Agenda

• Multimodal Study Recap
• Public Feedback Review
• Preliminary Working Concepts
  • Pedestrian Network
  • Bicycle Network
  • Transit Network
  • Street Network / Safety / Access
Multimodal Transportation Study Recap

• Purpose
  • Analyze current and future multimodal transportation conditions
  • Develop near- and mid-term recommendations along Maple Avenue for all modes of transportation in coordination with existing and future land uses

• Existing Conditions
• Future Conditions
• Public Feedback Opportunities
Public Feedback Review

- Existing Conditions Briefing
- Future Conditions Workshop
- Public Survey

**Maple Avenue Corridor Multimodal Transportation and Land Use Study**
Public Feedback Review – Priorities

- Congestion Relief: 110
- Pedestrian Accessibility and Connectivity: 75
- Public Parking Strategies: 65
- Get Me to Metro Via Transit: 58
- Focus on Safety: 42
- Bicycle Connectivity: 40
- Get Me Around Town Via Transit: 39
- Make Streets Green: 37
- Enhance Washington & Old Dominion Trail: 36
- Keep up with the Day-to-day Maintenance: 32
- Emerging Trends: 16
- Fast and Reliable Transit: 16
- Activate Curb Space: 10
- Guide My Route (Wayfinding): 7
- Enhance Bus Stops: 6
- More Transit Service: 6

Maple Avenue Corridor  Multimodal Transportation and Land Use Study
Public Feedback Review – Modal Investment

What public transit improvements would be most useful?

- Fast and Reliable Bus Service: 26%
- Enhanced Bus Stops: 4%
- More Frequent Bus Service: 15%
- Local Circulator Service: 44%
- Other: 11%

What type of bicycle improvements would make you more likely to ride?

- Bikeshare Stations: 15%
- On-Street Bike Lanes: 28%
- Trail Enhancements: 38%
- Bike Parking: 7%
- Other: 12%

Maple Avenue Corridor Multimodal Transportation and Land Use Study
What would improve traffic flow and safety?

- Improve Signal Timing: 34%
- Relieve Existing Bottlenecks: 11%
- Roadway Maintenance and Repair: 10%
- Traffic Calming or Driveway Management: 3%
- Other: 3%

What would improve your walking experience?

- Improve/Enhance Street Crossings: 16%
- Streetscaping Improvements/Widen Sidewalks: 41%
- Trail Enhancements: 16%
- Fill Existing Sidewalk Gaps: 9%
- Other: 4%
What other types of improvements would improve mobility and access?

- Curb Space Management
- Emerging Trends (E-Scooters, Rideshare, Etc.)
- Wayfinding
- Public Parking (On- or Off-Street)
- Other
Potential Development Future – Net New PM Trips (June 2019)

+ 753 PM peak hour trips
Potential Development Future – Net New PM Trips (August 2019)

+ 758 PM peak hour trips

Maple Avenue Corridor Multimodal Transportation and Land Use Study
Preliminary Working Concepts
Pedestrian Network
Pedestrian Network – Existing

Existing Pedestrian Network
- Sidewalk
- Crosswalk
- Crosswalk at Full Signal
- Crosswalk at HAWK Signal
- Trail

Maple Avenue Corridor Multimodal Transportation and Land Use Study
Pedestrian Network – Proposed

Maple Avenue Corridor Multimodal Transportation and Land Use Study
Sidewalks
Fill Sidewalk Gaps

**Description:**
Install concrete sidewalks along segments of Church Street, Glyndon Street, and Courthouse Road. This includes areas with no sidewalks as well as areas with existing asphalt paths.

**Challenges:**
- Potential right-of-way constraints
- Potential utility conflicts

**Opportunities:**
- Pedestrian connectivity, access, and comfort
- Completes the sidewalk network in the study area
- ADA infrastructure compliance

**Potential Cost:**
$280,000 to $523,000

**Timeline:**
- Near-term
Crosswalks

W&OD Trail Crossing Redesigns

DRAFT CONCEPT

Description:
Redesign crossings of the W&OD Trail at Maple Avenue and Church Street. These redesigns provide raised crossings of the trail, high-visibility pedestrian and cyclist crossing markings, consistent signage, and relocated signal push buttons.

