



*Welcome to the*

**MD 32**

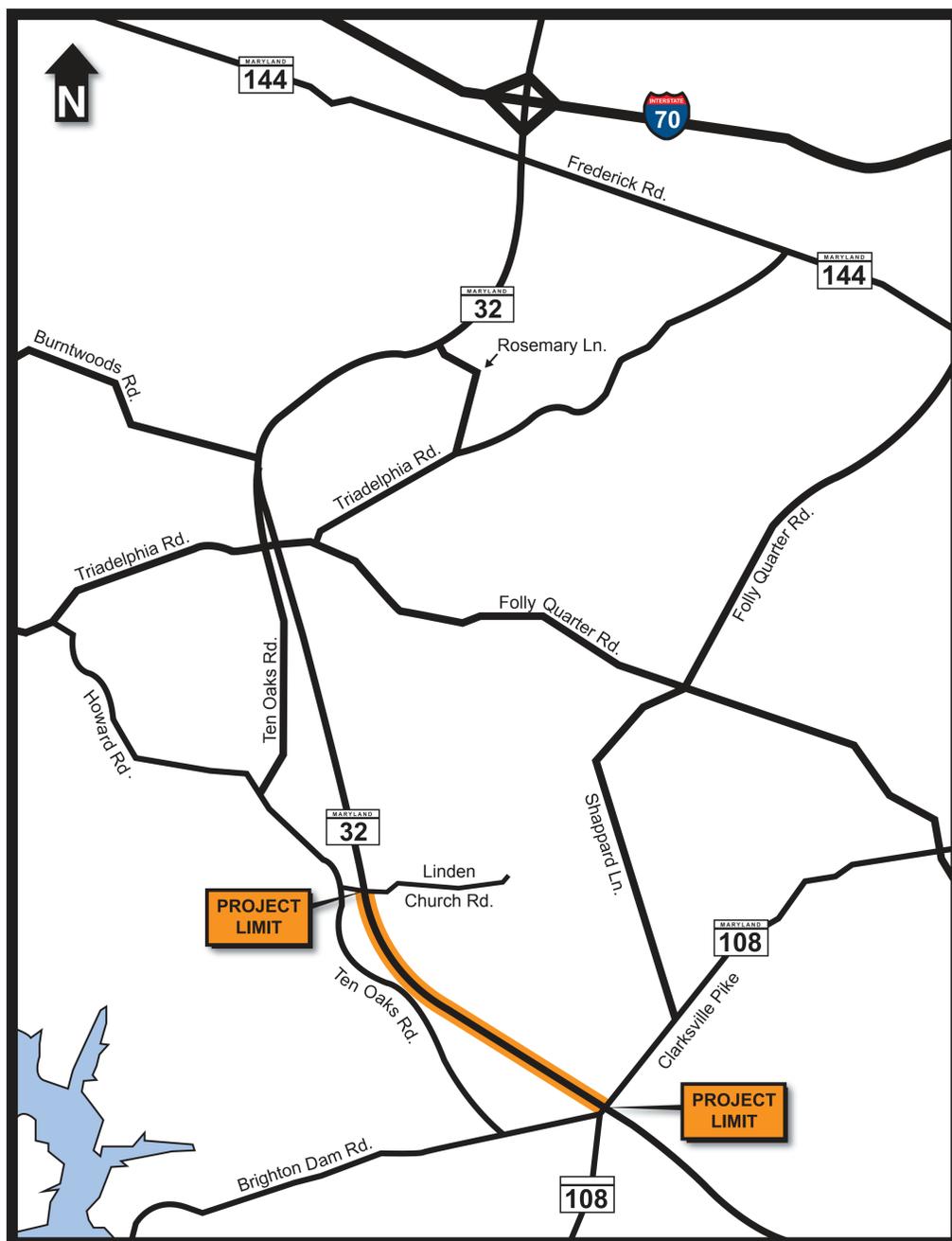
**From MD 108 to Linden Church Road**

**Informational Meeting**

**June 16, 2016**

**PLEASE SIGN-IN**





## PROJECT BACKGROUND

### ● PURPOSE AND NEED

- To improve safety and capacity throughout the corridor while attempting to minimize right-of-way and environmental impacts.

