

I-630 Trail and Hughes Crossing

The I-630 Trail, as part of the Tri-Creek Greenway, has the potential to #UniteLR and has been made stronger by ARDOT's work to it in 2020, but the Hughes trail crossing must be made safer.

I-630 Trail

Before the 2019-2020 I-630 widening, the "I-630 Trail" was an existing paved, eight-foot wide shared-use trail between Mississippi and Blue Bird Dr. immediately north of I-630 (Fig. 1). Its width, disrepair, connectivity, and accessibility issues limited its use to a Briarwood neighborhood recreational trail (Fig. 2). However advocates and planners have long considered it an opportunity to create an east-west active transportation corridor in the heart of Little Rock (Fig. 3). To ARDOT's credit, they used the I-630 widening project as an opportunity to make substantial improvements to the I-630 Trail, including rebuilding and widening the trail from 7-8 ft. to 10 ft. wide from Mississippi to ~620 ft. east of Hughes (Fig. 4).

I-630 Trail and Connectivity

Like many bicycle facilities in Little Rock, the I-630 Trail is underused because it doesn't connect to a larger bike network. The trail's western terminus empties onto a busy Mississippi/Rodney Parham/I-630 exit intersection and its eastern terminus exited into box stores and strip malls with no bicycle infrastructure or parking. Thankfully, dedicated City Park staff have been considering the I-630 Trail as part of a larger planned trail network, i.e. the Tri-Creek Greenway (Fig. 3; light green). The City's website outlines the Tri-Creek Greenway's extensive safety, equity, economic, and connectivity benefits and, to the City's credit, they have secured over \$3M for its construction.¹ More recently, the I-630 Trail was featured as essential in Metroplan's Central Arkansas Regional Greenways (Fig. 5).² This hub and spoke trail network will connect all of Central Arkansas with low-stress active transportation connectivity. The utility of the substantial investment in the Tri-Creek Greenway and the vision of the Central Arkansas Regional Greenway will depend, in part, on how well the I-630 Trail can be made to function as a regional bicycle and pedestrian trail.

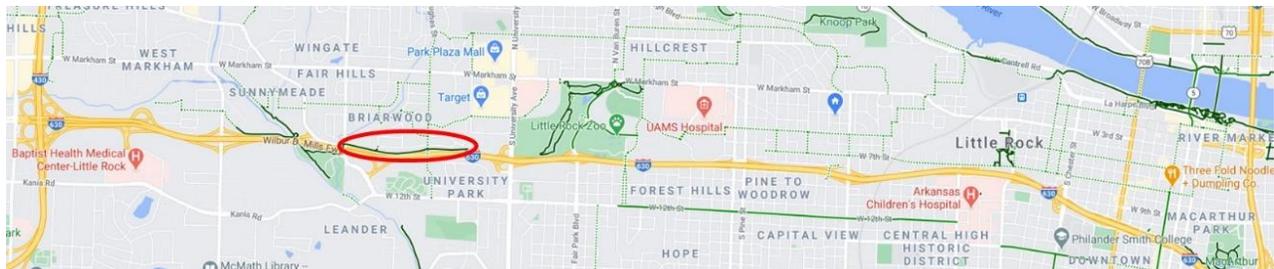


Figure 1. Location of the existing I-630 Trail. This corridor is particularly important because it offers an important east-west connection in central Little Rock where our built environment offers few alternative routes.

¹ <https://www.littlerock.gov/for-residents/bikeped-little-rock/projects/trails-sidepaths/tri-creek-greenway/>

² <https://www.centralarkgreenways.com/interactive-map>



Figure 2. Before the I-630 widening, the I-630 Trail was in disrepair and was bisected at Hughes and Blue Bird Dr. with car-scale signage that created a physical barrier to trail users. Pictured is the trail’s eastern terminus at Blue Bird Dr. which was outside of the scope of work and not remediated by ARDOT in 2020.



Figure 3. The I-630 Trail is an important part of planned connectivity in the City of Little Rock’s Trail Corridors, the adopted Master Bike Plan, and Master Trail Plan as well as a focus of the City’s “Midline” concept.



Figure 4. ARDOT rebuilt and widened much of the I-630 Trail in 2020.

