WEST MAIN STREET ACTION PLAN...

A PLACE FOR EVERYONE!

December 18th, 2014
AGENDA

• Context & Purpose
• Analysis Summary
• Streetscape Master Plan
• Parking Management Study
• Urban Design
• Economic Analysis
• Costs
• Discussion
PURPOSE OF STUDY

1. A Streetscape Project
   • Make West Main Street a great public space
   • Reflect the City’s increased emphasis on pedestrian and bicycle infrastructure
   • Incorporate stormwater regulations and tree planting best practices

2. An Urban Design Project
   • Provide clarity to the City’s built form and public space standards
   • Provide greater predictability in review processes
PROJECT PROCESS

- Review & Analysis
- Public Meetings
- Steering Committee Meetings
- Alternative Design Concepts
- Form-Based Code
- Fiscal Impact Analysis
- Master Plan
- Construction Documents

Timeline:
- Fall 2013
- Winter 2013
- Spring 2014
- Summer 2014
- Fall 2014
- Winter 2014
CREATIVE ANALYSIS

- Transportation Assessment
- Parking management
- Economic impact
- Multimodal precedents
- Urban design & form-based code
- Utilities & infrastructure
- Surface conditions & character
CHARACTER OF THE STREET

“Small town feeling”

Variety of building types and uses

Historic
THE CHARACTER OF WEST MAIN STREET IS CHANGING...

New businesses

New housing

Growing institutions
WHAT CHANGES DID PEOPLE WANT TO SEE?

- Eliminate On-Street Parking
- Place Utilities Underground
- Protect Sight Lines to Mountains
- More Trees
- Build Neighborhood Connections
- Preserve Trees
- Improve Bike Lanes
- Need High Visibility Crosswalks
- More Affordable Housing
- Add Seating
- Incorporate Pedestrian Plazas
- Improved Bus Stops
- More Wide Sidewalks
- Bike Boxes
- More Parks
- Colored Bike Lanes
- Unobstructed Views
- Outdoor Social Spaces
- “Funky Mix” of Buildings
- More Murals & Art
- Stormwater Management
- Minimize Large Development
- Improve Safety of Bicyclists
- Historic / Modern Mix
- One Street with One Consistent Character
- More Murals & Art
- Neighborhood Oriented Businesses
- Permeable Paving
- Protect Adjacent Neighborhoods From Increased Traffic
- Promote Minority Businesses
- Keep Art / Murals
- Repurpose Alleyways
- Keep Small Scale Character
- Arts & Culture District
TRANSPORTATION ASSESSMENT

OBJECTIVES

• Improve safety for all modes of travel
• Enhance transportation options that serve the corridor
• Support corridor businesses and institutions
• Optimize available resources and services
STREETSCAPE MASTER PLAN...

A PLACE FOR EVERYONE!
MASTER PLAN PRINCIPLES

1. Create a Multimodal Street
2. Encourage a Mix of Land Uses
3. Establish Neighborhood Connections
4. Link Cultural Landscapes
5. Accommodate Parking
6. Activate the Street
7. Foster Environmental Stewardship
8. Retain Views
9. Celebrate History
10. Create an Eclectic Streetscape
The design for West Main Street will encourage cars to move more slowly, in order to create an environment that is comfortable for all modes of travel: pedestrians, bicyclists, joggers, bus riders, and vehicles.
The streetscape along West Main will provide opportunities for a variety of vibrant new uses and public art opportunities that can encourage strolling, shopping, eating, living, working, and the celebration of public events.
West Main Street will become the “front door” for adjacent neighborhoods through the provision of improved pedestrian and vehicular connections between West Main and those neighborhoods.
The design for West Main Street should recognize the character differences between its east and west ends while ensuring that both work together as a unified, coherent, and vibrant whole.
On-street parking will be provided along West Main Street in order to support the local businesses and institutions on and to contribute to traffic calming.
West Main Street will become a street that invites walking - during daytime and evening hours - because it is attractive, interesting, safe, and comfortable.
West Main Street will serve as a “green design” street model for the City.
The mountain vistas from West Main Street are important to its character, and will need to be retained in key locations.
Retain and reflect the history of West Main Street and surrounding neighborhoods whenever possible, while creating a lively public space for all.
The diversity of West Main Street is its “charm,” and the plan should encourage this diversity of character along the entire street.
MANY ALTERNATIVES WERE CONSIDERED...
THE STREETSCAPE MASTER PLAN

