



# Complete Streets Implementation in Little Rock

NEIGHBORHOOD CONNECTIONS MEETING

DR. JOHN LANDOSKY, BICYCLE AND PEDESTRIAN COORDINATOR

CITY OF LITTLE ROCK

# Complete Street?

- ▶ Since the 1950's, streets increasingly designed to move and store cars
- ▶ A "Complete Street" moves people using several traffic modes
  - ▶ Bus
  - ▶ Car
  - ▶ Bicycle
  - ▶ Pedestrian



# Why Complete Streets?

Only accommodating cars not equitable



When we design streets to only move cars, we are only serving people who own and drive cars.

# Why Complete Streets?

Building for active transportation promotes public health.



Arkansas 2<sup>nd</sup> most inactive and 6<sup>th</sup> most obese state in the nation. <http://stateofobesity.org/>

<https://www.littlerock.gov/for-residents/bikeped-little-rock/why-walk-run-or-bike/active-transportation-and-obesity/>

# Why Complete Streets?

Livability = \$\$\$

**The Central Arkansas Livability Index**

*Transportation*

- Take a Walk: Walkability
- Wheels on the Bus: Access to Transit
- Personal Mileage: Personal Travel
- Let's Ride: Access to Active Transportation
- High Flying: Access to Air Travel
- Congested: Traffic Congestion
- Choice Riding: Non-Poor Transit
- Barge In: Water Transportation

Opportunity Enterprise Culture About the Index

ZOO

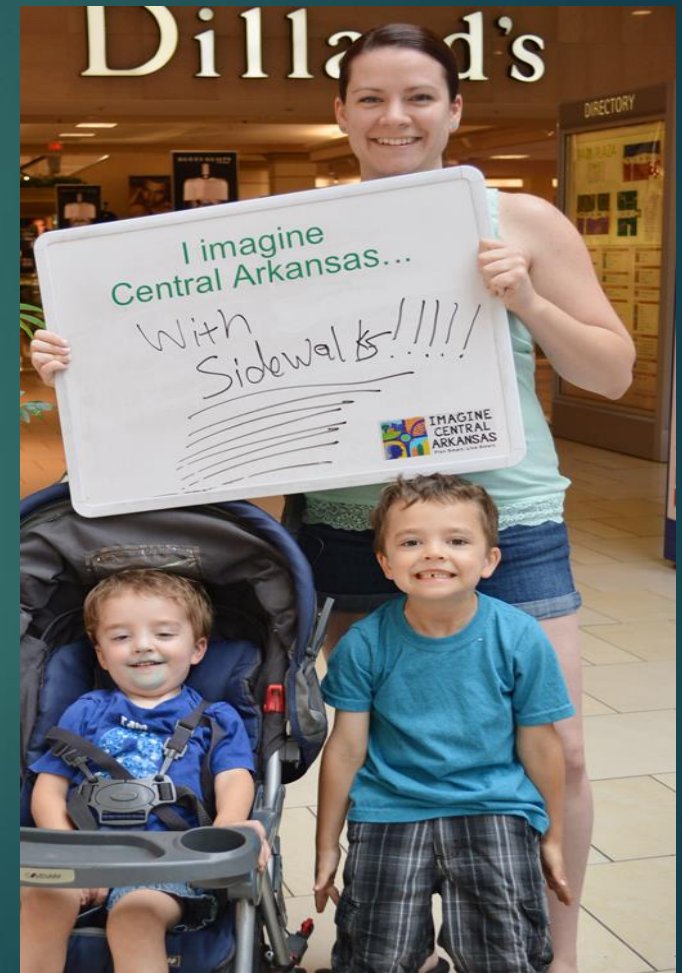
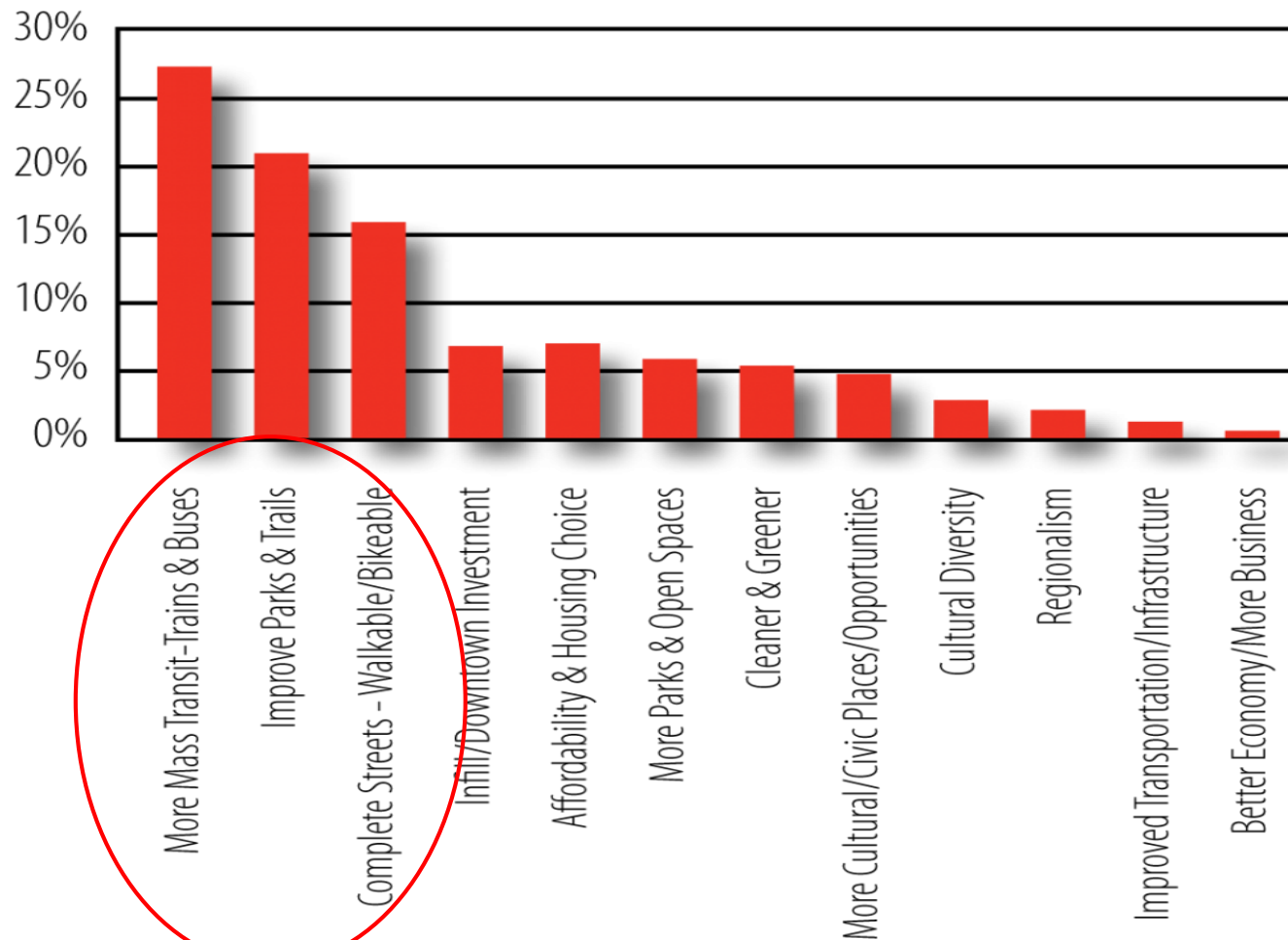
<http://www.centralarkansaslivability.org/>



