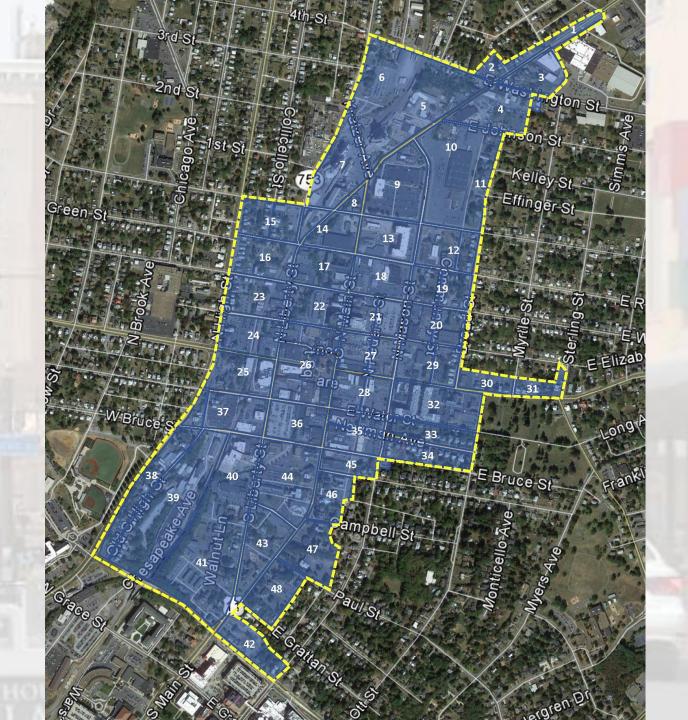
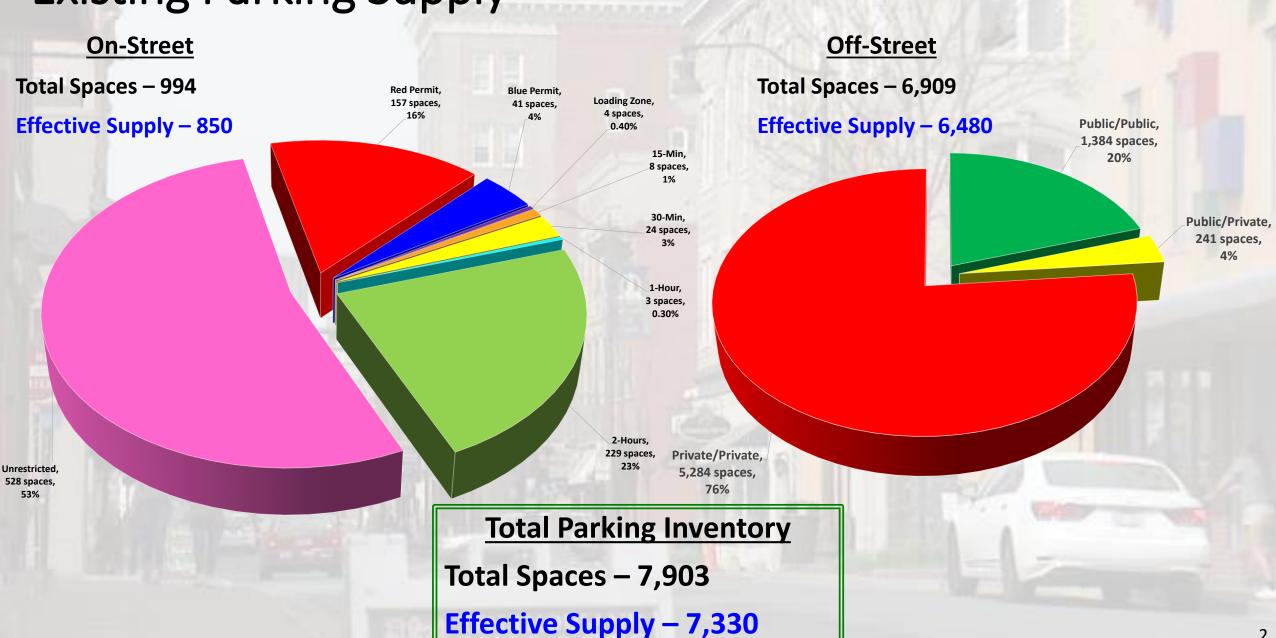