West Main St.
THE STREETSCAPE MASTER PLAN
FROM JEFFERSON PARK AVE. TO 9TH STREET (ALTERNATIVE)
THE STREETSCAPE MASTER PLAN
FROM 9TH STREET TO RIDGE-MCINTIRE RD.
SIDEWALK & PROTECTED BIKE LANE
WEST MAIN STREET: FROM RIDGE-MCINTIRE RD TO 9TH STREET
STREET CONFIGURATION

BICYCLE INFRASTRUCTURE

Sidewalk-Level, Protected Bike lane

Street-Level Bike Lane
CROSS SECTION TRANSITIONS
6TH & 7TH STREET CHICANES

Chicane Example

Bike Lane Transition to Protected Bike Lane
CROSS SECTION TRANSITIONS
6TH & 7TH STREET CHICANES

7th Street Chicane

6th Street Chicane
STREET CONFIGURATION
ON-STREET PARKING

52 ON-STREET PARKING SPACES

- 85 Existing
- 33 Removed

- Existing spaces are not managed to maximize effectiveness
- Managed spaces are typically 3x more productive
- Loss can be mitigated with enforcement, management, & other incentives
- Need for loading and short-term “transactional” parking.
- Delivery & waste services to be specifically managed (e.g., early morning when demand is lower)
- Plan places parking on blocks that lack off-street loading or customer spaces
STREET CONFIGURATION
INTERSECTION CONFIGURATIONS

Retain all existing traffic lights:

- Ridge-McIntire Rd.
- 4th St.
- 7th St.
- 10th St. / Roosevelt Brown Blvd.
- 11th St.
- Jefferson Park Ave.
GATEWAYS

1. Jefferson Park Ave. Intersection
2. The Bridge
3. Ridge-McIntire Rd. Intersection
Goal: Create a signature gateway to West Main Street that provides a safer intersection for pedestrians, bicyclists, and drivers.

A. Elimination of “slip-lane” from West Main St. onto Ridge St.

B. Refine intersection geometry to reduce intersection crossing times

C. Reconfigure travel lanes on Ridge, Ridge-McIntire, & Water Streets to accommodate bike lanes
**TREES**

- **Existing Trees**: 109 Trees (along West Main and immediately adjacent to the Right-of-Way)

- **Trees Removed & Potentially Saved**: 40 Trees Removed (approximately 40% of existing trees will be removed)

- **New Trees to be Added**: 321 Trees

- **Proposed Tree Count on West Main**: 430 Trees (400%)
VEGETATION OPTIONS

Large Canopy Trees--Street Worthy Oaks & Natives with a Focus on Fall Color

- Shumard Oak
- Northern Red Oak
- Kentucky Coffee Tree
- Autumn Flame Red Maple
- Pin Oak

Medium Canopy Trees:

- Black Gum
- Amur Maple

Columnar Trees:

- Columnar Maple
- Ninebark

Small Trees (Median):

- Fringetree

Bioretention Perennials & Grasses--Tough, Ground-Holding Plants

- Mostard
- Wild Basil
- Palm Sedge
- Switchgrass
- Golden Groundsel
- Partridge Feather
- Common Rush
- Coastal Sedge
LOW IMPACT DEVELOPMENT (LID)

- **Travel Lane**
- **Bike Lane**
- **Tree Zone**
- **Sidewalk**

1. Crushed aggregate
2. Paver-grate
3. Planting soil
4. Structured soil
5. Reflector dome

- **Transpiration + Evaporation**
- **Runoff**
- **Microclimate Control**
- **Drip Zone**
- **Habitat**

**Annotations**:
- 5' no compaction zone
- 6' underdrain
- 11' side indicator

**In situ** images show installation details and examples of LID practices.
FURNISHINGS OPTIONS
SEATING & LIGHTING
INTERPRETATION & SIGNAGE
HISTORY, ART & WAYFINDING

- Potential locations for art/interpretation
PARKING MANAGEMENT STUDY
PARKING MANAGEMENT STUDY

- Parking Inventory & Utilization
- Parking Demand Projections
- Demand-Management Opportunities
- Public Parking Expansion Opportunities
TRANSPORTATION ASSESSMENT

• Improve safety

  » All modes are provided adequate space for safe operations and circulation; where possible, protected facilities are offered

  » Slower travel speeds reduce potential for severe injuries

  » Maintains performance for emergency response
TRANSPORTATION ASSESSMENT

• Enhance transportation options
  » More space for transit waiting, boarding and alighting
  » Bus bulbs modestly reduce bus travel times
  » Improved bicycle facilities increase attractiveness for travelers of all skill and confidence levels
  » Wider sidewalks meet the performance standard to “accommodate double strollers”
TRANSPORTATION ASSESSMENT

