

2017

Armour Road
Complete Street

IMPLEMENTATION PLAN



NORTH
: KANSAS CITY
: *Virtually Urban. Supremely Suburban.*



INTRODUCTION

Over the past five years the Kansas City region has been advancing efforts to focus on active modes of transportation. In 2015, the Mid America Regional Council (MARC) adopted the region's first Complete Street Policy. As the policy was being developed, the City of North Kansas City emerged as a leader in the advancement of complete street planning and development through the North Kansas City Master Plan. One of the five themes of the Master Plan is to 'Build safe multi-modal network and the enhancement of the pedestrian scaled environment.' The development of a more complete street on Armour Road supports the goal of creating a mobility system that is well planned, interconnected and that offers multiple modes of transportation options and in turn have a positive impact on the overall quality of life of the community.

The North Kansas City Master Plan

The North Kansas City Master Plan is designed to represent the voice of the community and guide the growth of the City. After various meetings with business owners, young professionals, city officials and community members the consensus was that the City was optimally positioned to leverage current trends and market dynamics and ready for investment to achieve the vision for North Kansas City. A vision statement below was developed for North Kansas City from extensive stakeholder feedback.

The vision for North Kansas City is to support existing places and create unique and sustainable activity centers, with enhanced character that can be branded to grow economic development and support the community.

Themes for North Kansas City were formed through an open interactive process with the Advisory Committee. Under these themes were a series of principles that helped formulate policies for the Master Plan. On the right are a few of the themes and principles that are aligned with the development of a more pedestrian and bicycle friendly environment for North Kansas City.

One of the important market drivers identified during stakeholder interviews that influenced North Kansas City's evolution is its small-town character. People in the community have a strong sense of pride in their unique small town character. They are drawn to the safety and security of their community. They also enjoy its high walkability, especially in the downtown area. The downtown area contributes substantially to the character of NKC. It is a neighborhood and pedestrian oriented central business district destination. Armour Road makes up a significant part of the downtown, offering high visibility to businesses with large volume of traffic while maintaining a pedestrian character.

MASTER PLAN THEME #3

Establish memorable destinations to create authentic and diverse public spaces, while expanding the range of attractions and economic development opportunities.

- Develop compact, walkable, mixed-use neighborhoods centered on active places.
- Ensure people of all ages have access to a rich and vibrant public realm.
- Design corridor streetscapes with consistent materials to provide an enjoyable and safe experience for the pedestrians.



MASTER PLAN THEME #4

Build a safe multi-modal network and enhance the pedestrian-scaled environment.

- Maximize connectivity and safe pedestrian use of the street grid through direct connections among arterials, collectors and local roads.
- Create new and enhanced bike lanes where suitable to give commuters and the community a sustainable option for travel or leisure.
- Implement a parking management strategy that provides parking and circulation solutions throughout the city.
- Connect parks and open spaces to regional parks and destinations through bike and pedestrian trail systems.
- Improve streetscape character to promote active development uses and pedestrian activity.
- Improve physical connections to Downtown KCMO.



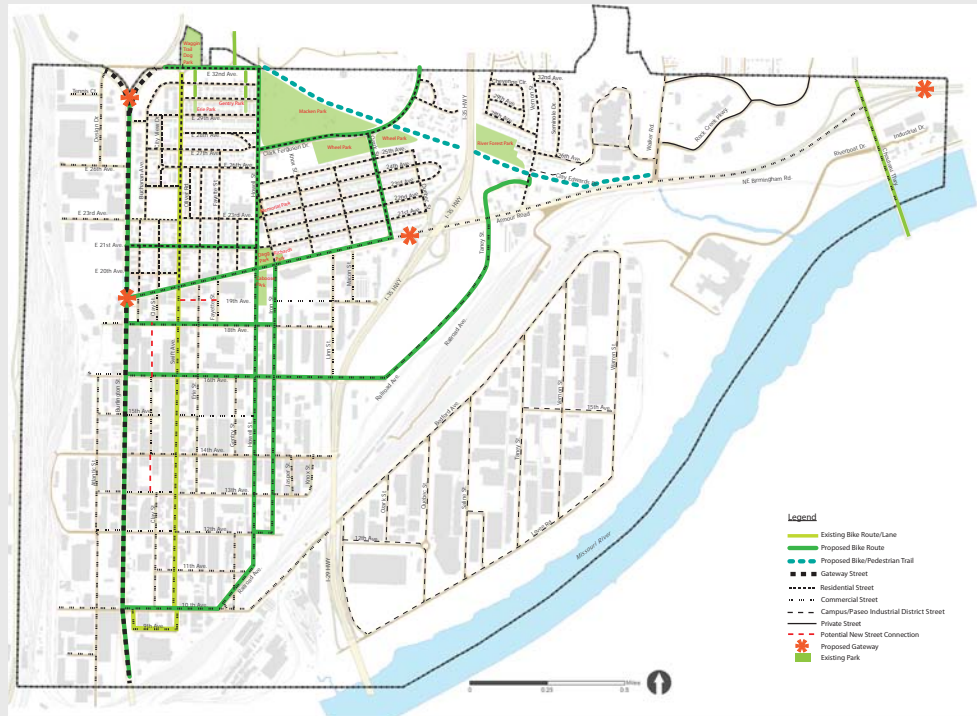
MASTER PLAN THEME #5

Preserve and enhance the local identity, uniqueness, and arts and culture assets of the North Kansas City.

- Maximize connectivity and safe pedestrian use of the street grid through direct connections among arterials, collectors and local roads.
- Create new and enhanced bike lanes where suitable to give commuters and the community a sustainable option for travel or leisure.
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- Connect parks and open spaces to regional parks and destinations through bike and pedestrian trail systems.
- Improve streetscape character to promote active development uses and pedestrian activity.
- Improve physical connections to Downtown KCMO.



The North Kansas City Master Plan’s mobility framework provides guiding principles for the character development North Kansas City wants for its community: a mobility system that is well planned, interconnected and that offers multiple modes of transportation options that can improve the overall quality of life of the community. The mobility framework addresses the appropriate design of the different types of streets throughout the study area with a focus on enhancing the experience of walking and biking throughout the community. It also maximizes opportunities for multiple mobility modes. Achieving the vision for the mobility system will require the provision of more and improved sidewalks, connected multi-use paths, and safe bike lanes. Landscaping can provide shade and generate visual interest to draw walkers down the sidewalks; that same level of visual interest can subconsciously slow down drivers. Pedestrian-friendly signage provides visual appeal and does not block sidewalks and walkways.



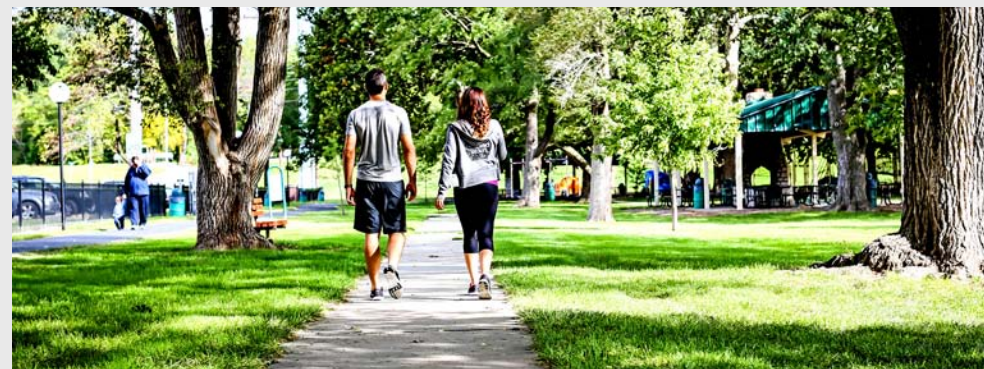
Open Space and Mobility Map

The downtown area of North Kansas City is highlighted as an area that has the capacity to stimulate short-term redevelopment to the ability and readiness of the area to support longer-term projects. This area also contains Armour Road, a very important connection and link. Armour Road represents a catalytic opportunity and a key part of realizing the community vision due to its existing energy and momentum. One recommendation of the North Kansas City Master Plan was to establish and implement a long-term street and opens space program. The City’s street network is laid out on a grid and should be designed to accommodate pedestrians, bicycles, transit riders and vehicles. Streets should be active urban spaces that connect major destinations and neighborhoods in a quality and experiential way, maintaining walkable block sizes and reflecting the character of the area.



Downtown Redevelopment Area

The North Kansas City Master Plan also provides a framework for Open Space and Trails Types. This framework provides guiding principles for sustainable open spaces and pedestrian and bicycle paths. Families communicated they wanted more a more walkable community with engaging public spaces that encourage social interaction between all types of people. This robust network of diverse open spaces connected to trails ensures community benefit by enhancing the community health and wellness. The North Kansas City Master Plan states that bike lanes/routes provide a mode of transportation that supports social interaction, provides physical activity and produces no pollution. The community of NKC would greatly benefit from building safer, improving, and connecting bicycle facilities.



The North Kansas City Master Plan identifies several key locations throughout North Kansas City that have great potential for projects that have the potential to dramatically transform the area and in turn catalyze further investment and public improvements in the surrounding areas. One of these areas is Downtown North Kansas City. Armour Road is the “main street” of the downtown, offering high visibility to businesses and a pedestrian environment. While the downtown has retained a viable commercial component, it lacks diversity in uses and has vacant lots, numerous curb cuts (leading into parking lots), and the pedestrian friendly area is limited to just a few blocks and it lacks support for other modes of travel besides the vehicle. Enhancements/improvements, wider sidewalks, more street trees, furniture, bike facilities, more trees and safer crosswalks are a few of the project needed to attract investment. These types of capital projects can maintain and encourage active pedestrian uses and in turn increase the hours along Armour Road and give more life to the street.

Armour Road plays a significant part in the fabric of North Kansas City. It is a critical connection to major employers and home to many restaurants, retailers, and offices. One of the recommendations stated in the ‘next steps’ in the North Kansas City Master Plan is to invest in the North Kansas City through catalyst public improvements such as streetscape improvements along Armour Road. The plan also highlights the need to build safe multi-modal network and the enhancement of the pedestrian scaled environment as one of the plan’s five key themes. The development of a complete street on Armour Road aligns with the City’s needs and goals for the expansion of multi-modal transportation network , future bicycle routes and enhance community character.



WHAT ARE COMPLETE STREETS?

Streets are a vital part of livable, attractive communities. Everyone, regardless of age, ability, income, race, or ethnicity, ought to have safe, comfortable, and convenient access to community destinations and public places—whether walking, driving, bicycling, or taking public transportation. But too many of our streets are designed only for speeding cars or creeping traffic jams.

A Complete Streets approach integrates people and place in the planning, design, construction, operation, and maintenance of our transportation networks. This helps to ensure streets are safe for people of all ages and abilities, balance the needs of different modes, and support local land uses, economies, cultures, and natural environments.

The National Complete Streets Coalition, which launched this movement in 2004, promotes the development and implementation of Complete Streets policies and professional practices. To date, over 1140 agencies at the local, regional, and state levels have adopted Complete Streets policies, totaling over 1200 policies nationwide.

Learn more at www.smartgrowthamerica.org/completestreets.

