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Memorandum

Date: May 6, 2016

To: City of Benton

From: Steve Bzomowski, Alta Planning + Design

Re: **Recommendations**

Overview

This memorandum details improvements related to complementary infrastructure, policy, and programmatic recommendations toward a safe, accessible, and connected bicycle and pedestrian network in Benton. Recommendations were developed based on information from public input, guidance from the steering committee and local stakeholders, previous plans and studies, and consultant data/field analysis.

Infrastructure

A diverse mix of facilities are recommended to create a comprehensive network, including sidewalks, crossing improvements, on-road bicycle facilities, and shared use paths. Conceptually, the network recommendations and the destinations they connect can be seen as a network of 'hubs and spokes'. Schools, parks, downtown, neighborhoods, and other destinations identified during the planning process are the 'hubs', whereas the pedestrian and bicycle facilities are the 'spokes' that connect them. The proposed network touches every corner of Benton. Maps of draft recommendations can be found here – Draft Benton Bicycle & Pedestrian Plan Maps.

Bicycle & Pedestrian Facility Types

Below is an overview of the primary facility types recommended in this proposed network.

Shared Use Paths

A shared use path is a facility that is separated from the roadway and designed for a variety of users, including bicyclists, walkers, hikers, joggers, wheelchair users, and skaters.

- Shared use paths may be paved or unpaved and are the preferred facility for novice and average bicyclists.
- These facilities are frequently found in parks, along rivers, beaches, and in greenbelts or utility corridors, away from roadway ROW where there are few conflicts with motorized vehicles.
- Path facilities can also include amenities such as lighting, signage, and fencing (where appropriate).

Sidepaths – A sidepath is a type of shared use path that follows a roadway corridor but is separated from on-road traffic. Sidepaths are more transportation-oriented in character and used by bicyclists and pedestrians. Because of operational concerns, it is generally preferable to place paths within independent rights-of-way away from roadways. However, there are situations where existing roads provide the only corridors available.

- Sidepaths are most appropriate in corridors with few driveways and intersections.
- Signage should be included along sidepaths to direct users to access points with high-visibility crosswalks.
- Families and novice bicyclists are most comfortable on shared use paths. Therefore, a comprehensive network of shared use paths, that includes trails built in open space as well as sidepaths is an integral part of the overall bicycle facility network, and its development should be a priority for Benton.
- The key difference between a sidepath and a typical sidewalk is the extra width. A 10' wide path, for example, allows for safer shared use by bicyclists, pedestrians, and other users, whereas the typical 5'-wide sidewalk does not allow for safe passing by multiple user types.

Cycle Track

One-way cycle tracks are physically separated from motor vehicle traffic and typically provide bicycle travel in the same direction as motor vehicle traffic. They may be at street level, or distinct from the sidewalk, as a raised cycle track. In situations where on-street parking is allowed, cycle tracks are located adjacent to the curb and sidewalk, with on-street parking repositioned to buffer people on bicycles from moving vehicles. Buffered bike lanes and conventional bike lanes can be converted into cycle tracks with the development of a physical barrier – the recommended buffered bike lanes on Market Street are one such example that ideally would eventually be converted into cycle tracks.

Buffered Bike Lanes

Buffered bike lanes are conventional bike lanes paired with a designated buffer space, separating the bike lane from the adjacent motor vehicle travel lane and/or parking lane. A buffered bike lane could potentially be converted to a cycle track.

Bike Lanes

Bike lanes as a portion of the roadway that has been designated by striping, signing, and pavement markings for the preferential and exclusive use of bicyclists. Bike lanes carry bicyclists in the same direction as adjacent motor vehicle traffic. While bike lanes on both sides of the roadway are preferred, when space is limited, uphill bike lanes and down hill shared lane markings are an option.

Uphill Bike Lane

Uphill bike lanes (also known as 'climbing lanes') enable motorists to safely pass slower-speed bicyclists, thereby improving conditions for both travel modes. Uphill bike lanes should be 6-7 feet wide (wider lanes are preferred because extra maneuvering room on steep grades can benefit bicyclists). They can be combined with shared lane markings for downhill bicyclists who can more closely match prevailing traffic speeds.