# Study Area

- 48 City Blocks
- 994 On-Street Spaces (13%)
- 6,909 Off-Street Spaces (87%)
- 7,903 Total Spaces



# **Existing Parking Supply**



### Parking Occupancy Observations

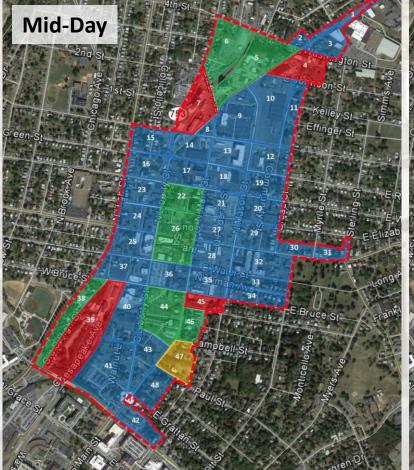
- 3 observations on Tuesday, April 16, 2019:
  - Morning (7:00 AM 9:00 AM)
  - Mid-Day (11:00 AM 1:00 PM)
  - Evening (4:00 PM 6:00 PM)

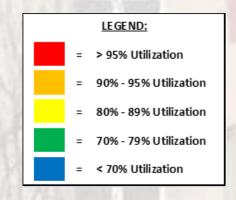
27% Utilization

53% Utilization

54% Utilization (PEAK)

