seriously, and is willing to devote resources to addressing it. Attendance at the kickoff event, and viewership of the event recording, was strong, helping to raise campaign awareness early.

Overall, the community response to the engagement offerings was robust, showing that this is an issue people care about and that the community engagement strategies motivated people to act.



Projected Long-term Outcomes and Results

The following long-term outcomes were established (see the logic model on **Page 9**):

- Reduced speeding
- Reduced speed-related crashes and injuries
- Community norms and culture shift toward slower speeds and greater attention to pedestrians

Long-term outcomes and results are largely measured following the active implementation of the campaign. While some outcomes, such as reducing speeding and shifting community norms and culture, may be measured immediately following the campaign, reducing speed-related crashes and injuries rely on data from police reports which was not readily available. Furthermore, the long-term effects of the campaign will only be realized with ongoing activities and reporting in the coming years.

Several shifts were observed immediately after the campaign through the speed studies and the post-campaign survey. The speed studies demonstrated that the 85th percentile speeds decreased on the majority of observed roadways.

The public survey found a shift in community awareness of the issue of speeding. Post-campaign, over 96% of survey respondents believed that people in Roanoke drive faster than the posted speed limit at least half of the time. Additionally, the percentage of respondents who agree that people should not drive faster than the speed limit increased by nearly 13%. There was also a shift in attitudes toward the statement “When I drive at or below the speed limit, it helps to make Roanoke streets safer”, which reflects a positive impact of the campaign in the recognition that driving speeds impact the safety of streets.

Future Plans

The City of Roanoke applied for and received another grant from the Virginia Department of Motor Vehicles to develop a youth-focused pedestrian safety campaign in 2022. The campaign will build upon the work of the previous two campaigns to increase awareness of traffic safety such as speed and crosswalk compliance near schools.

9th St

JAMISON AVE

Every corner
is a
crosswalk

Every
corner
is a
cross-
walk

Designed by
Sumi Purviance & Eliza Kraus
Portland State University
City of Roanoke Transportation Center