Complete Streets Stimulate the Local Economy

Making it easier for residents and visitors to take transit, walk, or bike to their destinations can help stimulate the local economy. People living in Dallas, TX save an average of \$9,026 annually by switching from driving to taking transit, and those in Cleveland, OH save an average of \$9,576. The total savings from biking, walking, or taking transit instead of driving can really add up across a city, ranging from \$2.3 billion in Chicago to an astounding \$19 billion a year in New York City. This “green dividend” means that residents can spend that money in other ways, such as housing, restaurants, and entertainment, that keep money circulating in the local economy.

And it’s not just big cities that see these impacts: in Wisconsin, economic benefits from public transit alone are \$730 million. Providing the infrastructure for people to get to work by walking, biking or taking transit can provide a boost to the economy in other ways, too: traffic congestion costs businesses in the San Francisco Bay Area over \$2 billion a year due to time employees spent stuck in traffic, and the total cost of congestion in the Los Angeles region tops \$1.1 billion each year. A Complete Streets approach has the power to recapture some of that cost.

Local businesses see many benefits in improving access to people traveling by foot or bicycle. When a bike lane was added along Valencia Street in San Francisco’s Mission district, nearby businesses saw sales increase by 60 percent, which merchants attributed to increased pedestrian and bicycle activity. Similarly, a study in Toronto showed that nearly three-quarters of merchants along Bloor Street expected that better bicycle and pedestrian facilities would improve business.

Implementing Complete Streets policies can have economic benefits even before the projects are finished. Road improvement projects that include bike and pedestrian facilities create more jobs during construction than those that are only designed for vehicles, per dollar spent. Adding or improving transit facilities is good for jobs, too. During the recent economic downturn, each stimulus dollar invested in a public transportation project created twice as many jobs as one spent on a highway project.

Better bicycle infrastructure can create jobs directly, too. Cycling adds over \$556 million and 3,400 jobs to Wisconsin’s economy through increased tourism, bicycle manufacturing, sales and repair, bike tours, and other activities. Similarly, there’s a \$90 million benefit to the city’s economy from Portland, Oregon’s bicycling industry, and the state of Colorado reaps a benefit of over \$1 billion each year from bicycle manufacturing, retail, and tourism.



Complete Streets spur private investment

The investment that communities make in implementing Complete Streets policies can stimulate far greater private investment, especially in retail districts and downtowns where pedestrians and cyclists feel unwelcome. In Washington, D.C., design improvements along a three-quarter mile corridor in Barracks Row, including new patterned sidewalks and traffic signals, helped attract 40 new businesses and nearly 200 new jobs, along with increases in sales and foot traffic. Lancaster, California added pedestrian safety features as part of a downtown revitalization effort, including a pedestrian-only plaza, wider sidewalks, landscaping and traffic calming.

The project spurred \$125 million in private investment, a 26% increase in sales tax revenue, and 800 new jobs, after a public investment of \$10.6 million. And in Mountain View, California, the addition of space for sidewalk cafes and a redesign of the street for pedestrians were followed by private investment of \$150 million, including residential, retail and offices, resulting in a vibrant downtown destination.

“The total savings from biking, walking, or taking transit instead of driving can really add up across a city, ranging from \$2.3 billion in Chicago to an astounding \$19 billion a year in New York City.”



Complete Streets raise property values

Complete Streets policies lead to networks of streets that are safe and accessible for people on foot or riding bikes, which in turn raises property values. In a survey of 15 real estate markets from Jacksonville, Florida to Stockton, California a one-point increase in the walkability of a neighborhood as measured by WalkScore.com increased home values by \$700 to \$3,000. For neighborhoods in the Washington, D.C. region, becoming one step more walkable on a five-point scale can add \$9 per square foot to retail rents and nearly \$82 per square foot to home values. This increase is amplified when walkable neighborhoods are near each other, demonstrating the value of networks of Complete Streets connected throughout a community.

The preference for walkable neighborhoods is likely to increase in coming decades, too, as today's young college graduates flock to downtowns and close-in suburbs. The population of college educated 25 to 34 year olds in these walkable neighborhoods has increased by 26% in the last decade, creating a workforce that can further add to economic growth in these communities.

It's not just sidewalks: bike paths add value to neighboring properties as well. One North Carolina neighborhood saw property values rise \$5,000 due to a nearby bikeway, while research showed that bike paths in Delaware could be expected to add \$8,800 to neighboring home values. Even design elements like street trees can raise property values. Having trees on the street in front of homes in Portland, Oregon added more than \$7,000 to selling prices.

Even with higher housing prices, walkable neighborhoods are good for working families. People living in communities that give them the option to walk, bike or take transit to their destinations often pay less in total housing and transportation costs than those who live in areas with lower housing prices that are more auto-dependent. When coupled with programs to maintain access to affordable housing, families of all incomes can realize the economic benefits of Complete Streets.

Incomplete streets put people at risk

Streets without safe places to walk, cross, catch a bus, or bicycle put people at risk. Over 5,000 pedestrians and bicyclists died on U.S. roads in 2008, and more than 120,000 were injured. Pedestrian crashes are more than twice as likely to occur in places without sidewalks; streets with sidewalks on both sides have the fewest crashes. While the absolute numbers of bicyclists and pedestrians killed has been in decline for the decade, experts attribute this in part to a decline in the total number of people bicycling and walking. Of pedestrians killed in 2007 and 2008, more than 50 percent died on arterial roadways, typically designed to be wide and fast. Roads like these are built to move cars and too often do not have meet the needs of pedestrian or bicyclist safety. More than 40 percent of pedestrian fatalities occurred where no crosswalk was available.

A recent study comparing the United States with Germany and the Netherlands, where Complete Streets are common, found that when compared per kilometer traveled, bicyclist and pedestrian death rates are two to six times higher in the United States. Complete Streets therefore improve safety indirectly, by encouraging non-motorized travel and increasing the number of people bicycling and walking. According to an international study, as the number and portion of people bicycling and walking increases, deaths and injuries decline. This is known as the safety in numbers hypothesis: more people walking and biking reduce the risk per trip.

Complete Streets help reduce crashes

Complete Streets reduce crashes through comprehensive safety improvements. A Federal Highway Administration review of the effectiveness of a wide variety of measures to improve pedestrian safety found that simply painting crosswalks on wide high-speed roads does not reduce pedestrian crashes. But measures that design the street with pedestrians in mind – sidewalks, raised medians, better bus stop placement, traffic-calming measures, and treatments for disabled travelers – all improve pedestrian safety. Some features, such as medians, improve safety for all users: they enable pedestrians to cross busy roads in two stages, and reduce left turning motorist crashes to zero, a type of crash that also endangers bicyclists.

One study found that designing for pedestrian travel by installing raised medians and redesigning intersections and sidewalks reduced pedestrian risk by 28 percent. Speed reduction has a dramatic impact on pedestrian fatalities. 80 percent of pedestrians struck by a car going 40 mph will die; at 30 mph the likelihood of death is 40 percent. At 20 mph, the fatality rate drops to just 5 percent. Roadway design and engineering approaches commonly found in Complete Streets create long-lasting speed reduction. Such methods include enlarging sidewalks, installing medians, and adding bike lanes. All road users – motorists, pedestrians and bicyclists – benefit from slower speeds.



Select Exerpts Active Transportation & Real Estate: The Next Frontier

- **Fifty percent of US residents say that walkability is a top priority** of a high priority when considering where to live, according to the Urban Land Institute's America in 2015 report.
- Values of properties within a block of Indianapolis's Cultural Trail **rose 148% over 6 years**.
- Property values along Dallas's Katy Trail have **climbed nearly 80% since it opened in 2006**.
- A street upgrade in Salt Lake City that removed 30% of on-street parking but improved crosswalks and sidewalks and added protected bike lanes found that retail sales **increased 8.8% (more than citywide increase of 7%) in the first six months** of the following year.
- Retail vacancies in Dunedin, FL **declined by more than 50% after opening** of the Pinellas Trail.
- Properties within 1/4 mile of the Radnor Trail, part of Philadelphia's Circuit regional trail network, were **valued on average \$69,000 higher** than other area properties.
- Minneapolis's Midtown Greenway has catalyzed more than \$750 million worth of new residential development. Property values along the corridor have **increased by over 90 percent in 10 years**.
- A 2009 nationwide study by CEOs for Cities, a cross-sector organization that develops ideas to make US cities more economically successful, found that "houses located in areas with above-average walkability or big ability are **worth up to \$34,000 more than similar houses with average walkability levels.**"
- Active transportation infrastructure can catalyze real estate development. Trails, bike lanes, and bicycle-sharing systems can improve pedestrian and bicyclist access to employment centers, recreational destinations, and public transit facilities, thereby enhancing the attractiveness of developments along active transportation corridors. In some cases, former industrial districts and towns outside **urban cores have benefited from active transportation infrastructure due to improved walking and cycling connectivity**.
- Investments in trails, bike lanes, and bicycle-sharing systems have high levels of return on investment. Regions and cities have found that **relatively small investments in active transportation can have outsized economic returns** due to improved health and environmental outcomes and reduced negative externalities, such as automobile traffic congestion and poor air quality.
- There is evidence of a **correlation between access to active transportation facilities and increased property values**. In a number of markets, both urban and suburban, studies have found that direct access to trails, bike-sharing systems, and bike lanes can have a positive impact on property values.

PUBLIC ENGAGEMENT

To develop the Armour Road Complete Street plan, the City of North Kansas City conducted a robust stakeholder and community engagement effort that focused around selecting alternative solutions for Armour Road and piloting the preferred solution so that the public would be able to experience the preferred design first hand.

This interactive approach to public engagement was also driven by an advisory committee to ensure that key stakeholders and City leaders were able to shape the vision and plan in the best interest of the community.

