



# ARLANDRIA STUDY

Intersections of Mount Vernon Avenue  
with W. Glebe Road and with W. Reed Avenue



Presented by:



Kimley-Horn  
and Associates, Inc.

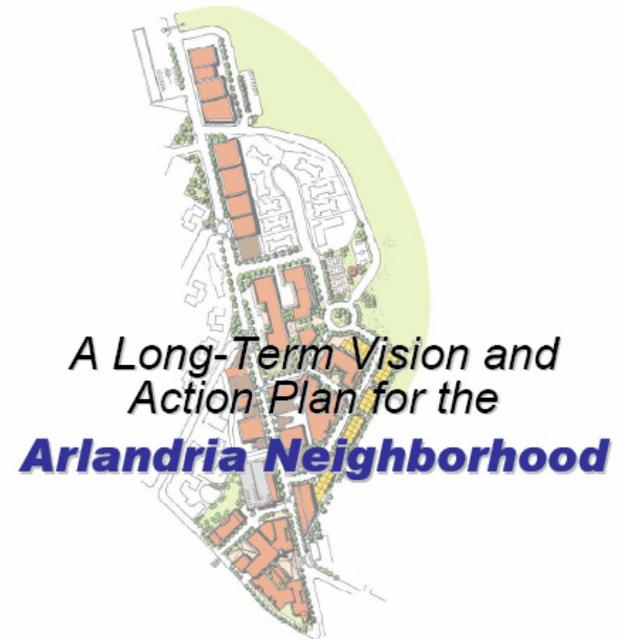
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## Study Context

- Workgroup convened in 2002
- Arlandria Plan adopted in May 2003
- Activities since Plan adoption
- City added implementation of Plan to Work Program in June 2009
- Advisory Group formation in Fall 2009



The Department of Planning & Zoning  
City of Alexandria  
May 8, 2003



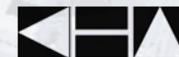
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## Study Purpose

- Improve safety for all transportation modes
- Develop near- and long-term transportation improvements
- Provide Arlandria property owners and developers with a guide for future redevelopment



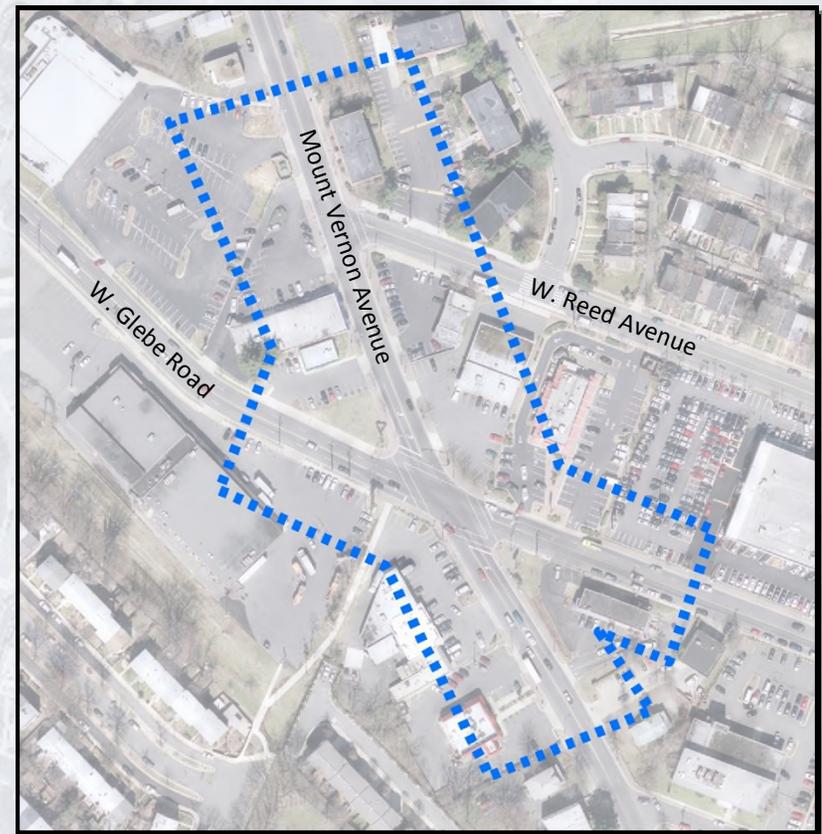
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## Study Area

