UofL Traffic and Pedestrian Improvement Project

2nd Street/3rd Street/Museum Drive Intersection and Brandeis Avenue Pedestrian Improvement Project

Belknap Northwest Campus
Jefferson County, Kentucky
KYTC Item No. 5-581; KIPDA ID: 2982

May 2024 Public Engagement Summary & Response to Comments

PUBLIC ENGAGEMENT SUMMARY

An in-person open-house public information meeting was held Thursday, May 9th, 2024, from 5:30 to 7:30 pm at the Swain Student Activities Center, Room W118, University of Louisville Belknap Campus. Display boards, project summary handouts, and comment sheets were available to share information (see Appendix). This engagement effort was supplemented with an online StoryMap which shared similar information presented at the meeting. Aside from project team members, a total of nine people attended.

The meeting and StoryMap were advertised via press release, media coverage, UofL websites, social media outlets, newsletters, email blasts, and yard signs outside of the meeting.

Comments were collected both online and on paper through May 23rd, 2024. Common feedback themes are summarized below. A total of 78 comments were received. Overall, comments were positive, mostly agreeing with the need for the project and welcoming bicycle and pedestrian safety improvements in this portion of campus.

Several suggestions were offered to further enhance these benefits, by far the most common suggestion was to protect the separated bike lanes either through bollards and enhanced markings or making them completely separated and further from the travel lane.

Quite a few were concerned the road diet would create more traffic flow issues than fix, particularly by creating a steady stream of slow-moving traffic that would make it more challenging to maneuver.

Others noted concern for the number of lanes and length of pedestrian crossings on Cardinal Boulevard and at Eastern Parkway. There were several concerns regarding pedestrian safety at Eastern Parkway, including length of crossing, signal timing, visibility, and pedestrian volume increase with the new ped bridge south of Reynolds Lofts. One comment suggested extending improvement slightly south to better direct these users to the marked crosswalk at the signalized intersection.

Other concerns and suggestions include:

- Bike/bus interaction where the bus pull-offs cross the bike lane.
- Considering either a pedestrian bridge or tunnel in lieu of signalized crossings.
- Traffic circulation during peak JCPS times along Cardinal.
- Access to the Playhouse loading dock via 2nd Street needs to be maintained.
- Signal phasing/timing, noting turning cars don't yield to pedestrians when they have walk sign and some of the crossings seemed lengthy.
- Turn lanes at the Oval and Speed Museum are not needed.
- Consider a 3-way stop at Speed Museum instead of signal.
- Loss of loading areas/access to University Pointe/Greek Row housing.
- Access to blue parking lot near the Ville Grill.
- Need for more parking in this portion of campus, a few suggested a parking garage.

RESPONSE TO COMMENTS

The project team thoroughly explored the common suggestions and considerations:

- **Protect the separated bike lanes either through bollards and enhanced markings or making them completely separated and further from the travel lane.**
    - There will be a separate multi-use path along 2nd Street between Brandeis and Cardinal.
    - A potential on-street bike lane on 3rd Street between Brandeis and Cardinal was considered; however, there is not enough width between the existing pavement to add, the template cannot be reconfigured to remove any of the turn lanes as the *Traffic Impact Analysis* determined they were necessary for acceptable levels of service, and the pavement cannot be widened in this segment due to potential utility, right-of-way, environmental (potential Section 4(f) impacts to the Playhouse property), and budget impacts. Phase II design will further explore potentially widening the east sidewalk to be a multi-use path between Brandeis and Cardinal, right-of-way, utility, and cost impacts will be considered.
    - For the remainder of the project, the project team explored potentially adding delineators or bollards, green paint on the bike lanes, rumble edge line strips, a separate bike lane behind the curb, and widen the eastern sidewalk to be a multi-use path. Inconsistency with other university, county, and state projects was a concern, potentially creating a precedence/expectation to be applied elsewhere. Other examples of similar treatments within the city were not identified. A meeting is scheduled with Louisville Metro for July 1st, the proposed template for their 2nd & 3rd two-way conversion project will be reviewed. Most of the considerations (delineators, bollards, paint) would create added maintenance issues and costs, needing to be refreshed or replaced frequently. As currently designed, the project is primarily a restriping project within the current roadway footprint, many of the considerations would require widening which would increase right-of-way, utility, environmental (potential Section 4(f)—*Stansbury Park & The Playhouse* and Section 6(f)—*Stansbury Park* impacts), and costs. The project will go through the state encroachment permit process, which will make the final determination on which treatments will be permissible on the state highway. Phase II design will further explore potentially widening the east sidewalk to be a multi-use path, right-of-way, utility, and cost impacts will be considered.
- **The road diet would create more traffic flow issues than fix**.
    - A *Traffic Impact Analysis* has been completed for the project and determined it will operate at an acceptable level of service for urban areas.
- **The number of lanes and length of pedestrian crossings on Cardinal Boulevard and at Eastern Parkway, visibility was also a concern at Eastern.**
    - The minor added crossing distance on Cardinal Boulevard was noted in the *Traffic Impact Analysis* and it has been weighed against acceptable vehicle delay. The crossing distance at Eastern Parkway is not increasing. The crosswalks will be marked and included in the signal phasing creating a safe pedestrian environment. Signal phasing and pedestrian crossing timing will be checked by Louisville Metro post-construction to ensure pedestrians have acceptable crossing time.
- **Bike/bus interaction where the bus pull-offs cross the bike lane.**
    - In addition to the potential bike reconfigurations discussed above, the project had previously considered adjusting the bike lane to route behind the bus pull-offs. However, there were concerns about sight distance and potential bicycle/pedestrian conflict for users