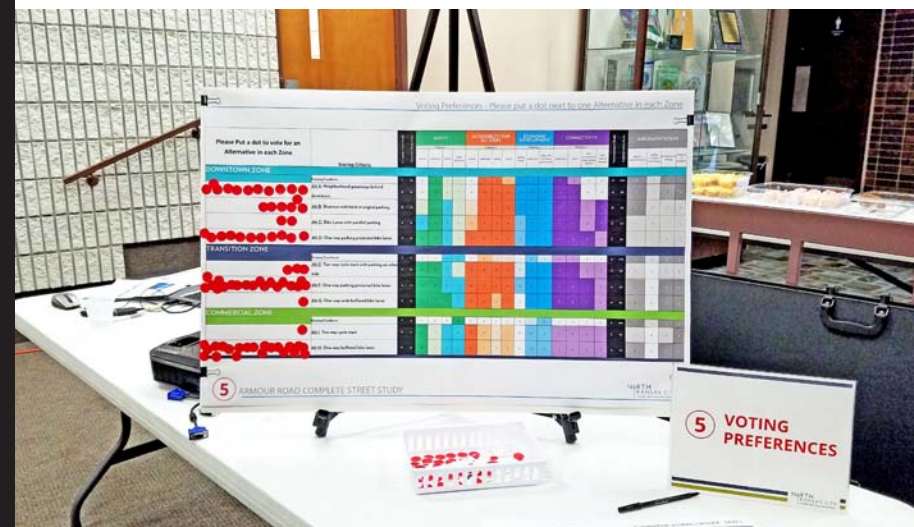
- **May 2, 2017**
Advisory Committee Meeting #1
- **June 13, 2017**
Public Meeting #1: Alternatives
- **June 22, 2017**
Advisory Committee Meeting #2
- **August 10, 2017**
Advisory Committee Meeting #3
- **September 27, 2017**
Public Meeting #2: Meet on the Street!
- **November 2, 2017**
Advisory Committee Meeting #4

The Advisory Committee

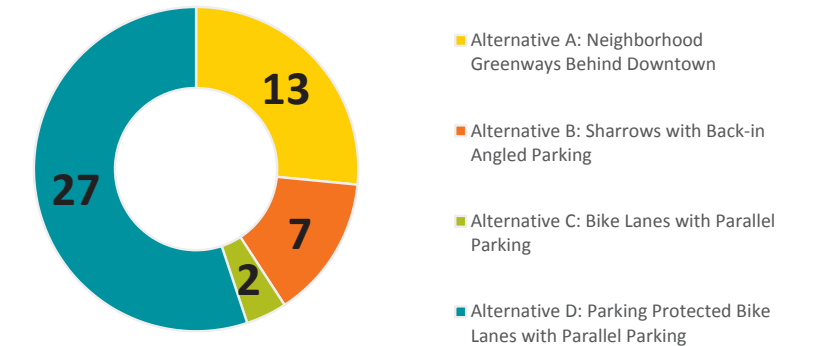
- Alecia Kate, Mid-America Regional Council
- Byron Spencer, North Kansas City, Planning Commission
- Duane Marusz, North Kansas City Municipal Services
- Gary Linn, YMCA
- Jim Bagley, North Kansas City Police Department
- Zach Henderson, Owner of Colony Espresso + Beer
- Rich Groves, NKC Business Council (rep. by Jennifer Keller)
- Richard Lanning, NT Realty
- Shawn Strate, KCATA (rep. by Mike Goodman)
- Susannah Peterson, YMCA
- Thomas Morefield, BikeWalk KC
- Valerie Pearman, North Kansas City, City Council

Public Meeting #1: Alternatives Selecting the Alternatives

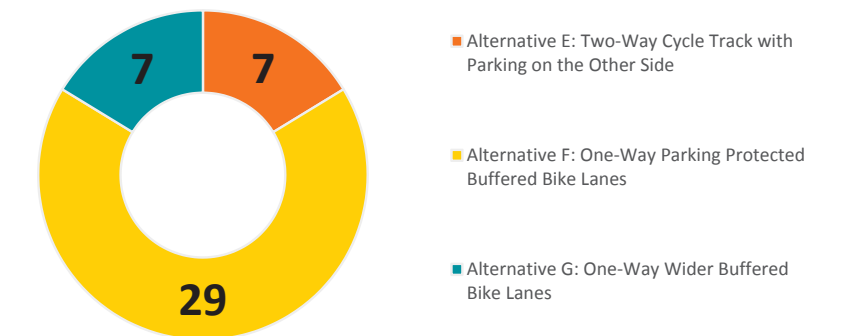
The Community Workshop was interactive in that it had six different stations for meeting attendees to visit each one to provide input on existing issues, indicate a preference for potential features, learn about the various alternatives, and then vote on their preferred alternative. The stations included (1) Existing Conditions, (2) What are Complete Streets?, (3) Potential Opportunities, (4) Alternatives, (5) Voting Preferences, and (6) a comment table. There was also a chance for attendees to listen to a short, informational presentation at two set times – 4:30 p.m. and 6:00 p.m. A walking tour for attendees to provide input on existing issues and concerns occurred at 5:00 p.m. The selection results are shown to the right.



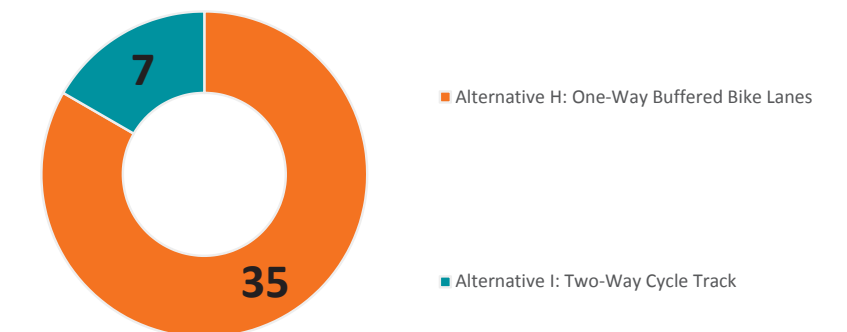
Which alternative to you prefer for the Downtown Zone? (from Burlington to Fayette)



Which alternative to you prefer for the Transition Zone? (from Fayette to Knox)



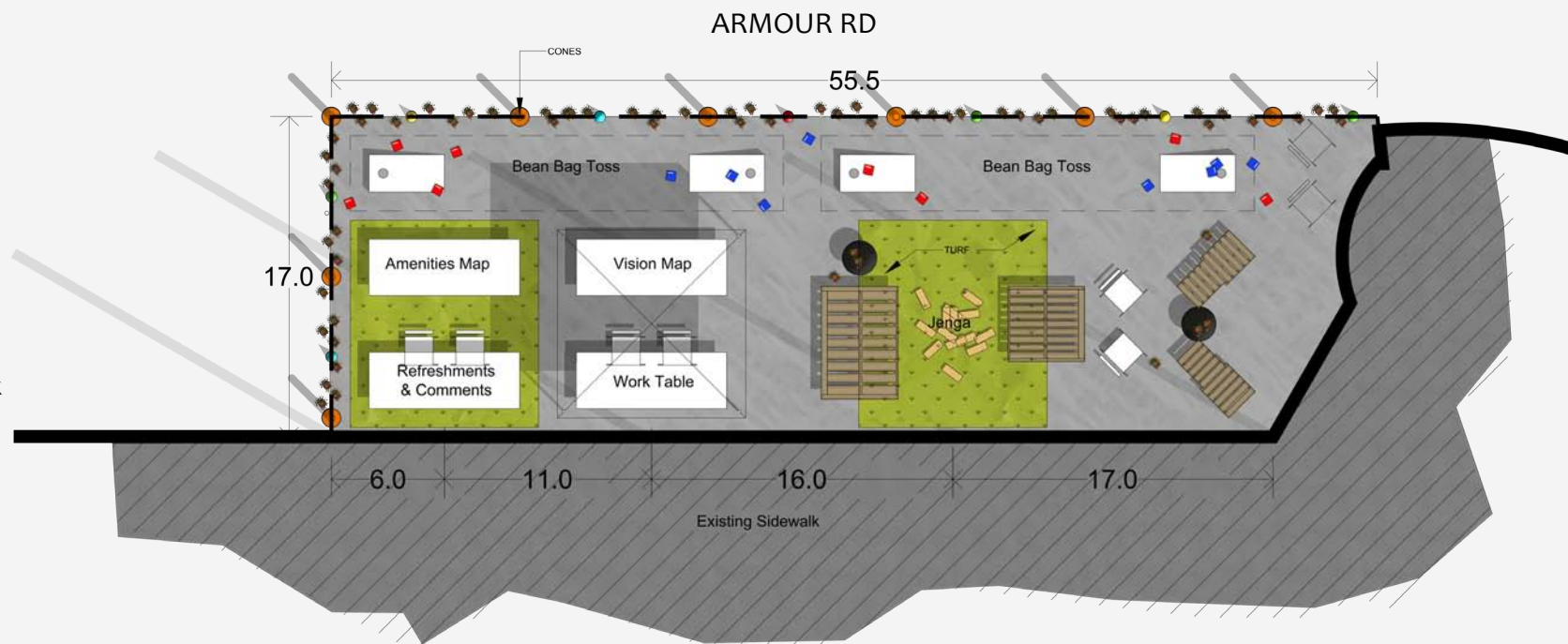
Which alternative to you prefer for the Commercial Zone? (from Knox to Ozark)



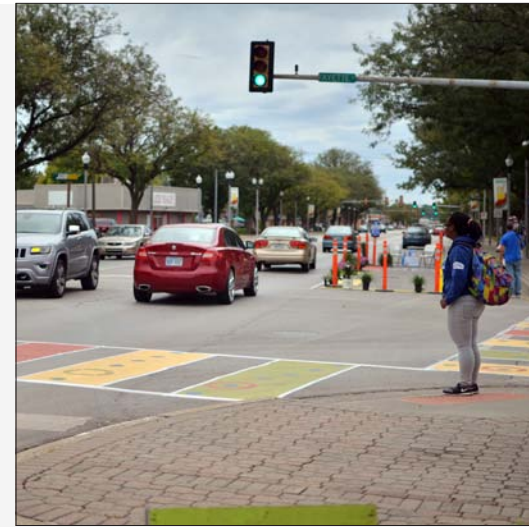
Public Meeting #2: Meet on the Street! The Parklet Meeting: A Pilot

On September 27, 2017 the City of North Kansas City conducted its first public “parklet meeting” for the Armour Road Complete Street project. The idea was to ensure that the meeting was exciting and engaging for attendees, to provide an example of an expanded sidewalk area and protected bike lane, and to allow guests to attend at their convenience during the day.

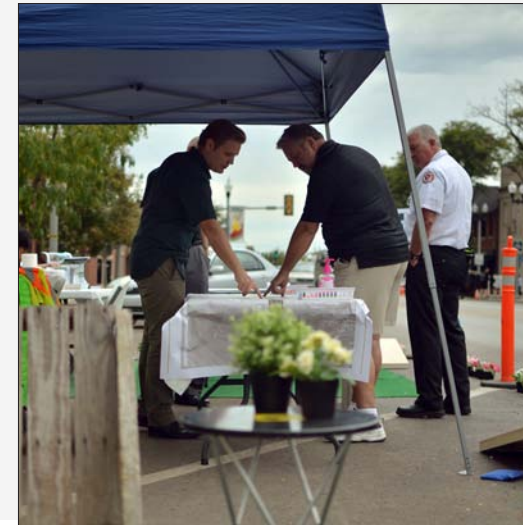
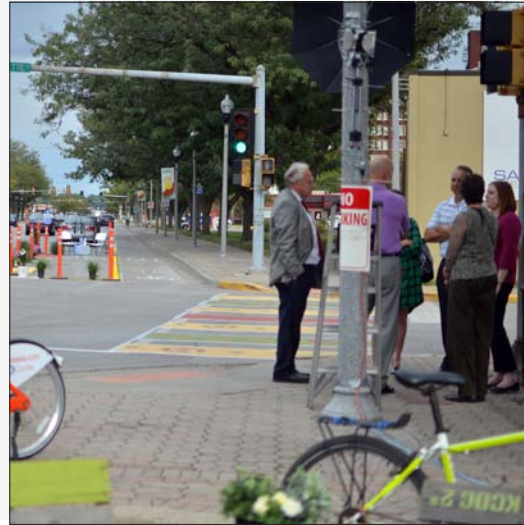
Throughout the day from 8:00 AM to 6:00 PM, we estimate that approximately 70 to 80 community members attended the parklet meeting, discussing the project with staff, providing input on maps and comment cards, and participating in the games, food, fun, and lounging.