# Why Complete Streets?

Because Central Arkansans want it!

Most Votes by Category



<http://imaginecentralarkansas.org/>

**Safety?**

**Public Health?**

*Livability?*

**Economic Development?**

What types of streets do you want  
in your neighborhood?

WHAT CONCERNS DO YOU HAVE IN YOUR NEIGHBORHOOD?

**Equity?**

**Traffic Speeds?**

**Public Spaces?**

# Complete Streets: South Main



Main St. and 13<sup>th</sup> August 2007

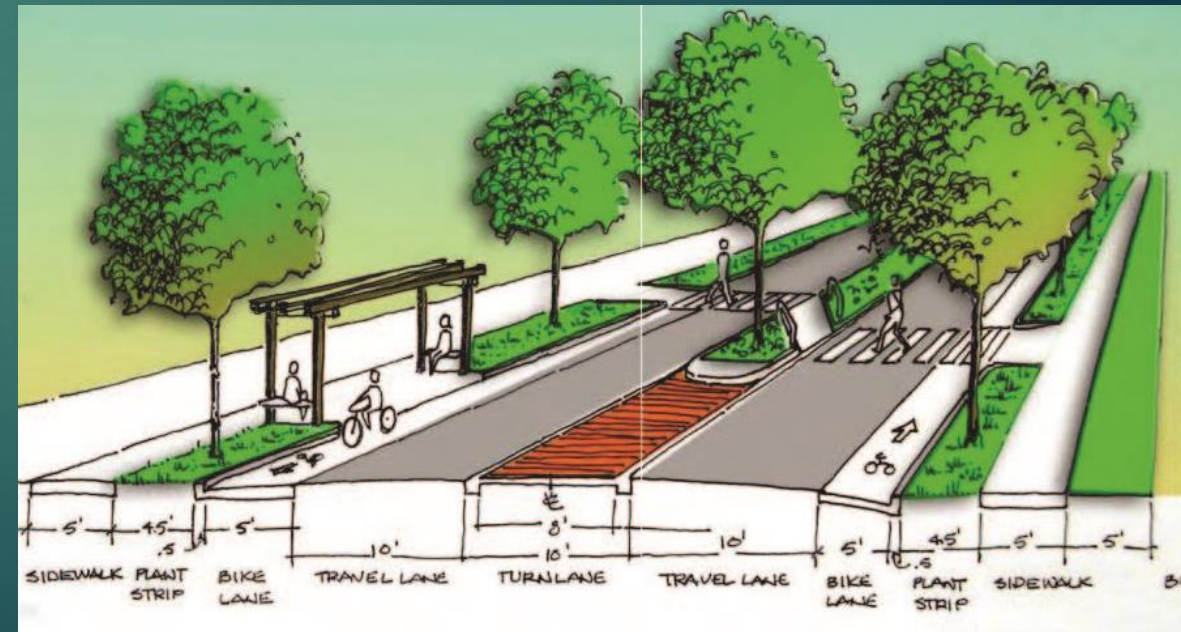


Main St. and 13<sup>th</sup> September 2016



# How Do We Get Complete Streets?

- ▶ Change the Master Bike Plan
- ▶ Create or amend your Neighborhood Action Plan
- ▶ Public input on new Master Plan
- ▶ Road resurfacing projects – Road Diet
- ▶ Reach out to public officials, City staff, and AHTD
- ▶ Effective communication with residents
- ▶ Advocate for a specific corridor
- ▶ Remain informed and vigilant