Neighborhood Bikeway

Neighborhood bikeways, also known as “bicycle boulevards” in some cities, are low stress, active transportation corridors that have been optimized for bicycle travel. These corridors take advantage of the existing low-speed and low-volume local street network with enhanced crossings where routes cross major roadways. There are a wide variety of elements in a successful neighborhood bikeway, including:

- Wayfinding signs and markings
- Speed management
- Volume management
- Intersection design

Main Street Bikeway

Main street bikeways are mixed use streets with on-street parking and low design speeds, usually found downtown. These streets are designed for high pedestrian volumes and active street walls. This condition makes it appropriate for bicycles to share space with automobiles in general travel lanes. Shared lane markings, or “sharrows”, may often be placed along these bikeways to help align bicyclists properly and alert motor vehicle drivers to expect bicycle traffic.

Sidewalk

Sidewalk Sidewalks are a fundamental component of a pedestrian network and can serve a complementary function to bicycle facilities. Sidewalks in Benton should be at least 5’ wide, and, where possible, should include a landscaped buffer between the sidewalk and roadway. Areas of higher pedestrian volume may require 7’ wide sidewalks, and sidewalks serving as part of the shared use path system should be at least 10’ in width (sidepaths).

Intersection Improvements

There are many components of pedestrian and bicycle friendly intersection design that should be considered. **Clear Space:** Corners should be clear of obstructions. They should also have enough room for curb ramps, for transit stops where appropriate, and for street conversations where pedestrians might congregate. **Visibility:** It is critical that pedestrians on the corner have a good view of vehicle travel lanes and that motorists in the travel lanes can easily see waiting pedestrians. **Legibility:** Symbols, markings, and signs used at corners should clearly indicate what actions the pedestrian should take. **Accessibility:** All corner features, such as curb ramps, landings, call buttons, signs, symbols, markings, and textures, should meet accessibility standards and follow universal design principles. **Separation from Traffic:** Corner design and construction should be effective in discouraging turning vehicles from driving over the pedestrian area. Crossing distances should be minimized. **Lighting:** Adequate lighting is an important aspect of visibility, legibility, and accessibility.

These attributes will vary with context but should be considered in all design processes. For example, suburban and rural intersections may have limited or no signing. However, legibility regarding appropriate pedestrian movements should still be taken into account during design.

Priority 'Catalyst' Projects

While the implementation of projects throughout the city can happen as opportunities arise, identifying priority 'catalyst' projects is important for efficient and effective network development. Several have been identified by the project team and discussed in detail with the committee (use link on page 1 to access maps), with a general consensus on the following:

- River Street
  - River Street is part of the actual historical route of the Southwest Trail and makes a direct connection from downtown Benton to the Old River Bridge. On-street bike lanes combined with sidewalk completion and a formalized trail connection from the southwest terminus of River Street to the Old River Bridge can make this connection directly from downtown to the Old River Bridge. This project would require the removal of parking to make way for bike lanes, and it is also recommended to lower the speed limit to at least a consist 25 mph along the length of River Street. This project connects several neighborhoods as well as Ringgold Elementary School and UALR Benton and adds another element of connectivity to Riverside Park. Lynn Moore of the Saline Crossing group strongly recommended this route as well.
- Southwest Trail Loop
  - This project consists of several smaller segments that form a loop providing mostly shared use path connectivity utilizing old railroad corridors, sidepath links, and existing/programmed facilities at the Riverside Park complex, Reservoir Trail, and Old River Bridge. This loop is bookended by Riverside Park, the Reservoir Trail, Saline River, and Old River Bridge to the west/southwest, the Ralph Bunche neighborhood to the south, and downtown to the north – see the River Street project description above and the Market Street project description below for connectivity to downtown from this proposed loop project.
- Market Street
  - This project provides a direct connection from the proposed Southwest Trail loop to downtown and to the Saline Memorial Hospital complex further to the north. The wide travel lanes from Smith Street south to Hazel Street could be transformed into buffered bike lanes (through striping) and eventually cycle tracks (through construction of a physical barrier such as plastic bollards, planting strip, etc.). This would require the removal of on-street parking along this corridor. This could also be implemented along N. Market Street from Cross Street to Narroway Street.
    - Shared Lane Markings (sharrows) can make the connection through downtown (utilizing the one-way loop system)
    - Shared Lane Markings from Narroway Street north through McNeil Street at the Saline Memorial Hospital campus would complete this connection for bicycles
    - From the S. Market Street and Hazel Street intersection to the southern part of the proposed Southwest Trail loop (on the south side of the active railroad tracks in the Ralph Bunche neighborhood), a sidepath should be constructed, most likely on the west side of S. Market Street