Morning



Afternoon



Evening



Sample Comment Cards



ARMOUR ROAD COMPLETE STREETS PLAN MEET ON THE STREET - COMMENT FORM



Name Jude Tull - age 7 Address _____
 Email Address _____ Zip Code 64116

1. What did you like about the street transformation?

- Outdoor Seating
- Protected Bike Lane
- High Visibility Striping
- Outdoor Activities
- Reconfigured Parking - Parallel
- Other _____

2. What would you like to see different if the street was transformed?

3. How important are the following?

- Benches and Outdoor Seating Areas
- Branding, Signage and Wayfinding
- Bus, Transit Amenities and Upgrades
- Intersection & Crosswalk Improvements
- Enhanced and Expanded Sidewalks

ARMOUR ROAD COMPLETE STREETS PLAN

4. The City will do a parking study for the entire downtown prior to implementing changes.

How far do you generally park from your Downtown destination currently?

- I park directly in front of my destination
- 1 block
- 2 blocks
- More than 2 blocks
- I don't drive to Downtown
- Other _____

5. What comments do you have regarding the proposed Armour Road Complete Streets Plan?

I love the crosswalks and the protected bike lane.

6. Please list any additional comments or suggestions you may have about the Armour Road Complete Streets planning process.

Bike racks, & a bike sink

7. Please tell us how you found out about this meeting.

dmase @mom

ARMOUR ROAD COMPLETE STREETS PLAN - PUBLIC COMMENT FORM - 09.27.17 MEET ON THE STREET



Sample Comments

- "The protected bike lanes are the most important feature to me. I love the green space."
- "This is great."
- "Love it!"
- "I think the plan is an awesome idea and i think making Armour more accessible and easier to travel would be great."
- "It is beautiful. Glad to see NKC leading the way!"
- "✓✓✓★ ★★ :) :)"
- "Love the bump outs! Love the patios! Love the bike lane!"
- "Improved landscaping & greenery."
- "Places to lock up personal bikes while you shop, etc. Bring the streetcar to NKC! What a way to connect cool neighborhoods like River Market and NKC!"
- "Looks great! Keep enhancing NKC's bike & ped facilities! The high visibility crossings are needed too."
- "Great improvement. Please develop & expand as far as possible."
- "Love the plan."
- "I am all for the bike lanes, especially now there are bike rentals on Swift Street."
- "This looks great! What a way to show off how awesome NKC is! Long overdue!"
- "Please continue forward."

ARMOUR ROAD COMPLETE STREET

The Armour Road Complete Street project is an implementation plan for the heart of North Kansas City - Armour Road. The street has been designed to accentuate and enhance the overall character of the City, while also playing to the strengths of each distinct place along the corridor. The roadway has been balanced to accommodate all forms of transportation, and improvements that can be phased over time. The vision was established through engagement with representatives from the City and input from stakeholders at community meetings.

VISION STATEMENT

“The ultimate vision for Armour Road between Burlington and Ozark is a corridor that is safe, serves all users, incorporates sustainable measures, is visually appealing, and is economically vibrant.”

PROJECT GOALS

- Safety
- Economic Development
- Access for Ages and Users
- Connectivity



The Downtown Zone Burlington Street to Fayette Street

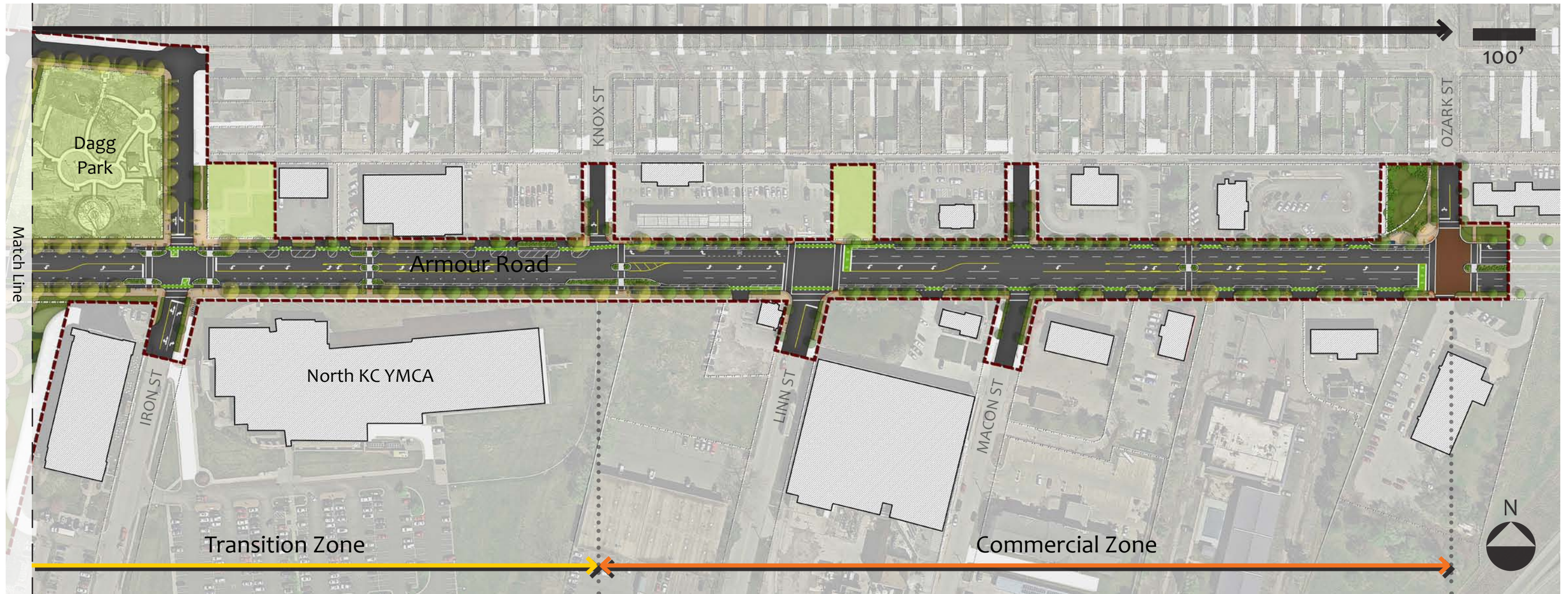
Falling primarily within the Downtown character area in the North KC Master Plan, the intention of this zone is to build the classic “main street” character of the area through placemaking and gateway elements that shape the outdoor room, connect to the existing public spaces and foster a sense of arts, entertainment, and cultural diversity. The design of the street enhances walkability, encourages lively facades, and ensures that there are plenty of sidewalk spaces that support retail, commercial, and dining activities.

The Transition Zone Fayette Street to Knox Street

Falling between two distinct character areas in the North KC Master Plan, the intention of this zone is to expand the intensity of Downtown and support additional development intensity, and transition the spatial experience of the street to the less intense development patterns exhibited on the east end of the district. The design of the street enhances multi-modal access and increases safety for bikes and pedestrians, while also seeking to expand the civic realm with new and improved public spaces and community areas.

The Commercial Zone Knox Street to Ozark Street

Falling primarily within the Suburban Commercial character area in the North KC Master Plan, the intention of this zone is to soften the impact of more suburban, auto-centric, and industrial development patterns exhibited in the area. The design of the street ensures safety for pedestrians at key crossings and intersections, protected facilities for cyclist, and essential beautification and landscaping to buffer low-intensity land uses. The area also offers opportunity to expand green spaces and define gateways.



The Downtown Zone Burlington Street to Fayette Street

Falling primarily within the Downtown character area in the North KC Master Plan, the intention of this zone is to build the classic “main street” character of the area through placemaking and gateway elements that shape the outdoor room, connect to the existing public spaces and foster a sense of arts, entertainment, and cultural diversity. The design of the street enhances walkability, encourages lively facades, and ensures that there are plenty of sidewalk spaces that support retail, commercial, and dining activities.

Public Realm Improvements

Generally, the public improvements in the Downtown Zone include placemaking treatments that reinforce the urban and walkable character existing in Downtown. This includes improvements such as gateways, branding and identity, beautification, curb extensions and medians, and a range of tactics to increase multi-modal access, pedestrian comfort, and vibrancy of building frontage. Should redevelopment occur in the Downtown Zone, new curb cuts and access to sites from Armour Road should not be allowed, and all access and circulation movements be limited to side streets or alleys to ensure that the streetscape remains walkable and pedestrian friendly.

Development Opportunities & Public Space Considerations

- Support incremental infill development on under-utilized parcels that accommodate ground floor commercial spaces.
- Complete a Parking Management Plan for Downtown, including strategies regarding parking efficiency, demand management and support.
- Develop annual programming and special events calendar that will capitalize on the intimate nature of Downtown through street closures, pop-up galleries, community events, and other strategies.

Gateway Intersection Enhancements

- Paving materials & design
- Signature gateway elements
- District branding & identity



Medians, Landscaping & Planters

- Center median w/ landscaping
- Planter boxes along sidewalks
- Street trees & shade canopy



Multi-Modal Facilities

- Improved bus shelters/signage
- Planter boxes along sidewalks
- Bicycle facilities (long-term)



Expanded Sidewalks & Amenities

- Wide sidewalks & ADA access
- Outdoor amenities zone/areas
- Seating areas & public benches



Specialty Crosswalk Treatments

- High-visibility striping
- Colorful/creative painting
- Pedestrian refuge in medians



On-Street Parking & Access Management

- Angled parking (existing to stay)
- Center turn lane (access control)
- Protected cycle track (long-term)

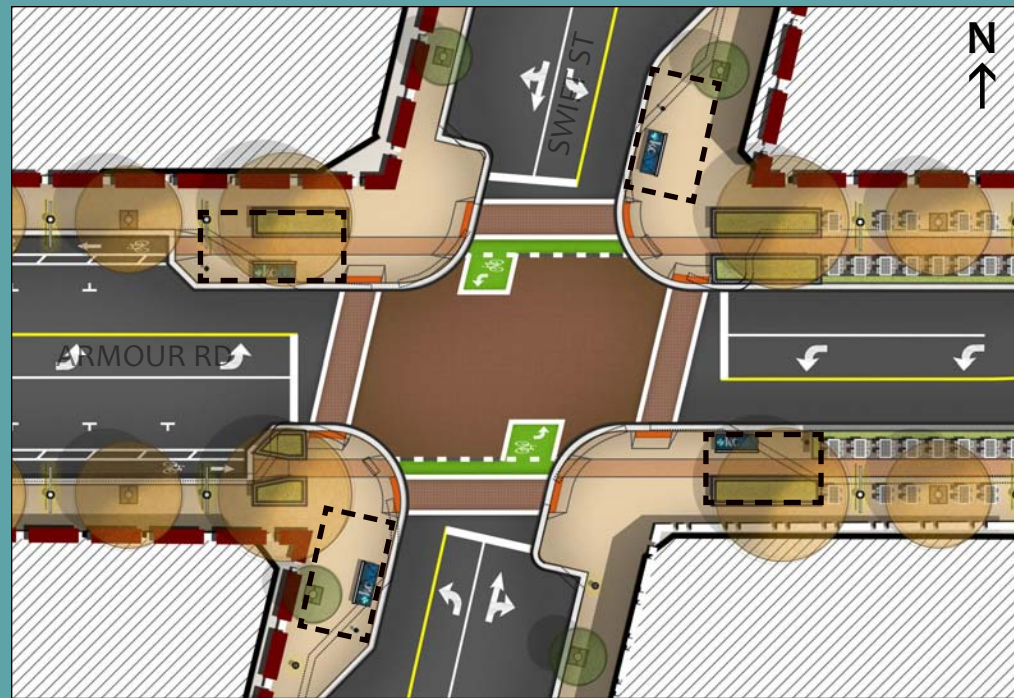


Images found through Google Search

Multi-Modal Improvements at Armour Road & Swift Street

With respect to multi-modal connections, the intersection of Armour Road and Swift Street is particularly important in Downtown. The intersection is a both a major north/south connection (#238 to Kansas City) and major east/west connection (#133); as well as the 100% corner in Downtown North Kansas City.