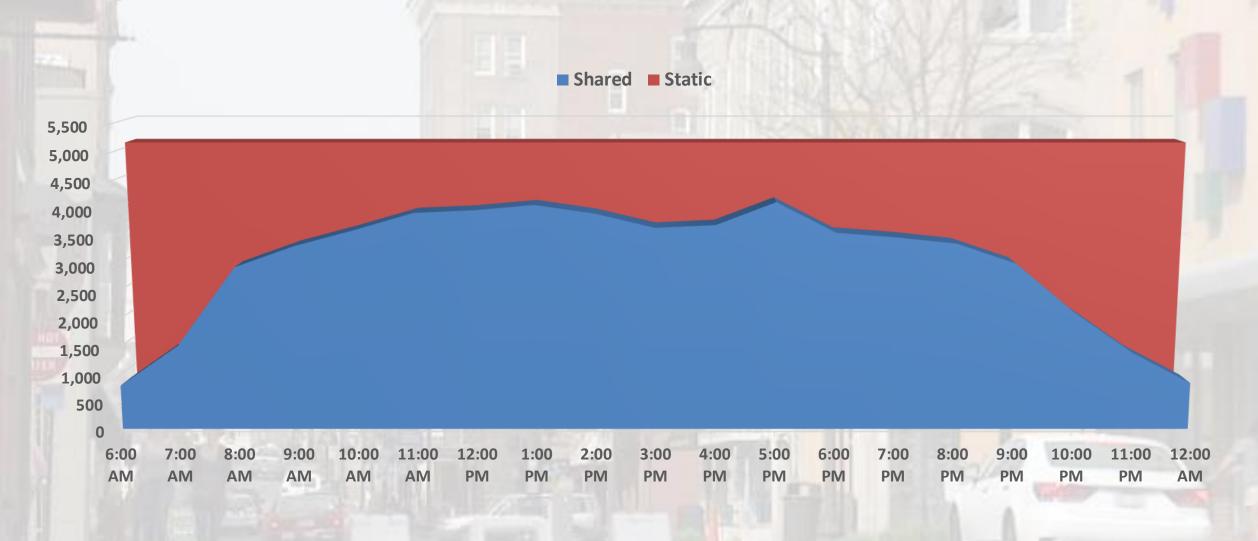




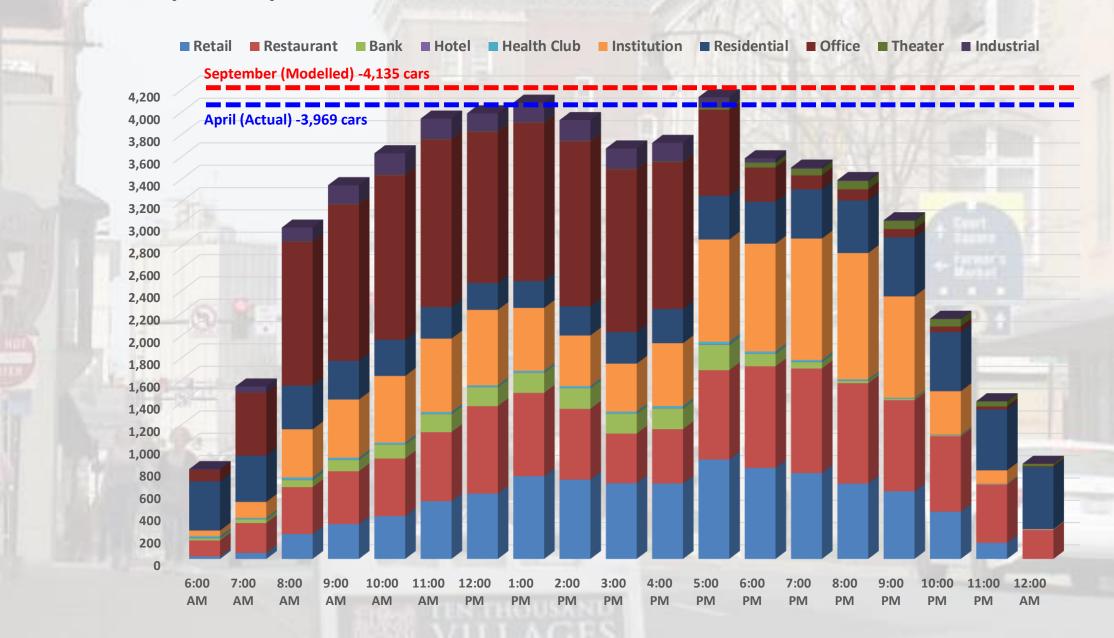




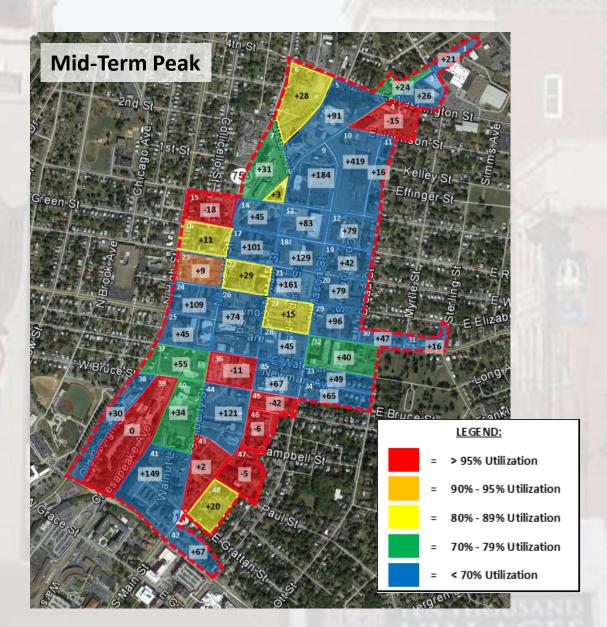
# Static vs. Shared Parking Modeling



### Peak Day (September) Demand Accumulation



# **Long-Term Impacts**





#### Long List Recommendations

- Goal: identify all possible initiatives to address current and/or future parking issues
- Resulted in nine potential recommendations:
  - Revise code to assure adequate parking for new development
  - Improve current facility maintenance and management practices
  - Invest in wayfinding and technology systems to help locate open parking
  - Introduce new public parking capacity
  - Promote shared parking to maximize the use of existing assets
  - Simplify parking time limits.
  - Invest in new technologies to improve operations
  - Support use of alternative modes of transportation.
  - Investigate fee-for-use (e.g. "paid" parking) as a mechanism for influencing behavior