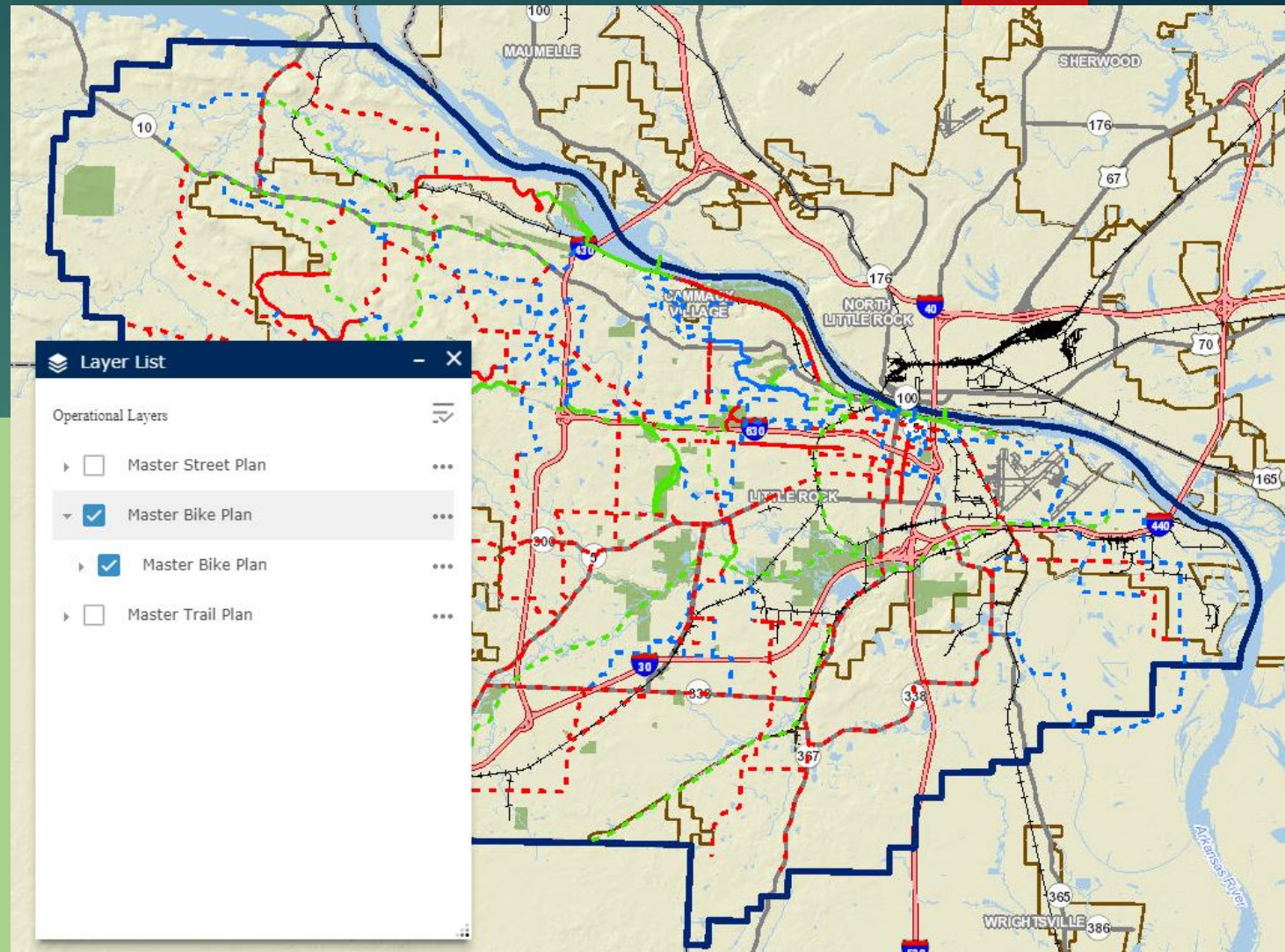
# Master Bike Plan

- ▶ Part of Master Street Plan
- ▶ Interactive Map



## MASTER STREET PLAN

2015



[http://maps.littlerock.state.ar.us/webapps/LR\\_Transportation\\_Plans\\_View/](http://maps.littlerock.state.ar.us/webapps/LR_Transportation_Plans_View/)

<https://www.littlerock.gov/media/1375/master-street-plan-12-2015.pdf>

# How to Change the Master Bike Plan

- ▶ **Step 1:** Reach out to me, [jlandosky@litterock.gov](mailto:jlandosky@litterock.gov)
- ▶ **Step 2:** Document support in your neighborhood for the change (petition, letters, business/organization support, Neighborhood Action Plan)
- ▶ **Step 3:** Discuss at the Bike Friendly Community Committee  
<https://www.littlerock.gov/for-residents/bikeped-little-rock/bike-friendly-community-committee/>
- ▶ **Step 4:** Create meeting with City staff
- ▶ **Step 5:** Submit a Master Street Plan Amendment application to the Little Rock Planning Commission  
<https://www.littlerock.gov/Images/UserFiles/PDF/Applications/MAAPP041806.pdf>
- ▶ **Step 6:** Lobby City Board members to accept the amendment

# Create/Amend your Neighborhood Action Plan

- ▶ Neighborhood Action Plans
  - ▶ Generated through a partnership between your neighborhood and City of Little Rock Planning and Development
  - ▶ Communicate your vision for the future of your neighborhood
  - ▶ Can be used in advocacy and grant writing

## **OAK FOREST NEIGHBORHOOD ACTION PLAN**



**UPDATE**  
2008

**A Revision of the July 1999 Plan**

# How to Amend Action Plan

- ▶ **Step 1:** Determine if your neighborhood has an action plan.
- ▶ **Step 2:** Reach out to Planning Manager Walter Malone, [WMalone@littlerock.gov](mailto:WMalone@littlerock.gov)
- ▶ **Step 3:** Decide how and to what degree you want Complete Streets in your action plan. Complete Streets can be a means to:
  - ▶ Increase safety (reduce speeds, create separated space for bicycles)
  - ▶ Increase health (promoting active transportation and reducing air pollution)
  - ▶ Increase economic conditions (shops want to be where people are walking and biking)
  - ▶ Increase equity (facilitate movement of *all* neighborhood residents)
  - ▶ Increase livability (people want to move to walkable neighborhoods, property values increase)
- ▶ **Step 4:** *Use your Action Plan!* Refer to it in any outreach as evidence of neighborhood support for your proposed change

# New Master Plan

- ▶ This fall, the City of Little Rock will apply for a grant to create a new Master Bicycle and Pedestrian Plan or Master Complete Streets Plan
- ▶ The synthesis of a new Master Plan would include many opportunities for public comment
- ▶ **Step 1:** Get on mailing list for updates, [jlandosky@littlerock.gov](mailto:jlandosky@littlerock.gov)
- ▶ **Step 2:** Attend public meetings and advocate for Complete Streets
- ▶ **Step 3:** Stay tuned for other opportunities to affect this Plan