        - Sidewalks are complete along Market Street from Hazel Street north to Carpenter Street. Sidewalks should be completed to McNeil Street along with the section of N. Main Street from Saline Memorial Hospital to Carpenter Street (along with completing the stretch of the north side of Carpenter Street between Market Street to the Carpenter Street bridge over I-40). Pedestrian crossing improvements will be needed at the traffic signal at Market Street and Carpet Street.

- Benton Schools Athletic Complex to the proposed Southwest Trail
    - This project includes:
        - A shared use path extension from the proposed Southwest Trail Loop to Edison Avenue (and Neeley Street)
        - Sidewalk completion along Neeley Street from Edison Avenue to Tyndall Park as well as completing the link from Cox Street to the Benton Schools Athletic Complex (this last link could be sidepath)
        - Neighborhood bikeway markings (sharrows) and wayfinding signage along Neeley Street and Hoover Street from Edison Avenue to the Benton Schools Athletic Complex
        - Intersection crossing improvements would be needed at the Edison Avenue and Neeley Street intersection

- Tyndall Park/East Benton Schools to downtown Benton
    - Sidewalk completion along Sevier Street (and a small stretch along 4th Street)
    - Neighborhood bikeway markings (sharrows) and wayfinding signage along Sevier Street (downtown – Market Street to Pearson Street), Pearson Street, 1st Street, Maple Street, 4th Street, and Hoover Street

- East Benton Greenway
    - This project could potentially connect from the Benton Schools Athletic Complex directly to Lake Pauline and would consist of a shared use path along the floodplain/creek that runs from Lake Pauline to the Benton Schools Athletic Complex. This would include a short stretch of sidepath along Alcoa Road to the east side of the Chris Drive intersection where a formalized bike/ped crossing of Alcoa Road would be needed.

Programming and Policy

Complementary programming and policy efforts are important for a community's transition to becoming a place where walking and biking are effectively incorporated into the transportation and recreation system for all. Key policy and programmatic elements in Benton should include:

Trails Website

Many current and potential pedestrians and bicyclists do not know where to find information on traffic laws, events, maps, tips, and recreation groups. The City of Benton should continue developing the website used for this plan as a "one-stop" website that houses all pedestrian- and bicycle-related information and

promotions. A website is not difficult to set up, but it will only be successful if the site is easy to use, easy to find, and updated frequently. The site should be reviewed and updated regularly with the most current information. Other recommended programs in this chapter could be housed on the website, such as a hike and bike map, media campaign materials and links, and a calendar of upcoming events.

- Sample pedestrian and bicycle information websites:
  - Portland, OR: http://www.portlandoregon.gov/transportation/60164
  - Austin, TX: http://austintexas.gov/bicycle
  - Fayetteville, AR: http://www.fayetteville-ar.gov/496/Trails-Greenways
  - Little Rock, AR: http://www.bikelr.com/
  - Duck, NC: http://www.townofduck.com/ducktrail/

Media Campaign

A media campaign should be aimed at reducing the number of bicyclists and pedestrians hit and injured in crashes with vehicles. Such a campaign consists of educational messages on traffic laws and safety, and an enforcement effort by area police.

One example of an effective media campaign is currently being led by the North Carolina Department of Transportation (NCDOT) called 'Watch for Me NC' with community partners. A similar program could easily be developed by the City of Benton to suit local needs. After developing a brand and materials, the City of Benton and/or partners could:

- Distribute the educational materials made available at local festivals and other events, at local businesses, and in renters' information packets and property owners' guest information books.
- Work with police officers to hand out bicycle lights along with bicycle and pedestrian safety cards.
- Broadcast program promotions and educational videos on the local government access channel.
- Enforce motorist rates of yielding to pedestrians.