### ● PREVIOUSLY CONSTRUCTED PROJECTS

- Burntwoods Interchange -  
*Completed in 2008*
- Linden Church Interchange -  
*Completed in 2013*
- Nixon Farm Mitigation Site -  
*Completed in 2010*

# SCHEDULE

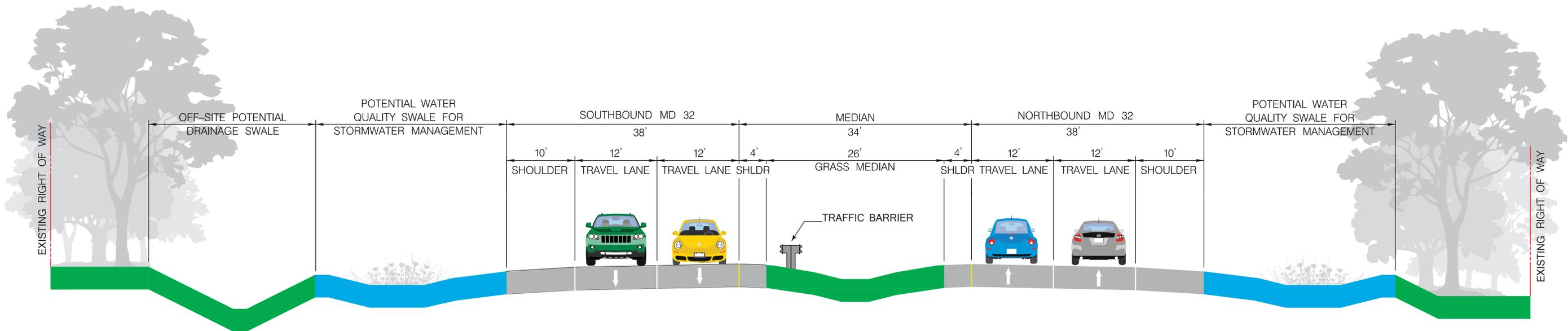
## ● WHAT IS DESIGN-BUILD?

- A project delivery method where the owner utilizes a contract with a Design-Build Team (consisting of a contractor and a designer) that is responsible for the design and construction of the project.
- Benefits to this method include:
  - **Reduced time** - Potential to accelerate the schedule by overlapping design and construction
  - **Cost certainty** - Better cost control than traditional project delivery
  - **Collaboration** - Direct collaboration with the designer and contractor optimizes constructability and encourages innovation

## ● PROJECT SCHEDULE

- Advertise Request for Proposals (RFP)  
**June 28, 2016**
- Selection of Design-Build Team  
**December 2016**
- Anticipated Construction Start  
**Spring 2017**
- Anticipated Completion  
**Spring/Summer 2019**