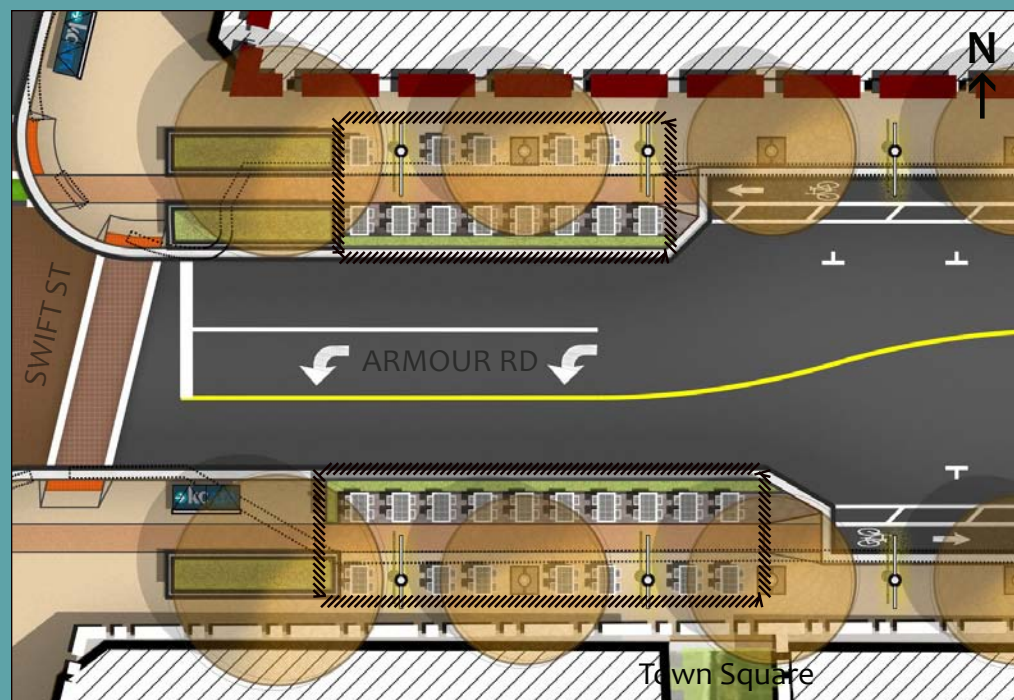
Improvements at this intersection should increase multi-modal access and comfort for transit riders, including (1) curb extensions, (2) safe crossings, (3) creative bus shelters and benches, and (4) signage and branding for Ride KC/ KCATA.



New Outdoor Seating Areas & Connection to Town Square

With respect to public spaces and outdoor seating areas, the Town Square is one of the most important assets in Downtown North Kansas City. The square is directly connected by pedestrians to Armour Road, Swift Street, and Erie Street.

To help activate this space, improvements to the surrounding streets should entice users, invite activity, and encourage more engagement with the plaza. This should also include expanded seating areas on both the north and south sides of Armour Road, which should be balanced with the need for parking and the particular concerns of adjacent property owners.

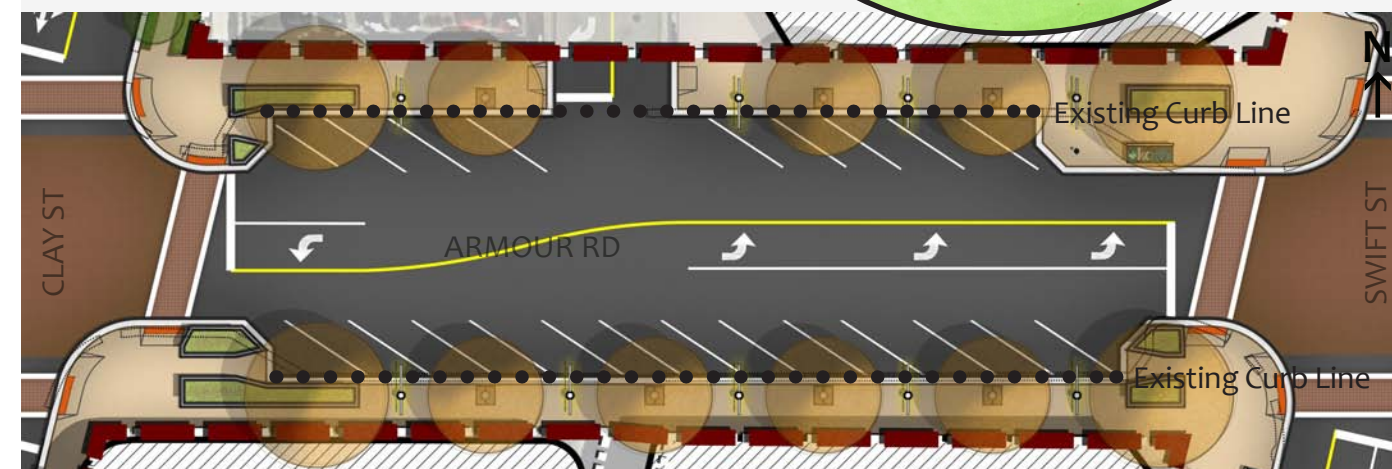


Phasing the Improvements:

The community values the existing parking arrangement in downtown. No changes are recommended to on-street parking until a parking management plan has been completed and the community has reached consensus on parking management. The proposed street design respects the existing curb lines, allowing for a phased, multi-project implementation over time. Phase one includes essential streetscape, beautification, and branding improvements to build the Downtown character, while phase two accommodates protected bicycle facilities and allow the City opportunity to engage further with property owners relative to balancing parking needs with multi-modal access.



Phase 1.0: Streetscapes, Beautification & Branding



Phase 2.0: Bicycle Facilities (and Balancing Parking Needs)



Images found through Google Search

The Transition Zone

Fayette Street to Knox Street

Falling between two distinct character areas in the North KC Master Plan, the intention of this zone is to expand the intensity of Downtown and support additional development intensity, and transition the spatial experience of the street to the less intense development patterns exhibited on the east end of the zone. The design of the street enhances multi-modal access and increases safety for bikes and pedestrians, while also seeking to expand the civic realm with new and improved public spaces and community areas.

Public Realm Improvements

Generally, the public improvements in the Transition Zone include placemaking treatments that assist in expanding Downtown and supporting the civic character of the area. This includes improvements such as landscaping and tree-lined streets, expanded public spaces with outdoor seating areas, protected bicycle facilities, safe crossings, and other pedestrian improvements. In the near-term, public realm improvements can be completed such as restriping and select sidewalk / median improvements to encourage mode-shifting and slow cars, while the City seeks additional funding for the other amenities and placemaking features over time.

Development Opportunities & Public Space Considerations

- Support incremental infill development on under-utilized parcels that will expand the building wall and character of Downtown, reclaim setback frontage, and shape the character of new public spaces and streets.
- Expand and improve existing under-utilized public spaces, such as Richards Park, Caboose Park, and open space at City Hall to bring activity along the street; as well as incorporate more programming, activities, and special events.
- As redevelopment occurs, require driveway access to be located on side streets, and encourage well-designed bicycle and pedestrian connections to Armour Road from the neighborhoods.

Street Trees & Landscaping

- Increased street tree canopy
- Tree lawn and landscaping
- Raingardens & sustainable BMPs



Multi-Model Center & Public Space

- New plaza in front of City Hall
- Enhanced bus facilities & seating
- Safe N/S pedestrian connection



Benches & Outdoor Seating

- Increased passive public spaces
- Seating & gathering areas
- More benches & amenities



Protected Bicycle Crossings & Markings

- Separated/buffered bicycle lanes
- Protected E/W intersections
- "Copenhagen" lefts at Dagg Park



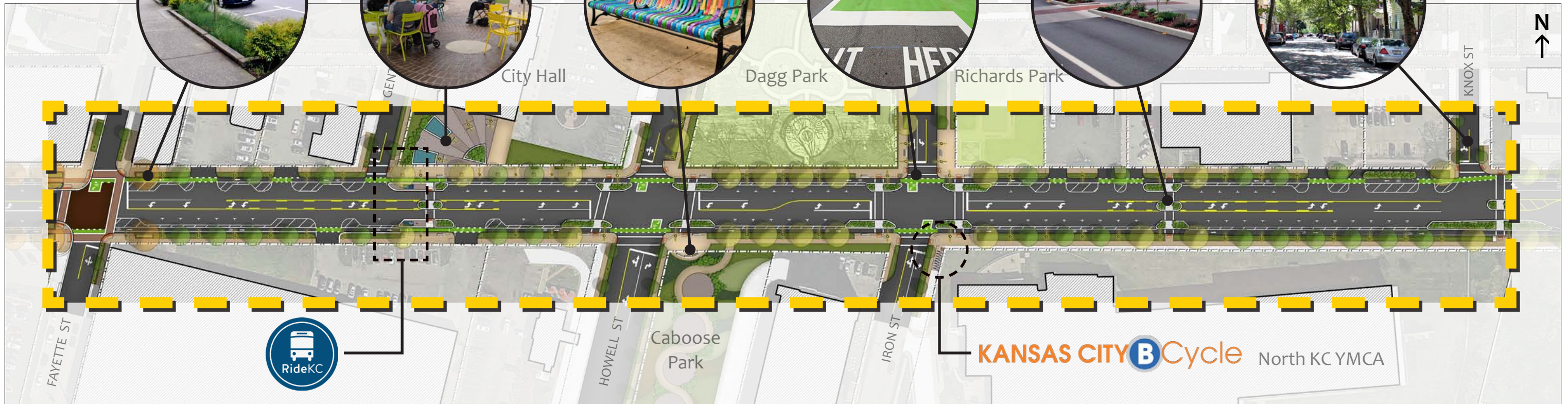
Mid-Block Crossings & Refuge Areas

- Mid-block, high-visibility crossings
- Safe, pedestrian refuge areas
- Signature trees/landscaping



Side Street Connections & Improvements

- Increased street trees & canopy
- Tree lawn & landscaping
- Connections to neighborhood

