FRM
Fayetteville Raleigh Metropolitan Planning Organization

BURGESS & NIPLE
Engineers ■ Architects ■ Planners

Maxwell Hill Area Traffic Study

Public Meeting #2

August 16, 2016

Agenda

- Review of Study Purpose, Goals, and Process
- Recap of Previous Meetings
- Existing Conditions Highlights
- Evaluation Criteria
- Initial Idea Screening
- Improvement Concepts for Consideration
- Open Discussion/Wrap-Up

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Study Area

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Study Purpose and Goals

Clearly identify and define current transportation problems with traffic in the Maxwell Hill area

Identify cost effective solutions to address the specific issues and reduce "cut-through" traffic

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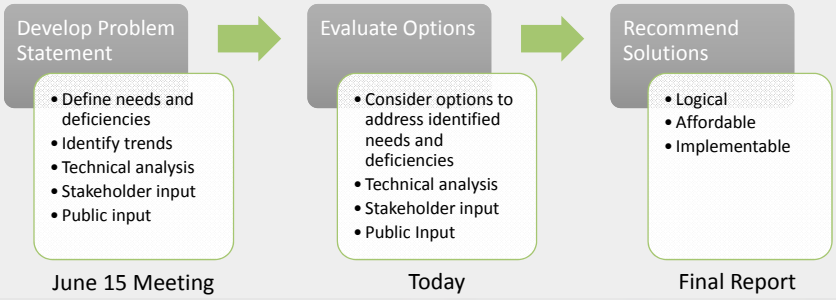
Study Process



June 15 Meeting | Today | Final Report

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Recap of Previous Meetings

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Recap of Previous Meetings – June 15, 2016

- Stakeholder Meeting #1
  - 18 stakeholders in attendance
  - WVDOH, FRM, RCESA/911, Beckley Police, Beckley Fire, Beckley City Council, City of Beckley, Raleigh County
- Public Meeting #1
  - 30 citizens signed in
  - 13 citizens provided comments (written or online)
- Summaries on FRM website

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Recap of Previous Meetings – June 15, 2016

- Identified Issues/Concerns
  - Vehicles speeding
  - Large number of vehicles using residential roadways
  - Residents have difficulty doing yardwork
  - Children cannot play in their front yards
  - Large number of heavy vehicles (tractor trailers, buses, etc.)
  - Residents have difficulty leaving their driveway
  - Mailboxes have been hit
  - Residents have difficulty walking and crossing the streets
  - Added traffic creates more noise
  - Roadways are very narrow and were not designed to accommodate these traffic volumes or the heavy vehicles
  - Large number of ATVs and motorcycles that speed and are considerably louder than other vehicles

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Recap of Previous Meetings – June 15, 2016

- Potential Solutions
  - Restrict access via dead-end roadways
  - Build a bypass road
  - Speed humps/bumps
  - Increased police presence
  - Reduced speed limit
  - Additional warning and traffic calming signage
  - Redirect/prohibit truck traffic
  - More stop signs
  - Increased fines for speeding
  - Convert some residential streets to one-way

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Existing Conditions Highlights

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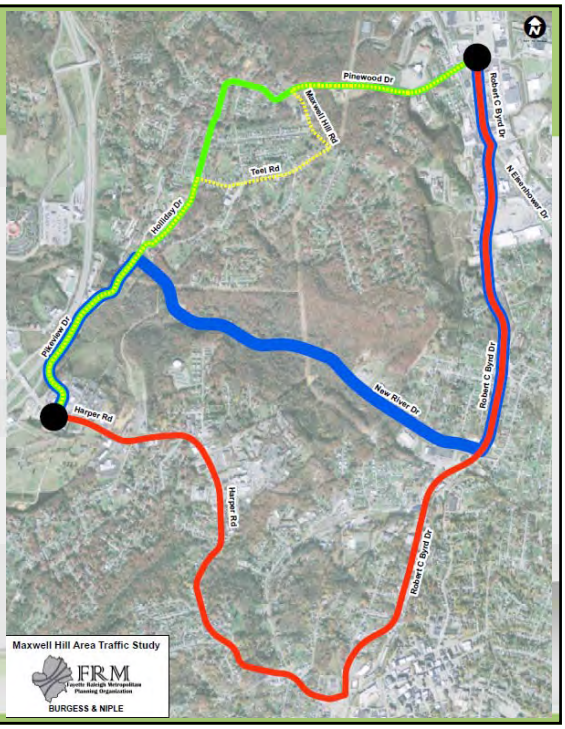
Existing Travel Times

