



# Bicycle and Pedestrian Program



Presented by Jeanne Stevens, AICP and Jessica Wilson  
September, 2010

# 2004 TDOT Bicycle & Pedestrian Policy

- TDOT Policy Number 530-01:

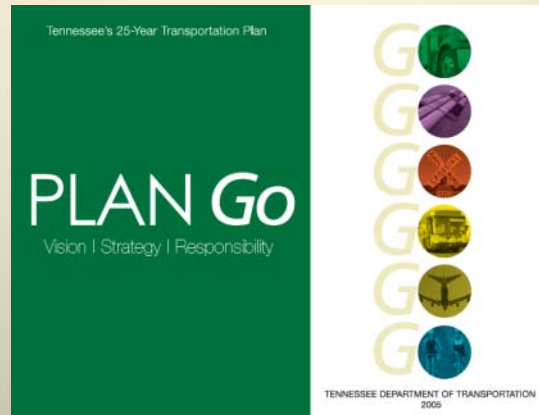
The policy of the Department of Transportation is to routinely integrate bicycling and walking options into the transportation system as a means to improve mobility and safety of non-motorized traffic. This policy pertains to both bicycle and pedestrian facilities.

<http://www.tdot.state.tn.us/bikeped/pdfs/policy.pdf>

# 2005 Bicycle and Pedestrian Plan

- The TDOT 2005 Long Range Plan included a bicycle and pedestrian component that outlines the department's goals and proposed initiatives over the next 25 years.

<http://www.tdot.state.tn.us/plango/pdfs/plan/BicyclePed.pdf>



# 2009 Strategic Highway Safety Plan

TN was the 1<sup>st</sup> state to adopt a Strategic Highway Safety Plan. In Fall 2009, TDOT approved revisions to the state's Strategic Highway Safety Plan, which now includes bicycle and pedestrian safety as a statewide goal. TDOT may now spend federal HSIP funds on bicycle and pedestrian safety projects.



## How are we implementing existing policies to form liveable communities?

- Road Safety Audit Reviews that address bicycle and pedestrian safety
- Include bicycle/pedestrian facilities in resurfacing projects where applicable
- Bicycle-tolerable rumble strip policy
- Transportation Planning Report input
- Safe Routes to School, TE, Recreational Trails

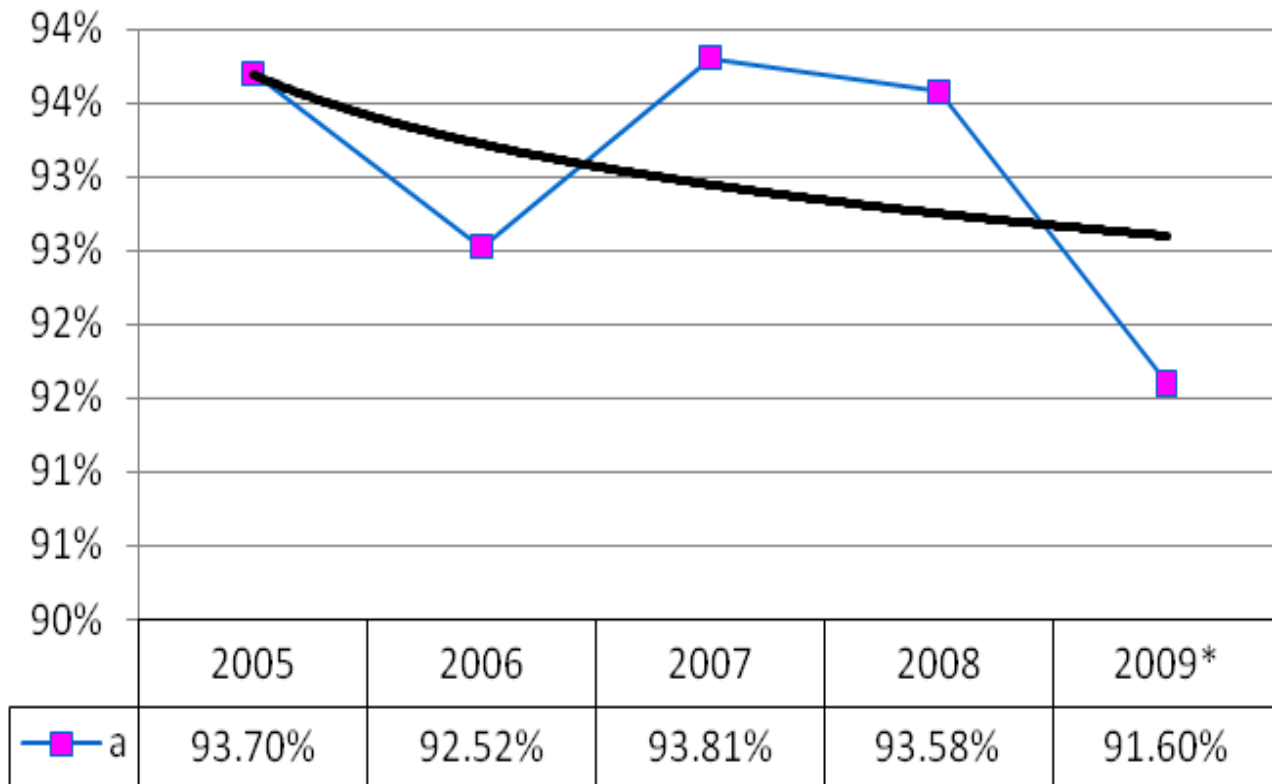
# TN Bicyclists & Pedestrians- Crash Data