# MD 32 PROPOSED CONDITION



TYPICAL SECTION

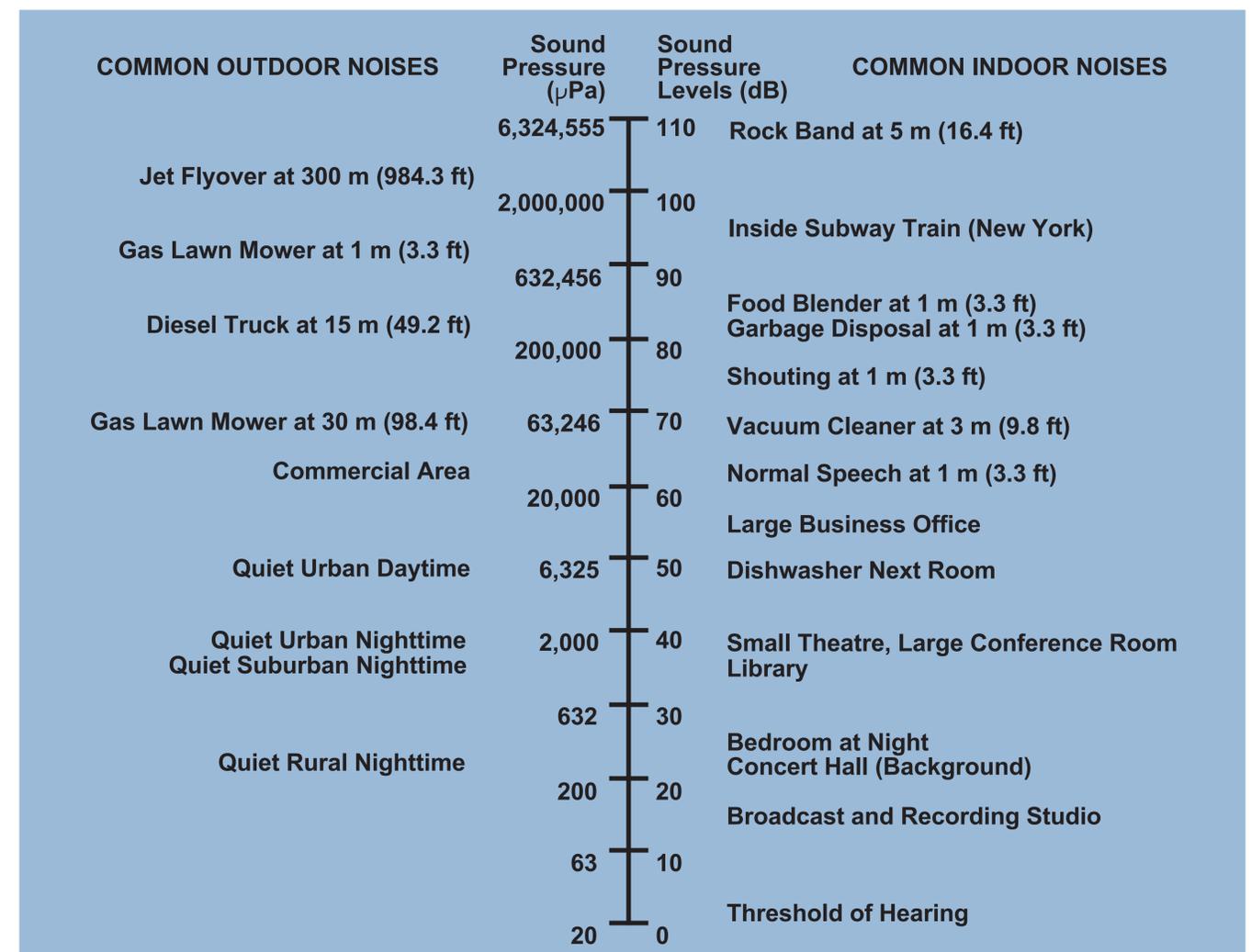
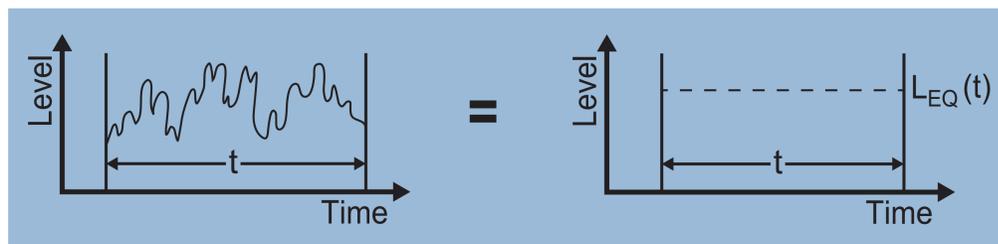
# NOISE FUNDAMENTALS

## Units of Measurement

- Decibel (dB)
- “A” - weighting - approximates how the human ear responds to sound. (dBA)

SOUND LEVEL CHANGE	PERCEIVED CHANGE IN LOUDNESS
0 dB	Reference
3 dB	Barely Perceptible
5 dB	Readily Noticeable
10 dB	Twice / Half as Loud