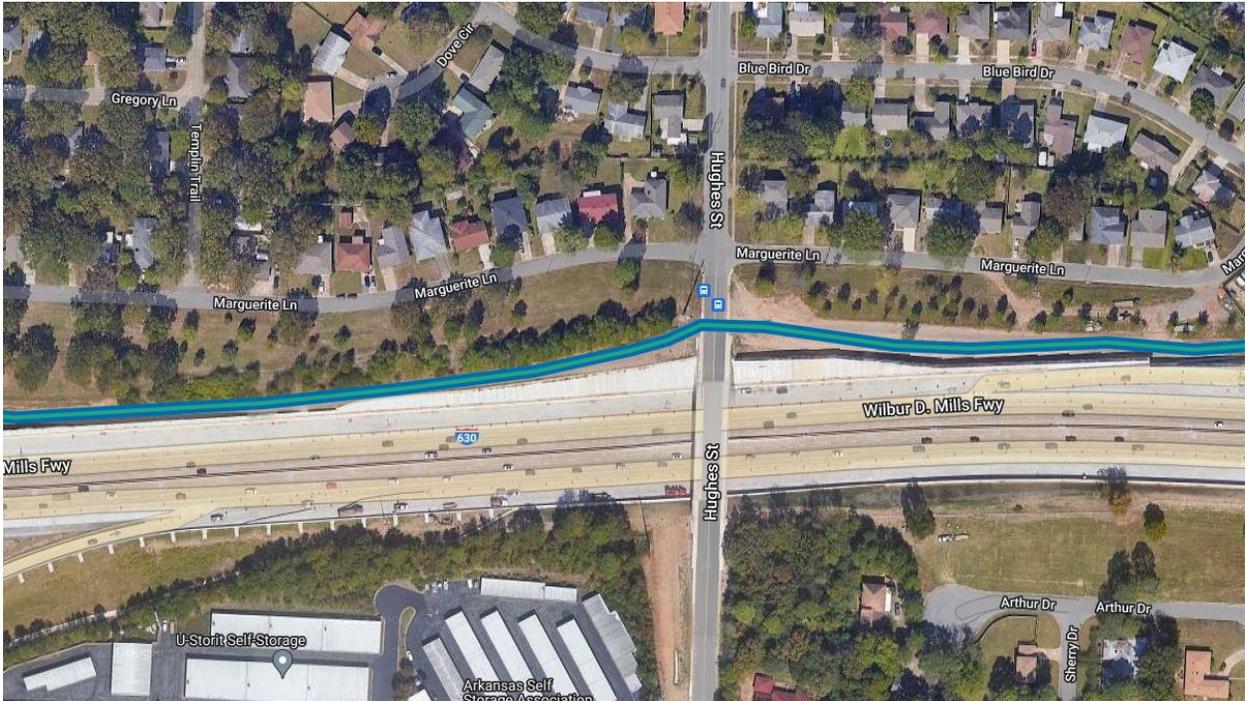


Figure 5. Metroplan’s Central Arkansas Regional Greenways create a core hub and spoke trail connectivity concept around which local trails and on-street bike connectivity will be based. The I-630 Trail’s Hughes crossing will have to be improved to make this vision a reality.

I-630 Trail and Accessibility

ARDOT's 2020 work on the I-630 Trail included accessibility improvements at Hughes Street, including removal of dangerous signage (similar to Figure 2) and realigning the trail east of Hughes to better align with the trail west of Hughes (Fig. 6). However the project did not include a safe way for trail users to cross Hughes and simply ends at Hughes with no ramps, crosswalk, or signage for trail users or Hughes motorists. Recent trail improvements, particularly the trail realignment, make the absence of a crossing where the trail meets the street more unexpected than it was earlier (i.e. recent improvements make trail users assume the trail now meets ADA requirements) and therefore more dangerous. It is conceivable that users on wheeled transportation (e.g. bicycles, scooters, rollerblades, and wheelchairs), reasonably expecting ramps at this trail crossing, could fall over the curb into the street and become incapacitated in the street or have mobility challenges that complicate getting out of the roadway. Fallen trail users on Hughes would be less visible to approaching car traffic.

Garver Engineering and ARDOT explained that they replaced the Hughes overpass with an overpass with different geometry. This new overpass shortens the sightlines between northbound traffic on Hughes and the trail corridor such that a midblock crossing would not be safe with their created trail alignment. They proposed that trail users follow the sidewalk between the trail and Marguerite Ln., cross at the ramps there, and follow the improved sidewalk back to the trail (Fig. 6). This solution is not intuitive nor used in this way in practice. BACA believes this response is not sufficient and leaves both Garver and ARDOT exposed to an ADA lawsuit.

Hughes Crossing Not Good Enough

Safety: As discussed above, improvements to the trail suggest but do not deliver a midblock crossing. Naive users might assume a ramped crossing here, fall into the street, and be invisible to vehicles while prone. Frequent wheeled users may choose to "hop" the curb, but in so doing, could crash in the roadway. Disabled users who require wheels for mobility may be unable to remove themselves from the roadway if they fall into it.