• **Support existing businesses and institutions**
  » Reduced on-street parking supply is a concern for businesses
  » Inadequate parking for businesses and churches during Sunday services

• **Optimize existing resources**
  » On-street parking is not presently effectively managed
  » Off-street parking resources are not fully utilized nor promoted
PARKING MANAGEMENT STUDY
TRANSPORTATION NEEDS FOR BUSINESSES

• Parking access for customers
  » Reliable
  » Easy to find and use
  » Affordable
  » Not punitive (enforcement)

• Loading, deliveries, and quick transactions

• Safe and reliable access for employees
PARKING MANAGEMENT STUDY
STRATEGIES TO SATISFY NEEDS

• **Better manage existing supply**
  » Parking is largely unmanaged now
  » Management can more than triple efficiency
  » **Strategies:** Metering (and revenue reinvestment), consistent enforcement, revisiting time limits, signage and wayfinding

• **Leverage potential supply**
  » Many existing off street resources unused during peak business demand periods
  » Generally not available to West Main Street businesses or “park once”
  » **Strategies:** leases, insurance, and incentives for public parking; employee parking arrangements

• **Expand supply**
  » **Strategies:** Zoning and financial incentives for shared parking resources with new developments
PARKING MANAGEMENT STUDY
BETTER MANAGE EXISTING SUPPLY

- 85 on-street parking spaces
- Currently unmetered
- 2-hour time limit, generally loosely enforced
- Unmanaged during peak times (evenings and Sundays)
On-street parking is highest on Friday and Saturday nights (86% and 90% utilization, respectively)

Demand is lowest morning midweek periods (25-70% utilization)

Utilization midday generally hovers around 75%

On-street parking demand is highest in areas lacking off-street parking options (6th to 4th Streets)

Optimal utilization rate of on-street parking is 85%
Efficiently managed, one on-street parking space is worth $300,000 in annual retail sales to nearby adjacent businesses.

Source: Rich Renomeron
One (well managed) on-street parking space can serve 18 to 22 patrons per day (equivalent to 3-5 off street parking stalls).

Source: Rich Renomeron
PARKING MANAGEMENT STUDY
BUSINESS BENEFITS OF BICYCLE ACCOMMODATION

- Protected lanes
  - 49% more retail sales
  - 58% fewer injuries

- Bicycle parking
  - 12x more spending power

Which is better for local businesses?
PARKING MANAGEMENT STUDY
BUSINESS BENEFITS OF TRANSIT ACCOMMODATION

• Improved stops and accommodations
  » 20% increase in bus speeds
  » 10% increase in ridership
  » 71% increase in retail sales

PEDESTRIAN ACTIVITY IN 1 HOUR

TRANSIT
25 people every 15 minutes = 100 people per hour

ON-STREET PARKING (10 cars)
1.2 people every 15 minutes = 48 people per hour
If it is so valuable, why is on-street parking free?
• Meter public parking
  » Metering can more than triple parking efficiency, turn over, and access
  » Metering facilitates effective enforcement
  » Price on-street spaces slightly higher than off street
  » Make payment easy

• Reinvest revenues
  » Parking benefit district with locally directed priorities

• Prioritize short duration, transactional parking, and loading
  » Free very short term parking (15 min)
  » Reserved zones during peak need

• Explore removing or relaxing parking time limits; manage through price

• Install clear way-finding to existing off street public parking
PARKING MANAGEMENT STUDY
LEVERAGE POTENTIAL SUPPLY

APPROXIMATELY 5000*
PARKING SPACES WITHIN 600 FEET OF WEST MAIN STREET
*(INCLUDING FUTURE DEVELOPMENT)
PARKING MANAGEMENT STUDY
LEVERAGE POTENTIAL SUPPLY
Investigate potential public parking arrangements
- Leases
- Insurance or liability coverage

Municipal management program for collective pricing and uniform enforcement
- Parking management district

Investigate opportunities for employee parking agreements

Explore district assisted parking

Install wayfinding information

Manage consistent with public parking assets
EXPAND SUPPLY

• New, independent municipal facility is not needed
  » Adequate supply exists
  » Alternatives exist
  » Need does not justify capital, operating, and opportunity costs

• Promote public parking as amenity in new developments
  » Need is greatest between 6th and Ridge-McIntire
  » Include where projects redevelop existing surface parking
  » Provide clear wayfinding and information to the public about availability
EXISTING ZONING

