City of Ketchum
City Hall

September 7, 2021

Mayor Bradshaw and City Councilors
City of Ketchum
Ketchum, Idaho

Mayor Bradshaw and City Councilors:

Presentation and Discussion regarding Downtown Parking Plan

Recommendation and Summary

On March 13th, the City Council approved a contract with Dixon Consulting as well the procurement of license plate recognition (LPR) parking enforcement technology as a starting point in the development of the downtown parking plan. Staff has completed several months of data collection via the new technology. Dixon consulting will present the findings and recommended next steps.

The reasons for the recommendation are as follows:

- The city continues to receive applications for new development in the downtown core
- Adequate and predictable availability of public parking is essential for the health of local businesses
- The city desires to utilize both national best practices policies and technology in the creation of a downtown parking plan

Introduction and History

The city retained Dixon Consulting to advise on the development of a downtown parking plan as well as assist with the selection and deployment of new (LPR) parking technology. This technology is the most efficient method to acquire parking utilization data for each block in the downtown area. City staff has completed an adequate sample period and is now prepared to present the findings (attached) as well as recommended next steps to engage our residents, visitors, and businesses to develop the plan with associated short, medium and long-term strategies/tasks.

Sustainability Impact

A modern and well managed public parking system reduces the occurrence of people driving around several times to find adequate parking.

Financial Requirement/Impact

There is no immediate impact, however, staff is scoping the next phase of activities and anticipates returning with a proposed new task order to the Dixon Consulting contract.

Attachments:

1. PowerPoint Presentation
2. August 11, 2021, City Hall Block Findings
3. July 27, 2021, Downtown Findings

Downtown Parking Plan

Ketchum City Council

September 7, 2021

Introduction & Company Profile

Julie Dixon

Principal

Dixon Resources Unlimited

- 30 years of traffic & parking management experience
- Supported two of the largest U.S. parking meter programs: the City of Los Angeles and the City & County of San Francisco
- SF*park* implementation (USDOT-funded congestion management program)
- Established Dixon Resources Unlimited in 2012
- 2020 Parking Today's Parking Person of the Year

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- Clients throughout the country
- Extensive parking and traffic management experience
- On and off-street programs:
  - Technology Operations
  - Customer Service
  - Procurement
  - Collections
  - Maintenance
  - Security/Safety
  - Enforcement
- Revenue reconciliation
- Efficiency analysis
- Overall recommendations and training

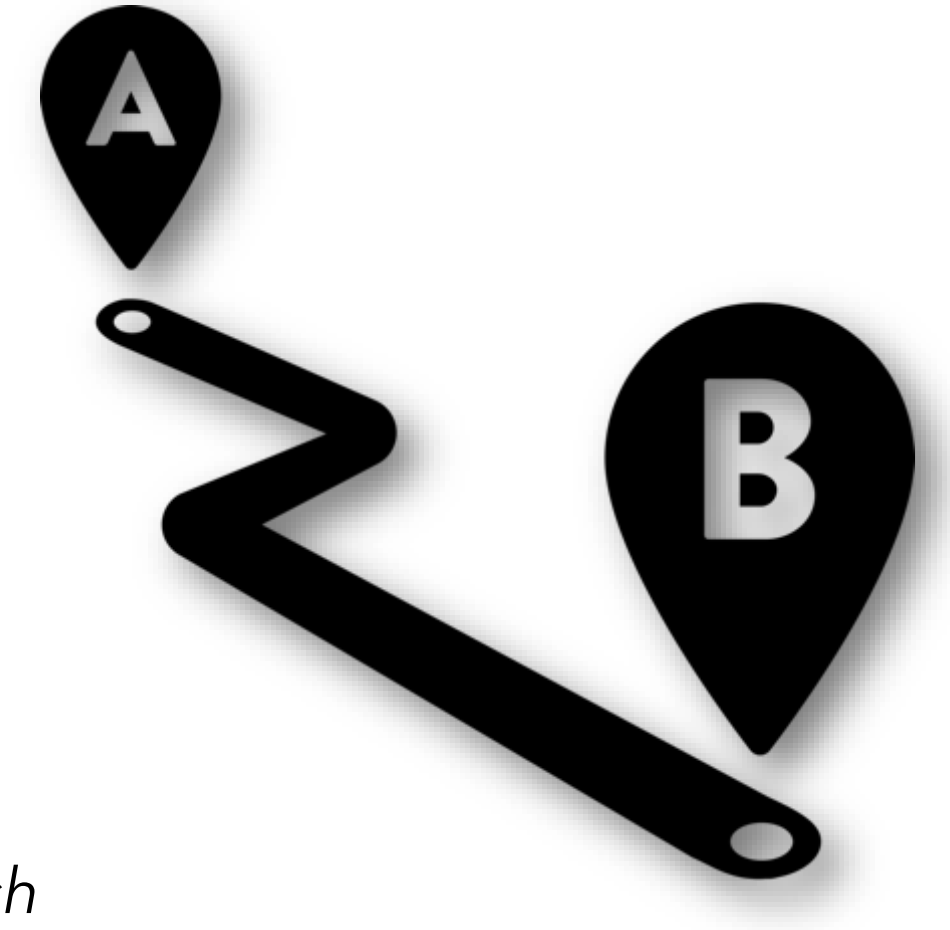
Understanding Ketchum's Needs

→ What are your parking objectives?

