

City of Alexandria, Virginia

Central Alexandria Traffic Study

November 30, 2016

Meeting 2, Bishop Ireton School





Agenda

1. Welcome and Introductions
2. Purpose of the Traffic Study and Background
3. Review of Traffic Study Scope
4. Group Discussion
5. Public Comment
6. Adjournment

Ground Rules



- Everyone's opinions are important and valid
- Meetings will begin and end on time
- Please follow the agenda
- Be respectful and courteous - avoid dominating the conversation
- Purpose of the meeting is for Group discussion
- Time is reserved for public comment toward the end
- Please silence cell phones and other mobile devices

Traffic Study Group



- Two representatives from Seminary Hill, Seminary Ridge, Clover College Park, and Taylor Run Civic Associations
- Provide input on the traffic study
- Review scope, data collection, and proposed mitigations for traffic study

Project Goals



- Respond to neighborhood concerns about traffic
- Measure and better understand origins/destinations of traffic, traffic volumes, and traffic routes
- Test neighborhood improvements with future traffic conditions and programmed capital improvements to relieve traffic pressure in neighborhoods



Schedule

Summer
2015

Fall/Winter
2016

Spring
2017

Summer
2017

Meeting 1

Meeting 2

Meeting 3

Meeting 4

Project introduction and review of data collection locations

Review project scope and data collection methods

Review data collection results and potential mitigations

Review and discuss potential mitigations

What is an Origin/Destination Study?



- Study used in transportation planning to determine travel patterns of vehicles in a particular area
- Given the travel patterns, the impacts of alternative solutions to current and future transportation problems can be evaluated
- Calculates travel time and vehicle volumes

What We've Heard

How We've Responded

Origin Destination data collection should be expanded where feasible within the scope to capture more locations

Origin destination map revised to include additional locations

Study should include data from other recent traffic studies conducted

Staff will provide this data to the consultant to be incorporated into the study

The Alexandria Police Department should be included in the discussion

Going forward, the Alexandria Police Department will attend group meetings as needed

More discussion/explanation necessary for the data collections methods and scope should consider expanding beyond bluetooth data collection method

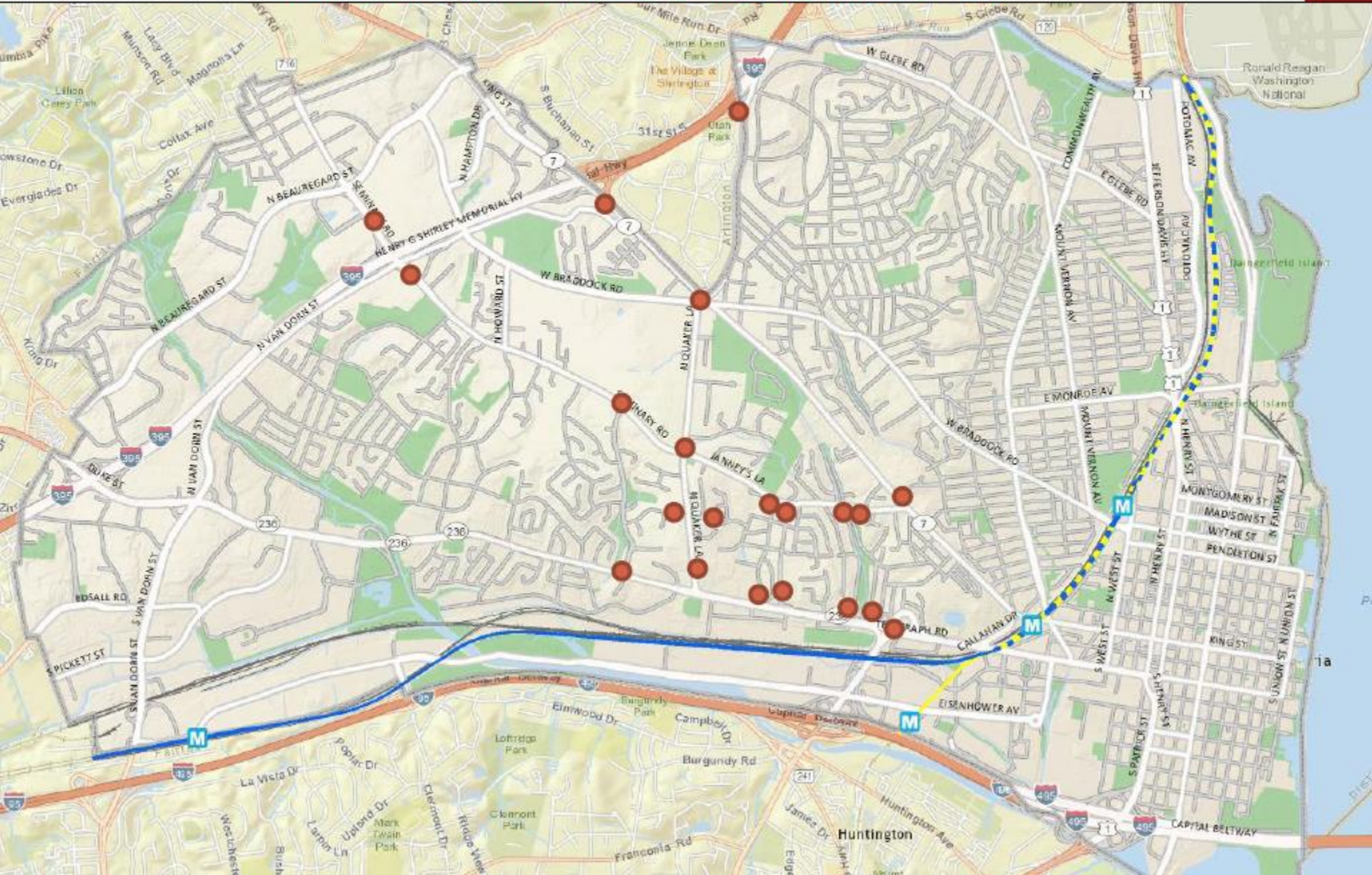
Meeting #2 includes discussion of data collection methods and project scope has been modified to allow for proposals on a number of different data collection methods