- In 2008, there were 1,176 reported traffic crashes involving pedestrians and 476 crashes involving bicyclists.
- In 2009, there were 75 pedestrian fatalities and 8 bicyclist fatalities.



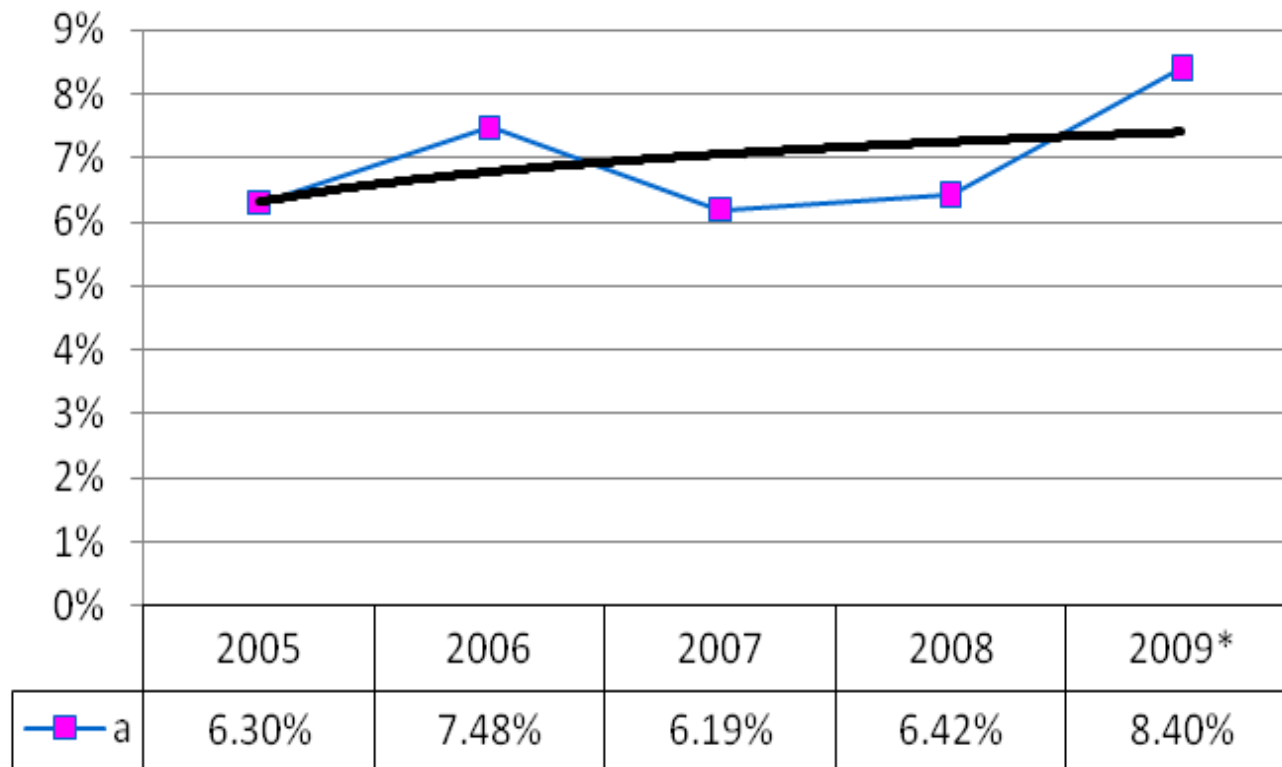
Photo by Phil Gentry

## Motorized vehicle occupants as % of Total Fatalities



Data from TN Department of Safety

## Bicyclists & Pedestrians as % of Total Fatalities



Data from TN Department of Safety

# Road Safety Audit Reviews

- TN currently holds more RSARs than any other state .
- A team of internal and external stakeholders meets for a pre-brief to go over crash data, then holds a field review. Measures to improve safety are discussed at the field review and then entered into a draft report. The report is distributed to team members and a post-meeting is held to go over findings so that the draft report can be finalized.



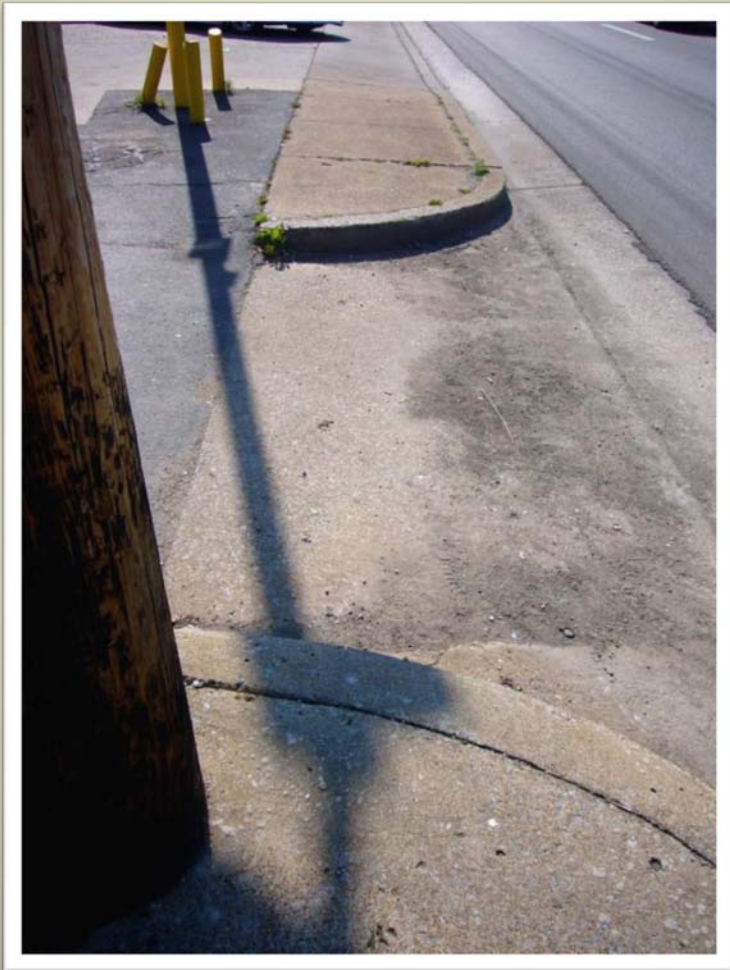
# Road Safety Audit Reviews

- When attending Road Safety Audit field reviews, it is crucial to think of not only safety of motorists, but of bicyclists and pedestrians as well.
- Ex: Are drainage grates bicycle-friendly? Do curb ramps meet ADA standards? Are crosswalks clearly marked?

# Chattanooga RSAR- Case Study











# GIS Initiatives

- TDOT is currently working with the TN Dept. of Safety to create a GIS layer showing bicycle and pedestrian crash data (location and attributes) along state and local roads.
- Once this data is collected, we plan to propose using HSIP funds for projects that specifically address bicyclists and pedestrians at “hot spots”, corridors, and/or facility gaps where bike/ped crashes are occurring.

# Resurfacing

- As we receive resurfacing lists, we review them to see if there are opportunities to:
  - ✓ add bicycle and pedestrian signage such as Bike Route or Share the Road signage
  - ✓ stripe for bicycle lanes
  - ✓ comment on rumble stripe placement or request exclusions where applicable
  - ✓ upgrade curb ramps to meet ADA standards
- However, with resurfacing projects, TDOT must work within the existing ROW and with existing local plans.



