



Bike Alliance of Northwest Arkansas

ROLLING HILLS – APPLEBY SAFE STREETS PILOT PROJECT

Response to Frequently Asked Questions

What is the purpose of the project?

To pilot changes to the street design for one-year that make it safer for all users of the street (people driving cars, people riding bicycles, and people walking) to travel to where they live, work, go to school, or to restaurants and shops along the corridor.

What is the time period for the pilot project?

The project will be in place for at least a year in order to have sufficient time to collect data and evaluate its success. Vehicles speeds and volumes, bicycle volumes, and crash data will be collected and a post-installation survey will be available online once all elements of the project are completed later in December.

What was actually changed on the corridor?

Vehicle travel lanes were narrowed on Rolling Hills from 11½ ft to 10 ft

- Existing buffered bike lanes were upgraded to protected bike lanes on Rolling Hills
 - The 3ft painted buffer was relocated to create 10 ft car travel lanes
 - Bike lanes were increased as a result of moving the buffer to an average of 6½ ft (best practice)
 - Curb stops were installed in the painted buffer to provide a physical protection from vehicles
 - Green paint was used in high-risk conflict areas
- Existing standard bike lanes were upgraded to enhanced bike lanes on Appleby
 - White striping was refreshed in some locations and added in sections where it was missing
 - Ceramic-reflective buttons were installed to provide awareness of the bike lane to drivers
 - Green paint was used in high-risk conflict areas
- Enhanced and protected bike lanes were installed in Fiesta Square
- Crosswalks were painted along and across the corridor where pedestrian ramps existed
- Signage alerting to drivers of bike facilities was installed

How are the actual changes supposed to affect users of the corridor?

The pilot uses various design elements and speed mitigation techniques found in [NACTO](#) in order to:

1. Encourage people driving cars to drive at or below the posted speeds
2. Discourage people from driving cars in the bike lanes
3. Discourage distracted driving (e.g. texting while driving)
4. Connect the previous gap in bike facilities that existed in Fiesta Square
5. Create a connected facility that allows people to ride bikes to and from the Razorback Greenway
6. Create safer conditions for children riding bicycles and walking to and from Butterfield Elementary
7. Make it safer, and more comfortable for people to walk on the sidewalks along the corridor
8. Make it safer for people walking to cross Appleby where only pedestrian ramps previously existed

Why make changes to the corridor?

The Community:

One of the biggest concerns voiced by the community during the discussions over connecting Rolling Hills to Crossover was the safety of all street users- people driving cars, riding bikes, and walking. Speed and volume studies were done that showed a problem with speeding. Additionally, the community felt that the bike lanes were being underutilized because of vehicle speeds and people frequently driving in the bike lanes. The community also reached out to BikeNWA for help.

The City of Fayetteville:

The city adopted the [Fayetteville Mobility Plan](#) in 2018 which lays out goals and objectives for mobility improvements in the community.

- On-street bike facilities and pedestrian projects were the top two priorities from public input (pg. 4-5)
- The top strategy identified during planning workshops was to “improve low-stress neighborhood bike routes connecting to the trail system” (pg. 5-3)
- It directs the city to “expand dedicated and comfortable bicycle facilities, prioritize a walk-friendly environment, provide multiple transportation options, and provide pedestrian safety (pg. 2-3)
- It directs the city to use the latest [NACTO](#) guidance (pg. 5-4)
- It directs the city to “prioritize school access and safety” (pg. 5-8)
- It adopts the “Contextual Guidance for Selecting All Ages & Abilities Bikeways” which details the selection of the kinds of bike facilities to implement (pg. 5-17)
- It states that streets like Rolling Hills and Appleby that are “Neighborhood Links” “...must provide safe accommodation for all users” (pg. 6-12)
- Designates design features like narrowing travel lanes, traffic taming interventions to further manage vehicle speeds, utilization of high visibility crosswalks, providing buffers of at least 6’ between car travel lanes and sidewalks, and the city must have designated marked and/or protected bike lane facilities (pg. 6-13).

BikeNWA’s Mission:

Our mission is to educate, inspire, and activate the Northwest Arkansas community to support the creation of a world-class all ages and abilities network of bicycle infrastructure in order to increase the number of people riding bicycles. Although we are clearly focused on people riding bikes, we care about the safety of all street users. It is a fact that implementing bicycle infrastructure creates safer conditions for all street users. People driving cars are safer because: a) the facilities encourage people to drive speeds at or below the speed limit, b) there is an increased distance between moving vehicles and people walking on the sidewalk, and c) reduced vehicle speeds make it safer to cross streets because of increased sight lines and lower speeds.

What was wrong with the wide vehicle lanes on Rolling Hills?