# Road Resurfacing Projects and Road Diets



- ▶ Complete Streets expensive
- ▶ Restriping road to be more Complete during a road resurfacing project inexpensive
- ▶ “Road Diets” can have safety and operational benefits for all road users, including motorists,  
<https://www.littlerock.gov/for-residents/bikeped-little-rock/projects/road-diets/>

# How Do We Get a Road Diet?

- ▶ **Step 1:** Determine which streets in your neighborhood will get a road diet soon
  - ▶ <https://www.littlerock.gov/city-administration/city-departments/public-works/civil-engineering/sales-tax-projects-by-wards-2016-2018/>
- ▶ **Step 2:** Reach out to [jlandosky@littlerock.gov](mailto:jlandosky@littlerock.gov)
- ▶ **Step 3:** Consider as a neighborhood what you would like those street to look like after resurfacing (refer to <https://www.littlerock.gov/for-residents/bikeped-little-rock/projects/road-diets/>)
- ▶ **Step 4:** Document neighborhood support for any changes to lane configurations (petition, letters, business/organization support, Neighborhood Action Plan)
- ▶ **Step 5:** Contact Public Works and your Ward Director and let them know your request
- ▶ **Step 6:** Attend public meetings and stay on top of project development



# Reach Out to Representatives, City staff, and AHTD

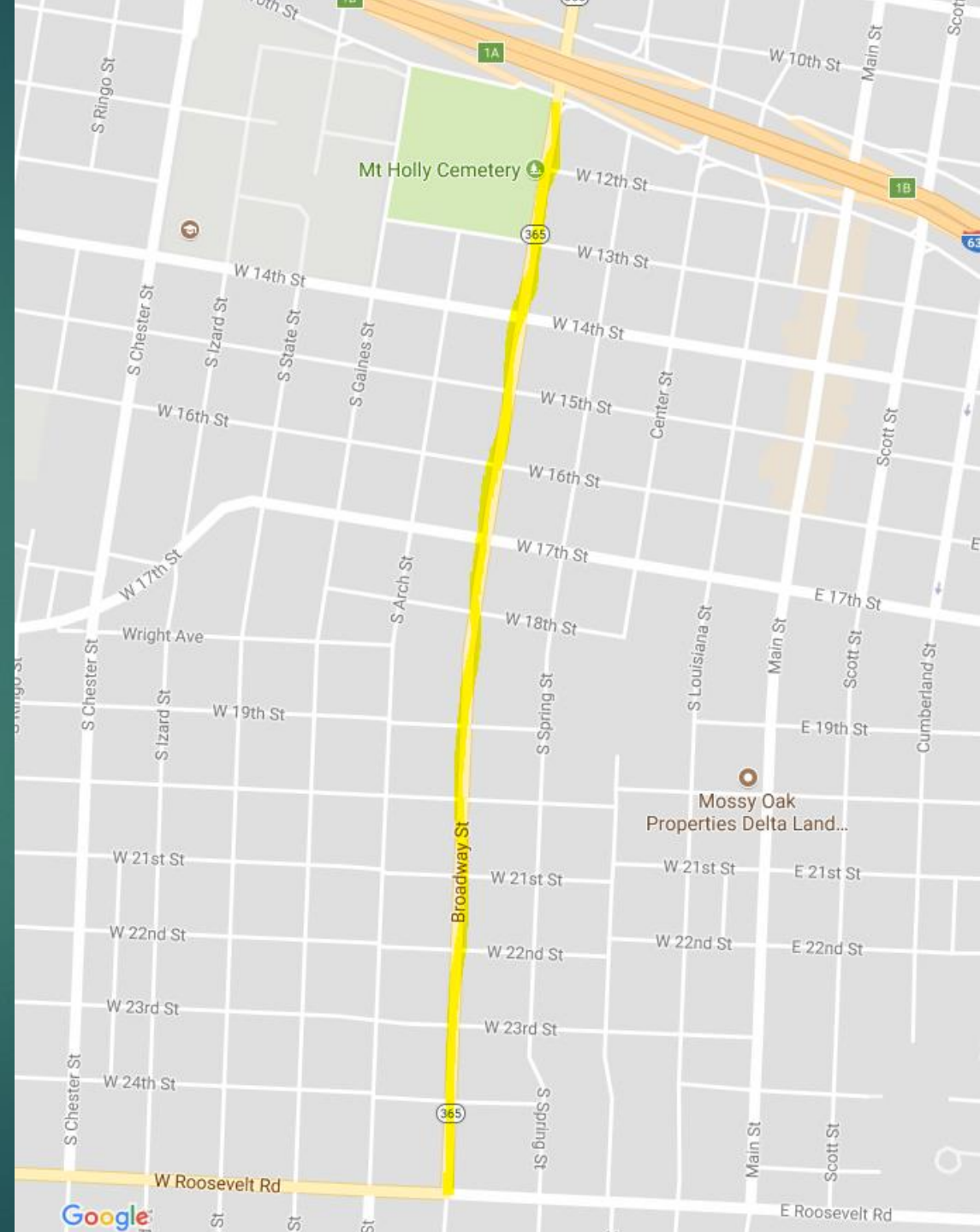
- ▶ Generally about:
  - ▶ Individual and neighborhood opinion regarding the importance Complete Streets
  - ▶ How Complete Streets relates to your neighborhood objectives
- ▶ Specifically regarding Complete Streets consideration in:
  - ▶ projects happening in your community
  - ▶ any proactive Complete Streets initiatives your neighborhood is pursuing
- ▶ Why AHTD?
  - ▶ Many of the streets in Little Rock are actually state highways governed by AHTD (e.g. Cantrell, Baseline, Arch, Broadway, Asher, Colonel Glenn)
  - ▶ AHTD has become more cognizant of the need to integrate their street designs with local streetscapes  
[http://arkansashighways.com/Trans\\_Plan\\_Policy/biking/Arkansas%20Bike-Ped%20Plan%20-%20FINAL%20-03312017.pdf](http://arkansashighways.com/Trans_Plan_Policy/biking/Arkansas%20Bike-Ped%20Plan%20-%20FINAL%20-03312017.pdf)
- ▶ Contact [jlandosky@littlerock.gov](mailto:jlandosky@littlerock.gov) for more information