Challenges:
- Potential right-of-way constraints
- Potential utility conflicts
- Emergency vehicle response time

Opportunities:
- Visual prominence for trail crossings
- Indicates pedestrian and cyclist priority
- Provides consistency for all trail crossings town-wide

Potential Cost:
$10,000 to $30,000 per crossing

Timeline:
- Mid-term

Source:
https://www.mass.gov/files/documents/2017/10/26/SeparatedBikeLaneChapter4_Intersections.pdf
Crosswalks
W&OD Trail Crossing Redesigns

at Maple Avenue
Existing

at Church Street
Existing

Maple Avenue Corridor Multimodal Transportation and Land Use Study
Crosswalks
W&OD Trail Crossing Redesigns

at Maple Avenue
High-Visibility Crosswalk

at Church Street
Raised Crosswalk

Maple Avenue Corridor Multimodal Transportation and Land Use Study
Curb Ramps at Intersections

**Description:**
Install perpendicular curb ramps to replace existing diagonal curb ramps at study area intersections as feasible. Perpendicular curb ramps provide better alignment with marked crosswalks and provide better directional cues for blind or visually impaired pedestrians and wheelchair users.

**Challenges:**
- Signal timing changes
- Drainage
- Potentially longer crossing distances

**Opportunities:**
- Curb ramps align with crosswalks
- Better directional cues for blind or visually impaired pedestrians, wheelchair users
- Push buttons can be separated

**Potential Cost:**
$430,000 to $1,086,000

**Timeline:**
- Mid-term
Church Street and Mill Street
Slip Lane Removal and Intersection Redesign

**Challenges:**
- Curb work required
- Potential need for utility relocation
- Potential for vehicle queuing at intersection

**Opportunities:**
- Reduced curb radii for slower, safer vehicle turns
- Shorter and more direct pedestrian crossings
- Elimination of slip lane elevates pedestrian access and safety

**Description:**
Redesign intersection to remove the existing slip lane at the SW corner of the intersection. This redesign normalizes intersection geometry, realigns crosswalks for shorter pedestrian crossings, and expands public space at the NE corner of the Town Green.

**Potential Costs:**
$110,000 to $190,000

**Timeline:**
- Near-term

Maple Avenue Corridor Multimodal Transportation and Land Use Study
Leading Pedestrian Intervals (LPI)

Description:
Adjust signal timing at intersections that see significant pedestrian activity. A Leading Pedestrian Interval (LPI) typically gives pedestrians a 3–7 second head start when entering an intersection with a corresponding green signal in the same direction of travel.

Challenges:
• May conflict with leading left turns
• May conflict with right turn on red
• Signal timing impacts

Opportunities:
• Gives pedestrians a head start
• Enhances the visibility of pedestrians
• Reinforces pedestrian right-of-way
• Shown to reduce pedestrian-vehicle collisions as much as 60%*

Potential Cost:
Minimal ($1,500 to $3,000 per intersection)

Timeline:
• Near-term

*National Association of City Transportation Officials (NACTO)
Leading Pedestrian Intervals

Maple Avenue
Locust Street
Mill Street
Park Street
Center Street
Glyndon Street
Follin Lane
Branch Road
Church Street
Berry Street
East Street
Pleasant Street
Wade Hampton Drive
W&OD Trail

Proposed Pedestrian Network
Leading Pedestrian Interval

Maple Avenue Corridor Multimodal Transportation and Land Use Study
Additional W&OD Trail Crossing Considerations

• Signage
  • Adopt a consistent trail crossing sign style to use Town-wide

• Markings
  • Install high-visibility markings at Church Street

• Push buttons
  • Relocate pedestrian signal buttons back from the street to increase safety
## Pedestrian Network Summary