The lanes were wider than necessary for a 30-mph street. You can frequently find 11 ½ ft lanes on streets that have 45 and 50 mph speed limits (like HWY 265/Crossover). The wide lanes that existed previously encouraged speeding. The average 85th percentile vehicle speed was as high as 8.4 mph over the speed limit on Rolling Hills and 12.8 mph over on Appleby. It is clearly a problem when people are averaging 38.4 mph on Rolling Hills with a 30-mph speed limit and driving 37.8 mph on a 25-mph street like Appleby.

Why do we need to encourage people driving cars to slow down on this corridor?

To increase the safety of people driving cars, riding bikes and walking. For the average pedestrian the [chance of death when hit by a car](#) going 40 mph is 45%, 35 mph is 31%, and 25 mph is 12%. The chances of people driving cars dying in a vehicle on vehicle collision also decrease the slower the vehicle is traveling.

Were the lanes reduced to 10ft to make the bike lanes bigger?

No, the lanes are 10ft wide (as are many other streets in Fayetteville) to encourage people to drive at or below the posted speed limit. This is one of the tools that can be used to encourage better driving behavior and is more

effective than speed limit signs. Speaking of, remember it is a “speed limit” sign and not a “you-have-to-drive-this-fast” sign. Slowing down from 35 mph to 30 mph (the speed limit) changes your travel time by about 20 seconds. The bike lanes could be reduced down to the minimum of 5ft. It is not a best practice, and it creates safety issues for one person riding a bike passing another. This is why 6 to 6½ ft is the preferred lane width.

You say the lanes are 10ft, but they seem even narrower?

No, they are not narrower, they are 10ft wide and within current street design standards. They may seem narrower to you because of the visual impact of the curb stops. People have expressed that this visual narrowing causes them concerns for the safety of people driving cars. This feeling of narrowness and a desire to avoid obstacles is exactly what causes people to be more cautious and drive slower. This makes you more alert which creates a safer street for all users. The more comfortable you feel driving down the street, the more likely you are to travel faster limit and to do things that are illegal, like texting and driving.

Are narrow lanes more dangerous than wide lanes?

No. You can [Google](#) this if you like or check out one example study [here](#). The problem is that for many years engineers designed streets to be wider than needed to try to make people safer when driving faster than the speed limit. Often streets were designed for people to travel more than 10 mph above the speed limit. The problem is that this encourages speeding and results in more crashes and more dangerous streets.

Why are the curb stops so close to the car travel lanes?

One reason is that the city required that the street sweeper be able to fit in the bike lane. They make adjustable arm street sweepers that can fit in tighter spaces and we have asked the city to buy this type the next time a sweeper is purchased. The curb stops are not within the 10ft travel lane. They do not present an actual safety hazard according to design standards. They are effective at discouraging speeding because of the fact that you are worried about hitting them. This slows you down and creates a more cautious driver. This makes it safer for all users of the street. If you remove them or relocate them away from the car travel lanes, then you are changing the perceived width of the street. The resulting 11 to 12 ft car travel lanes (similar to what was there before) will result in more speeding vehicles. Once again the community was against people speeding on Rolling Hills.

What are those things sticking up on the corners?

Those white plastic stick-looking things with reflective stickers are called bollards. They are there to prevent you from hitting one of the curb stops when turning on or off of rolling hills. They are also there to encourage you to slow down when turning. A common problem is people taking turns too fast which causes multiple safety problems to all road users. A tighter turning radius makes a person driving a car more cautious.

I am scared I am going to hit a curb stop!

Driving at a slower rate of speed will help you feel more comfortable with the curb stops. Try driving 30 mph or better yet, 25 mph. This will affect your drive time by less than 20 secs and increase everyones safety. This will double the chance that a pedestrian or cyclist will live if you hit them (lowers chance of dying from 20% to 12%). Are 20 secs worth doubling the chances of killing someone trying to cross a street?

I hate the look of those curb stops!

Yes, some people may not like the look of the curb stops. These are a temporary cost-effective material. A permanent implementation could use a different material such as a concrete curb. This would be prettier (no one complains about them now) and still provide separation and safety. Try not to focus on the aesthetics during this testing phase. There are plenty of places where orange barrels and cones are used during construction projects on streets for lengthy periods of time.

Why does Appleby have ceramic reflector buttons and Rolling Hills have curb stops?

Appleby lanes were already 10ft wide for most of the corridor and there was not a way to install the curb stops and the street sweeper still operate. Cars commonly drove in the bike lane. The buttons were the best thing that could be implemented to encourage people not to drive in the bike lane given the design constraints. These are not as

effective as curb stops and so data will be collected to see how successful they are at reducing people driving in the bike lane.

What about room for emergency vehicles?

Yes, 10ft lanes are adequate for emergency response vehicles. The curb stops that separate the bike lane from the car lane are mountable meaning that even a small car can pass over them to get out of the way of emergency vehicles without causing damage. The effective width of the street for emergency situations hasn't changed.

How do these changes affect the collection of trash?

The trash truck arms reach twelve feet and so it does not affect their operation.