- *Immediate*
- *Within 12 months*
- *5 years*
- *10 years+*

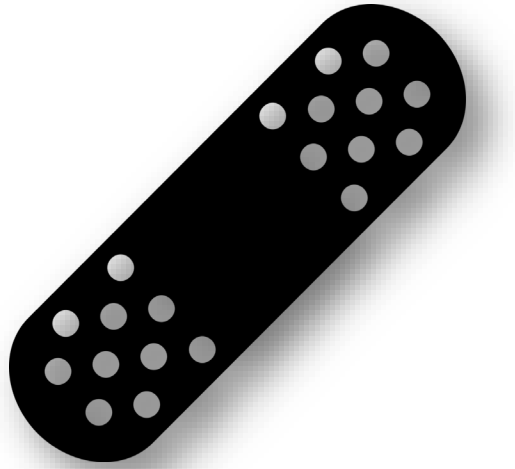
→ Develop a parking solution roadmap

- *Consider the end user experience*
- *Long term planning, technology refresh*
- *Incremental investments, phased approach*



What's the problem?

- Have a problem parking area? Install a meter!
  - **Band-Aid solutions** become overwhelming to manage
  - **Chasing the tail**
    - Restrictions push the problem elsewhere
  - **Proactive vs. reactive** approach to parking management

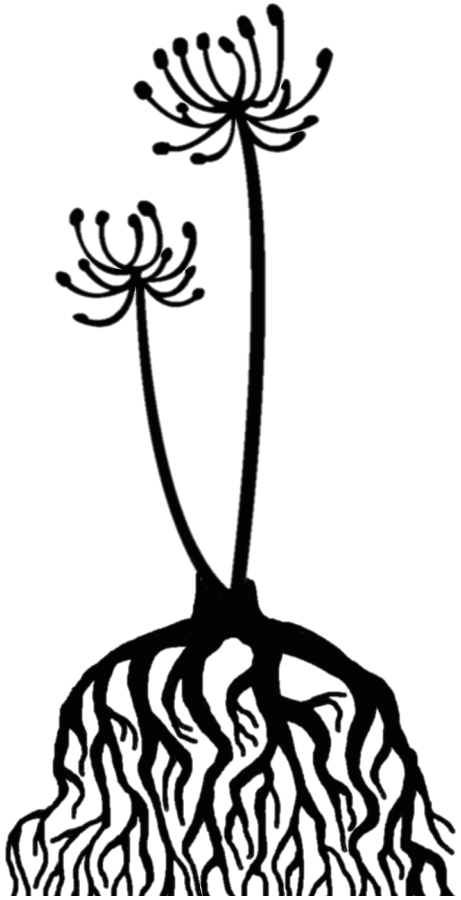


Identify the core root of the challenge

- Accurately addressing problems
- Make data-driven decisions

ENFORCEMENT IS CRITICAL

- Compliance based approach to managing parking



Downtown Parking Key Considerations

Easy, convenient, and accessible

- Overall downtown experience
  - Customer service
- "Park Once"
  - On-street vs. off-street parking
  - What is a reasonable walking distance?
- Mobility and accessibility
- Employee parking
- Compliance
- Wayfinding and parking guidance
- Alternative mode options
- Ongoing data collection
  - 85% occupancy target
  - Transparency

Stakeholder feedback

Parking Study

On-street mobile LPR data collection

- Opportunity to pilot compliance technology

June 3 – June 26, 2021

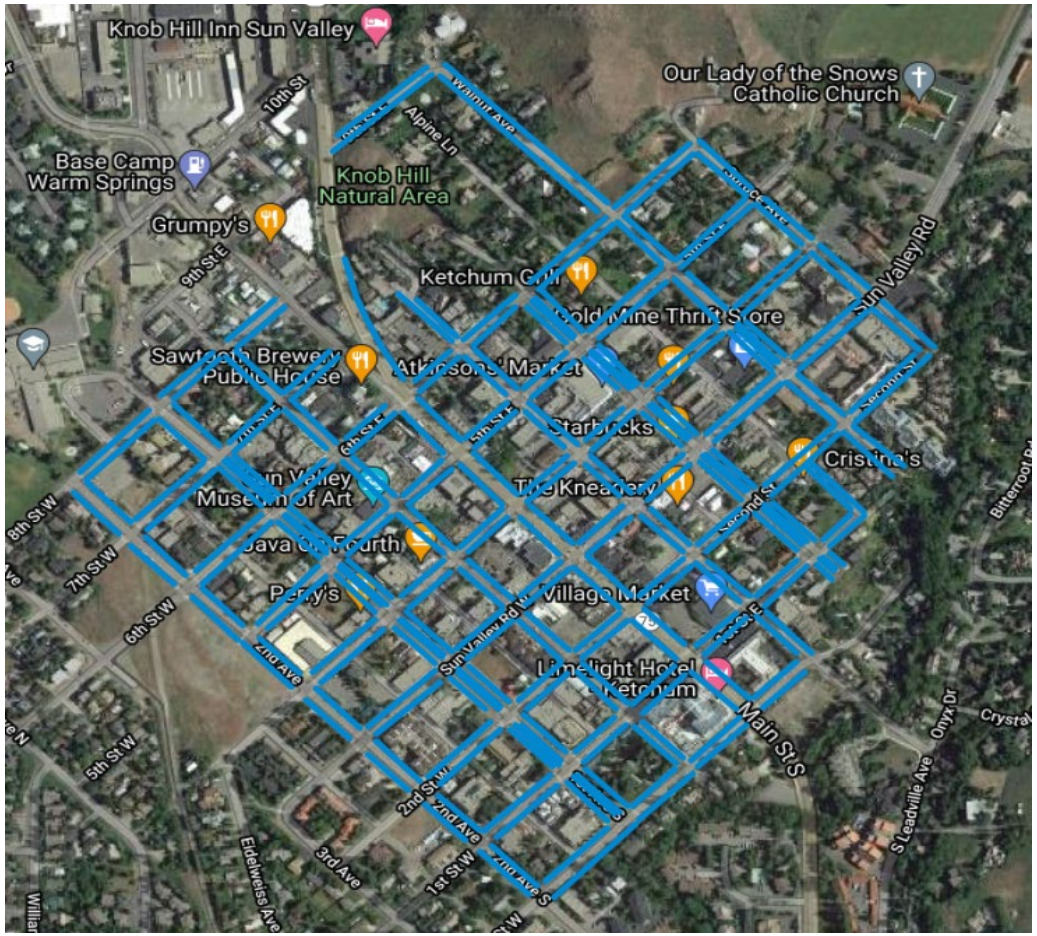
- 8am – 5pm on weekdays
- 10am – 4pm on Saturdays