<table>
<thead>
<tr>
<th>Concept</th>
<th>Timeline</th>
<th>Preliminary Cost Range</th>
<th>Modal Impact</th>
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</thead>
<tbody>
<tr>
<td>Sidewalks Fill Sidewalk Gaps</td>
<td>Near-Term</td>
<td>$280,000 to $523,000</td>
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<tr>
<td>Crosswalks W&amp;OD Trail Crossing Redesigns</td>
<td>Mid-Term</td>
<td>$10,000 to $30,000</td>
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<tr>
<td>(Maple Avenue and Church Street)</td>
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<tr>
<td>Curb ramps at intersections</td>
<td>Mid-Term</td>
<td>$430,000 to $1,086,000</td>
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<tr>
<td>Church Street and Mill Street Slip Lane</td>
<td>Near-Term</td>
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<td>Removal and Intersection Redesign</td>
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<tr>
<td>Leading Pedestrian Intervals (LPI)</td>
<td>Near-Term</td>
<td>$1,500 to $3,000 per intersection</td>
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</table>
Bicycle Network
Bicycle Network – Proposed

Maple Avenue Corridor  Multimodal Transportation and Land Use Study
Church Street
Buffered Bike Lanes

Description:
Install buffered bike lanes along Church Street between Pleasant Street and Park Street. This design removes existing on-street curbside parking and should only be considered if the Town constructs a new parking garage in the vicinity to meet Church Street parking needs.

Challenges:
• Loss of ~ 127 on-street parking spaces
• Increased need for enforcement
• *Contingent on Town providing structured parking to replace lost on-street spaces

Opportunities:
• New bike facility parallel to Maple Avenue
• Increased safety for cyclists
• Reduced parking may decrease traffic
• Narrower traffic lanes may decrease speeds

Potential Cost:
$644,000 to $805,000

Timeline:
• Mid-term
Church Street
Buffered Bike Lanes

Existing Conditions

Proposed Concept

Maple Avenue Corridor Multimodal Transportation and Land Use Study
Church Street

*Standard Bike Lanes (Alternate Concept)*

**Existing Conditions**
- Sidewalk
- Parking
- Travel Lane
- Travel Lane
- Parking
- Sidewalk

**Proposed Concept**
- Sidewalk
- Bike Lane
- Travel Lane
- Travel Lane
- Bike Lane
- Parking
- Sidewalk
Pleasant Street
Bike Lanes and Shared Lanes

**DRAFT CONCEPT**

**Challenges:**
- Increased need for enforcement
- Variable curb width

**Opportunities:**
- New bike facility across Maple Avenue
- Increased visibility for cyclists
- Narrower traffic lanes may decrease vehicle speeds
- Coordination with private redevelopment

**Description:**
Install bike lanes and shared lanes ("sharrows") along Pleasant Street. Bike lanes in both directions are proposed where street width allows, while a bike lane in one direction and shared lanes in the other are proposed on narrower segments.

**Potential Costs:**
$216,000 to $270,000

**Timeline:**
- Near-term
Pleasant Street

Bike Lanes and Shared Lanes

Existing Conditions

Proposed Concept

Maple Avenue Corridor Multimodal Transportation and Land Use Study
Courthouse Road
Shoulders to Bike Lanes

Challenges:
• Conflicts at adjacent residential driveways
• Loss of de-facto parking areas
• Variable/inconsistent width of existing shoulders

Opportunities:
• New bike facility parallel to Maple Avenue
• Increased safety for cyclists
• Narrower traffic lanes may decrease vehicle speeds

Potential Costs:
$270,000 to $337,500

Description:
Convert existing shoulders along Courthouse Road to bike lanes. Existing shoulders between Locust Street and Glen Avenue present ample width for bike lanes. However, the narrower cross section between Glen Avenue and Nutley Street can only accommodate shared lanes (“sharrows”).

Timeline:
• Near-term
Courthouse Road
Convert Shoulders to Bike Lanes

Existing Conditions

Proposed Concept

Maple Avenue Corridor Multimodal Transportation and Land Use Study
Locust Street and Hine Street

Shared Lanes to W&OD Trail

Description:
Install shared lanes ("sharrows") on Locust Street and Hine Street connecting to the W&OD trail.