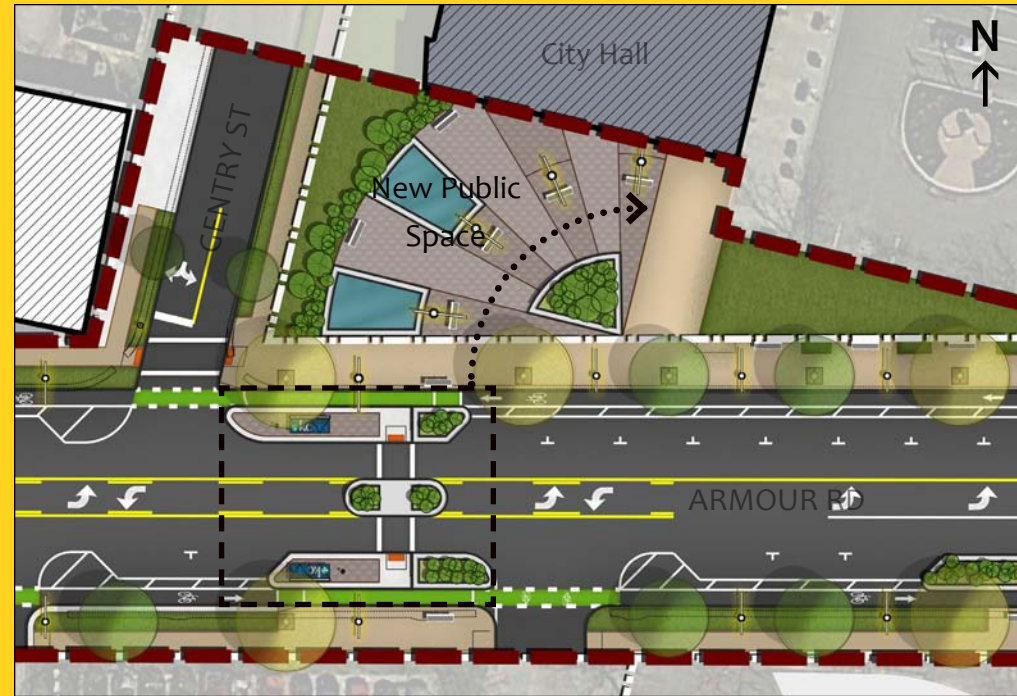


Images found through Google Search

Multi-Modal Center & New Public Space at City Hall

With respect to public space along Armour Road, one of the biggest opportunities is to construct a new plaza space that will bridge the gap between City Hall, the streetscape, and transit.

Improvements to this area can expand passive public space and increase multi-modal access and comfort for transit riders, including (1) curb extensions and pedestrian refuges, (2) new planters, fountains, and other amenities, (3) exterior seating areas and lighting, (4) creative bus shelters and benches, and (5) signage and branding for Ride KC/KCATA.



Phasing the Improvements:

With respect to the implementation of improvements in the Transition Zone, the proposed street design for Armour Road allows for a phased, multi-project, incremental implementation over time.

Phase one would include essential streetscape, landscape, safety improvements, and restriping to build civic character, with temporary painted medians, pedestrian crossings, and bicycle guide posts. While phase two would include more permanent raised medians, pedestrian refuges, and landscaping. This phased approach also applies to the Commercial Zone.



Phase 1.0: Streetscapes, Landscapes, Safety & Restriping



Phase 2.0: Permanent Medians & Pedestrian Refuges (with Landscaping)

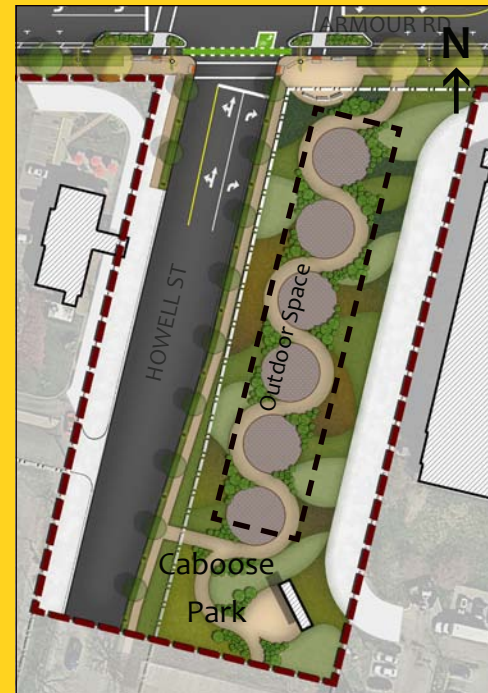


Images found through Google Search

Activating the Outdoor Space at Caboose Park

With respect to activating existing open spaces in the Transition Zone, Caboose Park is an opportunity to leverage an existing asset by adding placemaking elements that increase passive and active uses, and support special events and programming.

Landscape and hardscape improvements to the park and surrounding streetscapes can facilitate a temporary/seasonal farmers market, and allow for redevelopment at a future date. This approach will activate the space in the near-term and generate the activity and interest necessary to add permanent improvements in the long-term.



The Commercial Zone

Knox Street to Ozark Street

Falling primarily within the Suburban Commercial character area in the North KC Master Plan, the intention of this zone is to soften the impact of more suburban, auto-centric, and industrial development patterns exhibited in the area. The design of the street ensures safety for pedestrians at key crossings and intersections, protected facilities for cyclist, and essential beautification and landscaping to buffer low-intensity land uses. The area also offers opportunity to expand green spaces and define gateways.

Public Realm Improvements

Generally, the public improvements in the Commercial Zone include placemaking treatments that will shape the street space and outdoor room, despite the auto-centric and inconsistent building frontage. This includes improvements such as landscaping and tree lined streets, increased signage, buffered bicycle facilities, safe crossings, pedestrian improvements, and a gateway entry. As redevelopment occurs in the Commercial Zone, access management will be an important consideration for public improvements. Access to property should be limited to side streets or alleys throughout this zone to ensure that the streetscape remains walkable and pedestrian friendly.

Development Opportunities & Public Space Considerations

- Support incremental infill development and wholesale redevelopment of existing sites that will transform the suburban character of the area toward more walkable, urban building typologies.
- As redevelopment occurs, require driveway access to be located on side streets, and encourage well-designed bicycle and pedestrian connections to Armour Road from the neighborhoods.

Pedestrian- and Bicycle-Oriented Lighting

- Pedestrian-scaled lighting
- Branding and signage elements
- Landscaping and beautification



Improved Truck Route Signage & Enforcement

- Additional high visibility signage
- Restrict trucks from Downtown
- Increased enforcement



Buffered Bicycle Lanes & Markings

- Buffered/protected bike lanes
- Short-term buffer option(s)
- Bicycle lane markings/signage



Safe, High-Visibility Crossings & Refuge Areas

- High-visibility striped crosswalks
- Pedestrian refuge at mid-crossing
- Rumble strips/warning pavers



Wide Sidewalks & Tree-Lined Streets

- Continuous street tree canopy
- Wide, ADA accessible sidewalks
- Tree lawn and landscaping



Gateway Entry & Open Space

- New green/public space
- Center, landscaped median
- Remove free-flow right turn



Images found through Google Search

Gateway Entry / Iconic Intersections

The Ozark and Armour intersection is a key gateway into the heart of North Kansas City for traffic exiting from I-35 and traffic arriving from Highway 210 to the east. Improvements at the intersection can create a better sense of entry into the unique place that is North Kansas City. Ozark also provides a gateway into the residential neighborhoods on the north side of Armour Road.

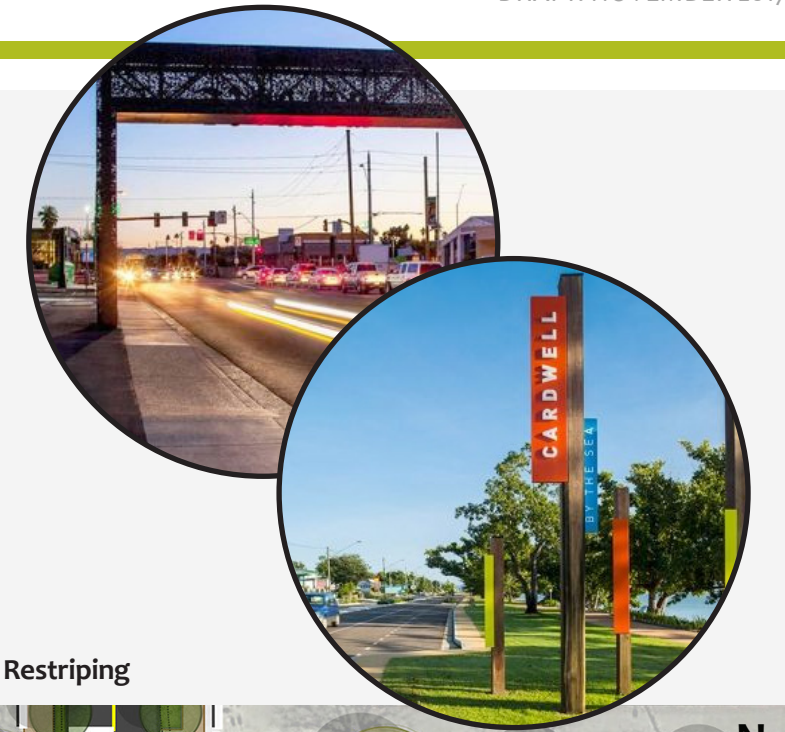
Future improvements to this intersection may be partially driven by access needs for properties on the south side of Armour. Any improvements should further extend bicycle and pedestrian facilities and access. Gateway elements should include improved landscaping and intersection treatments such as special materials, patterns, and colors. Future intersection improvements should remove the free-flowing right turn on the north leg of the intersection to reduce vehicular speeds and improve pedestrian and bicycle safety.



Phasing the Improvements:

With respect to the implementation of improvements in the Transition Zone, the proposed street design for Armour Road allows for a phased, multi-project, incremental implementation over time.

Phase one would include essential streetscape, landscape, safety improvements, and restriping to build civic character, with temporary painted medians, pedestrian crossings, and bicycle guide posts. While phase two would include more permanent raised medians, pedestrian refuges, and landscaping. This phased approach is identical to the Transition Zone.



Phase 1.0: Streetscapes, Landscapes, Safety & Restriping



Phase 2.0: Permanent Medians & Pedestrian Refuges (with Landscaping)



Bike Lane Buffers and Bike Boxes

With respect to bicycle amenities, protected bike lanes and bike boxes can greatly assist cyclists navigating through intersections where the majority of the bike-motor vehicle conflicts occur. The vision plan proposes protected bike lanes and bike boxes at key intersections where north or south movements are needed.

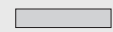






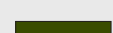
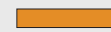
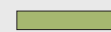






Bike boxes improve cyclist's visibility and allow turning bicyclists to reach a better position for making a safe turn. They elevate the 'status' of bicyclists and clearly delineate space on the road for bikes and prevent cars from infringing on that space. Installing physical barriers offer the greatest degree of protection.



AMENITIES PLAN

The purpose of the amenities plan is to identify the specific types and general locations for amenities that will support the vision proposed for the Armour Road Complete Street plan. The improvements, upgrades, and facilities have been allocated to enhance the character and intended uses within each zone of the corridor, and are generally intended to improve the experience of all modes of transportation in the area.