1,996 on-street spaces in downtown region

Continued collection in July and August around the City Hall site

- Evaluation of potential Bluebird Village parking impacts

Study Area

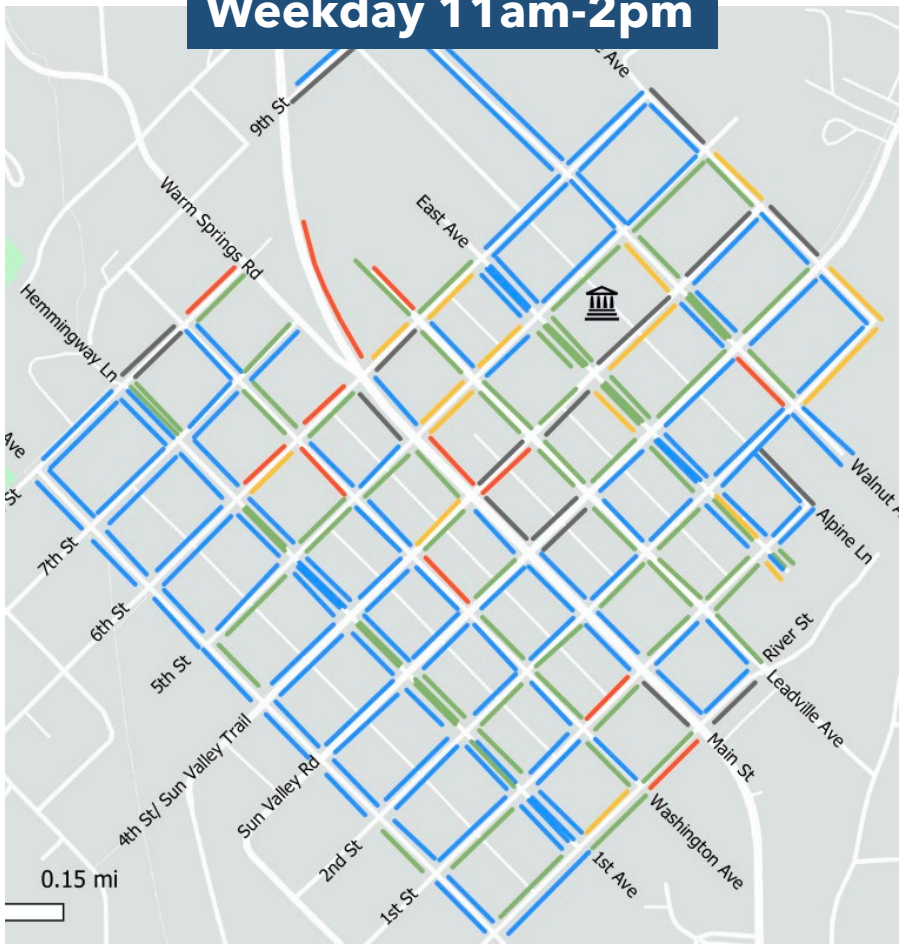


Peak Period Heat Maps

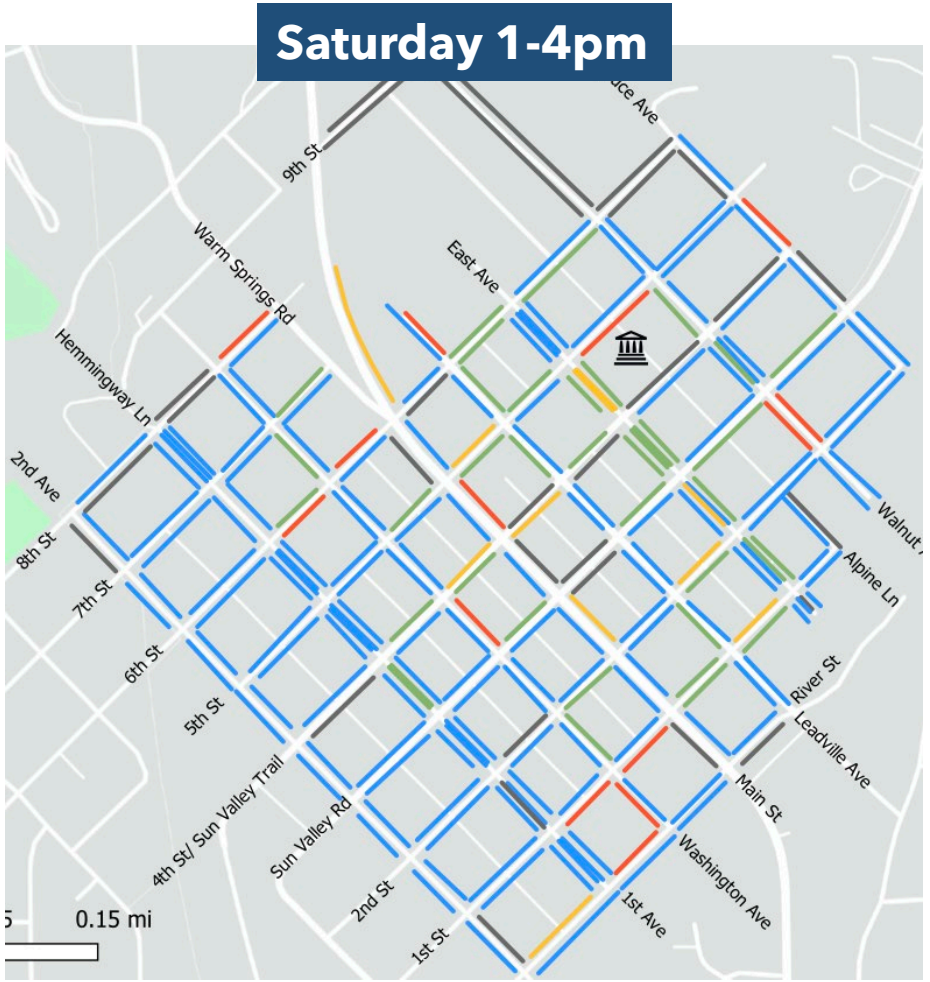
Study Area Averages:

- Weekday occupancy was highest from 11am-2pm (54%)
- Saturday occupancy was highest from 1-4pm (44%)

Weekday 11am-2pm



Saturday 1-4pm



Summary of Results

- Some blocks exceeded 85% occupancy, but parking was available within 1 or 2 blocks
- Peak on-street parking demand occurs around lunch time
- Most vehicles stay less than three hours

Perception vs. Reality

Potential Next Steps

- **Ongoing data collection plan**
  - Post results to City website
  - Data-driven decisions

- **Stakeholder engagement**
  - Extensive outreach and direct feedback
  - Online parking survey
    - Understand parking experience and priorities

- **Downtown Parking Framework**
  - Strategies to optimize parking management
  - Realistic and actionable

Contact

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Julie@dixonresourcesunlimited.com

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City of Ketchum Parking Data Report #2

To: City of Ketchum
From: Dixon Resources Unlimited (DIXON)
Date: August 11, 2021
Subject: Ketchum Mobile LPR Data Collection Results for City Hall Block Zone

Methodology

The City of Ketchum has used Vigilant Solutions mobile license plate recognition (LPR) cameras to collect on-street parking occupancy and turnover data since early in June 2021. The study area has shifted from the entire downtown area to a focused study area around the current City Hall site bounded by Sun Valley Road to 6th Street from Main Street to Spruce Avenue (See Figure 1).

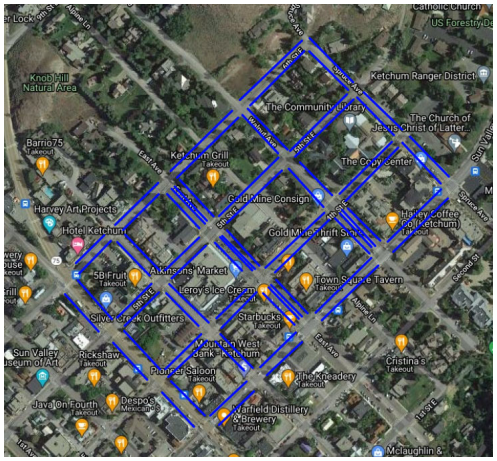


Figure 1: City Hall Block Study Area.

Mobile LPR data was collected on 23 weekdays and three Saturdays between June 3rd and August 4th. Data was recorded at various times between 8am – 5pm on weekdays, and 10am – 4pm on Saturdays. This data was then used to calculate average parking occupancy and turnover values for weekdays and Saturdays. Parking occupancy data was organized into three time intervals on weekdays (8am – 11am, 11am – 2pm, and 2pm – 5pm), and two time intervals on Saturdays (10am – 1pm, 1pm – 4pm). Data collection times were subject to staff availability, and due to certain limitations, the entire study area was not collected on some days. Parking inventory information was also collected to provide accurate occupancy results. License plate information was used to calculate parking turnover values identified by average length of stay. Results for the parking study were calculated down to the block face level for assessment.

When block faces reach a parking occupancy rate greater than 85% this can impact congestion and ease of finding a space, which is why the parking industry standard identifies 85% as the measure for considering policy changes.

Key Results

The results of this parking study show that, while some block faces occasionally exceeded 85% occupancy levels, overall, the parking occupancy for the study area is below the threshold. The focused study area around the City Hall site includes 515 on-street parking spaces. The average weekday on-street occupancy rate was highest from 11am-2pm at 56% occupied. The average

Saturday on-street occupancy rate was highest from 1-4pm at 49% occupied. There are slightly lower levels of occupancy overall on Saturdays compared to weekdays.

Table 1: Weekday Average On-street Parking Occupancy Percentage

Date	8-11am	11am-2pm	2-5pm
Thursday, June 3, 2021	N/A	37%	45%
Friday, June 4, 2021	34%	48%	N/A
Monday, June 7, 2021	51%	51%	39%
Tuesday, June 8, 2021	41%	52%	N/A
Wednesday, June 9, 2021	N/A	57%	N/A
Thursday, June 10, 2021	8%	54%	56%
Friday, June 11, 2021	55%	44%	66%
Monday, June 14, 2021	45%	58%	47%
Tuesday, June 15, 2021	44%	58%	52%
Wednesday, June 16, 2021	38%	56%	53%
Thursday, June 17, 2021	44%	68%	N/A
Friday, June 18, 2021	47%	55%	58%
Monday, June 21, 2021	52%	61%	57%
Tuesday, June 22, 2021	43%	N/A	53%
Wednesday, June 23, 2021	43%	64%	40%
Thursday, June 24, 2021	37%	60%	58%
Friday, June 25, 2021	41%	68%	60%
Monday, June 28, 2021	38%	57%	51%
Tuesday, June 29, 2021	53%	N/A	53%
Thursday, July 1, 2021	50%	58%	61%
Wednesday, July 7, 2021	49%	N/A	N/A
Wednesday, July 28, 2021	50%	N/A	44%
Thursday, July 29, 2021	52%	52%	N/A
Friday, July 30, 2021	N/A	54%	32%
Wednesday, August 4, 2021	47%	46%	51%
Average	**45%**	**56%**	**53%**