Challenges:
• Potentially unfamiliar to cyclists and drivers
• Slow vehicle speeds required
• Not ideal for new cyclists or children
• Right-of-way needed for trail connections

Opportunities:
• Greater connectivity to W&OD Trail
• Safer alternate route for residents
• Increased visibility for cyclists

Potential Costs:
$273,000 to $341,250

Timeline:
• Near-term
Locust Street and Hine Street

*Shared Lanes to W&OD Trail*

**Existing Conditions**

**Proposed Concept**
Locust Street
Trail Improvement / Extension

Maple Avenue Corridor Multimodal Transportation and Land Use Study
# Bicycle Summary

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<th>Preliminary Cost Range</th>
<th>Modal Impact</th>
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</thead>
<tbody>
<tr>
<td><strong>Bike Lanes</strong>&lt;br&gt;Church Street (Pleasant Street to Park Street; Beulah to E Street)&lt;br&gt;Locust Street (Courthouse Road to Cottage Street)&lt;br&gt;Pleasant Street (Church Street to Courthouse Road)&lt;br&gt;Courthouse Road</td>
<td>Mid-Term</td>
<td>$599,000 to $748,750</td>
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<tr>
<td><strong>Shared Lanes</strong>&lt;br&gt;Church Street (Park Street to East Street)&lt;br&gt;Locust Street (Cottage Street to Center Street)</td>
<td>Near-Term</td>
<td>$218,000 to $272,500</td>
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<td><strong>Trails</strong>&lt;br&gt;Locust Street “Extension” (Center Street to Park Street through school fields)</td>
<td>Mid-Term</td>
<td>Pending further evaluation</td>
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</table>
Transit Network
Transit Network - Existing

Maple Avenue Corridor *Multimodal Transportation and Land Use Study*
Transit Network - Proposed

Maple Avenue Corridor Multimodal Transportation and Land Use Study
Maple Avenue Bus Stops

Description:
Install shelters, seating, and level boarding areas at all bus stops along corridor

Challenges:
- Cost
- Right of way and/or utility constraints

Opportunities:
- Provide amenities to enhance passenger access and comfort
- Coordination/cost-sharing with developers

Potential Costs:
$10,000 to $25,000 each

Timeline:
- Near-term

Maple Avenue Corridor Multimodal Transportation and Land Use Study
Local Circulator

**Challenges:**
- Relatively high cost
- Ridership
- Integration with Fairfax Connector service
- Desired headways
- Church Street geometry

**Opportunities:**
- Fills existing local transit gap
- Serve local trips for existing and future residents

**Potential Costs:**
1. $275,000/year*
2. $415,000/year*
*does not include vehicle costs

**Timeline:**
- Mid-term

**Description:**
Provide frequent, all day bus service to and between Maple Avenue and Church Street destinations. Potential Route Options:
1. Maple Avenue to Metro Express “Maple-2-ME”
2. Maple Avenue-Church Street Loop

Maple Avenue Corridor Multimodal Transportation and Land Use Study
## Transit Summary

<table>
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<th>Modal Impact</th>
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<tbody>
<tr>
<td>Maple Avenue Bus Stops</td>
<td>Near-Term</td>
<td>$10,000 to $25,000 per bus stop</td>
<td>Icon</td>
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<tr>
<td>Add shelters, seating, and level boarding</td>
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<tr>
<td>Local Circulator</td>
<td>Mid-Term</td>
<td>$275,000/year to $415,000/year</td>
<td>Icon</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*does not include vehicle costs</td>
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</tbody>
</table>
Street Network
Street Network – Existing
Street Network – Proposed

Maple Avenue Corridor Multimodal Transportation and Land Use Study
Church Street and Lawyers Road
Intersection Redesign (Concept A)

**Description:**
Redesign intersection of Church Street and Lawyers Road. This redesign tightens curb radii, realigns crosswalks, and provides a pedestrian refuge island. This redesign could be designed to maintain or eliminates the left turn from southbound Lawyers Road to Church Street.