SR-12/ Rosa Parks Blvd. resurfacing project



SR-12/ Rosa Parks Blvd. resurfacing project

# Rumble Stripes/Strips

- Rumble Stripes vs. Rumble Strips.  
What's the difference?



Rumble stripe



Rumble strip

# The dilemma...

- Rumbles force cyclists to ride further into the roadway in order to avoid their effects. While this is entirely legal, it puts them at greater risk of being hit by an inattentive motorist.

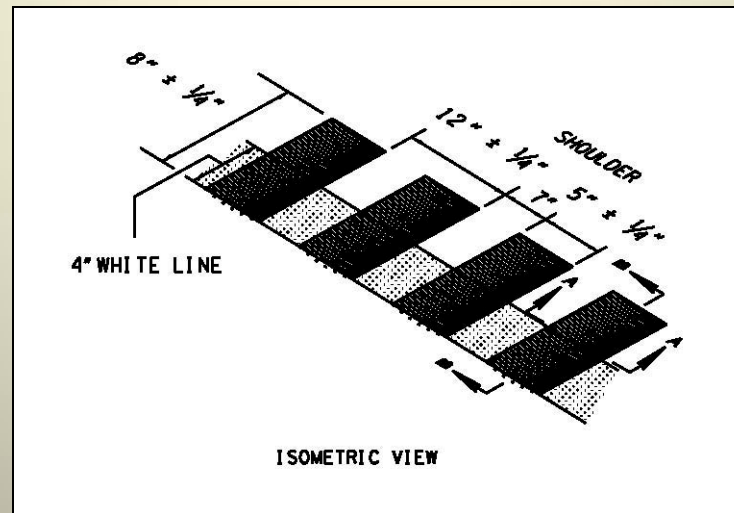


# Working together towards a solution

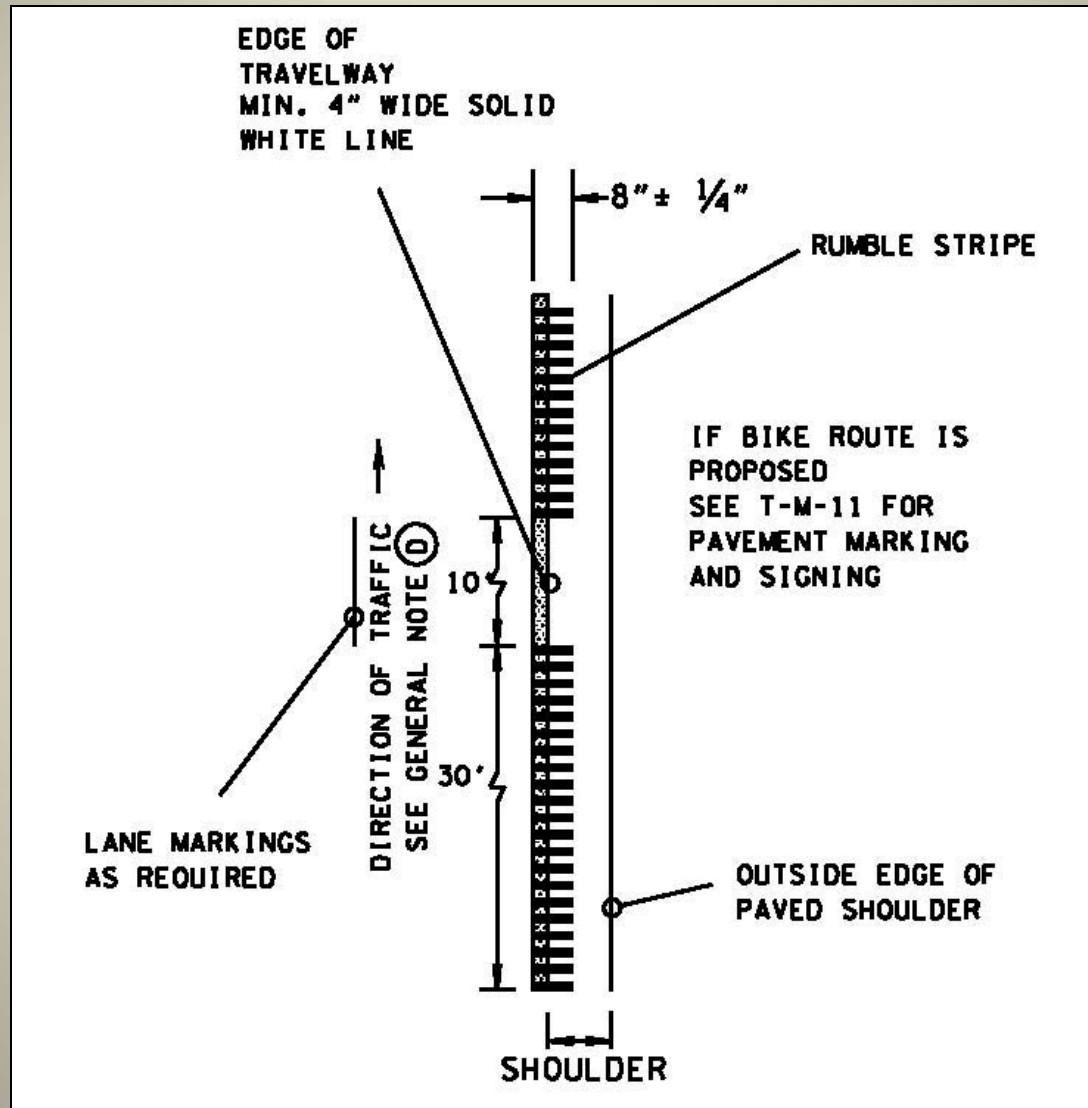
- TDOT held a series of meetings to research and devise more bicycle-friendly rumble strip standards that would include options for a narrower stripe, intermittent gaps, 5” rumble 7” space pattern, and shallower rumble depth where rumbles are applied.
- Members of working group comprised of folks from:
  - Bike/Ped office
  - Safety
  - Design
  - Construction
  - Materials and Testing