- Focused area within the Arlandria neighborhood
- Intersections of:
  - Mount Vernon Avenue & West Glebe Road
  - Mount Vernon Avenue & West Reed Avenue



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## Stakeholder Meeting

- March 25, 2009 at the Tenants and Workers United Building
- Input from property owners and neighbors
  - Transportation concerns/issues
  - Redevelopment plans
  - Site circulation and access
- Similar feedback to 2003 plan



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## Crash History

- 5 years of crash data
- Mount Vernon Avenue and West Glebe Road
  - 5 crashes total
  - 3 involving pedestrians
- Mount Vernon Avenue and West Reed Avenue
  - 24 crashes total
  - 4 involving pedestrians or bikes



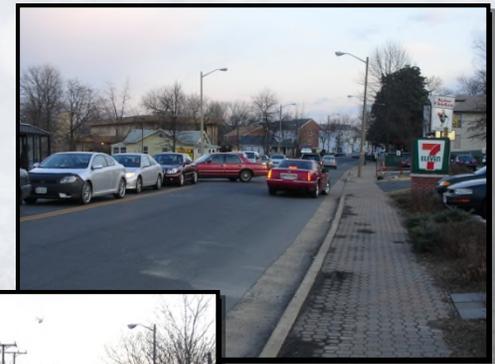
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## Mount Vernon Avenue/West Glebe Road

- Existing Conditions
  - Skewed geometry
  - Pedestrian push button locations
  - 27 driveways within 500 feet of intersection
  - Inconvenient crosswalks
  - No bicycle amenities
  - Limited transit amenities
  - Development pattern



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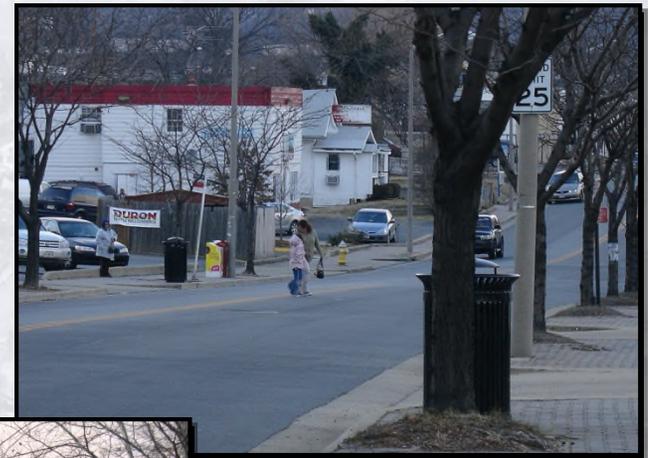
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## Mount Vernon Avenue/West Reed Avenue

- Existing Conditions

- No crosswalks across Mount Vernon Avenue
- Driveways do not align with West Reed Avenue
- Wide travel lanes on Mount Vernon Avenue
- Number of crashes
- No transit amenities
- No bicycle amenities
- Development pattern



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## Concepts – Guiding Principles

- Resolve existing issues
- Build upon recommendations from the Arlandria Neighborhood plan
- Consistent with the vision for long-term improvements
  - Arlandria gateway
  - Multimodal transportation accommodation
- Provide short-term improvements supportive of the long-term vision



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## Constraints

- Right-of-way
- Existing development access (driveways)
- Circulation on private property
- Ability to implement
- Cost



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## Mount Vernon Avenue/West Glebe Road

- Concept 1 – Roundabout
- Concept 2 – Intersection Realignment
- Concept 3 – Offset Intersections
- Concept 4 – Preferred Concept



# Concept 1: Roundabout

## Pros

- Promotes steady traffic flow
- Manages traffic speed
- Shorter crossing distances for pedestrians
- Provides a gateway

## Cons

- Considerable right-of-way impact
- Difficult to implement
- Requires realignment of either W. Glebe Rd. or Mt. Vernon Ave.
- Would require driveway closures
- Turning difficulties for truck traffic
- Intersection spacing with W. Reed Avenue
- Cost
- No dedicated pedestrian crossing signals