Table 2: Saturday Average On-street Parking Occupancy Percentage

Date	10am-1pm	1-4pm
Saturday, June 12, 2021	46%	50%
Saturday, June 19, 2021	52%	49%
Saturday, June 26, 2021	44%	48%
Average	**47%**	**49%**

Chart 1: Weekday Average On-street Parking Occupancy Percentage

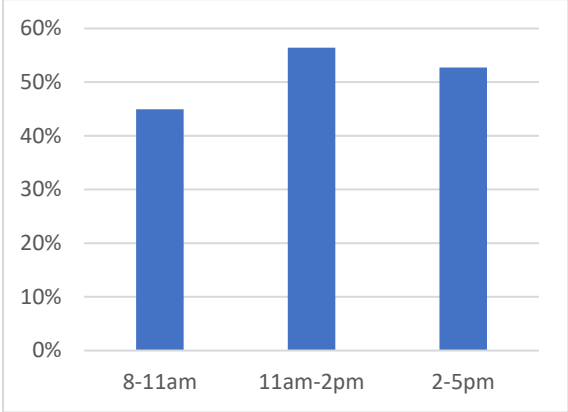
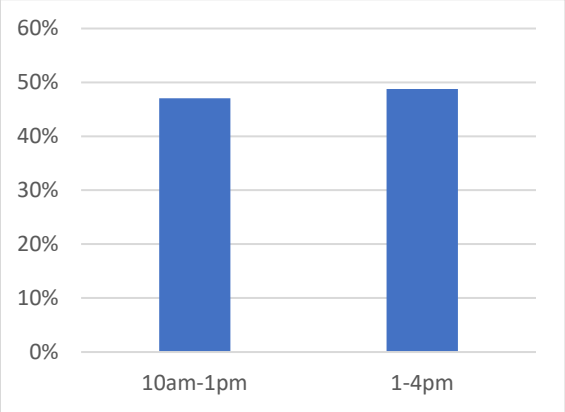


Chart 2: Saturday Average On-street Parking Occupancy Percentage



Parking turnover results show most vehicles stay less than three hours, with 89% staying less than three hours on weekdays and 98% staying less than three hours on Saturdays. Most vehicles stay between 1-3 hours, with 52% staying between 1-2 hours on weekdays and 84% staying between 1-2 hours on Saturdays.

Table 3: Weekday Average On-street Parking Length of Stay

Date	< 1 Hr	1 - 2 Hrs	2 - 3 Hrs	> 3 Hrs
Friday, June 4, 2021	2%	86%	11%	0%
Monday, June 7, 2021	0%	65%	31%	4%
Tuesday, June 8, 2021	0%	79%	15%	6%
Friday, June 11, 2021	5%	30%	56%	9%
Monday, June 14, 2021	4%	60%	33%	4%
Tuesday, June 15, 2021	6%	78%	10%	6%
Wednesday, June 16, 2021	0%	23%	54%	23%
Thursday, June 17, 2021	26%	74%	0%	0%
Friday, June 18, 2021	2%	72%	25%	2%

Monday, June 21, 2021	2%	73%	22%	3%
Tuesday, June 22, 2021	0%	0%	4%	96%
Wednesday, June 23, 2021	2%	71%	18%	8%
Thursday, June 24, 2021	0%	20%	63%	18%
Friday, June 25, 2021	0%	20%	56%	24%
Thursday, June 10, 2021	13%	68%	16%	3%
Thursday, June 3, 2021	50%	50%	0%	0%
Monday, June 28, 2021	0%	27%	55%	18%
Tuesday, June 29, 2021	0%	5%	55%	40%
Thursday, July 1, 2021	4%	71%	18%	7%
Wednesday, July 7, 2021	0%	0%	0%	0%
Wednesday, July 28, 2021	7%	7%	50%	36%
Friday, July 30, 2021	3%	86%	11%	0%
Wednesday, August 4, 2021	21%	36%	38%	6%
Total	**5%**	**52%**	**32%**	**11%**

Table 4: Saturday Average On-street Parking Length of Stay

Date	< 1 Hr	1 - 2 Hrs	2 - 3 Hrs	> 3 Hrs
Saturday, June 12, 2021	7%	78%	11%	4%
Saturday, June 19, 2021	2%	87%	11%	0%
Saturday, June 26, 2021	0%	87%	11%	2%
Total	**3%**	**84%**	**11%**	**2%**

Chart 3: Weekday Average On-street Parking Length of Stay

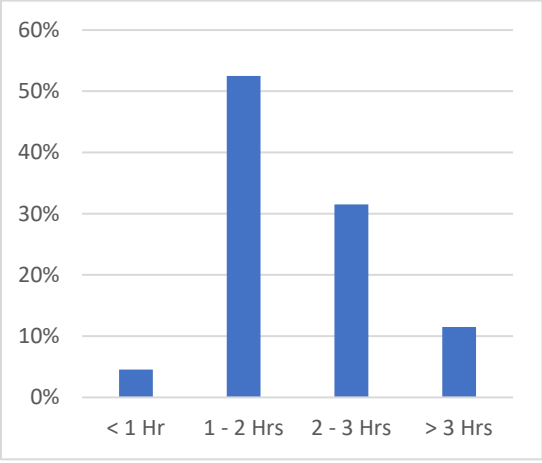
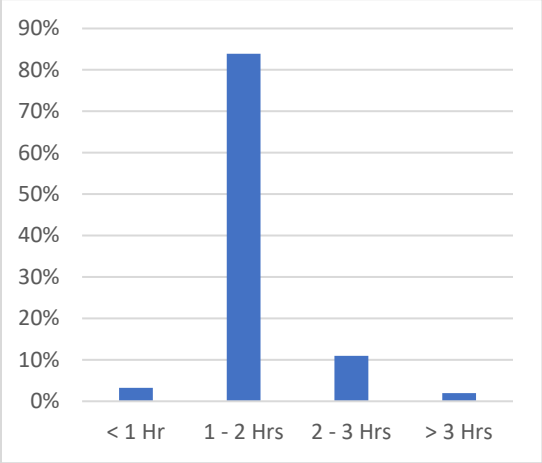


Chart 4: Saturday Average On-street Parking Length of Stay



The data concisely shows ample parking available in the study area during all portions of the day. While some block faces become more congested at times, the results demonstrate that most, if not all, vehicles can park within reasonable walking distance to their destination.