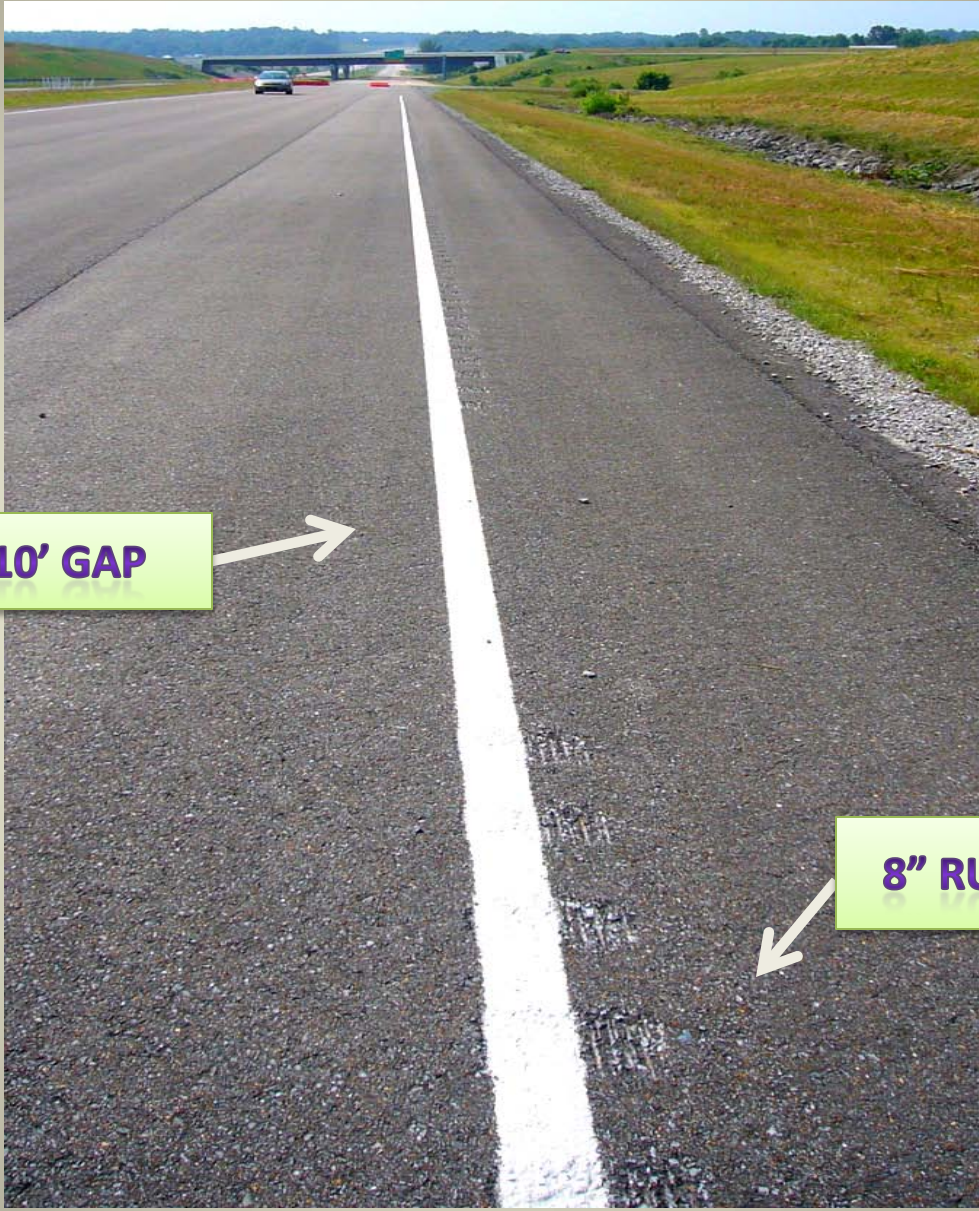
# New Rumble Strip/Stripe Standard Drawings