**Challenges:**
- Curb work required
- Potential need for utility relocation
- Traffic impacts to turn restrictions

**Opportunities:**
- Reduced curb radii for slower, safer vehicle turns
- Shorter and more direct pedestrian crossings

**Potential Costs:**
$210,000 to $368,000

**Timeline:**
- Near-term
**Church Street and Lawyers Road Intersection Redesign (Concept B)**

**Description:**
Redesign intersection of Church Street and Lawyers Road. This redesign eliminates the existing slip lane at the SW corner of the intersection, while maintaining existing Church Street alignments.

**Challenges:**
- Curb work required
- Potential need for utility relocation

**Opportunities:**
- Reduced curb radii for slower, safer vehicle turns
- Elimination of slip lane elevates pedestrian access and safety

**Potential Costs:**
$200,000 to $431,000

**Timeline:**
- Near-term
Church Street and Lawyers Road
Intersection Redesign (Concept C)

**Description:**
Redesign intersection of Church Street and Lawyers Road to provide two offset “T” intersections. This redesign eliminates the existing slip lane at the SW corner of the intersection, tightens curb radii, and realigns crosswalks for shorter pedestrian crossings.

**Challenges:**
- Eliminates through movements along Church Street
- Significant curb work required
- Potential need for utility relocation

**Opportunities:**
- Shorter and more direct pedestrian crossings
- Reduced curb radii for slower, safer vehicle turns

**Potential Costs:**
$710,000 to $1,372,000

**Timeline:**
- Mid-term
Nutley Street and Courthouse Road
Operational and Geometric Improvement

**Challenges:**
- Curb work required
- Tree impacts

**Opportunities:**
- Increased capacity

**Potential Costs:**
$180,000 to $297,000

**Timeline:**
- Near-Term

**Description:**
Extend the turn bay on Nutley Street to provide greater capacity for northbound vehicles turning left onto Courthouse Road. Update phasing to signal and eastbound right turn overlap.
Branch Road – Beulah Road
Realignment/Connection (Concept A)

**Description:**
Construct a new local street to serve vehicular demand between Branch Road and Beulah Road. A new alignment may present new development or public space opportunities for the existing right-of-way.

**Challenges:**
- Significant right-of-way needs
- Wolftrap Creek and environmental considerations

**Opportunities:**
- New street network connections
- Enhanced pedestrian and bicycle connections

**Potential Costs:**
$5,160,000 to 9,936,000

**Timeline:**
- Mid-term
Branch Road – Beulah Road
Realignment/Connection (Concept B)

**Description:**
Construct a new local street to serve vehicular demand between Branch Road and Beulah Road. A new alignment may present new development or public space options for the existing right-of-way.

**Challenges:**
- Significant right-of-way needs
- Property impacts

**Opportunities:**
- New street network connections
- Enhanced pedestrian and bicycle connections

**Potential Costs:**
- $2,170,000 to $5,424,850

**Timeline:**
- Mid-term
Maple Avenue and Nutley Street Roundabout

**Description:** Convert the existing signalized intersection to an urban multilane roundabout.

**Challenges:**
- Right-of-way /Property
- Pedestrian and bicyclist circulation
- Community familiarity and safety
- High cost of implementation

**Opportunities:**
- Traffic calming
- Gateway treatment
- Congestion/Delay reduction

**Potential Costs:**
$8,000,000 to $10,000,000+

**Timeline:**
- Mid-term
Maple Avenue
Peak Period Flexible Lane

**Description:**
Convert existing center turn lanes between Nutley Street and East Street into a third travel lane (eastbound for the weekday AM Peak and westbound for the weekday PM Peak).

Maintain two-way left turn lane during off-peak times.