W. Glebe Road

Mount Vernon Avenue

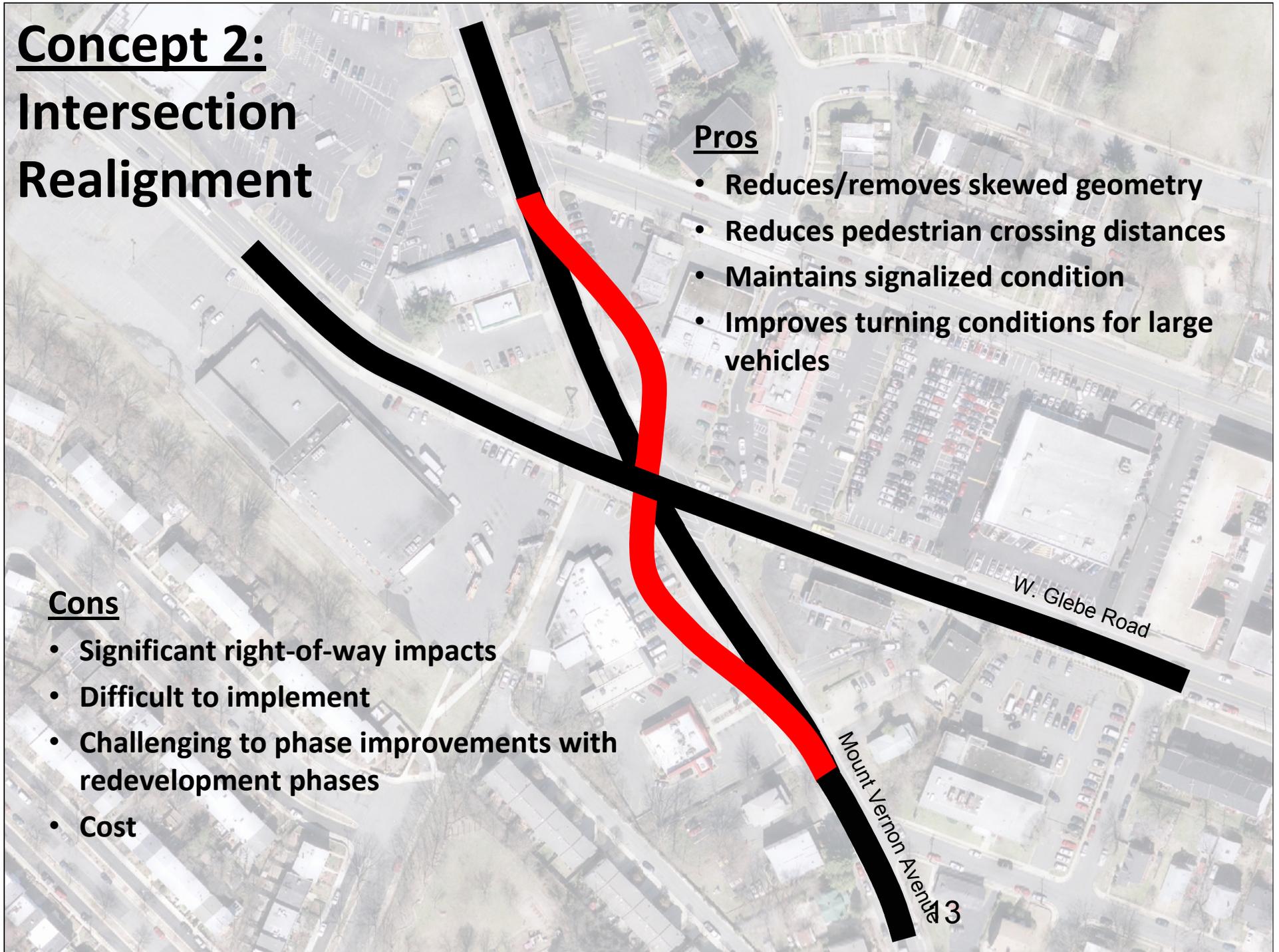
# Concept 2: Intersection Realignment

## Pros

- Reduces/removes skewed geometry
- Reduces pedestrian crossing distances
- Maintains signalized condition
- Improves turning conditions for large vehicles