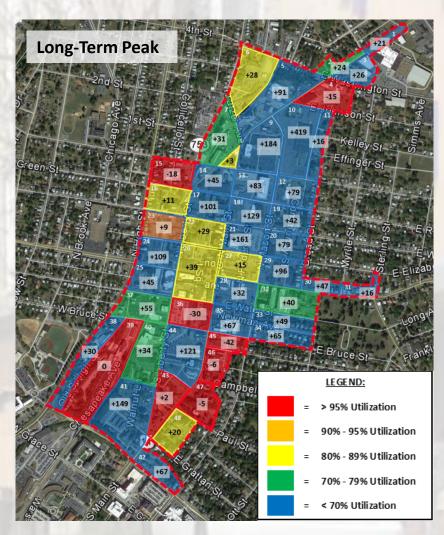
### Parking Requirements for Downtown Development

- Institute zoning requirements for parking
  - Set requirements based on current parking industry and development best practices
  - In conjunction, introduce alternatives to providing the required parking
    - Allow demonstrated availability of public parking in the vicinity of a development to offset the stated requirement
    - Allow reductions/waivers against parking requirements based on independent Shared Parking analyses
    - Establish a "fee in lieu" program
    - Allow reductions/waivers for projects that can demonstrate that they have access to available private parking capacity in the immediate area

	la 6	
Land Use	Base Spaces	Unit
Retail		
Retail (<400 ksf)	4.00	ksf
Retail (400 to 600 ksf)	3.00	ksf
Retail (600 ksf to 1,000 ksf)	4.50	ksf
Retail (1,000 ksf to 2,000 ksf)	5.00	ksf
Retail (over 2,000 ksf)	4.00	ksf
Supermarket/Grocery	4.75	ksf
Pharmacy	3.40	ksf
Discount Stores/Superstores	4.75	ksf
Home Improvement Stores/Garden	4.35	ksf
Food and Beverage		
Fine/Casual Dining	17.75	ksf
Family Restaurant	17.40	ksf
Fast Casual/Fast Food/Food Court/Food Halls	14.70	ksf
Bar/Lounge/Night Club	19.00	ksf
Entertainment and Institution	ins	
Family Entertainment	2.75	ksf
Active Entertainment	2.00	ksf
Amusement Park/Water Park	3.30	ksf
Adult Active Entertainment	11.20	ksf
Cineplex	0.25	seats
Specialty Movie Theatre	0.30	seats
Live Theater	0.40	seats
Outdoor Amphitheater	0.40	seats
Public Park/Destination Open Space	5.50	acre
Museum/Aquarium	5.00	ksf
Arena	0.33	seats
Pro Football Stadium	0.31	seats
Pro Baseball Stadium	0.35	seats
Health Club	7.00	ksf
Public Library	2.25	ksf
Convention Center	6.00	ksf
Hotel and Residential	0.00	1131
Hotel-Business	1.15	keys
Hotel-Leisure	1.15	keys
Restaurant/Lounge	9.00	sf
Residential, Urban	3.00	31
Studio Efficiency	1.00	units
1 Bedroom	1.05	units
2 Bedrooms	1.80	units
3+ Bedrooms	2.65	units
	0.83	units
Active Senior Housing Office	0.83	uiiits
Office <25 ksf	2.90	ksf
	3.80 3.94	ksf
Office 25 to 100 ksf Office =100 ksf	3.40	ksf
	3.40	
Office 100 to 500 ksf		ksf
Office >500 ksf	2.80	ksf
Open Plan/High Density Office	6.00	ksf
Medical/Dental Office	4.60	ksf
Day Care Center	3.50	ksf
Bank (Drive In Branch)	6.00	ksf

# Parking Requirements for Downtown Development

- Current zoning does not require parking be provided with new development
- The revitalization of downtown has created parking availability issues
  - Utilization surveys identified specific blocks with existing parking shortages
  - Public/public facilities are especially stressed
  - Future demand analysis indicates this problem will be made worse
  - Nearly every group of stakeholders cited localized parking shortages as a significant issue in downtown



### Parking Requirements for Downtown Development

#### Benefits:

- Reduces the City's financial burden by ensuring demand from private development does not occupy all of the spaces intended for public parking
- Allowing exemptions will help ensure that parking is not overbuilt

#### Liabilities:

- Additional cost of parking or "in lieu" fees likely to make some projects infeasible
- Development momentum could be stalled
- Tracking of Shared Use Agreements could become onerous for the City



Charlottesville, VA



Fairfax, VA

#### In Lieu Parking

#### What is In Lieu Parking Program?

Some cities allow developers to <u>pay a</u> <u>fee in lieu of providing parking spaces</u> required by zoning ordinances, and use this revenue to finance public parking spaces to replace the private parking spaces the developers would have been required to provide.