- Draft standards were approved by FHWA and issued by TDOT through an Instructional Bulletin before being added to standard drawings.



# Stripe details





**10' GAP**

**8" RUMBLE**

# Following through

- TDOT Bicycle and Pedestrian program staff review safety and resurfacing projects several months before they are let to ensure that recommendations are made in advance of final design. We then compile a spreadsheet of our recommendations and send these to our design office for distribution to appropriate staff members.

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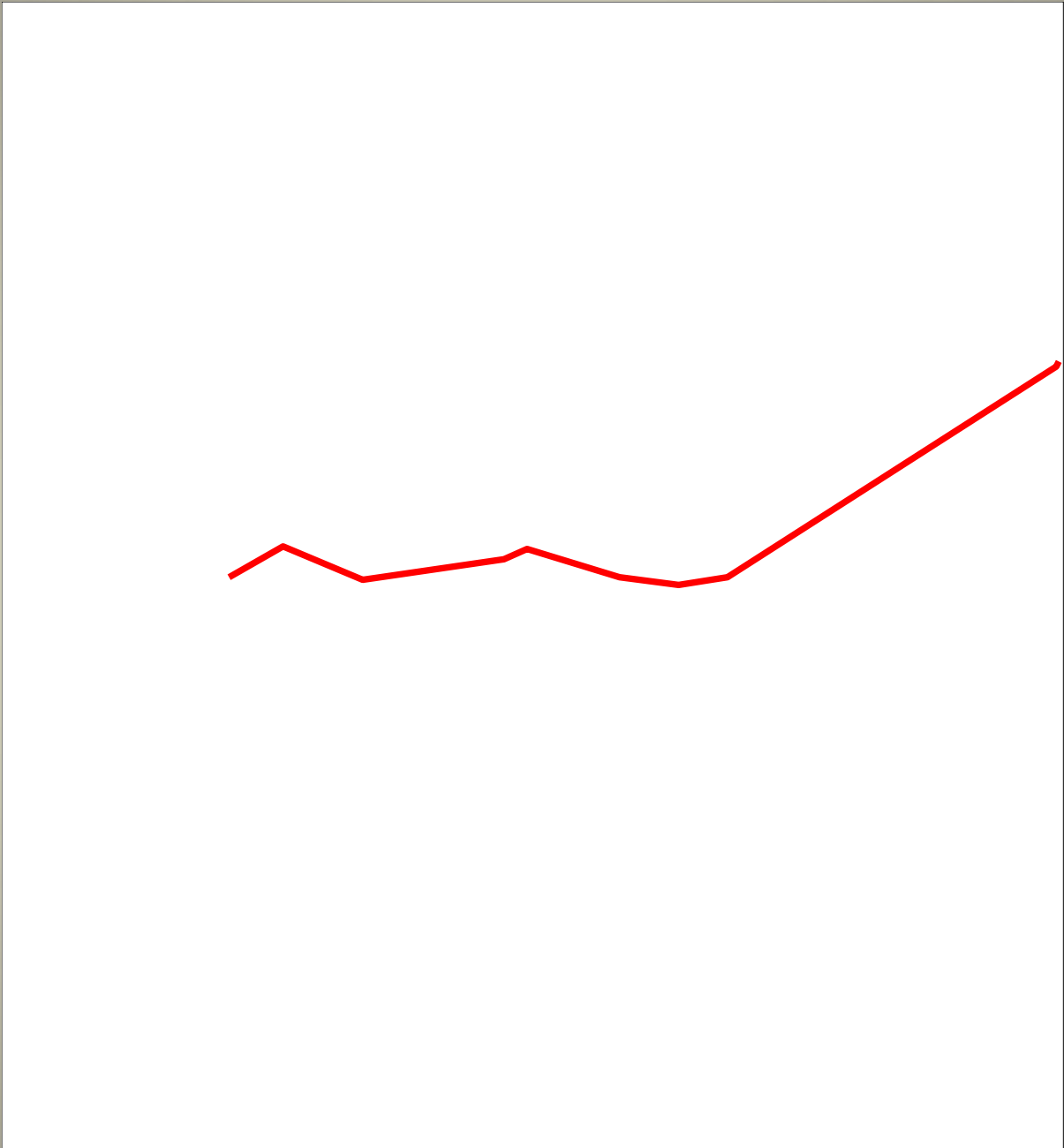
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A1 June 2010 Resurfacing- Bicycle Recommendations