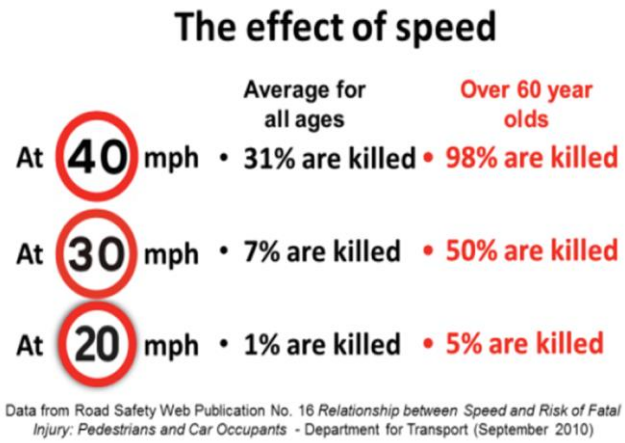
Images targeting motorists from the 'Watch for Me NC' campaign, including ad space on a bus, messaging at the pump, and bumper stickers.

Example North Carolina program: Watch for Me NC website: http://www.watchformenc.org/

Enforcement – 20's Plenty Campaign

Lowering residential speeds to 20 MPH has enormous safety benefits for all users, including pedestrians and bicyclists, by lowering both the rate and severity of crashes. One campaign, from the United Kingdom, is called "20's Plenty."

A successful campaign will bring together several different strategies, including:



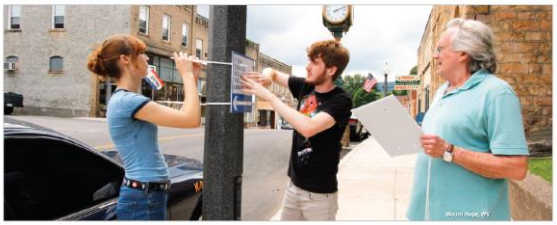
- Changing the legal guidelines around minimum speed and/or authority to set speed limits. For example, the State Legislature may consider passing a law that would permit towns and cities to set speed limits on certain types of roadways, based on classification or designation in an adopted plan.
- Making residents aware of the benefits of 20 MPH roadways and engaging their partnership on raising awareness and buy-in from their neighbors.
- Identifying specific streets on which a 20 MPH speed limit is appropriate. Likely candidates would include roads identified in pedestrian or bicycle plans as important corridors for those uses and residential streets whose residents request inclusion in a 20 MPH program.
- Traffic engineering to ensure that the design speed of the street matches the new posted speed.
- Partnership with law enforcement to issue warnings and moving violations on designated 20 MPH streets.
- Evaluation of vehicle speeds and reported crashes (number and severity) before and after the integrated campaign is implemented to the effort to measure results and correct course.

Video about UK "Twenty's Plenty" campaign:

http://www.streetfilms.org/no-need-for-speed-20s-plenty-for-us/

Wayfinding

Wayfinding signage enhances resident and visitor orientation by directing pedestrians, bicyclists, and motorists to popular destinations around town. Benton could develop a customized wayfinding program that provides effective orientation and direction to key destinations. A wayfinding program can include directional signage, on-road markings, and kiosks with city maps. Chambers of commerce and health departments are examples of potential partners to develop such a program,



Road signage has traditionally been expensive and car-centered, leaving walkers and bikers by the wayside. Walk [Your City] lets anyone from citizens to corporations quickly and affordably promote healthy lifestyles, public safety, and human-centered transit.

based on the nexus with tourism, economic development, and active living. A cost-effective signage program can be implemented quickly and easily through the "Walk [Your City]" program (see below). Signs can be customized for bicycling. One of the first wayfinding signage projects could be implemented following completion of this plan's pilot projects.

Visit http://walkyourcity.org/ for more information.

Encouragement Groups and Events

Local groups such as the Saline County Striders and the Saline Memorial Hospital Foundation are already leading efforts to encourage active living in Benton. Other groups such as the Bicycle Advocacy of Central Arkansas, Central Arkansas Trail Alliance (local chapter of the International Mountain Biking Association (IMBA), and Bike Little Rock can serve as key partners as well.