loading/unloading buses, and concerns for cyclists opting to take the shorter route (between the driving lane and bus pull-off) resulting in an unsafe crossing on an unmarked path, increasing potential bicycle/bus conflict. Potential bike/bus interaction has been explored by the project team.

- **Consider either a pedestrian bridge or tunnel in lieu of signalized crossings.**
    - A pedestrian bridge or tunnel were considered; however, they would be costly and have significant impacts.
        - The approach length to make a bridge ADA accessible would be infeasible in this highly developed urban area. Section 4(f) and Section 6(f) protected properties are adjacent to much of the corridor and would add significant coordination time and costs to mitigate any adverse impacts.
        - A shorter structure with stairs and an elevator would be costly, visually intrusive to the area, and where they have been installed elsewhere has shown that pedestrians often opt to take the shortest distance in lieu of climbing stairs, so this may actually encourage less safe crossing situation. Adjacent property impacts would still be a concern with the reduced footprint.
        - A tunnel was installed elsewhere on campus (Eastern at Speed School) in 1941and was closed in 2010 due to safety issues (potential flooding and unsafe human encounters) and lack of use. Pedestrians opted to take a shorter less-safe route by jaywalking. Construction of a tunnel would be costly and have drainage, utility, right-of-way, and environmental impacts.
    - Signals are warranted for traffic operations and create a driver expectation to encounter pedestrians in the marked crosswalks. The project team decided to keep the signalized pedestrian crossings.
- **Traffic circulation during peak JCPS times along Cardinal.**
    - The *Traffic Impact Analysis* considered operations during peak travel times and determined the project will operate at an acceptable level of service for urban areas. KYTC has committed to converting the 3rd Street segment from Cardinal to Hill prior to the construction of the project to further improve future operations.
    - The project team met with JCPS Manual High School's Principal, Michael Newman on June 17th, 2024. Manual will be impacted from the change in busing and their future traffic circulation plan for pick-up/drop-off is being routed behind the school (away from the project area where their previous bus loop was). Mr. Newman indicated no traffic impact concerns as a result of this project. He did note concern for the 2nd Street shared-use path making that route more desirable for cyclists, and potential future Metro project(s) that may incorporate bike lanes on 2nd Street further north and reduce potential on-street parking that they rely on.
- **Access to the Playhouse loading dock via 2nd Street needs to be maintained.**
    - The project team explored several options to maintain access to the Playhouse dock including adding an access point off of 3rd Street, creating a link to the adjacent business school lot across the multi-use path, making the multi-use path restricted to some vehicular access (garbage pickup, service vehicles, and crews), and creating a separated access drive parallel to the multi-use path.
        - A new access point on 3rd Street would likely have significant Section 4(f) impacts to the Playhouse property which would add time and costs to the project to mitigate. Multiple

pedestrian paths would have to be crossed to connect to the parking area on the east side of the building.