## Cons

- Significant right-of-way impacts
- Difficult to implement
- Challenging to phase improvements with redevelopment phases
- Cost



# Concept 3: Offset Intersections

## Pros

- Creates gateway/destination
- Reduces pedestrian crossing distances
- Creates two, relatively simple T-intersections

## Cons

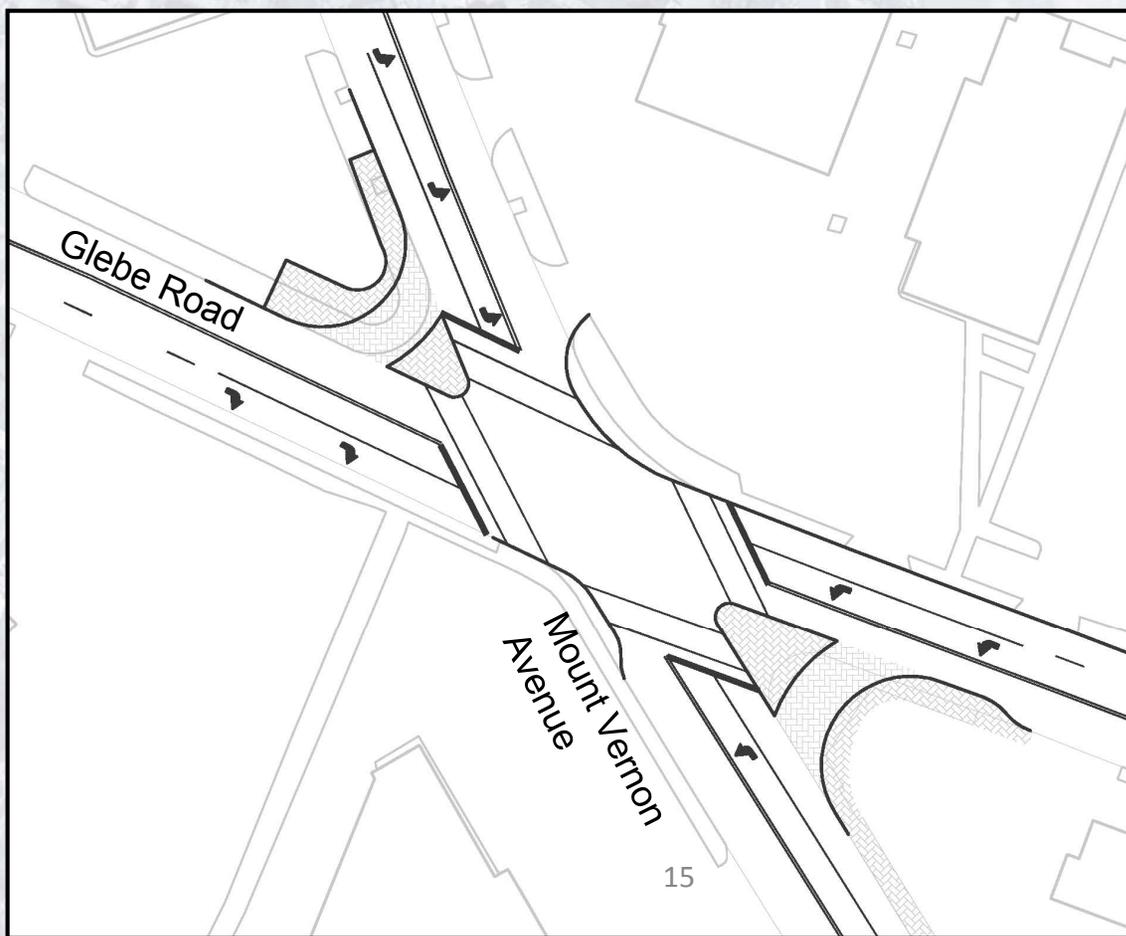
- Difficult to implement
- Significant right-of-way impacts
- Interrupts continuity of Mount Vernon Avenue
- Increases the number of intersections
- Increases traffic on W. Glebe Road
- Redevelopment would have to occur in a coordinated manner
- Adds a new traffic signal
- Cost