#### How do Cities set the Fees?

- 1. <u>Case -by-case Basis</u> Based on land value appraisal to estimate cost
- 2. <u>Uniform Fees</u> Uniform fee per space, Tiered fee structure adjusted as per scale of development, distance from downtown

#### **Examples of In Lieu Parking Program in Other Cities**

#### Miami's Coconut Grove, FL

- In Lieu fees:
- \$50 per space per month
- Or \$10,000 per stall
- · Revenue Usage:
- · Pays for shared, structured parking
- · Improvement of transit service
- Maintenance of sidewalks and pedestrian amenities

#### Bend, OR



- In Lieu fees:
- \$510 per stall
- · Fee set very low
- · Revenue Usage:
- Fees go into Parking Fund (to pay for parking only)
- Policy being re-evaluated to consider increased fee

# Improved Facility Maintenance/Management Practices

- Improve lighting, clean the facilities more frequently, install security cameras and/or increase Police patrols
- Remove reserved space designations for City employees in publicly-owned, publicly-accessible off-street parking facilities
- Replace existing hangtag permits with a system that is easier to monitor



# Improved Wayfinding and Parking Guidance Systems

 Improve parking wayfinding and investigate automated parking guidance technology



# Improved Wayfinding and Parking Guidance Systems

#### • Benefits:

- Increased awareness of the parking options available
- Clearer understanding of the location of parking in relation to popular destinations
- Reduction in drivers circling looking for available on-street parking
- Ability for drivers to know where spaces are available before arriving in downtown
- Liabilities:
  - Requires municipal investment

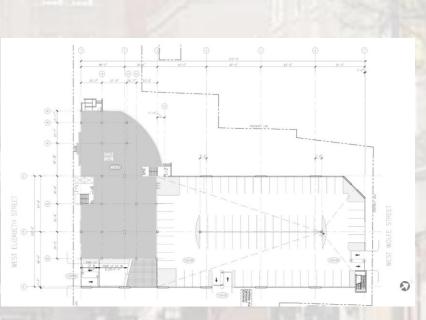


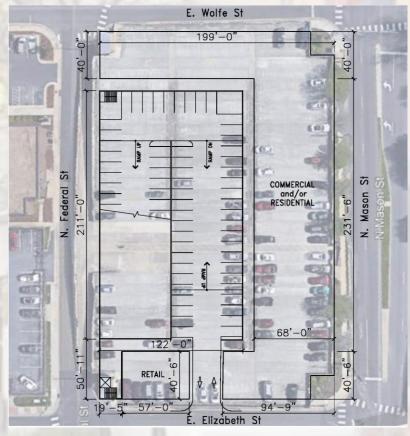
Durham, NC Battle Creek, MI Naperville, IL Asheville, NC

# Introduce New Public Parking Supply

Replace existing decks or lots with structured parking facilities

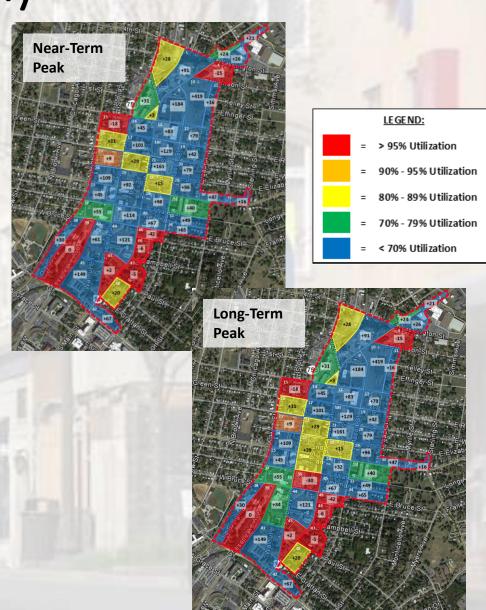






#### Introduce New Public Parking Supply

- DESMAN projects near-term development to generate 315 more vehicles than new parking spaces provided; in the long-term, that number rises to 605
- The City's existing Water Street and Elizabeth Street garages are near the end of their useful lives
  - 2018 Urban Land Institute report proposed replacing the Water Street Garage with a newer facility wrapped by residential and/or commercial space
- Surface parking lots throughout downtown could and should support higher and better land uses
  - Proposed projects in the 2014 Downtown Streetscape Plan and Build Our Park proposal would significantly reduce the public supply