- Creating a tie to the business lot would create parking challenges since access would have been through a restricted red lot and would introduce a conflict point with pedestrians and cyclists on the multi-use path.
- Making the multi-use path restricted access would be challenging to control vehicular access: since this option would look more like a roadway, signage would not effectively restrict potential traffic from accessing, movable bollards could create traffic backups for the time it takes to move them, and a gate arm would similarly create backups and would require approved access. There was concern that unfamiliar vehicles would follow them onto the shared-use path. All of these potential options would introduce risk for crashes with pedestrians/cyclists, which are typically more severe crash types.
- The project team decided to create a separate access drive within the existing 2nd Street footprint to reduce impacts and potential pedestrian/cyclist conflict points. It will include signage deterring access and a turnaround area. Contrasting pavement options (pavers, stamped concrete, etc.) will be explored to further distinguish it from the roadway. A buffer area will be provided between the access road and shared-use path to eliminate potential pedestrian/cyclist conflict points. Bollards will be installed at the end of the shared-use path to prevent vehicular access.

- **Turn lane at the Oval and Speed Museum are not needed.**
  - Since the project is reducing two travel lanes per direction, to one travel lane per direction, a left-turning vehicle could create lengthy queues at this intersection. The left-turn lane will provide refuge and reduce potential for queuing and vehicular travel delay.
- **Consider a 3-way stop at Speed Museum instead of signal.**
  - Several intersection configurations were previously considered for the Brandeis/Speed Museum intersection, but not recommended due to capacity, costs, right-of-way concerns, or operations. The *Traffic Impact Analysis* determined the recommended improvements will result in acceptable operations. The signal is necessary to safely facilitate the heavy pedestrian movement to the west in this area.
- **Loss of loading areas/access to University Pointe/Greek Row housing.**
  - Loading areas, access to University Pointe, and Greek Row housing will all be maintained. While some areas will be reduced and travel distances may be minorly increased, access is still available. The amount of parking available in front of Greek Row will be maintained.
- **Access to blue parking lot near the Ville Grill.**
  - Access to the blue lot near the Ville Grill will be from Brandeis Avenue and bollards will be in place to protect the shared-use area east of the blue lot access. The existing 3rd Street access points will remain.
- **Need for more parking in this portion of campus, a few suggested a parking garage.**
  - This comment has been noted by the University and will be considered when exploring future infrastructure development in the area.

Other design changes recommended include:

- Reducing the Speed Museum entrance drive to further support the ongoing Speed Museum greenspace project. To accommodate buses, the proposed bus pull-off between Brandeis and Cardinal will shift further south to be in front of the Speed Museum, just before the Brandeis/Speed signal (the museum will need to direct school field trips to drop-off at the northbound bus pull-off to reduce pedestrian trip length). A bus pull-off would also be provided on the southbound side of 3rd in the vicinity. Bus pull-off locations will be coordinated with TARC during Phase II Design, KYTC noted TARC Route 94 around the campus is TARC's busiest route.
- The southern crosswalk of the Brandeis/Speed intersection will be removed to reduce potential left turn conflicts with pedestrians. The northern crosswalk is wider to accommodate the heavy pedestrian movement.
- Include bollards for bike/ped transition areas and striping plans.
- Include striping plans for tie-ins at either end of the project.
- Add estimated disturb limits and right-of-way lines.