# Effective Communication with Residents

- ▶ Residents in your neighborhood may not always be as engaged in neighborhood development/improvement
- ▶ Changes often initially met with skepticism
- ▶ You need education tools
- ▶ **Tool 1 - [www.littlerock.gov/BikePed](http://www.littlerock.gov/BikePed):** I will continue to develop tools to help with outreach. If you are trying to do a specific project, contact me ([jlandosky@littlerock.gov](mailto:jlandosky@littlerock.gov)) and I will research and create materials for you
- ▶ **Tool 2 - Visual Aids:** being able to visualize what a street will look like with proposed changes can help communicate a lot of information quickly.
- ▶ **Tool 3 – Demonstration Projects:** Residents may best understand a proposed street change if they can experience it.
  - ▶ Create Little Rock does one demonstration project per year <http://www.createlittlerock.com/popupintherock/>
  - ▶ Coordinate with Public Works
  - ▶ Labor intensive – not necessary for all projects!

# Advocate for a Specific Corridor

- ▶ Road diet on Broadway St. between I-630 and Roosevelt
- ▶ Ed Sergeant and Brett Budolfson did a remarkable job putting together a case for a road diet on this street
  - ▶ Evidence-based
    - ▶ Street meets criteria for a road diet
    - ▶ Street experiences speeding
    - ▶ Strong understanding of US DOT benefits of road diets
  - ▶ Strong community outreach
  - ▶ Evidence of support from residents and organizations
  - ▶ Discussion and public meetings with City staff and elected representatives
  - ▶ Patience
- ▶ Reach out to Ed Sergeant [edwardsergeant@sbcglobal.net](mailto:edwardsergeant@sbcglobal.net) or Brett Budolfson [bbudolfson@gmail.com](mailto:bbudolfson@gmail.com) to learn more