Introduce New Public Parking Supply

#### • Benefits:

- Ensure adequate supply to accommodate future growth
- Replace existing facility(s) reaching the end of useful life
- Bring additional commercial/residential space to downtown
- Commit public lands to higher/better use

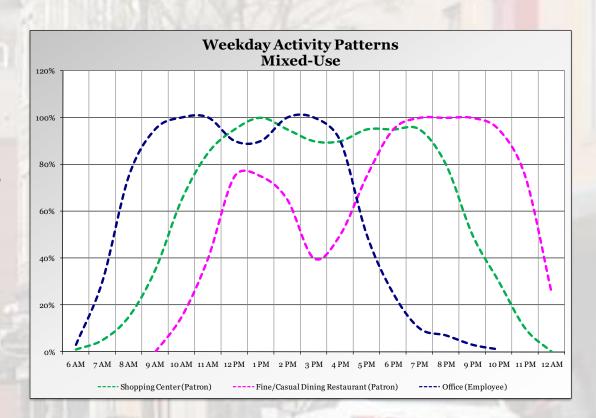
#### • Liabilities:

 Cost of structured parking - \$22,500/space based on recent JMU projects



### **Promote Shared Parking Agreements**

- Work with private property owners to formalize shared parking agreements to maximize the use of existing assets
  - Improves use of spaces in private facilities during off-peak hours
  - Capitalizes on the different demand patterns for different land uses
  - City can plan several different roles
    - Educator
    - Broker
    - Participant



### **Promote Shared Parking Agreements**

- Field surveys indicate that private parking facilities in downtown are less-well utilized than public parking facilities
  - Only 27 of 189 private facilities (14%) reached capacity at peak
- Anecdotal evidence suggests that private facilities are even less well-utilized later in the evenings on weekdays and all day on the weekends
  - Private facilities were observed to have significant excess capacity when adjacent onstreet spaces and off-street public facilities were highly utilized

Table 4: Off-Street Occupancy and Utilization (4/16/2019)

Type of Space	Effective	7:00 am - 9:00 am		11:00 am - 1:00 pm		4:00 pm - 6:00 pm	
	Supply	Occupancy	Utilization	Occupancy	Utilization	Occupancy	Utilization
Private/Private	4,894	1,413	29%	2,732	56%	2,675	55%
Public/Public	1,355	249	18%	657	48%	780	58%
Public/Private	231	82	35%	145	63%	170	74%
Total	6,480	1,744	27%	3,534	55%	3,625	56%

Table 5: Private/Private Off-Street Occupancy and Utilization by Sub-Type (4/16/2019)

Sub-Type	Effective	Morning		Noon		Evening	
	Supply	Occupancy	Utilization	Occupancy	Utilization	Occupancy	Utilization
Customers	961	140	15%	398	41%	372	39%
Employees	1,216	353	29%	731	60%	813	67%
Mixed	2,053	521	25%	1,226	60%	1,135	55%
Residents	664	399	60%	377	57%	355	53%
TOTAL	4,894	1,413	29%	2,732	56%	2,675	55%

#### **Promote Shared Parking Agreements**

#### Benefits:

- Potential to mitigate acute shortages of parking on certain blocks in downtown
- Opportunity to delay construction of additional public parking capacity
- Increased likelihood of downtown patrons and visitors finding parking close to the most desirable destinations

#### Liabilities:

- Time/cost associated with managing the agreements
- Potential for property owners to request compensation for allowing public parking
- Chance for user confusion if the program is not properly managed or there is inconsistent signage/messaging
- Agreements can typically be cancelled by the owner at any time