Open Streets

As the bicycle and pedestrian network develops, (especially the completion of any connections to Riverside Park or the Southwest Trail), the City of Benton with local partners (example groups listed above) could implement an open streets event downtown or along any recently completed bicycle & pedestrian projects, especially those that may complete a key connection.

Open Streets events are periodic street closures (usually on Sundays) that create a temporary park that is open to the public for walking, bicycling, dancing, hula hooping, roller skating, and other forms of human-powered activity. These programs are known by many names: Ciclovias, Open Streets, Sunday Parkways, Summer Streets, and Sunday Streets. They promote health by creating a safe and attractive space for physical activity and social interaction.

Examples of Open Street events in Durham and Boone, NC

For this type of program, organizers should consider lessons learned and best practices from other communities. Some recommendations include:

- These events lend themselves to innovative partnerships and public/private funding. Health care providers whose mission includes facilitating physical activity are often major sponsors. Businesses may also support the event if it brings customers to their location. They often take place on a Sunday - partnerships with local churches in Youngsville could be pursued.
- Informing residents along the route about what it means for them is essential. They should be informed numerous times (3-6 times is not too much), including a reminder the day before the event. Expectations about vehicle access to and from residences should be managed clearly.
- Closing Main Street in Youngsville may be challenging due to through traffic needs - however, this could be a great location for an Open Streets event after Priority Project #2 is completed.
- For more local examples, refer to Durham's Bull City Summer Streets event. The Town of Boone, Marion, and the City of Salisbury have all held at least one ciclovia as well.
- Videos of Sunday Parkways events: http://www.streetfilms.org/tag/ciclovias/

Bicycle Friendly & Walk Friendly Community Programs

A goal for Benton should be to seek a "Bicycle Friendly Community" (BFC) designation from the League of American Bicyclists. The BFC campaign is an award program that recognizes municipalities that actively support bicycling activities and safety. A Bicycle Friendly Community provides safe accommodation for bicycling and encourages its residents to bicycle for transportation and recreation. North Little Rock, Bentonville, Conway, and Fayetteville are the only communities in Arkansas that have become designated as Bicycle Friendly Communities to-date.

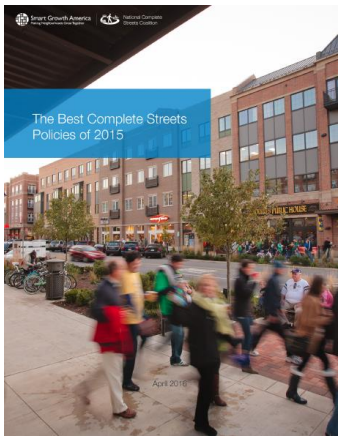
Similarly, the Walk Friendly Community (WFC) Campaign is an awards program that recognizes municipalities that actively support pedestrian activity and safety. A Walk Friendly Community provides safe accommodation for walking and encourages its residents to walk for transportation and recreation. The program is maintained by the UNC Highway Safety Research Center's Pedestrian and Bicycle Information Center, with support from a variety of national partners.

Becoming designated as a Bicycle- and Walk-Friendly Community signals to current residents, potential residents, and visitors that the town is a safe and welcoming place for individuals and families to live and recreate. The development and implementation of this plan is an essential first step toward becoming a Walk- and Bicycle-Friendly Community. With ongoing efforts and the short-term work program recommended here, the Town should be in a position to apply for and receive BFC status within a few years. For more information:

Bicycle Friendly Community Program: http://www.bikeleague.org/community

Walk Friendly Community Program: http://www.walkfriendly.org/index.cfm

Complete Streets Policy



There is a growing national trend towards integrating bicycling, walking, and transit as a routine element in highway and transit projects. This movement has developed under the name of "Complete Streets," which is defined by the Complete the Streets Coalition as follows:

"Complete Streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and bus riders of all ages and abilities are able to safely move along and across a complete street."

The Safe Routes to School National Partnership can assist the City's efforts in writing Complete Streets policy. Technical assistance can range from providing resources to assistance in creating marketing campaigns and Complete Streets language.

A recent report by Smart Growth America details the best Complete Streets policies from the 82 policies adopted nationwide in 2015 (including Little Rock). The report can be accessed here - http://www.smartgrowthamerica.org/best-complete-streets-policies-of-2015