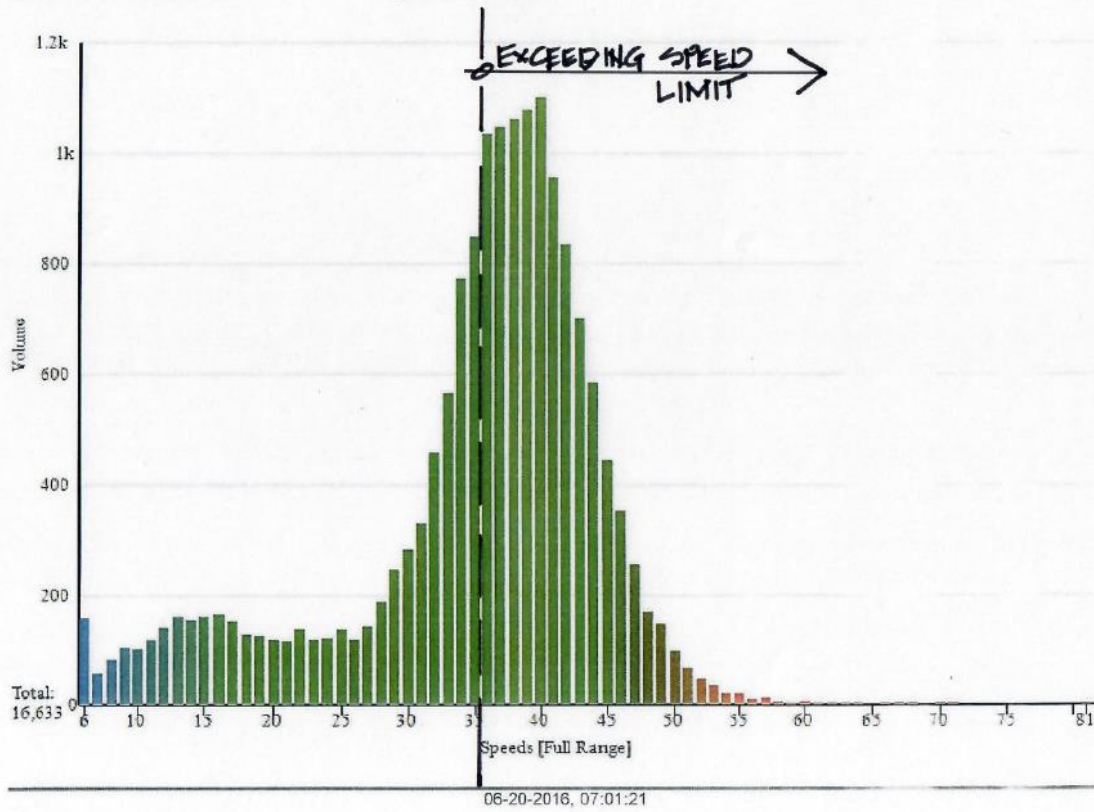
# Evidence

Place Currently Not Set  
Speed/Volume Graph

Location: 2300 South Broadway  
Dates: 06-13-16 to 06-17-16

Zone: Commercial  
Speed Limit: 35 MPH

Travel Direction: S



ReportNumber	DateOfCollision	Day	IntersectionWith	NumberOfVehicles	Road/Street/Highway	SpeedLimit	ContributingFactorText	DriverImpairment	DriverInjuryText
2013-034030	4/2/2013 0:00	3	BROADWAY	2	8RD STREET	35	NONE	NONE	NO INJURY / PROPERTY DAMAGE
2013-034031	4/2/2013 0:00	3	BROADWAY	2	7TH STREET	35	CARELESS PROHIBITED DRIVING	NONE	NOT IMPAIRED
2013-034283	4/2/2013 0:00	4	500 BLOCK OF 9TH STREET	2	500 BLOCK OF BROADWAY	30	UNKNOWN	NONE	POSSIBLE INJURY
2013-034383	4/3/2013 0:00	4	BROADWAY	2	8RD	30	UNKNOWN	NONE	NO INJURY / PROPERTY DAMAGE
2013-034780	4/4/2013 0:00	5	S. BROADWAY STREET	2	W. MARKHAM STREET	35	NONE	NONE	NO INJURY / PROPERTY DAMAGE
2013-034784	4/4/2013 0:00	5	BROADWAY STREET	2	W. MARKHAM STREET	35	NONE	NONE	NO INJURY / PROPERTY DAMAGE
2013-037071	4/16/2013 0:00	4	MARKHAM STREET	2	BROADWAY STREET	30	NONE	NONE	NO INJURY / PROPERTY DAMAGE
2013-037293	4/12/2013 0:00	6	9TH ST.	2	BROADWAY ST.	30	Multiple Contributing Factors	UNKNOWN	POSSIBLE INJURY
2013-038065	4/12/2013 0:00	6	9TH STREET	2	BROADWAY	35	CARELESS PROHIBITED DRIVING	NONE	NOT IMPAIRED
2013-039292	4/15/2013 0:00	2	9TH STREET	2	BROADWAY TOO BLOCK	35	NONE	NONE	NO INJURY / PROPERTY DAMAGE
2013-040651	4/18/2013 0:00	0	15TH STREET	0	BROADWAY	35	FAILURE TO YIELD	NOT IMPAIRED	NO INJURY / PROPERTY DAMAGE
2013-040482	4/27/2013 0:00	0	10TH STREET	0	BROADWAY	35	NONE	NONE	POSSIBLE INJURY
2013-040480	4/27/2013 0:00	0	14TH STREET	0	BROADWAY STREET	35	NONE	NONE	NO INJURY / PROPERTY DAMAGE
2013-046555	5/2/2013 0:00	5	8TH STREET	2	BROADWAY STREET	35	FOLLOWING TOO CLOSE	NOT IMPAIRED	NO INJURY / PROPERTY DAMAGE
2013-046724	5/9/2013 0:00	0	12TH STREET	0	BROADWAY STREET	35	NONE	NONE	NO INJURY / PROPERTY DAMAGE
2013-047144	5/9/2013 0:00	7	1.620 EAST EXIT RAMP	2	BROADWAY STREET	35	NONE	NONE	NO INJURY / PROPERTY DAMAGE
2013-047155	5/9/2013 0:00	0	DARTY BATES DRIVE	0	BROADWAY STREET	35	NONE	NONE	POSSIBLE INJURY
2013-047506	5/9/2013 0:00	8	17TH	0	BROADWAY	40	UNKNOWN	UNKNOWN	POSSIBLE INJURY
2013-047508	5/9/2013 0:00	1	BROADWAY STREET	2	WYTHEVILLE BLVD	35	NONE	NONE	NO INJURY / PROPERTY DAMAGE
2013-049091	5/9/2013 0:00	0	1300 BROADWAY ST	0	1300 BROADWAY ST	35	NONE	NONE	NON-IMPACTING INJURY
2013-049226	5/10/2013 0:00	6	8RD ST	2	BROADWAY ST	35	NONE	NONE	NO INJURY / PROPERTY DAMAGE
2013-050866	5/12/2013 0:00	1	ROOSEVELT RD.	2	BROADWAY ST	35	CARELESS PROHIBITED DRIVING	NONE	NO INJURY / PROPERTY DAMAGE
2013-050781	5/12/2013 0:00	2	BROADWAY	2	BROADWAY	35	CARELESS PROHIBITED DRIVING	NONE	NO INJURY / PROPERTY DAMAGE
2013-052852	5/16/2013 0:00	5	11TH STREET	1	UNKNOW	30	UNKNOWN	UNKNOWN	NO INJURY / PROPERTY DAMAGE
2013-052730	5/17/2013 0:00	6	BROADWAY	2	BROADWAY	35	NONE	NONE	NO INJURY / PROPERTY DAMAGE
2013-053002	5/18/2013 0:00	7	800 S. BROADWAY ST	2	BROADWAY ST	35	NONE	NONE	NO INJURY / PROPERTY DAMAGE
2013-053085	5/18/2013 0:00	7	BROADWAY STREET	2	2ND STREET (500 BLOCK)	35	DISOBEYED TRAFFIC SIGNAL	NONE	NO INJURY / PROPERTY DAMAGE
2013-053025	5/24/2013 0:00	6	8TH	2	BROADWAY	35	NONE	NONE	NO INJURY / PROPERTY DAMAGE
2013-056037	5/26/2013 0:00	1	CAPTOK ST	2	500 BROADWAY ST	35	NONE	NONE	NO INJURY / PROPERTY DAMAGE
2013-057044	5/29/2013 0:00	0	10TH STREET	0	BROADWAY STREET	35	NONE	NONE	NO INJURY / PROPERTY DAMAGE