Oak Park, IL



West Concord, MA



Walnut Creek, CA

### Simplify On- and Off-Street Parking Time Limits

- Revise time limits on transient spaces
  - Simplifies the system for transient parkers
  - Makes parking enforcement easier and more efficient
  - Proposed changes include converting:
    - All short-term on-street spaces to a 2-hour time limit
    - All unregulated on-street parking spaces to a 10-hour time limit
    - All 2- & 3-hour off-street transient spaces to a 4-hour time limit
    - 50% of the 10-hour off-street spaces to 4-hour spaces
    - 50% of the 10-hour off-street spaces to permit only spaces
    - All off-street transient parking spaces currently limited to 10 hours or less to permit parking only

### Simplify On- and Off-Street Parking Time Limits

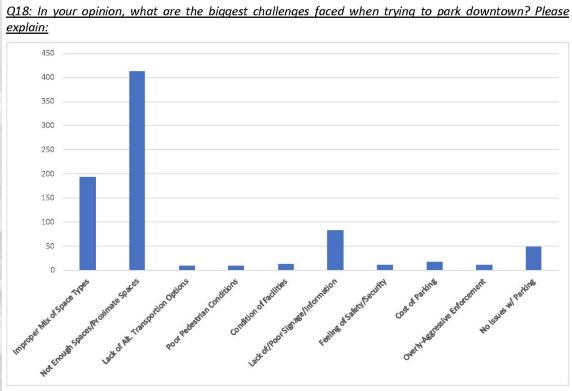
- Input from the public revealed that current time limits do not fit their needs
- Input also indicated that the varying time limits and poor signage created confusion among users

• Results of the online survey suggest long-term parkers are using the 10-hour spaces in off-street facilities or shuffling their vehicles through short-term

spaces to avoid being ticketed

 Confirmed by the Police who enforce the time limits

 Nearly 200 respondents identified the improper mix of spaces types as the biggest parking challenge facing downtown



### Simplify On- and Off-Street Parking Time Limits

#### Benefits:

- Increase the supply of long-term parking throughout downtown
- Increase the supply of short-term parking in the most desirable City parking facilities
- A 4-hour limit off-street would give jurors, tourists, and other transients likely to exceed the 2-hour time a better parking option
- Simplifying time limits make enforcement easier

#### • Liabilities:

- Reluctance of 10-hour parkers to convert to permit parking or to move to a curbside area a greater distance away
- Residents may not like 10-hour parking on currently unrestricted streets
- Improved enforcement will likely result in more citations being issued initially
- More effective enforcement will likely require additional staffing or effort to process and adjudicate citations

#### Invest in New Enforcement Technology

- Invest in vehicle-mounted License Plate Recognition (LPR) technology to improve parking enforcement
- Acquire hardware/software which will allow for automation of the parking permit registration, citation appeal, and citation payment processes



### Invest in New Enforcement Technology

- Enforcement of non-metered parking time limits is becoming more challenging
  - 6th Circuit Court in Saginaw, MI, recently determined that chalking tires of a vehicle is unconstitutional
  - Does not currently impact Virginia, but may in the future
- Proposed changes in policy would potentially increase the number of permit applications and citations issued/appealed
  - Permit applications currently processed manually
  - Tickets can currently be paid online but parking citation appeals must still be submitted and processed manually. The increase in
- Changes will result in additional workload for the Police Department and Treasurer's Office personnel

### Invest in New Enforcement Technology

#### • Benefits:

- LPR technology is a force multiplier
- Allows much higher accuracy and violation detection rates, leading to greater compliance with regulations
- Automating parking permit and parking citation adjudication processes will be a convenience for both applicants and City personnel

#### • Liabilities:

- LPR hardware and software costs \$15,000-\$25,000 per vehicle
- Supplemental handheld ticket writers are \$3,500-\$6,000 each
- Additional training will be needed
- Online systems may require modifications to the City's website
- Previously undetected violators will take issue with increased enforcement

### Support Use of Alternative Modes of Transportation

 Incorporate language into zoning ordinances to incent developers and property owners to support alternative modes of transportation

 Give developers credit against parking requirements for installing infrastructure that supports other modes of transportation including:

- Bicycle parking racks or stations
- Secured bicycle storage
- Support facilities for bicycle commuters like lockers and showers
- Inclusion of a car share services
- Provision of a shuttle service to major destinations or transit hubs