PUBLIC MEETING MATERIALS

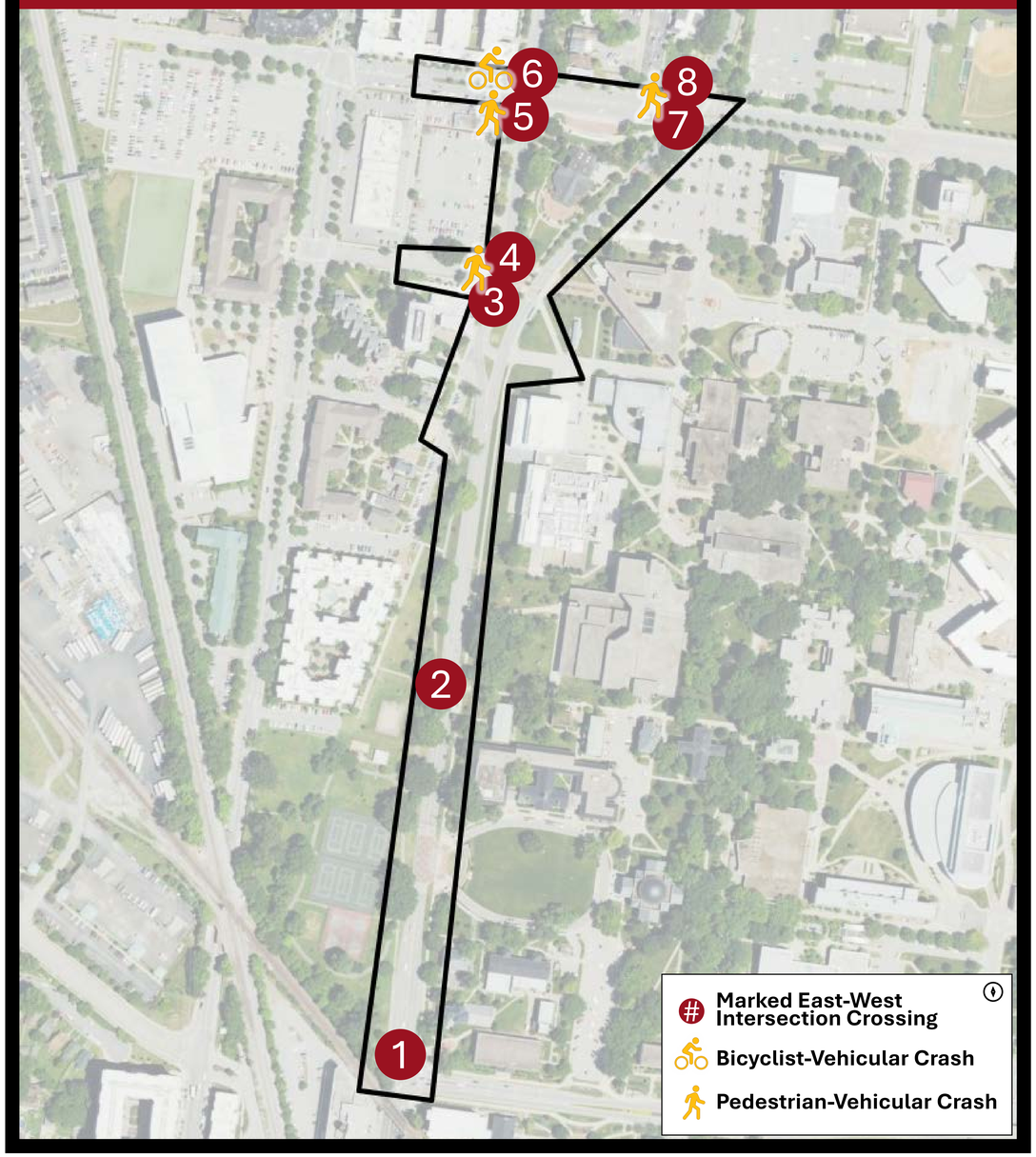
The Project

The **University of Louisville** is designing a project that would **improve vehicular safety and traffic operations** and **improve pedestrian safety and connectivity** on the northwest side of Belknap Campus, primarily along 2nd and 3rd Streets from Eastern Parkway to W. Cardinal Boulevard.

The eight marked east-west intersection crossings within the project area are frequently used by a high volume of students, faculty, and other pedestrians and cyclists.

During the five-year (2017-2021) crash review, three vehicle-pedestrian crashes and one vehicle-bicyclist crash occurred along 3rd Street.

REPRESENTATIVE PROJECT LOCATION



Project Recommendations

Several FHWA Proven Safety Countermeasures would be implemented to improve vehicular and pedestrian connectivity, flow, and safety.