HARPER ROAD TO ROBERT C. BYRD DRIVE

	AM	PM
RED	10m 18s	10m 45s
BLUE	7m 54s	7m 48s
GREEN	6m 10s	6m 15s
YELLOW	7m 6s	7m 13s

ROBERT C. BYRD DRIVE TO HARPER ROAD

	AM	PM
RED	8m 12s	10m 52s
BLUE	7m 6s	7m 19s
GREEN	5m 39s	5m 37s
YELLOW	5m 32s	6m 22s



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Cut-Through Traffic Estimates

- Nearly 50% of traffic in the residential area is cutting through
- Pikeview Drive to Holliday Drive to Pinewood Drive is the most utilized route (used by approximately 90% of cut-through traffic)

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Evaluation Criteria

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Evaluation Criteria

- Construction costs
- Likelihood to deter cut-through traffic
- Level of inconvenience to Maxwell Hill residents
- Decreased travel speeds
- Reduction in truck traffic

Based on:
- Existing Issues and Concerns
- Stakeholder Input
- Public Input

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Initial Idea Screening

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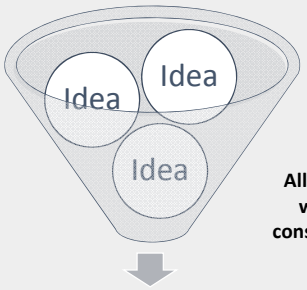
Initial Idea Screening

- Generate initial ideas
  - Potential solutions identified by public and stakeholders
  - Ideas generated by consultant
- Screen ideas
  - Evaluate ideas based on identified criteria
- Develop concepts for improvement



All ideas were considered

CONCEPTS FOR IMPROVEMENT

Identify cost effective solutions to address the specific issues and reduce "cut-through" traffic

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Ideas Considered and Eliminated

- Local bypass roads between WV 16 and Harper Road
  - Construction costs would be high
    - A new 2-lane roadway on new alignment would likely cost over $1,000 per linear foot to construct plus right-of-way acquisition and utility relocation costs.
  - Would be difficult to secure construction funding
  - Environmental and property impacts could be significant

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Ideas Considered and Eliminated

- Increased police presence
  - Unlikely to result in sustainable long-term benefit
  - Unfeasible with limited police funds and resources

- Reduced speed limit
  - Posted speed limits have little effect on actual travel speeds
    - For every 5 mph reduction in posted speed, only 1 mph reduction in travel speed
  - Negligible safety benefit
    - 10 mph reduction in speed limit reduces crashes by 4%
  - Ineffective without additional enforcement

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Ideas Considered and Eliminated

- More stop signs
  - *Manual on Uniform Traffic Control Devices* (MUTCD) has specific guidelines for installing stop signs.
    - Based on this criteria, additional stop signs are not justified
  - Unnecessary stop signs encourage motorists to drive faster between intersections and result in increased stop sign violations

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Ideas Considered and Eliminated

- Increased fines for speeding
  - Requires legislation changes
  - Unless coupled with increased enforcement, will not likely result in sustainable long-term solution

- Convert residential streets to one-way
  - Inconvenience to residents
  - Travel speeds could increase as a result of wider travel lanes and curves and terrain that is easier to navigate without oncoming traffic
  - Will not deter all of the cut-through traffic

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Improvement Concepts for Consideration