2013-058370	5/29/2013 0:00	5	BROADWAY	2	BROADWAY	35	UNKNOWN	UNKNOWN	POSSIBLE INJURY
2013-058909	5/31/2013 0:00	6	1480 ACCESS ROAD	2	BROADWAY STREET	35	NONE	NONE	NO INJURY / PROPERTY DAMAGE
2013-058981	5/31/2013 0:00	6	BROADWAY	2	BROADWAY	35	NONE	NONE	NO INJURY / PROPERTY DAMAGE
2013-059004	5/31/2013 0:00	6	1480	2	BROADWAY	30	CARELESS PROHIBITED DRIVING	NONE	NON-IMPACTING INJURY
2013-060519	6/4/2013 0:00	3	CAPITOL	2	BROADWAY STREET	35	CARELESS PROHIBITED DRIVING	NONE	NO INJURY / PROPERTY DAMAGE
2013-060741	6/4/2013 0:00	3	9TH STREET	2	BROADWAY	35	NONE	NONE	NON-IMPACTING INJURY
2013-063732	6/11/2013 0:00	3	BROADWAY	2	MARKHAM 400 BLK WEST	30	Multiple Contributing Factors	UNKNOWN	POSSIBLE INJURY
2013-064060	6/22/2013 0:00	0	14TH STREET	0	BROADWAY	35	UNKNOWN	UNKNOWN	POSSIBLE INJURY
2013-067791	6/20/2013 0:00	5	BROADWAY STREET	2	630 E/8 ACCESS ROAD	30	NONE	NONE	NO INJURY / PROPERTY DAMAGE
2013-067856	6/20/2013 0:00	5	9TH STREET	2	BROADWAY STREET 900 BLOCK	40	UNKNOWN	UNKNOWN	POSSIBLE INJURY
2013-068433	6/21/2013 0:00	6	2ND ST 400 BLOCK	1	BROADWAY 100 BLOCK	40	CARELESS PROHIBITED DRIVING	NONE	NO INJURY / PROPERTY DAMAGE
2013-068657	6/23/2013 0:00	1	4TH STREET	2	BROADWAY STREET	35	NONE	NONE	NO INJURY / PROPERTY DAMAGE
2013-069541	6/24/2013 0:00	2	BROADWAY	2	WEST 2ND STREET	30	NONE	NONE	NO INJURY / PROPERTY DAMAGE
2013-070623	6/26/2013 0:00	4	BROADWAY STREET	2	WEST ROOSEVELT ROAD	35	CARELESS PROHIBITED DRIVING	NONE	NO INJURY / PROPERTY DAMAGE
2013-074649	7/6/2013 0:00	6	W. CAPITOL AVE NINE	2	BROADWAY STREET	30	CARELESS PROHIBITED DRIVING	NONE	NO INJURY / PROPERTY DAMAGE
2013-074812	7/6/2013 0:00	6	WEST 6TH STREET	2	BROADWAY STREET	30	NONE	NONE	NO INJURY / PROPERTY DAMAGE
2013-076056	7/8/2013 0:00	2	BROADWAY	2	122 BLK S. BROADWAY	35	UNKNOWN	NONE	NO INJURY / PROPERTY DAMAGE
2013-080393	7/16/2013 0:00	0	17TH STREET	0	BROADWAY	30	DISOBEYED TRAFFIC SIGNAL	NONE	NO INJURY / PROPERTY DAMAGE
2013-080544	7/16/2013 0:00	5	BROADWAY	2	SOUTH BROADWAY STREET	35	CARELESS PROHIBITED DRIVING	NONE	NO INJURY / PROPERTY DAMAGE
2013-080611	7/16/2013 0:00	5	BROADWAY	2	ROOSEVELT	35	NONE	NONE	NO INJURY / PROPERTY DAMAGE
2013-081111	7/20/2013 0:00	7	BROADWAY	2	500 BLOCK OF S. BROADWAY ST	35	NONE	NONE	NO INJURY / PROPERTY DAMAGE
2013-082845	7/24/2013 0:00	4	BROADWAY	2	ROOSEVELT ROAD	35	NONE	NONE	NO INJURY / PROPERTY DAMAGE
2013-084224	7/27/2013 0:00	0	DARTY L. GATSON BATES	0	BROADWAY STREET	30	CARELESS PROHIBITED DRIVING	NONE	POSSIBLE INJURY
2013-084925	7/29/2013 0:00	2	CAPTOK AVENUE	2	BROADWAY STREET	30	NONE	NONE	NO INJURY / PROPERTY DAMAGE
2013-085058	8/1/2013 0:00	5	W. ROOSEVELT	3	BROADWAY ST	35	CARELESS PROHIBITED DRIVING	NONE	NO INJURY / PROPERTY DAMAGE
2013-085919	8/2/2013 0:00	6	BROADWAY	2	BROADWAY	35	NONE	NONE	NO INJURY / PROPERTY DAMAGE
2013-0860729	8/2/2013 0:00	6	INTERSTATE 650 ACCESS	2	BROADWAY STREET	35	CARELESS PROHIBITED DRIVING	NONE	NO INJURY / PROPERTY DAMAGE
2013-087544	8/4/2013 0:00	1	WEST 2ND STREET	2	BROADWAY	35	UNKNOWN	NOT IMPAIRED	NO INJURY / PROPERTY DAMAGE
2013-088450	8/6/2013 0:00	1	BROADWAY STREET	20	Multiple Contributing Factors	UNKNOWN	POSSIBLE INJURY	POSSIBLE INJURY	
2013-088774	8/7/2013 0:00	4	BROADWAY STREET	2	7TH STREET	30	NONE	NONE	NO INJURY / PROPERTY DAMAGE
2013-089807	8/8/2013 0:00	0	15TH STREET	0	BROADWAY	35	CARELESS PROHIBITED DRIVING	NONE	NO INJURY / PROPERTY DAMAGE
2013-089849	8/8/2013 0:00	5	2ND STREET	0	BROADWAY STREET	35	NONE	NONE	POSSIBLE INJURY