*Maple Avenue Corridor Multimodal Transportation and Land Use Study*
Maple Avenue
Peak Period Flexible Lane

**Description:**
Convert existing center turn lanes between Nutley Street and East Street into a third travel lane (eastbound for the weekday AM Peak and westbound for the weekday PM Peak).

Maintain two-way left turn lane during off-peak times

Maple Avenue Corridor *Multimodal Transportation and Land Use Study*
Maple Avenue
Peak Period Flexible Lane

Description:
Convert existing center turn lanes between Nutley Street and East Street into a third travel lane (eastbound for the weekday AM Peak and westbound for the weekday PM Peak).

Maintain two-way left turn lane during off-peak times.
Maple Avenue
Peak Period Flexible Lane

Maple Avenue Off Peak

*Maple Avenue Corridor Multimodal Transportation and Land Use Study*
Maple Avenue

Peak Period Flexible Lane

Maple Avenue 6AM to 10AM
Maple Avenue
Peak Period Flexible Lane

Maple Avenue 4PM to 7PM

Maple Avenue Corridor
Multimodal Transportation and Land Use Study
Maple Avenue
Peak Period Flexible Lane

Challenges:
• User familiarity and safety
• Reduced minor direction capacity
• High cost of installation and operation
• Reduce or challenge left turn opportunities
• More through lanes
• Complex signal timing/phasing

Opportunities:
• Potentially efficient use of limited capacity
• Maintain majority of traffic on Maple Avenue

Potential Costs:
$3,000,000 to $10,000,000*
*highly variable based on design

Timeline:
• Mid-term
Pleasant Street and Courthouse Road
Operational Improvements

Description:
Relocate the existing HAWK signal approximately 400 feet to the west to be at the middle of the block and to serve potential future parking. Install a new traffic signal at the intersection of Maple Avenue and Pleasant Street to allow left turns, relieving the demand for turns at Courthouse Road (also supports potential bicycle crossing).

Challenges:
• Signal relocation and installation

Opportunities:
• New and relocated pedestrian crossings

Potential Costs:
$1,190,000 to $3,359,000

Timeline:
• Mid-term

Maple Avenue Corridor Multimodal Transportation and Land Use Study
Church Street and Park Street Operational Improvements

**Challenges:**
- Loss of Parking
- Additional Pedestrian conflicts

**Opportunities:**
- Separates turning traffic
- Increases intersection capacity
- Quick implementation

**Potential Costs:**
$750 to $1,500 per intersection

**Timeline:**
- Near-term
Signal Timing / Phasing / Lane Configuration Improvements

**Challenges:**
- “Balancing” vehicle and pedestrian delays
- Establishing a performance target
- Driver familiarity and safety
- Limited by current geometry and ROW

**Opportunities:**
- Quick implementation
- Addresses both spot and corridor issues
- Develop more responsive time of day plans (as a precursor to adaptive signal installation)

**Potential Costs:**
$14,000 to $32,000 per intersection

**Timeline:**
- Near-term
Safety and Access

• Access Management
  • Consolidation of commercial driveways/curb cuts

• Raised Medians
  • Reduce turning conflicts, provide pedestrian refuge and landscaping opportunities

• Curb Radii Reduction
  • Tighter corners to calm turning traffic and enhance safety

• All-Way Stops
  • Church Street and Dominion Road (add stop bars)
  • Center Street and Locust Street (Vienna Elementary School)

• Off Peak Parking
Access Management

Challenges:
• Changes to commercial access
• Increased turns at intersections and on side streets

Opportunities:
• Fewer turns on Maple Avenue
• Fewer pedestrian and cyclist conflicts

Potential Costs:
Subject to further evaluation

Description:
~25 parcels have multiple driveways on Maple Avenue
~10 parcels have multiple driveways on side streets
~20 driveways present safety or operational challenges and are recommended to be evaluated for consolidation at the appropriate time (when development occurs or the Town pursues future access management strategies

Timeline:
• Mid-term
Raised Medians

**Description:**
Install raised medians along Maple Avenue in four key locations:

1. Glyndon Street to Branch/Beulah Road
2. W&OD Trail Crossing
3. Lewis Street/Wade Hampton Drive to Courthouse Road/Lawyers Road
4. Nutley Street to Lewis Street/Wade Hampton Drive