- MIXED USE
- R-1
- R-2
- R-3
- PLANNED UNIT DEVELOPMENT
- COMMERCIAL
- INDUSTRIAL
- ADC DISTRICT
- CONTRIBUTING STRUCTURE
TYPICAL CROSS-SECTION
EAST OF BRIDGE

2 STORIES, 27' MIN. BLDG. HEIGHT
15' MIN. CEILING OF STORY 1

EXISTING SPECIAL PERMIT
EXISTING BY-RIGHT

EXISTING APPURTENANCE

PROPERTY LINE

BULK PLANE

PROPERTY LINE

BULK PLANE

PROPERTY LINE

BULK PLANE

BULK PLANE STARTING POINT VARIES BASED ON HEIGHTS ALLOWED IN ADJACENT DISTRICTS

EXISTING BY-RIGHT

EXISTING SPECIAL PERMIT

2 STORIES, 27' MIN. BLDG. HEIGHT
15' MIN. CEILING OF STORY 1

PROPERTY LINE

PROPERTY LINE

PROPERTY LINE

PROPERTY LINE

NORTH SIDE
POTENTIAL DEVELOPMENT

WEST MAIN ST. - EAST
URBAN FORM STREET

SOUTH SIDE
POTENTIAL DEVELOPMENT
PROPOSED ZONING ENVELOPE MODIFICATIONS
PROPOSED ZONING ENVELOPE MODIFICATIONS

PROPOSED ZONING ENVELOPE
EXISTING ZONING ENVELOPE

PROPERTY LINE
PROPERTY LINE
PROPERTY LINE
PROPERTY LINE
PROPERTY LINE

BULK PLANE
BY-RIGHT
SIX STORIES MAX.
(at min. ceiling of story)

EXISTING APPURTENANCE
EXISTING SPECIAL PERMIT
EXISTING SPECIAL PERMIT
EXISTING SPECIAL PERMIT
EXISTING SPECIAL PERMIT

15’ MIN. CEILING OF STORY 1

BUILDING HEIGHT MEASURED FROM GRADE PLANE AT STREET

TRAIN TRACKS
204-208 7TH ST. SW
620 WEST MAIN ST. - POTENTIAL DEVELOPMENT
WEST MAIN ST. - EAST
617 WEST MAIN ST.

600-798 WEST MAIN ST. - POTENTIAL DEVELOPMENT
700-708 WEST MAIN ST. - POTENTIAL DEVELOPMENT
WEST MAIN ST. - WEST/EAST
715 WEST MAIN ST.

PUBLIC RIGHTS OF WAY
EXISTING BY-RIGHT (ZONE CH)
EXISTING SPECIAL PERMIT
EXISTING SPECIAL PERMIT
EXISTING SPECIAL PERMIT
EXISTING SPECIAL PERMIT

(REFER TO TYPICAL CROSS-SECTION)
ECONOMIC ANALYSIS: PURPOSE

• A fiscal impact analysis was performed to evaluate the relative differences between revenues generated through build-out under proposed zoning code versus current zoning requirements.
  » Property taxes
  » Sales taxes
  » Wages
  » Etc.

• Revenue generation is needed to support vital services.
  » Emergency services (fire & police)
  » Schools
  » Amenities
  » Infrastructure
Three sites were selected for analysis based on:

- Redevelopment potential (catalyst sites for future development)
- Location on West Main Street (varying geography to test zoning conditions)
A fiscal analysis was conducted for each development site to determine the revenue impact that the proposed zoning code will have as compared to the current zoning code, assuming development of the same land uses.

For existing zoning scenarios, an average of by-right density and special permit density was used in accordance with City information that most developers currently use only about half of the allowable special use permit height.

This comparison shows the economic implications, if any, for changing height, setback, stepback, and other requirements that could allow for greater or less density.
After evaluating the net fiscal impacts, it was concluded that the proposed zoning scenarios will not provide a significant difference in net fiscal impact from the existing zoning scenarios, though the net positive or negative change varies based on each development site.
Sites 1 and 2

- Development under the proposed zoning changes will have a more positive net impact than under existing zoning conditions.
- Existing zoning conditions allowed for a smaller building footprint but an increased height limit which would result in a greater number of residential units.
- Costs to support residents (schools, emergency services, etc.) are comparatively high when compared to other land uses. A capped height limit (resulting in fewer residents) in the proposed zoning creates a positive net fiscal impact.
Site 3

- For this example, proposed zoning changes will have a slightly less positive net impact than existing zoning conditions, due to a reduction in density in proposed zoning.