### Support Use of Alternative Modes of Transportation

- Providing infrastructure and programs that promote alternative modes of transportation can correct parking issues
  - Helps mitigate current and future parking demand
- Emerging developments will increase the number of people coming to and through downtown Harrisonburg
- City of Harrisonburg is focused on supporting alternative modes of transportation as a sustainable practice
  - Public Works and Planning & Community Development issued the 2017 Harrisonburg Bicycle & Pedestrian Plan
  - Calls to incentivize walking and biking across the city
  - City's existing Design and Construction Standards Manual requires bike racks be installed with most new developments

### Support Use of Alternative Modes of Transportation

#### Benefits:

- Allowing alternatives to on-site parking can mitigate impact of zoning changes on developers
- Supports the City's commitment to promoting sustainable practices
- Reduces the consumption of resources needed to build additional parking
- Reduces greenhouse gas emissions produced by single-occupant vehicles



Austin, TX

#### • Liabilities:

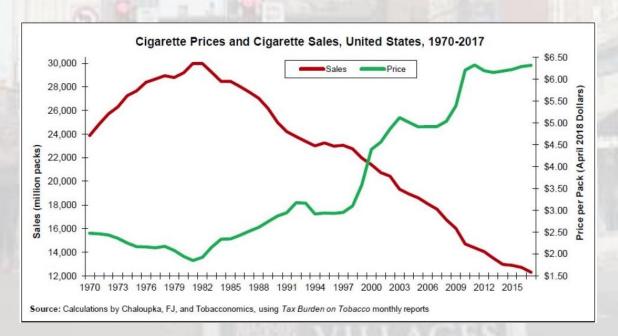
- Potential loss of parking spaces if these alternatives are introduced to the City's public parking facilities
- Market conditions may not entice developers to adopt these alternatives – will not be mandatory
- Demand for parking may still increase if users are unwilling to shift modes

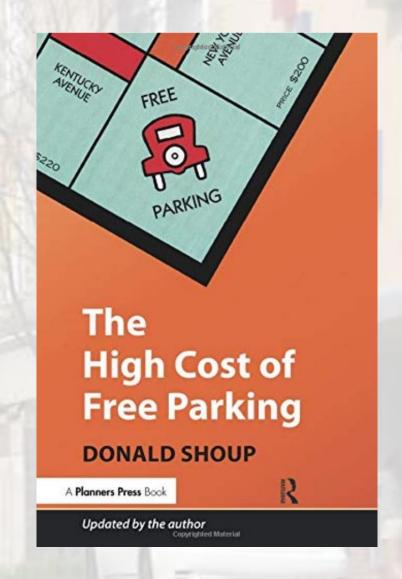


Denver, CO

### Investigate Implementing Paid Parking

- Consider a 'paid parking' pilot to measure the impact and influence it might have on parker's behaviors and mode choice
  - Nearly all public parking is currently free
  - Exception is permit parking in the City's Garages
  - Significant research points to price as the primary method to influence driver behavior





# Investigate Implementing Paid Parking

- Full-scale implementation of paid parking <u>not currently</u> recommended for Harrisonburg
  - Downtown demand patterns do not warrant paid transient parking
- A paid parking pilot allows for a limited pilot run of paid parking
  - Objectives and time period defined at the outset
  - Pilot area clearly defined
  - Alternative parking locations identified for displaced parkers
  - Make participation easy
  - Communicate frequently
  - Track results in utilization and revenue carefully
  - Report results back at end of pilot
- Long-term initiative implemented when utilization in a district or facility is consistently at or over 85%-90% of effective supply
  - All other initiatives should be exhausted first

### Investigate Implementing Paid Parking

#### • Benefits:

- Increased ability to manipulate driver behavior
- Lessen need to construct additional spaces due to improved utilization and turnover of existing supply
- New revenue can fund parking facility construction, operation, maintenance, etc.
- Promotes use of other modes of travel

#### • Liabilities:

- Public pushback
- Potential temporary reduction in business as users become accustomed to paid parking



Pasadena, CA



**Boulder, CO** 

# Next Steps **Public Meeting #2** • January 15, 2020 **Refine Recommendations** • January/February 2020 **Produce Final Report** • Due February 2020 32