**Challenges:**
- Loss of mid-block center turn lanes

**Opportunities:**
- Maintains turn lanes at intersections
- Supports progression of traffic
- Provides median refuge for pedestrians
- Potential for landscaping and gateways

**Potential Costs:**
$920,000 to $1,470,000

**Timeline:**
- Mid-term
Raised Medians

Maple Avenue Corridor *Multimodal Transportation and Land Use Study*
Curb Radii Reduction

Description:
Reduce curb radii at key intersections to facilitate safer, slower vehicle turning movements at street corners.

Challenges:
• Curb work required
• Utility conflicts
• Large truck turning movement conflicts

Opportunities:
• Slower, safer vehicle turns
• More comfortable, shorter pedestrian crossings

Potential Costs:
*Varies by intersection

Timeline:
• Mid-term
All-Way Stops

Description:
Install stop signs and mark stop bars at all intersection approaches at:
• Church Street and Dominion Road (W&OD Trail)
• Center Street and Locust Street (Vienna Elementary)

Challenges:
• Awareness and education

Opportunities:
• Traffic calming
• Enhanced pedestrian and bicycle crossings

Potential Costs:
$3,756 to $4,494

Timeline:
• Near-term

Church Street and Dominion Road
Center Street and Locust Street
Maple Avenue Off-Peak Parking Lanes

**Challenges:**
- Coordination with VDOT
- Enforcement
- Driver familiarity and safety
- Compatibility with traffic flow

**Opportunities:**
- Provides parking to stimulate or support evening activity
- Makes use of excess capacity during non-peak times
- Could be deployed in specific segments

**Potential Costs:**
$15,000 to $30,000

**Timeline:**
- Near-term
# Street Network Summary

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<tr>
<td>Church Street and Lawyers Road Intersection Redesign</td>
<td>Near-Term to Mid-Term</td>
<td>$200,000 to $1,372,000</td>
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<tr>
<td>Nutley Street and Courthouse Road Operational and Geometric Improvement</td>
<td>Near-Term</td>
<td>$180,000 to $297,000</td>
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<tr>
<td>Branch Road – Beulah Road Realignment/Connection</td>
<td>Mid-Term</td>
<td>$2,170,000 to $9,936,000</td>
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<td>Maple Avenue and Nutley Street Multilane Urban Roundabout</td>
<td>TBD</td>
<td>$8,000,000 to $10,000,000+</td>
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<tr>
<td>Maple Avenue Peak Period Flexible Lane</td>
<td>Mid-Term</td>
<td>$3,000,000 to 10,000,000+</td>
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<td>Pleasant Street and Courthouse Road Operational Improvements</td>
<td>Mid-Term</td>
<td>$1,190,000 to $3,359,000</td>
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<tr>
<td>Church Street and Park Street Operational Improvement</td>
<td>Near-Term</td>
<td>$750 to $1,500</td>
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<tr>
<td>Corridor Signal Retiming / Phasing Evaluation</td>
<td>Near-Term</td>
<td>$350,000 to $650,000</td>
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# Safety and Access Summary

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<tr>
<td>Access Management along Maple Avenue</td>
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<tr>
<td>Raised Medians along Maple Avenue</td>
<td>Mid-Term</td>
<td>$920,000 to $1,470,000</td>
<td></td>
</tr>
<tr>
<td>Maple Avenue Curb Radii Improvements</td>
<td>Mid-Term</td>
<td>Varies by intersection</td>
<td></td>
</tr>
<tr>
<td>All-Way Stops</td>
<td>Near-Term</td>
<td>$3,756 to $4,494</td>
<td></td>
</tr>
<tr>
<td>Maple Avenue Off-Peak Parking Lanes</td>
<td>Near-Term</td>
<td>$15,000 to $30,000</td>
<td></td>
</tr>
</tbody>
</table>