Appendix A: Heat Maps

Rapid Parking Report
City of Ketchum

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Data Collected over 23 weekdays between June 3rd and August 4th, 2021

Rapid Parking Report
City of Ketchum

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Data Collected over 23 weekdays between June 3rd and August 4th, 2021

Rapid Parking Report
City of Ketchum

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Data Collected over 23 weekdays between June 3rd and August 4th, 2021

Rapid Parking Report
City of Ketchum

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Data Collected over 3 Saturdays in June 2021

Rapid Parking Report
City of Ketchum

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Data Collected over 3 Saturdays in June 2021

Rapid Parking Report
City of Ketchum

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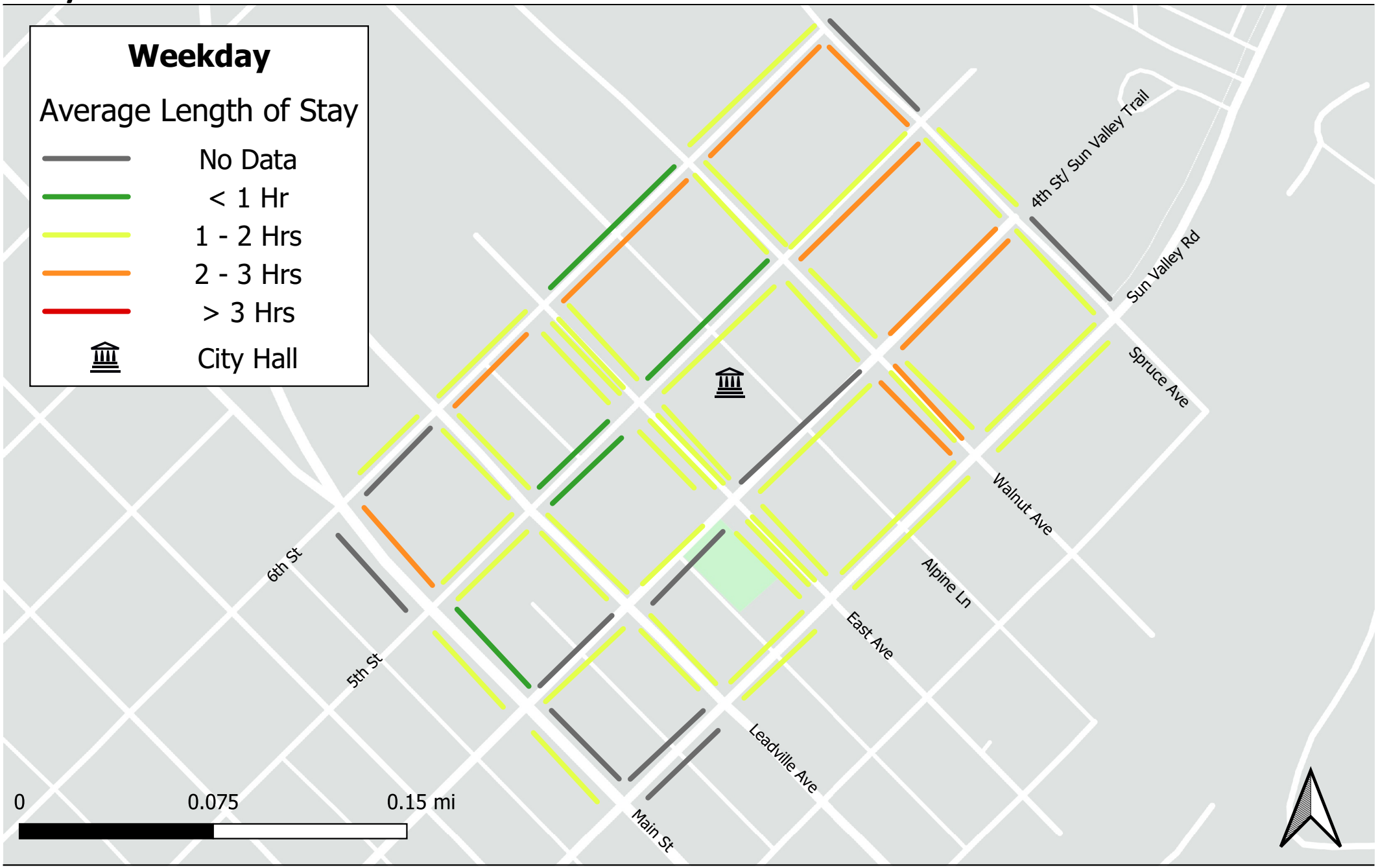

Data Collected over 23 weekdays between June 3rd and August 4th 2021

Rapid Parking Report
City of Ketchum

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Data Collected over 3 Saturdays in June 2021

DIXON
RESOURCES UNLIMITED

City of Ketchum Parking Data Report

To: City of Ketchum
From: Dixon Resources Unlimited (DIXON)
Date: July 27, 2021
Subject: Ketchum Mobile LPR Data Collection Results for June 2021

Methodology

The City of Ketchum used Vigilant Solutions mobile license plate recognition (LPR) cameras to collect on-street parking occupancy and turnover data during the month of June 2021 within the downtown study area (Figure 1).