Figure 6. The I-630 Trail alignment A) before 2020 trail widening (Google maps) and B) after 2020 trail widening. ARDOT's 2020 work included realigning, rebuilding, and widening the trail, but ends in 6 in. high curbs on both sides of Hughes. The project needs a safe and convenient Hughes Street crossing.



Figure 7. The trail crossing, as explained by Garver, has trail users stop where the trail meets Hughes St., make a 90 degree right turn, walk or ride along a five foot wide sidewalk immediately adjacent to the curb and the traffic lane, make a 90 degree turn at Marguerite Ln. and cross the street at an unmarked crosswalk where vehicles have no stop sign, make a 90 degree turn onto the five foot wide sidewalk immediately adjacent to a curb that falls into vehicular traffic, and make a 90 degree turn back onto the main I-630 Trail. This gains only ~52 feet of sightline distance for northbound vehicular traffic, does not meet shared use trail design standards, and is not the behavior that the existing trail alignment manifests.

Regional Trail: As discussed above, the I-630 Trail will soon be part of a larger transportation corridor. This isn't simply part of a visioning trail plan, but a component of a trail that the City and granting agencies have committed substantial money toward and will be constructed within the next three years. Until fixed, this crossing will be a weak link to that >\$3M project.

Trail Design Standards: This crossing does not meet City of Little Rock or AASHTO Guide to Bicycle Facilities trail design standards. If the trail alignment is meant to track the Hughes sidewalk to the Marguerite Ln. intersection, then the trail geometry (90 degree turns) and sidewalk width do not meet local or AASHTO design standards. Shared use trails should have minimum turning radii and should be at least 10 ft. wide. If there is an injury in this space, agencies will need to explain the engineering judgement applied to this facility.

Complete Streets Ordinance: The City of Little Rock’s Complete Streets Ordinance (#21,029) states that infrastructure must be made to accommodate bicycle and pedestrian traffic when they are impacted by new projects unless one of five exceptions is met. There is an important bicycle and pedestrian need in this space that is not properly addressed by the project.

ADA: It is our understanding that whenever an agency changes or improves sidewalks or shared use trails, they are responsible for bringing those facilities up to ADA compliance standards within the spatial scope of their project. This crossing does not meet ADA accessibility standards and may expose agencies to legal risk.

Hughes Street: Existing Conditions

The following overview of existing conditions is to better contextualize possibilities for the intersection of the I-630 Trail and Hughes. At the I-630 Trail crossing, Hughes Street is a ~36.5 ft. wide, 25mph posted Collector with a double yellow line separating one lane of traffic flowing in each direction. There are no I-630 on- or off-ramps at Hughes. This section of Hughes serves a low traffic volume at 3000 vehicles per day (2800-3400 ADT since 2010);³ perhaps the lowest-stress I-630 crossing between University and I-430 for active transportation. Hughes traffic takes priority at all nearly all intersections between Markham and 12th Street; there are no traffic lights and the only stop sign is at Sandpiper. There is a continuous sidewalk corridor from 12th St. to Markham on the east side of Hughes but intermittent sidewalk connectivity on the west side; there are no bicycle facilities. Rock Region Metro Route 3 runs along Hughes; the only Rock Region Metro route to cross I-630 west of University Ave. The only non-single family residential land use on this section of Hughes is Little Rock Preparatory Academy and Christ Little Rock Church and School and the recently-opened LISA Academy. Hughes is a two lane street between 12th and Markham except for a left turn lane created to serve Little Rock Prep. Parking is allowed on both sides of this section of Hughes, but in practice parking is rare because of land use and ubiquitous driveways. Hughes St. may be the I-630 crossing with the greatest opportunity to create synergy between walking, biking, and transit west of University to facilitate car-optional transportation.

Existing Infrastructure/Existing Use

Authorities stated that trail users can use the sidewalk to cross at Marguerite Ln., but that is not the behavior encouraged by the trail alignment authorities created. While making site measurements, BACA witnessed five single or groups of I-630 Trail users cross Hughes. They *all* crossed where the trail meets the street (Fig. 6) instead of going to Marguerite Ln. (Fig. 7) but with no crosswalk or traffic calming protections. Considering the way people cross now analogous to a “desire path”, could a crossing be made safe here (e.g. Fig. 8)? Sightline distance for northbound Hughes traffic to the crossing center was 231 ft. for an unraised crosswalk or 243 ft. for a raised crosswalk, well within AASHTO recommendations for a 25 mph street.