Best traffic engineering/planning practices nationally and regionally should be used in the study

Staff incorporates regional and national best practices in traffic engineering/planning into City studies



Draft Origin/Destination Data Collection Points – Revised following 7/7/16 Group Meeting



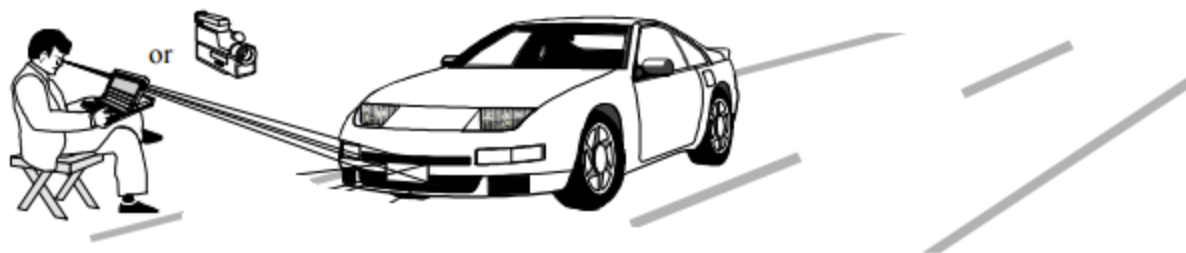
Project Scope – Key Tasks



- Review background studies
- Collect existing conditions data: origin-destination (O-D), volume, speeds, crashes
- Provide a matrix with pros and cons, and detection rate for data collection method
- Collect data at 15 - 20 locations in AM and PM peak hours for 1-2 week period
- Understand travel pattern, traffic volumes, speeds, and traffic origins and destinations in project area
- Prepare study report
- Prepare short term and long term recommendations to mitigate traffic
- Analyze existing conditions and mitigation measures
- Prepare preliminary cost estimates for potential improvements



Data Collection Methods: Manual or Video License Plate



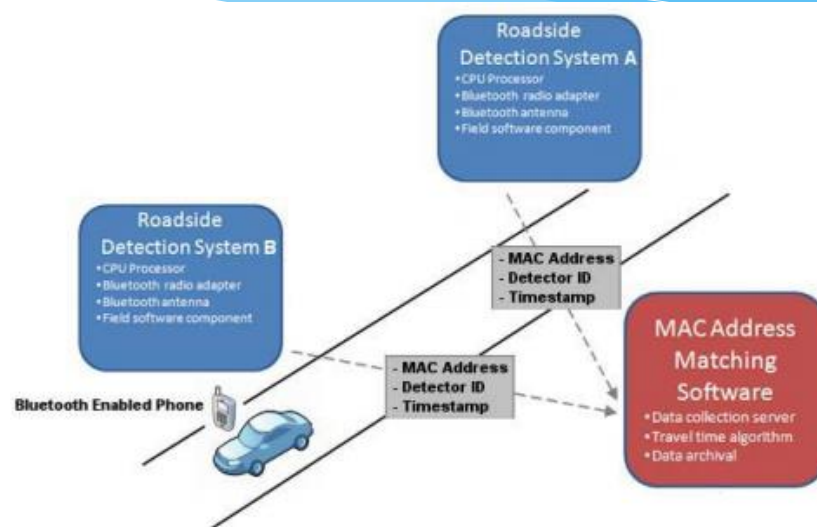
- Conventional method
- Provides full number plate information
- Very resource intensive
- Requires large resources to watch video and record license plate
- Provides data for single day during peak hours

Data Collection Methods: Aerial Photography



- Short duration - generally up to 2 hours at a time
- Photograph entire area every 1 second
- Vehicles are traced to determine the destination
- High cost
- Limitations at night and streets with tree canopies

Data Collection Method: Bluetooth



- Uses media access control address and time stamp
- Provides over longer period of time (2 weeks)
- Conducted during any time of day
- Less expensive
- Penetration rate between 5% to 15%

Data Collection Methods: Cell Phone Data



- Technology turns real time mobile signal into location data
- Does not reflect actual trip
- Uses data from cellular carrier
- Penetration rate between 15% to 25%
- Provides data for single day during peak hours

Data Collection Method



- Pros and Cons of sampling method
- Cost Sampling method
- Selection of sampling method
- Check point locations
- Duration of data collection

Group Discussion



1. Which scope tasks are a high priority?
2. Are there any missing scope tasks to be considered that meet the project goals?



Public Comment



Next Steps

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Spring
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Summer
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Review and discuss potential mitigations



Thank you!