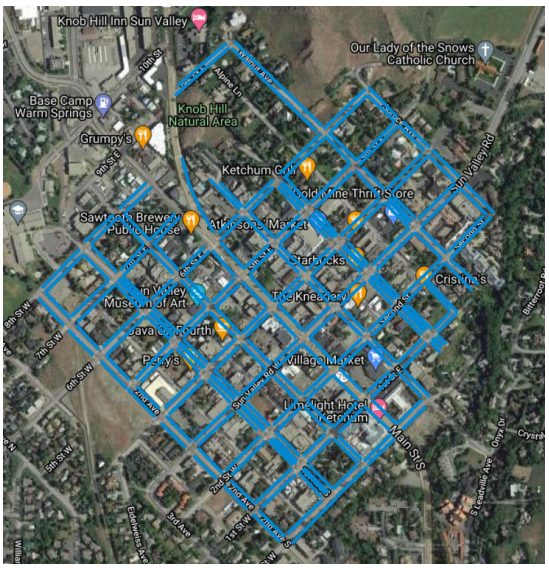


Figure 1: City of Ketchum parking study area.

Mobile LPR data was collected on 17 weekdays and three Saturdays between June 3rd and June 26th. Data was recorded between 8am – 5pm on weekdays, and 10am – 4pm on Saturdays. This data was then used to calculate average parking occupancy and turnover values for weekdays and Saturdays. Parking occupancy data was organized into three time intervals on weekdays (8am – 11am, 11am – 2pm, and 2pm – 5pm), and two time intervals on Saturdays (10am – 1pm, 1pm – 4pm). Data collection times were subject to staff availability. Parking inventory information was also collected to provide accurate occupancy results. License plate information was used to calculate parking turnover values identified by average length of stay. Results for the parking study were calculated down to the block face level for assessment.

When block faces reach a parking occupancy rate greater than 85% this can impact congestion and ease of finding a space, which is why the parking industry standard identifies 85% as the measure for considering policy changes.

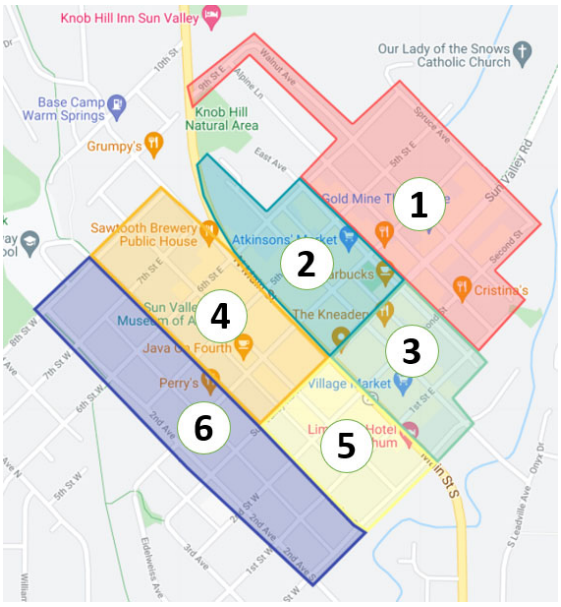
Key Results

The results of this parking study show that, while some block faces occasionally exceeded 85% occupancy levels, overall, the parking occupancy for the study area is below the threshold. Out of a total of 1,996 on-street parking spaces across the entire study area, the weekday high occupancy rate was 54% from 11am-2pm and the Saturday high occupancy rate was 44% from 1-4pm. The parking occupancy maps in Appendix A, which display the aggregated results of the study, demonstrate that there is plenty of available on-street parking in the study area throughout the

day. The highest concentration of parking congestion in the study area occurs east of 1st Ave and west of East Ave. This area has higher levels of parking congestion from 11am-5pm on weekdays and 1-4pm on Saturdays. There are slightly lower levels of occupancy overall on Saturdays compared to weekdays.

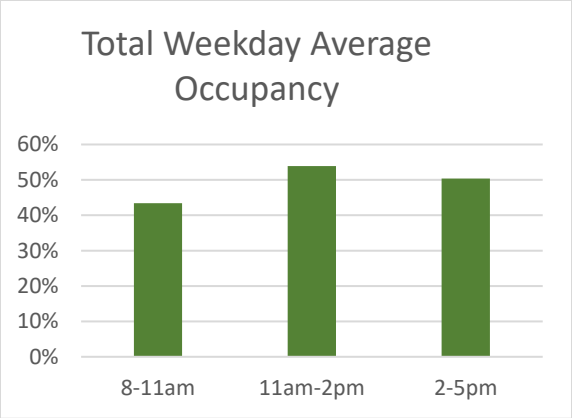
Parking turnover results show most vehicles stay less than three hours, with 77% staying less than three hours on weekdays and 94% staying less than three hours on Saturdays. Most vehicles stay between 1-3 hours, with the most common length of stay is between 2-3 hours on weekdays (40%) and 1-2 hours on Saturdays (65%).

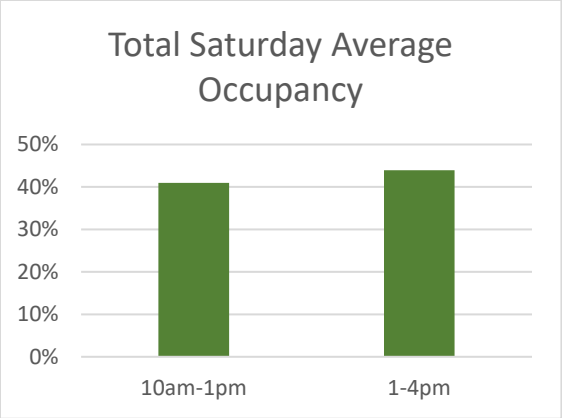
Figure 2: Six subareas across the study area.