LEGEND

-  Improved / Upgraded Sidewalks
-  High-Visibility / Safe Pedestrian Crossings
-  Tactile / Warning Paver Strips
-  Protected / Buffered Bike Lanes
-  Specialty Intersection Treatments
-  Bicycle Lane Buffers
-  Kansas City B-Cycle (Bikeshare)
-  Tree Lawn with grass & raingardens
-  Medians / Planters with Landscaping
-  Improved Parks & Open Spaces
-  Two-Way Center Turn Lane
-  On-Street Parking Areas
-  Improved Transit Shelter & Amenities
-  Additional Public Benches & Seating
-  Expanded Sidewalks & Seating Areas
-  Signage (See Truck Route Signage)





WALKING



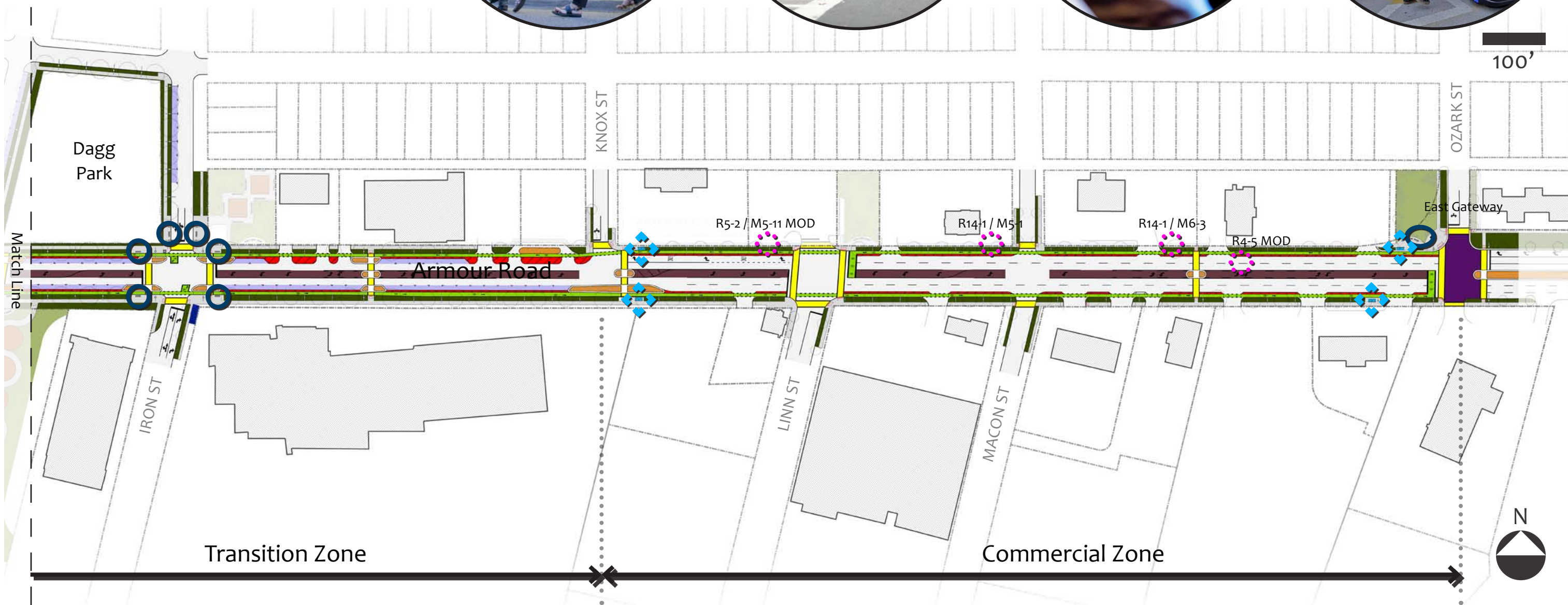
BIKING



DRIVING



TRANSIT



Benches & Outdoor Seating Areas

Public seating creates a comfortable, usable and active public environment where people socialize, wait for a bus, or simply people-watch. It also helps create a sense of place where people are able to see others, be seen, and feel safe, and therefore entice people to linger and relax.

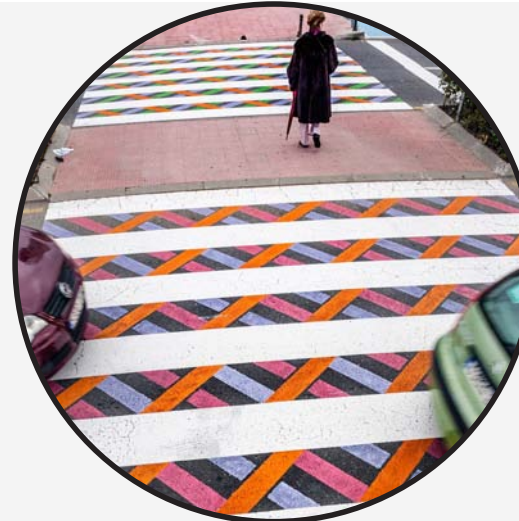
Seating should be made of durable, high quality materials. It should complement and visually reinforce design of other streetscape elements. It should also be located under shade, where possible, adjacent to transit stops, in the planting zone, high pedestrian places, and adjacent to businesses.



Intersection & Crosswalk Improvements

Pedestrian crossings are especially important in high pedestrian areas. Special paving treatments are key to communicating pedestrian hierarchy within heavily traveled crosswalks. Specifically, special paving should be considered in the following locations: transit stop areas, pedestrian crossings in neighborhood commercial areas, pedestrian refuge areas within medians, at special intersections, and gateways and other special areas.

Special treatments can include materials such as stamped concrete, brick or concrete pavers, thermoplastic striping and colors, stamped asphalt, and other artistic solutions.



Parklets & Reclaimed Sidewalk Space

When sidewalk space is limited and parking is abundant, a great way to reclaim public space is by using parklets. Parklets are small expansions to the sidewalk that reclaim the parking as public space for people. They can be temporary or permanent, and may consist of a variety of different functions that support sidewalk dining, expanded seating areas, gathering spaces, and other passive public and private activities.

Parklets should be considered in all three zones where there is an excess of on-street parking and the need for additional sidewalk or public space.



Images found through Google Search

Branding & Wayfinding Signage

Wayfinding compliments and enriches the pedestrian experience and create interesting streets and spaces. Wayfinding information should be conveyed clearly and efficiently with high quality signage and graphic design. It orients and directs pedestrians, locals and visitors alike to key destinations and parking, and it also contributes to the distinct identity of the corridor.

Wayfinding should be located on sidewalks, near to intersection corners, near transit stops, and places with high pedestrian activity. The intersections of Burlington Street and Ozark Street at Armour Road mark entries into downtown and offer opportunities for a gateway element and/or public art.

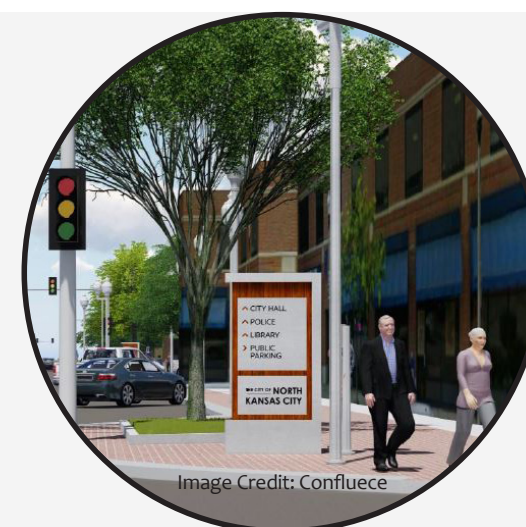
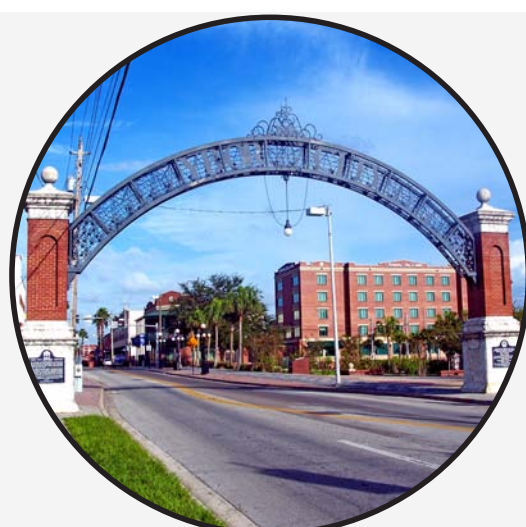


Image Credit: Confluence

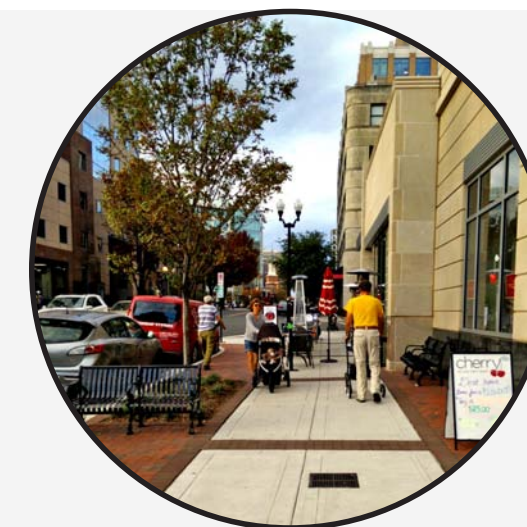
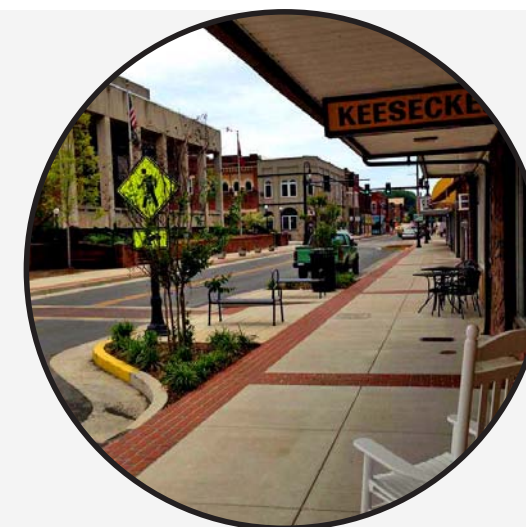
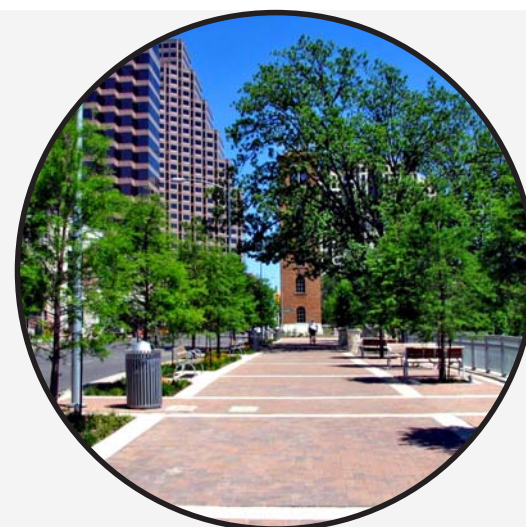


Image Credit: Confluence

Enhanced & Expanded Sidewalks

Sidewalks play an important role in pedestrian movement and access by improving connectivity and promoting walking. They help to activate the street and provide important public space. Safe, accessible and well maintained sidewalks are a fundamental and necessary investment for North Kansas City.