³ <http://ahtd.maps.arcgis.com/apps/webappviewer/index.html?id=8deb09579210490bafb97bd03c3c0792>

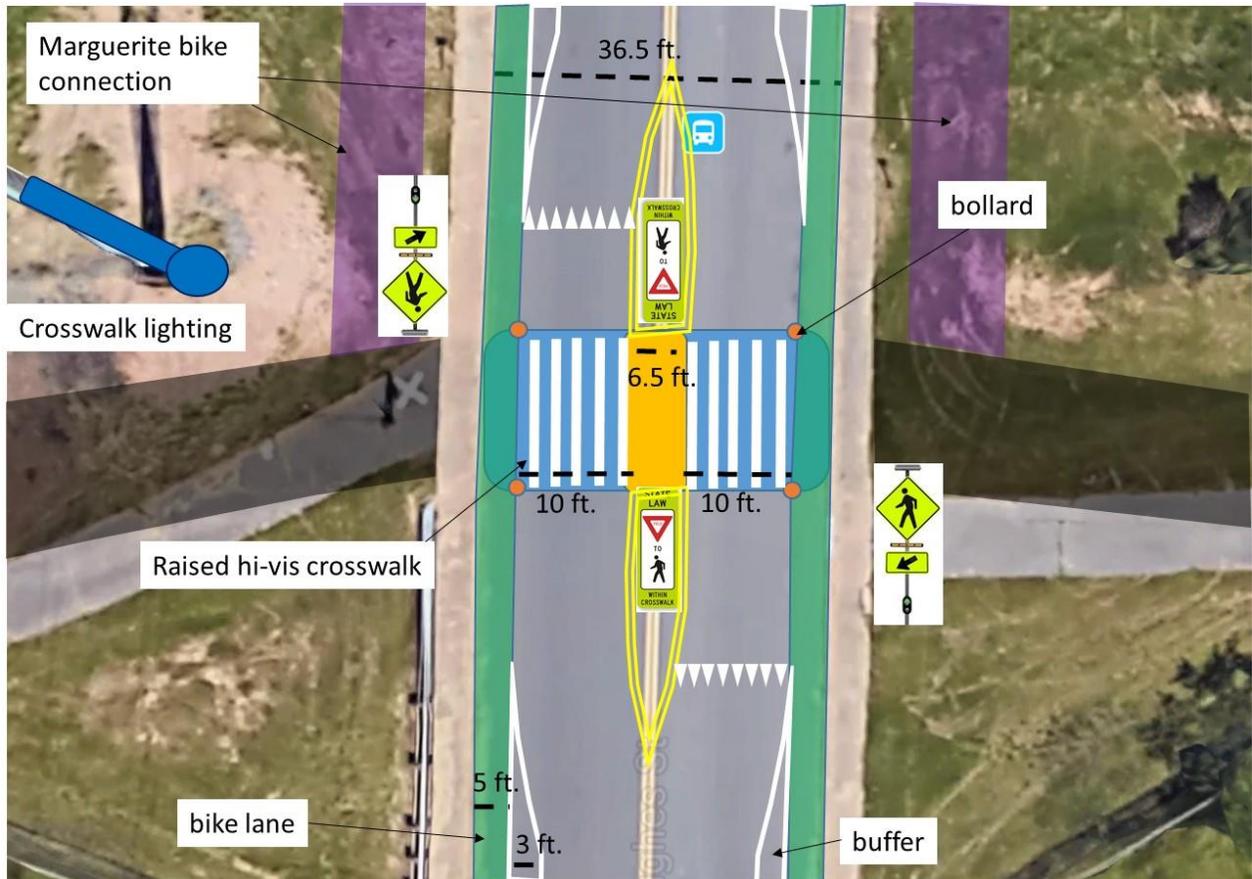


Figure 8. Acknowledging that trail alignment encourages trail users to cross here, crosswalk countermeasures could make this crossing safer, but likely not safe enough because of severe limits to sight triangles (Fig. 8).

Challenges of Each Crossing

Challenges of crossing at existing alignment (Fig. 8): The sound wall and guard rail created by the I-630 widening channelize sight triangles (Fig. 9), making it challenging for cars to see and yield to bike traffic. Acrylic sound barriers could address the sightline issue on the east side (Fig. 9), and motion-triggered RRFB signals could alert approaching vehicular traffic of trail traffic crossing Hughes.