What about mail delivery and UPS/FedEx?

The mail truck fits in the bike lane and uses it to deliver mail. The UPS and FedEx trucks can drive across the curb stops (that's why there are gaps) and deliver packages the same as before. Nothing has changed except for the driver's being more careful when pulling up to the curb.

Why do we need more bike facilities?

The city has adopted a mobility transportation plan that calls for increased mode share of biking and walking. You have to build infrastructure for this to happen. It also calls for a more equitable transportation network. This means safer conditions and connectivity for those walking, riding bicycles, and using the bus system. If you don't own a car (can't afford one or for just other reasons) and need to get to your job, or a doctor's appointment, or to school, why should you not be able to do so safely?

Why were the existing bike lanes not good enough?

The vehicle volume and speed and analysis on the corridor showed that the current bicycle facilities did not meet best practices. There also lacked a safe connection for people riding bikes between the east end of Rolling Hills through Fiesta Square and on Appleby to get to and from the Razorback Greenway. Appleby's bike lanes did not meet best practices either. Here's a [guidance document](#) (pg. 4) that shows what should be built according to number of lanes, vehicle speeds, and volumes that has been adopted by the City of Fayetteville.

Why not build shared-use paved trails?

The city just can't build trails everywhere like the Razorback Greenway. It would be prohibitively expensive. Also, because of the numerous curb cuts for driveways, homes, and businesses a trail would actually be less safe. People driving cars would have to look left and right for people walking on the sidewalk, left and right for bicycles coming from both directions, and then left and right for cars. You would need to do all of that so quickly before one of those users that you didn't see before gets to close. Additionally, what if you lived on the opposite side of the trail? How would you ride your bike safely down to Old Missouri or College Ave. to be able to safely cross at an intersection to get to the trail? We need bike facilities that are safely accessible for larger percentages of residents. One-way protected bike lanes are more equitable to the neighborhoods because they serve both sides of a street, just like vehicle lanes.

What is a protected bike lane?

One-way protected bike lanes are bikeways that are at street level and use a variety of methods for physical protection from passing traffic. These bike facilities- dedicates and protects space for bicyclists in order to improve perceived comfort and safety, eliminates risk and fear of collisions with over-taking vehicles, have a low implementation cost by making use of existing pavement and drainage (NACTO 2018).

What is an enhanced bike lane?

Appleby previously had standard bike lanes (from 4 to 5 ft wide) that consisted of a white stripe separating cars from bikes with sharrows painted periodically in the bike lane. We "enhanced" the bike lane with white ceramic reflective buttons spaces every 15ft and painted green paint in conflict areas (street intersections and commercial/high density multi-family driveways). The ceramic buttons are intended to provide a small "rumble

strip” effect when cars cross over into the bike lane. At night the reflectors are intended to encourage people to not cross over or drive in the bike lanes because the lanes are already 10ft in places we could not narrow them anymore and so we needed to do the best we could to increase safety for people riding bikes. This means encouraging cars to travel at or below the speed limit and to stay out of the bike lanes. The use of ceramic buttons is not considered protection due to them presenting no significant deterrent for cars to drive over them if desired.

We don't see people using them. What a waste! Will people even use them?

Yes, people use them. We have pictures and video. We believe over the course of the year that more people will use them. Data shows that if you build safe bike facilities people will utilize them. They said the same thing about the Razorback Greenway and now we have 10's of thousands of people on the Greenway. Be patient, its winter and really cold. We don't yet have that year-round commuting population.

How does this help people walking along the corridor?

The buffer that keeps cars from driving in the bike lane also makes it safer to walk on the sidewalk by creating more space between moving vehicles and people walking. There is now at least a 9 ft gap instead of less than 3 ft. in some cases. Think about how nice that space is to have when you are walking with your kids, have a young child on a tricycle, or a four-year riding her bike for the first time.

This project also included striping in cross-walks along the corridor wherever there were pedestrian ramps. We would have loved to have striped them at every street intersection, but because of ADA we were only allowed to do so where there were existing pedestrian ramps. We did not have the funds to install new concrete ramps. That would be permanent, and this is a pilot project.

We also added in crosswalks in two places to get across Appleby, one by the Razorback Greenway and an additional one by Washington Regional Hospital.

Who paid for the pilot project?

The materials and consultants that designed and managed installation of the project were paid for by a grant from the Walton Family Foundation to BikeNWA. City staff have participated in the project via meetings, on-site checks for quality and standards control, assistance with installation of signs, and deployment of speed and volume monitoring devices. The total project cost is approximately \$110,000.

Finally, remember that this is a pilot project!

Remember that this is testing something and there will be ample opportunities for feedback over the coming year. In fact, we will release a post-installation survey as soon as the pilot installation is complete. We are just waiting on a few more signs to be installed.

If you have any additional questions, please feel free to send an email to info@bikenwa.org. We will periodically make updates to this document.