June 2010 Resurfacing- Bicycle Recommendations									
Region	County	Route	Description	BLM	ELM	Length	Shoulder Width	Recommendations	
4	Haywood	SR-179	Tipton COL to Bridge over Big Muddy Creek	0	6.12	6.12	3'-5' gravel	Proposed bike route- recommend no rumbling unless shoulder is paved	
4	Crockett	SR-76	Haywood COL to SR-20	0	2.94	2.94	2'-5' gravel	Recommend no rumbles unless shoulder is paved	
4	McNairy	SR-5	Mississippi State line to SR-57	0	5.86	5.86	10'	Existing state bike route- follow new standards if rumbles used	
4	Shelby	SR-1	SR-57 to Isabelle St.	6.68	9.34	2.66	Curb & gutter	Urban curb and gutter- recommend no rumbles	
4	Henderson	SR-22	SR-22A to SR-20	9.31	11.38	2.07	2'	2' shoulders- new standards recommend no rumbles	
4	Hardeman	SR-15	Walton Road to bridge over Pleasant Run Creek	9.23	11.79	2.56	10'	Follow new standards if using rumbles	
4	Henry	SR-22	Carroll COL to Weakley COL	0	1.97	1.97	12'	Follow new standards if using rumbles	
4	Carroll	SR-22	Near SR-423 to Henry COL	23	25.09	2.09	12'	Follow new standards if using rumbles	
4	Shelby	SR-3	N. of Wolf River to Overflow bridge	15.69	20.32	4.63	varies	Urbanized area- rumbles not recommended	
4	Madison	SR-1	JCT SR-186 to SR-391	13.93	15.48	1.55	10'	Existing state bike route- follow new standards if rumbles used	
4	Benton	SR-1	JCT SR-391 to JCT SR-391	4.26	8.54	4.28	10'	Existing state bike route- follow new standards if rumbles used	

# Transportation Planning Reports

- Outline a project's purpose and need
- Attend field reviews
- Make recommendations based off state and local plans- including bike/ped and greenways and trails plans
- Note present and future demand



# Designing Bicycle and Pedestrian Facilities

- We held six 2-day workshops across the state titled ‘Designing for Bicycle & Pedestrian facilities’ for both state and local engineers to learn best practices in bike/ped design.





- Other sources of federal Bike/Ped funding:

- Safe Routes to Schools
- Transportation Enhancements
- Recreational Trails Program
- Congestion Mitigation and Air Quality (CMAQ)



Photo by Jeanne Reasonover

# State Bike Route update

- Your responses to the survey questions will assist the Tennessee Department of Transportation (TDOT) in updating Tennessee's State Bike Route System. The primary focus of this survey is on longer distance bicycle travel within Tennessee.

Please take our survey by October 30<sup>th</sup>, 2010!

<http://www.surveymonkey.com/s/TNBikeSurvey>

# Thank You!

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