Recommendations include:

- **Road Diet**
- **Left Turn Lanes**
- **Bike Lanes**
- **Intersection Realignment**
- **Dedicated Pedestrian Improvements**
- **Bus Pull-Offs**

3RD STREET | EASTERN PARKWAY TO EKSTROM LIBRARY

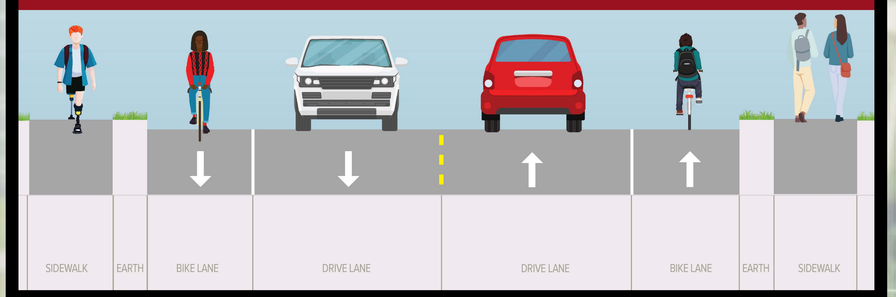
REYNOLDS LOFTS

NORFOLK SOUTHERN RAILROAD

STANSBURY PARK

UNIVERSITY POINTE

PROPOSED ROADWAY TEMPLATE



EXISTING RIGHT OF WAY

EXISTING RIGHT OF WAY

DECORATIVE FENCING

3RD ST

BUS PULL-OFF

BIKE LANES

EXISTING RIGHT OF WAY

BUS PULL-OFF

EXISTING RIGHT OF WAY

EASTERN PARKWAY

MCCANDLESS HALL

PATTERSON HALL

BRIGMAN HALL

DOUGHERTY HALL

ADMINISTRATIVE ANNEX

THE OVAL

BRANDEIS SCHOOL OF LAW

OPPENHEIMER HALL

BRODSCHI HALL

JOUETT HALL

EKSTROM LIBRARY

Note: Preliminary representative concepts and are subject to change. Not to scale. All improvements will be within existing right-of-way or University property.

3RD STREET | EKSTROM LIBRARY TO W. CARDINAL

PHI KAPPA TAU

DELTA ZETA

LAMBDA CHI ALPHA

BETA THETA PHI

SIGMA PHI EPSILON

GREEK WAY

SIGMA KAPPA

CHI OMEGA

TRIANGLE

UNIVERSITY TOWER APARTMENTS

UNITY PLACE

PROPOSED PARKING

VILLE GRILL

CLOSED TO VEHICULAR TRAFFIC

SIDEWALK

BRANDEIS AVENUE

CARDINAL BOULEVARD

EXISTING RIGHT OF WAY

BUS PULL-OFF

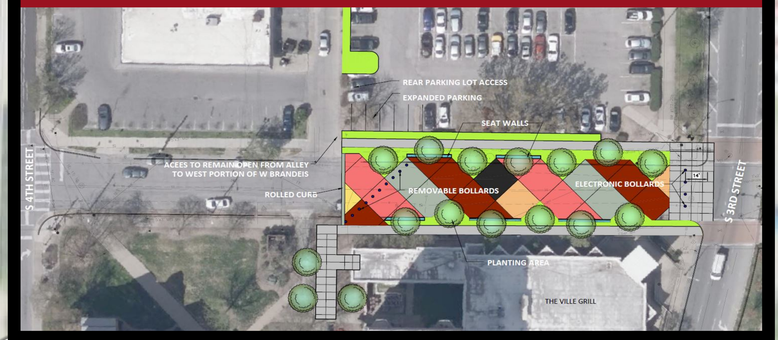
DECORATIVE FENCING

3RD ST

BIKE LANES

EXISTING RIGHT OF WAY

REPRESENTATIVE BRANDEIS PROMENADE



DECORATIVE FENCING

TWO-WAY TRAFFIC

BUS PULL-OFF

EXISTING RIGHT OF WAY

SPEED MUSEUM ENTRANCE SHIFTS

SPEED ART MUSEUM

THE PLAYHOUSE

WILTSHIRE AT THE SPEED

CLOSED TO VEHICULAR TRAFFIC / OPEN ONLY TO BICYCLISTS AND PEDESTRIANS

2ND ST

SPEED MUSEUM GARAGE

COLLEGE OF BUSINESS

Note: Preliminary representative concepts and are subject to change. Not to scale. All improvements will be within existing right-of-way or University property.

What do you think?