Special treatments on sidewalks improve the public realm, give circulation a stronger sense of place, and enhance the hierarchy of public spaces. Special treatments include a range of options such as natural stone, concrete pavers, textured and colored concrete, and stamped asphalt.



Bus, Transit Amenities & Upgrades

It is important that transit stops are safe, easily identifiable, accessible, and comfortable places to wait for the bus. A basic bus stop should consist of an accessible paved area and easily identifiable signage. They should also be near crosswalks, well lit, and placed at locations safe for passengers and vehicles.

Amenities provided at transit stops include shelters, benches, and trash cans. Waiting and boarding must be safe and there should be access to a safe street crossing, and transit shelters should complement other pedestrian amenities.



Images found through Google Search

Truck Route Signage

Signage is very important to ensure that truck traffic and other oversized vehicles are clearly directed to and from designated truck routes and around areas of highly-active pedestrian and bicycle uses to realize significant safety and operational benefits, and reduce the need for enforcement.

The following upgrades and improvements to truck route signage are recommended in the Armour Road Complete Street plan. We do not propose that these signs be mounted on the signal mast arms (as they currently are), but reserve that as an option should there be no other alternative.

- The large sign (R5-4 MOD) would be mounted just west of Ozark on the existing overhead pole/mast arm.
- The truck route (R14-1) and arrow (M5-1 left arrow) / (M6-3 straight arrow) signs would be ground mounted on the side of the road ahead of the intersection.
- The no trucks (R5-2) except local deliveries (R5-11 MOD) sign would be mounted just past the signal at Linn.

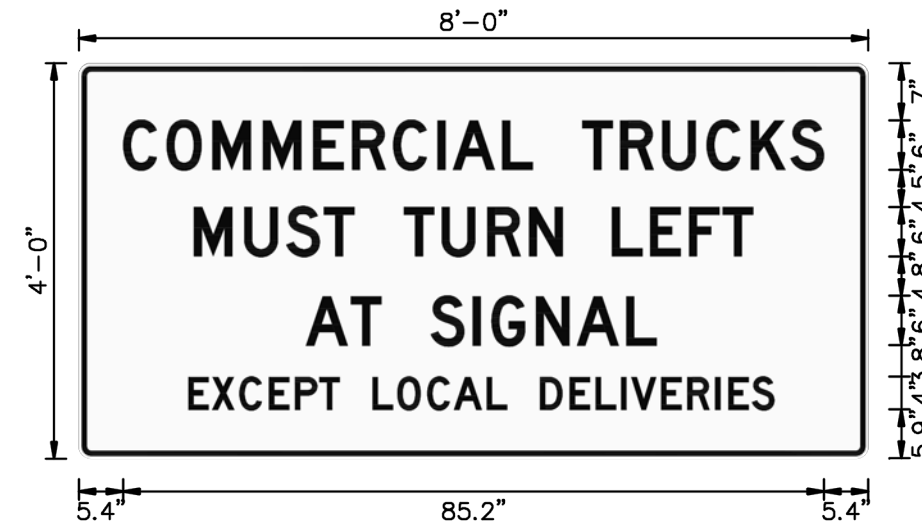
The city should also use the no trucks sign (R5-2) at each street going north from 16th Street and replace the black on yellow/green truck route signs throughout the city with black on white signs. The black on white signs are standard regulatory (legally requirement) signs. The black on yellow/green signs are not standard and not considered regulatory, but would probably be regarded as advisory signs by truck drivers that don't legally need to be followed.

These signs should greatly clarify the legality of driving a truck on Armour. If there continues to be a problem with trucks on Armour, then the truck route (R14-1 & M5-1) and no trucks except local delivery signs (R5-2 & R5-11 MOD) could be added to the signal mast arm as an additional countermeasure.

Some additional regulatory signage should be considered on Burlington Street similar to that is proposed for Armour to keep trucks off of Armour coming from the west.

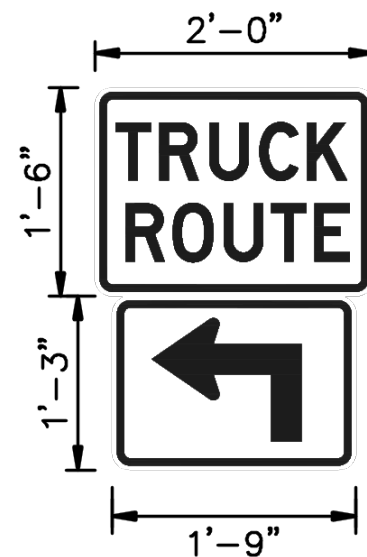
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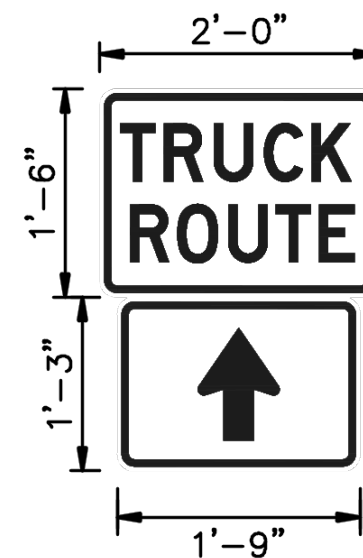
R5-4 MOD

The R5-4 MOD signage should be mounted just west of Ozark on the existing overhead pole/mast arm. See Amenities Plan for general location.



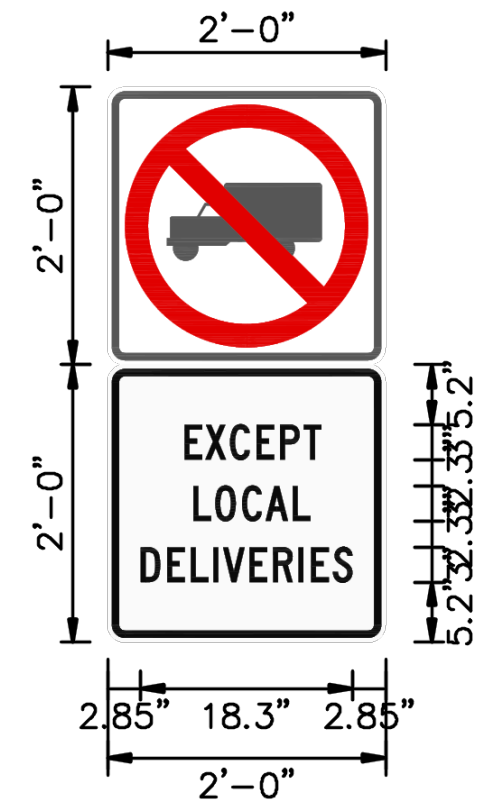
R14-1 / M5-1

The R14-1 / M5-1 (Left Arrow) signage should be ground mounted on the side of the road just west of Armour Road and Macon Street. See Amenities Plan for general location.



R14-1 / M6-3

The R14-1 / M6-3 (Straight Arrow) signage should be ground mounted on the side of the road east of Armour Road and Macon Street near the proposed mid-block crossing. See Amenities Plan for general location.



R5-4 MOD

The R14-1 / M5-1 (Left Arrow) signage should be ground mounted on the side of the road just west of Armour Road and Linn Street. See Amenities Plan for general location.



NEXT STEPS!

The purpose of this section is to provide the City of North Kansas City with a basic roadmap for implementation of the Armour Road Complete Street plan. These steps include phased implementation of the recommendations in this plan, as well as other important support efforts such as educational outreach and parking studies. By taking the steps over the next few years, the City can ensure that it will build consensus around any remaining issues and develop sustained support for implementation of the plan.

Furthermore, as we move forward through implementation of the plan, it will be important to ensure that future development and redevelopment enhance the experience of the streetscape, improve walkability and bikability, and leverage the economic potential of the improvements. These considerations may include increased focus on the quality and characteristics of new building projects along Armour Road, such as increased attention to setback, height, use, transparency, and parking placement on-site to ensure more walkable, pedestrian-friendly development. This may also include requirements for access management along Armour Road that limits access to parking, loading, and other services to side streets and alleys where possible. These considerations may take the form of regulatory updates or increased requirements during site plan review.

Step #1: Make improvements to the Transition Zone & Commercial Zone

With a high level of consensus in support of improvements to these zones, constructing the recommended improvements to the Transition Zone and Commercial Zone is the first step to take after adoption of this plan. The City has budgeted funds for these improvements in 2018. Plans for these improvements are based on the existing curbs along Armour Road, which should expedite the construction as well as keep costs low. Bike lanes between Fayette and Ozark will help connect the sharrow facilities on Howell, Iron, Linn, and Ozark and eventually help tie the Armour Road Redevelopment Area to downtown North Kansas City for pedestrians and bicyclists.

Step #2: Conduct educational outreach

Bicycle lanes on Armour Road will be new for people driving vehicles as well as people on bikes. Educational outreach will help ensure that all people using Armour Road understand the new facilities and are able to navigate them safely. Educational outreach should be targeted to user groups and could take the form of brochures, fliers, and online resources. Expanding and leveraging partnerships with advocacy groups and other City agencies will also help continue to grow the mission and support of the Armour Road Complete Streets plan, ensuring that we build capacity within younger generations and expand access to older generations.

Step #3: Conduct parking management study & plan

The planning process illustrated that there is a lack of consensus around making changes to parking in downtown North Kansas City, driven by the fact that the parking is seen as a high value resource for downtown businesses. A parking management study can help quantify the supply and demand of downtown parking and assist the City in making future decisions impacting downtown parking, such as whether or not to change the existing on-street angled parking, or how to help people driving to the area find available parking.

Step #4: Phase in placemaking improvements along Armour Road

There are a number of places along the corridor where additional improvements to public spaces, such as the space adjacent to City Hall or at key intersections, could further activate Armour Road and add vibrancy to the corridor. In addition, other plans such as the 2016 Master Plan and the Armour Road Redevelopment Area Framework Plan, call for expanding public art in North Kansas City. Establishing an ongoing public art and corridor amenities program is a key implementation step that can be phased as redevelopment projects occur or as a follow-up to corridor improvements. This could also take the form of temporary or permanent “pop-up” installations, galleries, and event spaces that add life and activity to under utilized areas and spaces within the corridor.

Step #5: Make improvements to the Downtown Zone

Improvements to the Downtown Zone are the final step in plan implementation in order to provide time for consensus to emerge regarding changes to on-street parking based on the parking management study and plan. If the community decides to forego changes to the angled parking, Downtown Zone improvements should focus on supporting pedestrian activity along Armour and supporting safe bicycle traffic on cross streets (Erie, Swift, and Clay). If the community decides to make changes to the on-street parking in order to accommodate bicycle lanes, improvements should take care to balance safety among all users. Regardless of any changes to parking, improvements should support safety, the vitality of downtown, and help make connections to Burlington to the west.



NORTH KANSAS CITY

Virtually Urban. Supremely Suburban.

For additional information please contact:

Sara Copeland AICP | Community Development Director

City of North Kansas City, MO

2010 Howell Street; North Kansas City, MO 64116

scopeland@nkc.org | 816-274-6006