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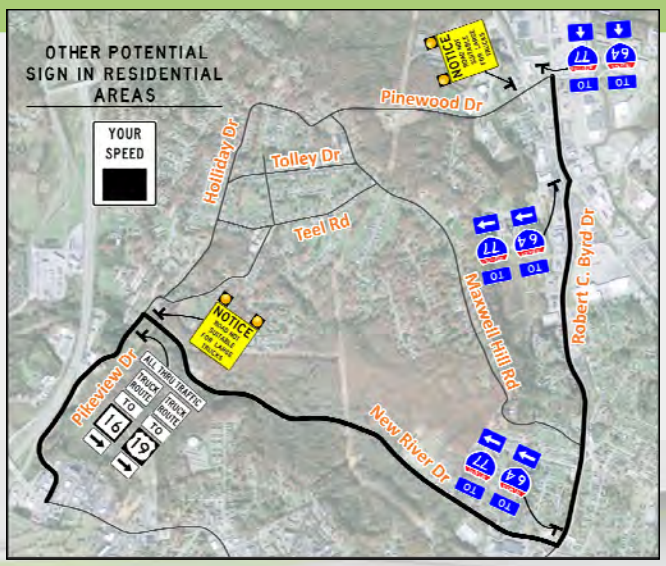
Concept A: Modified Signage



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Concept A: Modified Signage

Goal	Evaluation
CONSTRUCTION COSTS	DISADVANTAGE — ADVANTAGE; NO CHANGE
LIKELIHOOD TO DETER CUT-THROUGH TRAFFIC	DISADVANTAGE — ADVANTAGE; NO CHANGE
LEVEL OF INCONVENIENCE TO NEIGHBORHOOD RESIDENTS	DISADVANTAGE — ADVANTAGE; NO CHANGE
DECREASE IN TRAVEL SPEEDS	DISADVANTAGE — ADVANTAGE; NO CHANGE
REDUCTION IN TRUCK TRAFFIC	DISADVANTAGE — ADVANTAGE; NO CHANGE

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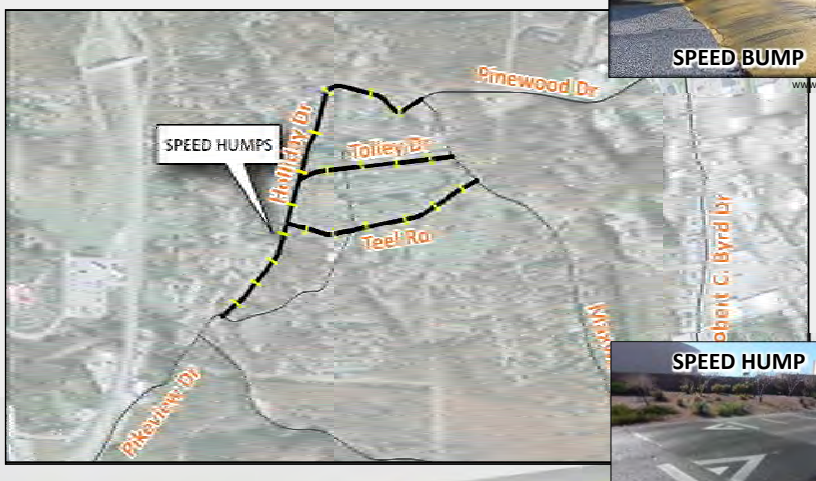
Concept B: Speed Humps



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Concept B: Speed Humps

Goal	Evaluation
CONSTRUCTION COSTS	DISADVANTAGE — ADVANTAGE; NO CHANGE
LIKELIHOOD TO DETER CUT-THROUGH TRAFFIC	DISADVANTAGE — ADVANTAGE; NO CHANGE
LEVEL OF INCONVENIENCE TO NEIGHBORHOOD RESIDENTS	DISADVANTAGE — ADVANTAGE; NO CHANGE
DECREASE IN TRAVEL SPEEDS	DISADVANTAGE — ADVANTAGE; NO CHANGE
REDUCTION IN TRUCK TRAFFIC	DISADVANTAGE — ADVANTAGE; NO CHANGE