Please share your comments by **May 23, 2024**

Project information is also available online at:

https://arcg.is/ueaHm

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Project Information

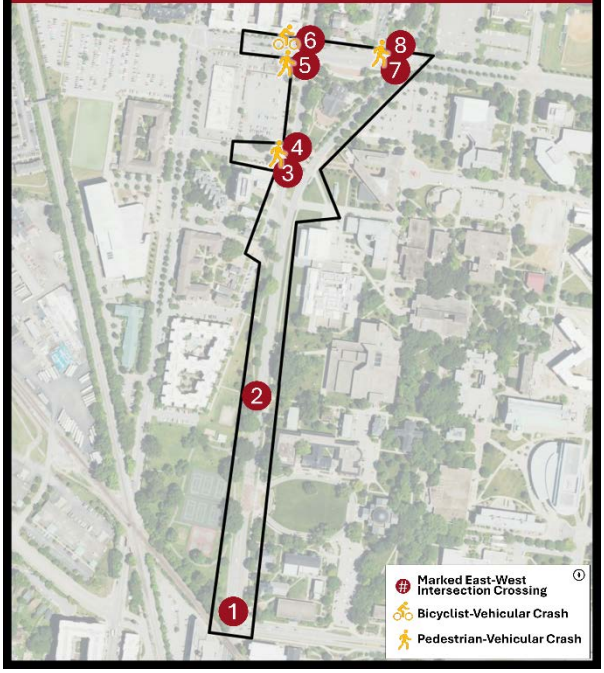
May 2024

The **University of Louisville** is designing a project that would **improve vehicular safety and traffic operations** and **improve pedestrian safety and connectivity** on the northwest side of Belknap Campus, primarily along 2nd and 3rd Streets from Eastern Parkway to W. Cardinal Boulevard.

East-west intersection crossings within the project area are frequently used by a high volume of students, faculty, and other pedestrians and cyclists. During the five-year (2017-2021) crash review, three vehicle-pedestrian crashes and one vehicle-bicyclist crash occurred along 3rd Street.

Several options were explored with key stakeholders to improve this area for university students, visitors, and the traveling public. Project recommendations will improve vehicular and pedestrian connectivity, flow, and safety. These improvements would drastically reduce opportunities for vehicle-pedestrian interaction, make pedestrians more visible to drivers, and have the potential to reduce vehicle-pedestrian crashes by up to 46%. All improvements would take place within the existing right-of-way or on university property.

REPRESENTATIVE PROJECT LOCATION



After reviewing project information and asking the project team members any questions you may have, please take a moment to share your thoughts with the project team. Forms may be left with us tonight or returned via email, mail, or online as identified below. Please be to share your comments with us by **May 23, 2024**.

Carrie Whitmore
PROJECT MANAGER

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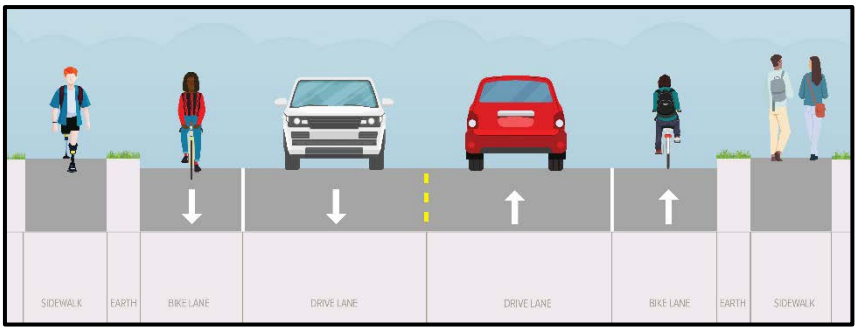
PROJECT INFORMATION AND COMMENT FORM ARE ALSO AVAILABLE ONLINE
https://arcg.is/ueaHm