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## Preferred Concept Mount Vernon Avenue/West Glebe Road



Example of turn  
treatment in  
Bethesda



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## Preferred Concept Bethesda Example



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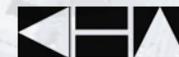
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## Preferred Concept

### Intersection of Mount Vernon Avenue and West Glebe Road

- Pros
  - Can be implemented without redevelopment
  - No additional right-of-way needed
  - Reduces pedestrian crossing distances
  - No impacts to existing driveways
  - Easier northbound and southbound right-turns
  - “Tightens” intersection geometry
  - Lower construction cost than other concepts
  - Multimodal solution
- Cons
  - Requires traffic signal modifications
  - Retains skewed intersection geometry



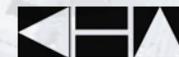
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## Mount Vernon Avenue/West Reed Avenue

- Signalization
- Roundabout
- Driveway closure(s)
- Traffic calming measures



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## Mount Vernon Avenue/West Reed Avenue

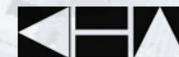
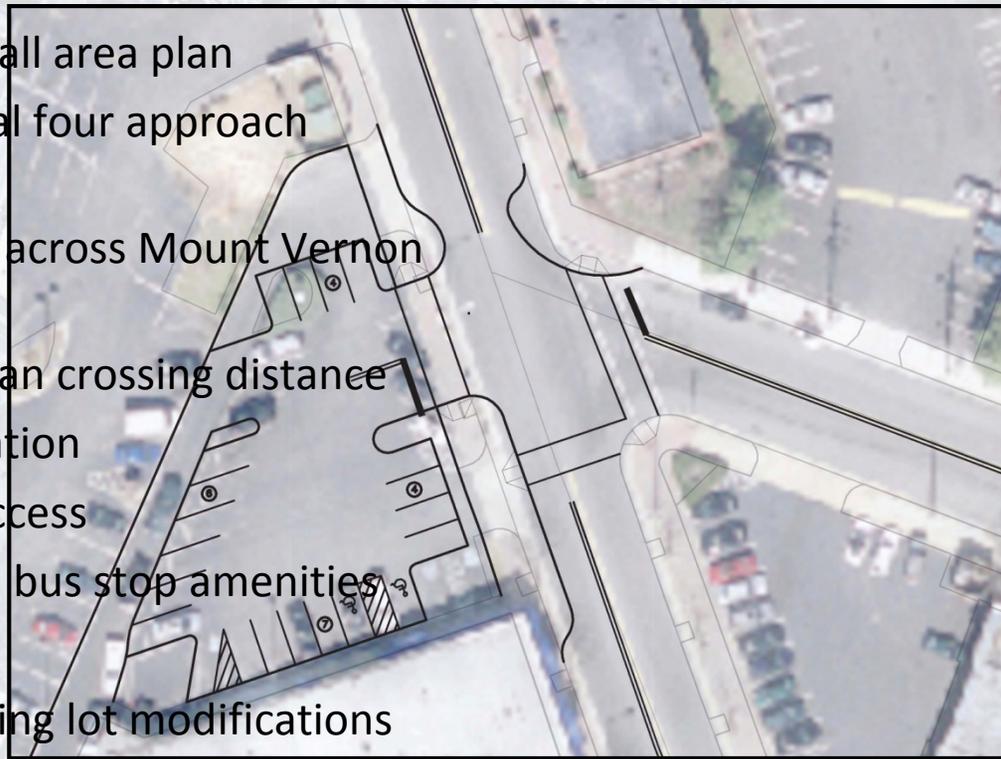
### Pros

- Consistent with small area plan
- Creates a traditional four approach intersection
- Provides crosswalk across Mount Vernon Avenue
- Minimizes pedestrian crossing distance
- Driveway consolidation
- Improved transit access
- Opportunity to add bus stop amenities

### Cons

- Wachovia site parking lot modifications

### Preferred Concept



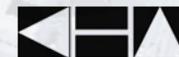
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## Next Steps

- Consensus
- Prepare engineering plans
- Construction

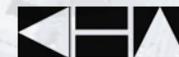


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Questions?



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Thank you!