- Loss of density through the reduction of allowable height in the proposed zoning conditions can be alleviated by eliminating or reducing building setback requirements and thus, increasing building widths to offset the loss of building height.
The analysis indicates no significant difference in net fiscal impact between current and proposed zoning conditions.

(net positive or negative change varies based on each development site)
“The proposed zoning changes improve urban planning guidelines that suit the needs of West Main Street in agreement with City leadership and citizens. It is advised that the new zoning regulations be adopted on the basis of economic return for the City of Charlottesville.”
COSTS
ORDER OF MAGNITUDE COSTS - STREETSCAPE

STREETSCAPE SURFACE IMPROVEMENTS

<table>
<thead>
<tr>
<th>Master Plan</th>
<th>With Value Engineering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area A: $7,074,536</td>
<td>$5,589,800</td>
</tr>
<tr>
<td>Area B: $9,585,086</td>
<td>$8,049,802</td>
</tr>
<tr>
<td>TOTAL: $16,659,622</td>
<td>$13,639,602</td>
</tr>
</tbody>
</table>

VALUE ENGINEERING
POST-PUBLIC MEETING #3

- Substitute paving materials
- Remove bridge deck features
- Reuse existing traffic and pedestrian signals
- Designate bus shelters by others
- Other opportunities...

A: JPA to east end of bridge
B: East end of bridge to Ridge-McIntire
### ORDER OF MAGNITUDE COSTS - UTILITIES

<table>
<thead>
<tr>
<th>Area</th>
<th>Undergrounding Overhead Utilities</th>
<th>On-Site Water &amp; Gas Relocation</th>
<th>Gas Line Replacement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area A</td>
<td>$2,015,000</td>
<td>$753,350</td>
<td>N/A</td>
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<tr>
<td>Area B</td>
<td>$7,618,000</td>
<td>$952,425</td>
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<tr>
<td>Area C</td>
<td>N/A</td>
<td>N/A</td>
<td>$1,752,400</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$9,633,000</strong></td>
<td><strong>$1,705,775</strong></td>
<td><strong>$1,752,400</strong></td>
</tr>
</tbody>
</table>

**Jefferson Park Ave.**

A: JPA to east end of bridge

B: East end of bridge to Ridge-McIntire

C: West of JPA to Rugby Rd.
**DESIGN FEES**

**SURFACE IMPROVEMENTS, UNDERGROUNDING OVERHEAD UTILITIES, AND ON-SITE WATER & GAS RELOCATION**

<table>
<thead>
<tr>
<th>Area</th>
<th>Cost</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area A &amp; B</td>
<td>$2,951,503</td>
<td>$44,879 (+/-)</td>
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<tr>
<td>Area C</td>
<td>N/A</td>
<td>$265,195</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$2,951,500</td>
<td>$44,879 (+/-)</td>
</tr>
</tbody>
</table>

**GAS LINE REPLACEMENT (AREA C)**

- Area C: West of JPA to Rugby Rd.
- A: JPA to east end of bridge
- B: East end of bridge to Ridge-McIntire

C: West of JPA to Rugby Rd.
## TOTAL ESTIMATED CONSTRUCTION COSTS
### WITH VALUE ENGINEERING & DESIGN FEES

<table>
<thead>
<tr>
<th>Improvements</th>
<th>Cost</th>
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</thead>
<tbody>
<tr>
<td>Streetscape Surface Improvements (Areas A, B)</td>
<td>$13,639,602</td>
</tr>
<tr>
<td>Undergrounding Overhead Utilities (Areas A, B)</td>
<td>$9,633,000</td>
</tr>
<tr>
<td>Betterment Utility Work (Areas A, B)</td>
<td>$1,705,775</td>
</tr>
<tr>
<td>Design Fees (Areas A, B), includ. opt. services</td>
<td>$2,996,379</td>
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<tr>
<td><strong>Total cost</strong></td>
<td><strong>$27,974,756</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Improvements</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas Relocation (Area C)</td>
<td>$1,752,400</td>
</tr>
<tr>
<td>Design Fees (Area C)</td>
<td>$265,195</td>
</tr>
<tr>
<td><strong>Total cost</strong></td>
<td><strong>$2,017,595</strong></td>
</tr>
</tbody>
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C: West of JPA to Rugby Rd.  
A: JPA to east end of bridge  
B: East end of bridge to Ridge-McIntire