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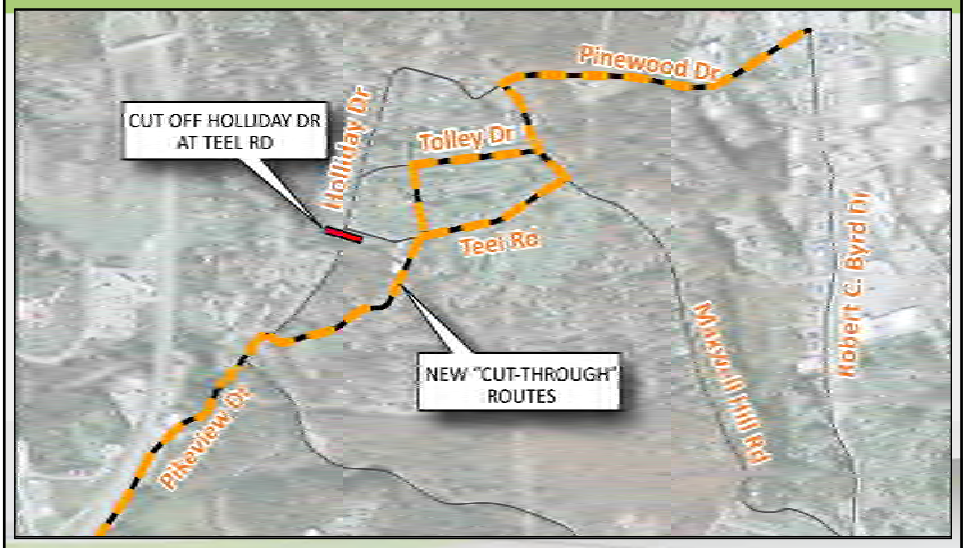
Concept C: Cut off Holliday Drive at Teel Road



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Concept C: Cut off Holliday Drive at Teel Road

Goal	Evaluation
CONSTRUCTION COSTS	DISADVANTAGE / ADVANTAGE / NO CHANGE
LIKELIHOOD TO DETER CUT-THROUGH TRAFFIC	DISADVANTAGE / ADVANTAGE / NO CHANGE
LEVEL OF INCONVENIENCE TO NEIGHBORHOOD RESIDENTS	DISADVANTAGE / ADVANTAGE / NO CHANGE
DECREASE IN TRAVEL SPEEDS	DISADVANTAGE / ADVANTAGE / NO CHANGE
REDUCTION IN TRUCK TRAFFIC	DISADVANTAGE / ADVANTAGE / NO CHANGE

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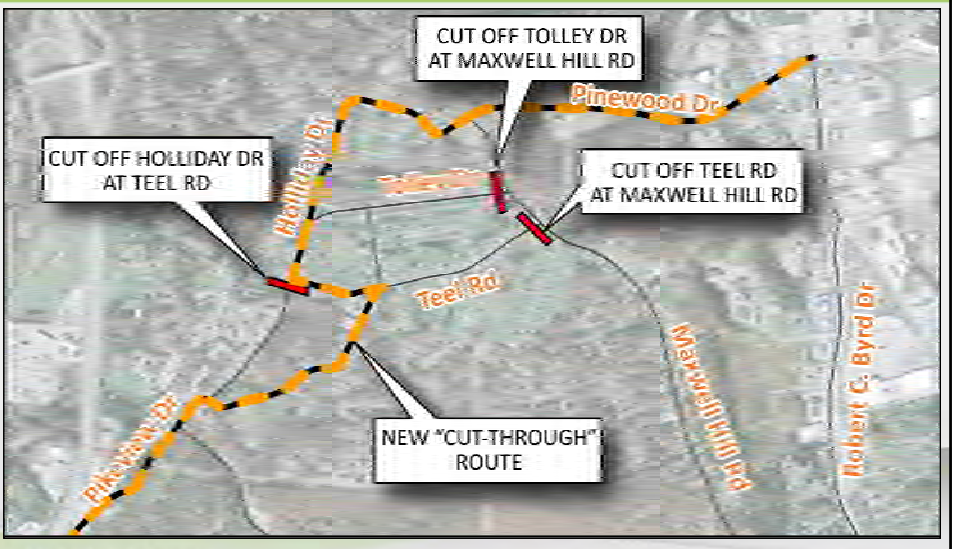
Concept D: Cut off Holliday Drive, Teel Road, and Tolley Drive