## LRPD Accident Report

### Road Diet Informational Guide



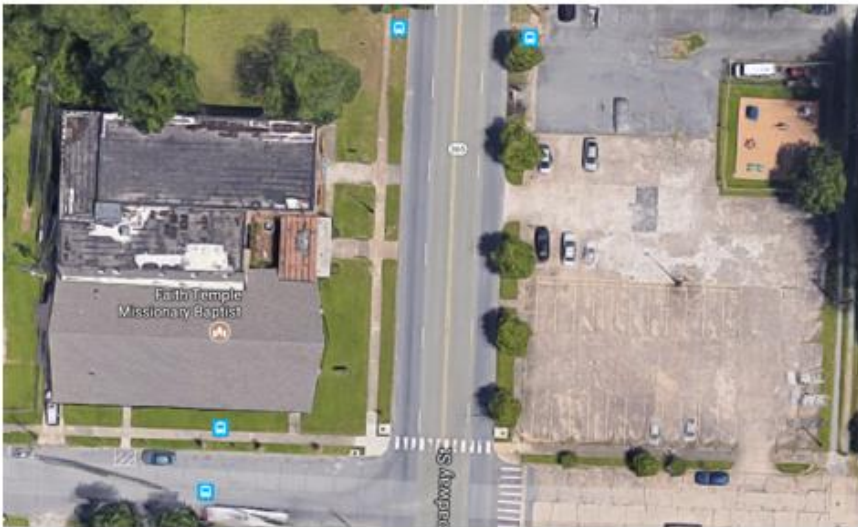
Benefits and best practices

## LRPD Speeding Report

# Community Outreach

## Crossing Broadway at Faith Temple Missionary Baptist Church

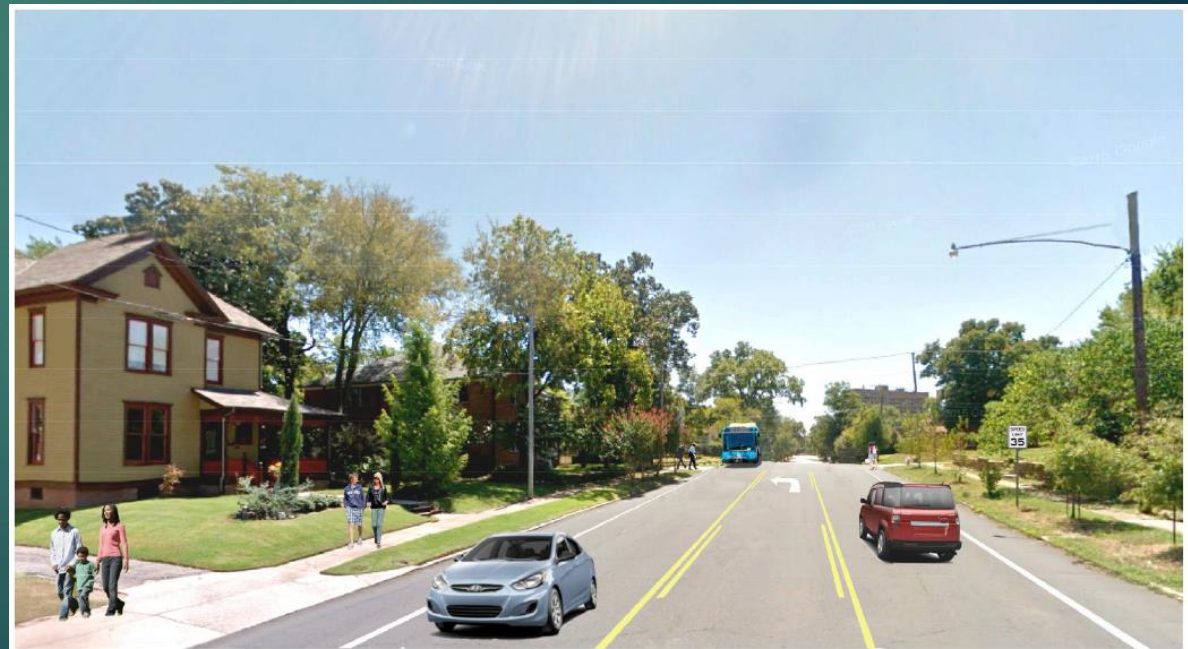
Faith Temple Missionary Baptist Church parishioners: Please take this short survey regarding crossing Broadway St. to go between your church and parking lot.



- 1) How do you typically get to church [walk, bike, bus, drive, other] (circle best answer)?
- 2) How often do you cross Broadway on foot in order to attend church 1 2 3 4 5  
(1=never, 5=every time I attend church)?
- 3) When you drive, does a safety concern crossing Broadway influence your decision to park in the lot across the street 1 2 3 4 5  
(1=not at all, 5=absolutely)?
- 4) When you cross Broadway on foot here, do you use the crosswalk at Charles Bussey Ave. (1=never, 5=always)?



1400 Block – existing 4 lanes



1400 Block – proposed "Safe Streets" Scheme

# Support from Residents and Organizations

## RESOLUTION

A RESOLUTION OF THE CAPITOL ZONING DISTRICT COMMISSION TO SUPPORT THE SAFE STREET PROJECT ON BROADWAY STREET SOUTH OF INTERSTATE 630.

Please sign below in support of **Broadway Street Safe Streets Project:**

• Name (print): <i>Frankie Webb</i>	Signature: <i>Frankie Webb</i>	Representing (Business, Organization): <i>Paris Towers</i>	Phone: <i>501-650-6329</i>
Street address: <i>1800 Broadway St. #806</i>	Mailing address: <i>Same</i>	Email:	
• Name (print): <i>Juan</i>	Signature: <i>Juan</i>	Representing (Business, Organization): <i>Vice President</i>	Phone: <i>Mr. Juan Duques Sr</i>
Street address: <i>1900 Broadway #908</i>	Mailing address:	Email:	
• Name (print): <i>Sandra Sanders</i>	Signature: <i>Sandra Sanders</i>	Representing (Business, Organization): <i>Paris Towers</i>	Phone:
Street address: <i>1800 Broadway #1402</i>	Mailing address:	Email:	
• Name (print): <i>Emily Delmar</i>	Signature: <i>Emily Delmar</i>	Representing (Business, Organization): <i>FRESH 2YOU</i>	Phone: <i>501-765-8141</i>
Street address: <i>18 FEDSPR Court LITTLE ROCK, AR 72212</i>	Mailing address:	Email: <i>EMILY@VIDEALSDUIMAGE.ORG</i>	
• Name (print): <i>Ronnie Tingle</i>	Signature: <i>Ronnie Tingle</i>	Representing (Business, Organization): <i>Paris Towers</i>	Phone:
Street address: <i>1800 Broadway Apt 717</i>	Mailing address: <i>Same</i>	Email:	
• Name (print): <i>Jinjer James Green</i>	Signature: <i>Jinjer James Green</i>	Representing (Business, Organization):	Phone:
Street address: <i>37 Carroll Circle Mabelvale AR 72103</i>	Mailing address:	Email: <i>owlscnr@aol.net</i>	



RESOLUTION

OF THE

MOUNT HOLLY CEMETERY ASSOCIATION

TO SUPPORT THE SAFE STREET PROJECT  
ON BROADWAY STREET SOUTH OF INTERSTATE 630

# Remain Informed and Vigilant

- ▶ If your neighborhood wants more Complete Streets projects, you might consider appointing a neighborhood association Complete Streets point person to:
  - ▶ Be a contact person for me
  - ▶ Develop some familiarity with options and their benefits/drawbacks
  - ▶ Stay informed of relevant projects in your neighborhood
  - ▶ Stay engaged with ongoing projects in your neighborhood



Questions?