Challenges of crossing at Marguerite Ln. (Fig. 11): Authorities propose trail users cross at Marguerite Ln., but this is not the behavior that their built environment creates. To actually make this the crossing, authorities would have to design the trail to function in this way (i.e. make the desire path cross at Marguerite Ln.). This would require rerouting the trail to Marguerite Ln. (Fig. 11). The topography on the west side of Hughes makes this more challenging than an aerial view would suggest. Agencies would have to cut into a berm on the west side of Hughes. The berm may block sightlines for northbound vehicles approaching the Marguerite intersection; because of this, it is not clear that this solution would create better sight triangles than a crossing at the existing alignment. Property acquisition would not be necessary; there is no private land ownership between Marguerite Ln. and I-630.



Figure 9. View from the Hughes northbound lane to the I-630 Trail entrances on the west side (A) and east side (B). Note that trail users in the crosswalk would be perfectly visible here (2 ft. high orange pail in (B) centerline), but users approaching the crosswalk would not be visible until shortly before reaching the sidewalk.



Figure 10. Acrylic sound barriers could be installed east of the Hughes crossing to increase sight triangles before the crossing.

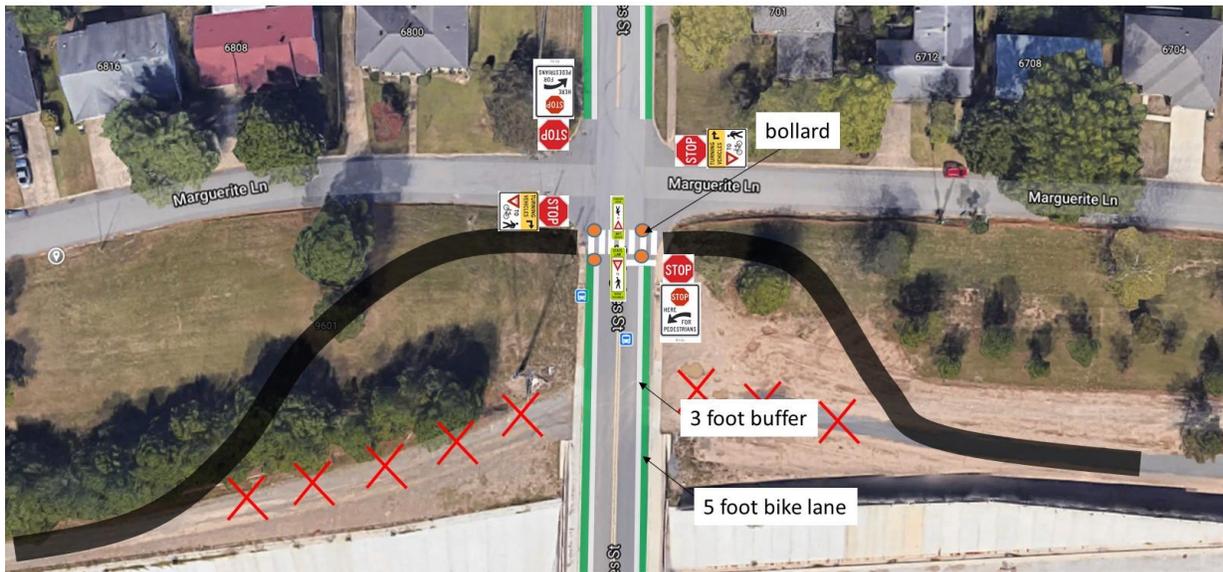


Figure 11. Overview of possible elements of this crossing.

Next Steps

BACA recognizes the work agencies have done to take a more bike-friendly approach to transportation. Thank you. This work is helping Arkansas and Little Rock be a safer, more equitable, and more economically vibrant state and city.

We are not traffic engineers; we want to get out of the way of agency professionals so that they can do their jobs. However, we see the jobs of agency professionals to create safe and convenient facilities for people walking, biking, and driving; this crossing does not reflect those priorities. This crossing is also inconsistent with the plans, ordinances, and guidelines of the agencies that constructed it. This crossing suggests there is room to improve how agencies work together to address the needs of people on bikes in our community.

BACA has made efforts to reposition ourselves as an ally to agencies. We are excited about our partnership with the City of Little Rock to secure Safe Routes to Parks funding. We *are* your community partner; we are here to give you a grassroots perspective on how your actions or inactions affect the bike community. It is in that spirit that we are only talking to the responsible agencies directly at this time about the Hughes crossing.

We would like to meet with agency professionals on-site and collaboratively discuss possible solutions for this crossing. We want to work directly and discretely with agencies to resolve this crossing. However, as Little Rock's only bicycle advocacy organization, it is our greater responsibility to make sure bike facilities are safe.

Thank you for your time and your efforts to make our community more bike friendly!