SCAN ME

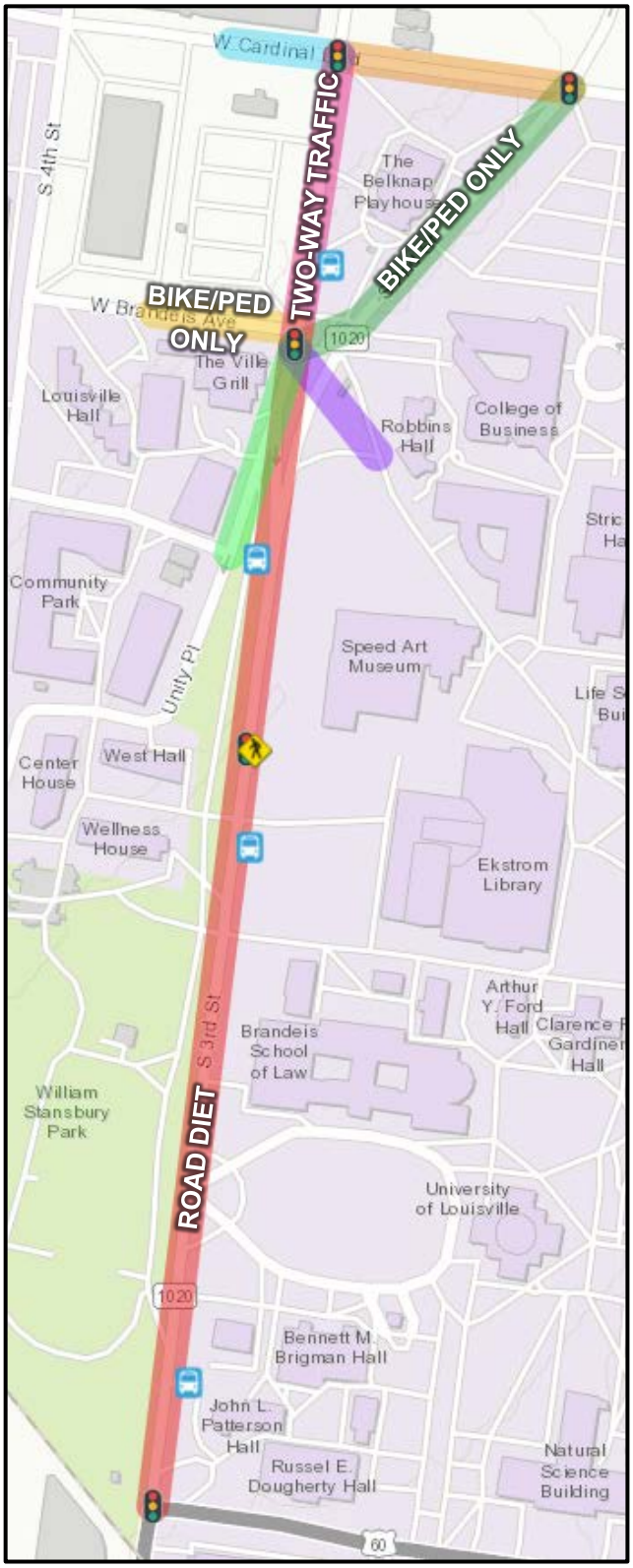
Recommendations include:



- **3rd Street Road Diet** from **Eastern Parkway to W. Brandeis Avenue.** The proposed roadway would include two travel lanes (one northbound and one southbound), with dedicated bike lanes, and sidewalks as currently exist.
- **Left turn lanes** would be provided **at Eastern Parkway, The Oval entrance, and Speed Museum garage entrance**.
- **Dedicated bus pull-offs** would be provided at several locations.
- **Decorative pedestrian fencing** would be added at along the west side of 3rd Street.
- A **right turn lane** would be added **from W. Cardinal Boulevard to southbound 3rd Street**.
- **W. Cardinal Boulevard left turn lanes** to southbound 3rd Street and northbound 2nd Street **would be extended.**
- **2ND Street from W. Brandeis Avenue to W. Cardinal Boulevard would be converted to a multi-use path** that would only serve pedestrians and bicyclists.
- **Northbound vehicular traffic would shift to the proposed two-way segment of 3rd Street between W. Brandeis Avenue and W. Cardinal Boulevard.**
- **Unity Place from 3rd Street would be closed to vehicles.** Access to Unity Place would be retained via 4th Street and Greek Way. **Parking in front of Chi Omega, Triangle, and Sigma Kappa would change from angled spaces to perpendicular spaces with turnaround area provided.** Existing angled parking spaces along Unity Place south of Greek Way would remain.

- **Speed Art Museum entrance would shift north** closer to the existing W. Brandeis Avenue pedestrian crossing.

- The **eastern half of W. Brandeis Avenue to 3rd Street would be converted to a pedestrian and bicyclist promenade**.



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Comment Form

Please return by May 23, 2024

Do you have any comments or questions for the project team?

If you would like a response, please provide your email address. _____

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SCAN ME