## Equivalent Sound Level (Leq)



# COMPARISON OF 1998 AND 2011 HIGHWAY NOISE POLICIES

	OLD POLICY - 1998	NEW POLICY - 2011	NOTES
<b>IMPACT CRITERIA</b>			
Noise Level	66 DECIBELS (dBA) - Residences, parks, etc.	UNCHANGED	Land use categories redefined, same base level criteria
	66 - 71 dBA - Hotels, offices, restaurants, etc.	71 dBA	
Noise Increase	10 dBA (AND exceed 57 dBA)	Sliding scale: 10 - 15 dBA	No minimum levels required w/new Policy
<b>FEASIBILITY CRITERIA - Can effective abatement be provided</b>			
Minimum reduction	7 - 10 dBA at impacted residences	7 dBA @ majority of impacted residences	
Design goal	7 - 10 dBA	UNCHANGED	
Non-highway source effects	Limits on overall reduction caused by existing non-highway noise sources	UNCHANGED	
<b>REASONABLENESS CRITERIA</b>			
Views of Residences	Required 75% APPROVAL from impacted residents	Greater than 50% OPPOSITION required from benefited residents	
Impact threshold	66 dBA or more (71 dBA)	UNCHANGED	
Total Benefited Residences	Impacted @ 3 dBA or more Non-impacted @ 5 dBA or more	Impacted & non-impacted @ 5 dBA or more	
Level Increase	Must be 3 dBA or more (build vs. No-build)	ELIMINATED	
Cost effectiveness	Barrier cost must be \$50,000/benefited residence or LESS	Barrier QUANTITY must be 2700 square feet/benefited residence or LESS	
	Project averaging for areas between \$50,000 and \$100,000/benefited residence	Project averaging for areas between 2700 square feet and 3700 square feet/benefited residence	Allows combining of areas with higher cost with lower cost areas
	No accounting for extra cost items exclusively related to noise abatement	Site constraint assessment procedure established	
Funding	Third party funding allowed; to cover cost above allowable cost/residence	Third party funding prohibited by FHWA regulatory mandate (Environ. Justice)	Third party cannot fund above allowable limits

# THE FIVE ELEMENTS OF A HIGHWAY NOISE ANALYSIS

## 1 IDENTIFY ALL EXISTING LAND USES / ACTIVITIES IN PROJECT AREA.

- Focus on noise-sensitive activities (e.g. residences, schools, parks, etc.).
- Non-noise sensitive included.

## 2 DETERMINE EXISTING NOISE LEVELS.

- Establish generalized baseline / typical conditions.
- Use in validation of computer prediction model.

## 3 DETERMINE FUTURE NOISE LEVELS RESULTING FROM THE PROJECT.

- Based on loudest hour FUTURE traffic volumes.
- Independent of current measured noise levels.

## 4 DETERMINE THE DEGREE AND EXTENT OF HIGHWAY NOISE IMPACT FOR ALL IDENTIFIED LAND USES.

- Noise level (one-hour average).
- Increase over existing levels.

## 5 EVALUATE NOISE ABATEMENT ALTERNATIVES TO REDUCE OR ELIMINATE IMPACTS.

- Feasibility (i.e. can effective abatement be built).
- Reasonableness
  - *Is there opposition to providing abatement.*
  - *At least 50% of benefited must receive at least 7 dBA reduction.*
  - *Barrier quantity limit of 2700 square feet (s.f.) per benefited residence. Secondary limit of 3700 s.f.*