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Concept D: Cut off Holliday Drive, Teel Road, and Tolley Drive

Goal	Evaluation
CONSTRUCTION COSTS	DISADVANTAGE / ADVANTAGE / NO CHANGE
LIKELIHOOD TO DETER CUT-THROUGH TRAFFIC	DISADVANTAGE / ADVANTAGE / NO CHANGE
LEVEL OF INCONVENIENCE TO NEIGHBORHOOD RESIDENTS	DISADVANTAGE / ADVANTAGE / NO CHANGE
DECREASE IN TRAVEL SPEEDS	DISADVANTAGE / ADVANTAGE / NO CHANGE
REDUCTION IN TRUCK TRAFFIC	DISADVANTAGE / ADVANTAGE / NO CHANGE

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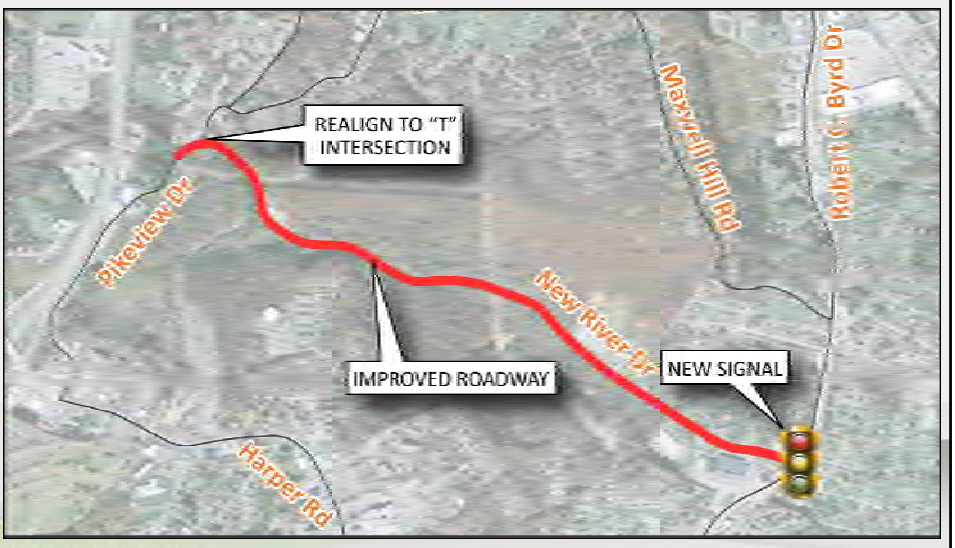
Concept E: Improvements to New River Drive



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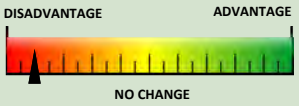
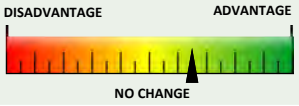
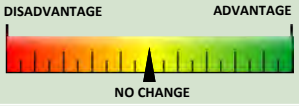
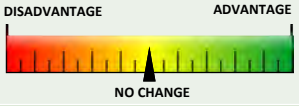
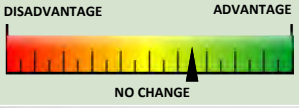
Concept E: Improvements to New River Drive

Goal	Evaluation
CONSTRUCTION COSTS	
LIKELIHOOD TO DETER CUT-THROUGH TRAFFIC	
LEVEL OF INCONVENIENCE TO NEIGHBORHOOD RESIDENTS	
DECREASE IN TRAVEL SPEEDS	
REDUCTION IN TRUCK TRAFFIC	

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We Ask You To Please…

- Review the concepts
- Ask questions
- Tell us what you like/dislike about each concept

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Next Steps

- Develop recommended concept
  - Likely a variation and/or combination of concepts presented tonight
- Final Report in September
  - Email notification
  - Posted on FRM website

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