# OTHER PROJECTS

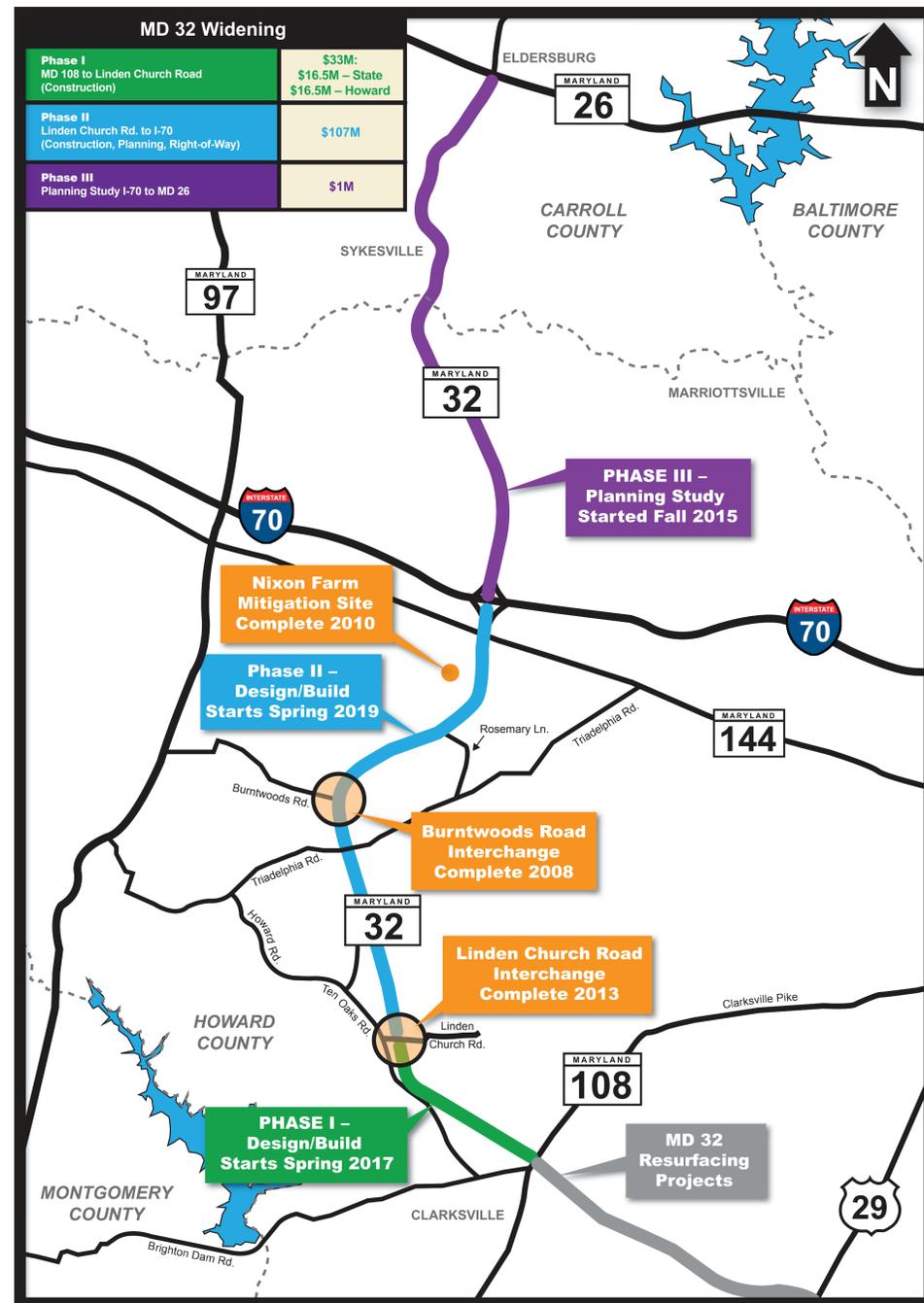
- **PHASE II**

MD 32 from Linden Church Road to I-70

- **PHASE III**

Planning Study from I-70 to MD 26

- **UPCOMING DISTRICT RESURFACING PROJECTS**



## STAY INFORMED

- If you have questions or need additional information about the MD 32 from MD 108 to Linden Church Road project, or if your community would like the project team to present information at a local neighborhood meeting, please contact:  
  
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Toll Free (888) 228 - 5003  
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- Please visit [roads.maryland.gov](https://roads.maryland.gov) for Project Information
  - Click on Projects / SHA Projects Page
  - Type project name in search box (MD 32, Sykesville Road MD 108 to Linden Church Road)
- Please feel free to fill out a **Comment Card**