The study area was also divided into six subareas for analysis to show the spread of parking across the downtown region (see Figure 2). Subarea two had the highest average occupancy rate of all zones, with a weekday average occupancy rate of 67% between 11am-2pm, and a Saturday average occupancy rate of 57% during both time intervals between 11am-1pm and 1-4pm. Subarea six had the lowest average occupancy rate of all zones, with a weekday average occupancy rate of 35% between 8-11am, and a Saturday average occupancy rate of 27% between 10am-1pm.

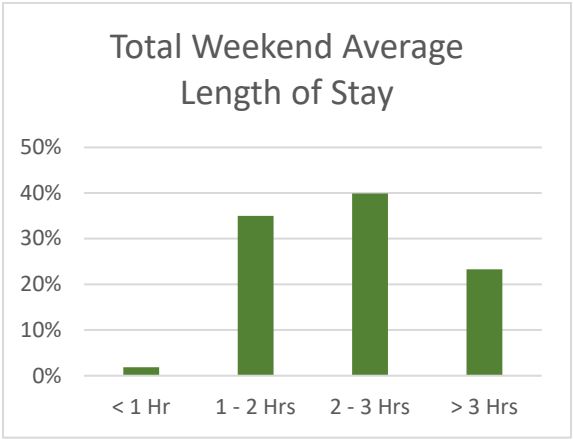
Average Parking Occupancy Percentage						
Subarea	Inventory	Weekday			Saturday	
		8-11am	11am-2pm	2-5pm	10am-1pm	1-4pm
1	457	39%	49%	47%	39%	39%
2	254	52%	67%	62%	57%	57%
3	242	51%	60%	51%	48%	50%
4	307	48%	61%	56%	43%	48%
5	229	42%	48%	51%	37%	43%
6	507	35%	43%	38%	27%	28%
Total	**1,996**	**43%**	**54%**	**50%**	**41%**	**44%**

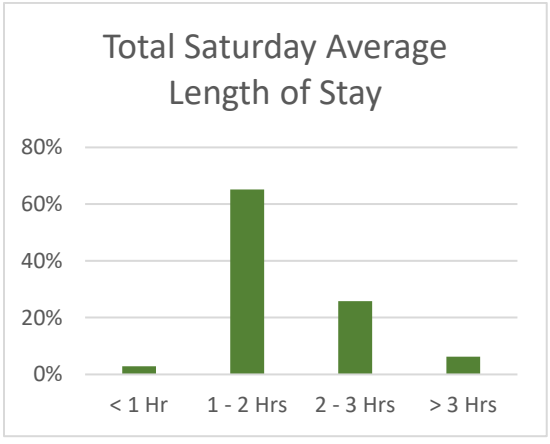




Average stay for each subarea followed the similar trends observed across the study area, with most vehicles staying less than three hours, primarily between 1-3 hours. Subarea two had the highest rate of vehicles staying between 1-3 hours with an average of 85% on weekdays and 97% on Saturdays. Subareas four, five, and six had the fewest number of vehicles staying less than one hour with an average of 1% on weekdays, while subarea one saw no block faces with an average stay of less than one hour on Saturdays. Subarea two had the fewest number of vehicles staying more than three hours with an average of 11% on weekdays and 1% on Saturdays.

Average Parking Length of Stay Percentage								
Subarea	Weekday				Saturday			
	< 1 Hr	1 - 2 Hrs	2 - 3 Hrs	> 3 Hrs	< 1 Hr	1 - 2 Hrs	2 - 3 Hrs	> 3 Hrs
1	2%	39%	37%	22%	0%	70%	22%	8%
2	4%	51%	34%	11%	2%	82%	15%	1%
3	2%	32%	43%	23%	3%	58%	33%	8%
4	1%	30%	43%	26%	4%	65%	26%	5%
5	1%	38%	39%	22%	8%	63%	25%	3%
6	1%	25%	43%	31%	2%	53%	34%	11%
Total	**2%**	**35%**	**40%**	**23%**	**3%**	**65%**	**26%**	**6%**





The Bluebird Village project is expected to replace the current City Hall site located on the corner of 5th St E and East Ave. Parking occupancy was aggregated into four categories as depicted in Figure 3: street segments immediately adjacent to the project site, street segments one block away, street segments two blocks away, and the combination of all three zones.

The average occupancy on street segments that are immediately adjacent, one block away, and two blocks away were not significantly different from each other. The average parking occupancy did not exceed 64% on adjacent blocks, 56% on segments one block away, and 59% on segments two blocks away. The highest average parking occupancy rate observed across the total of these zones was 59% between 11am-2pm on weekdays.

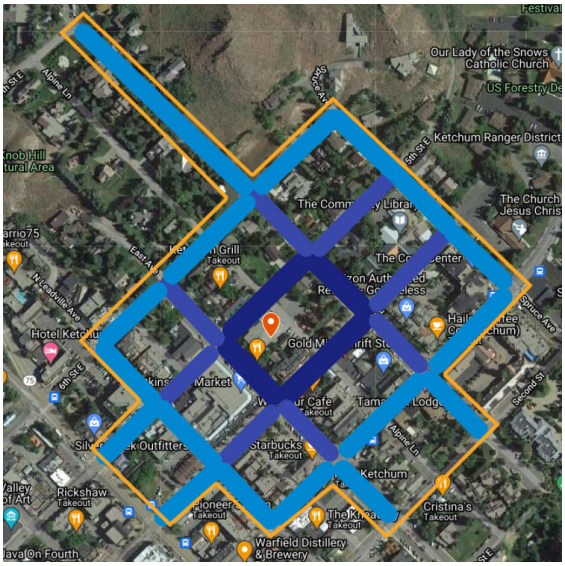
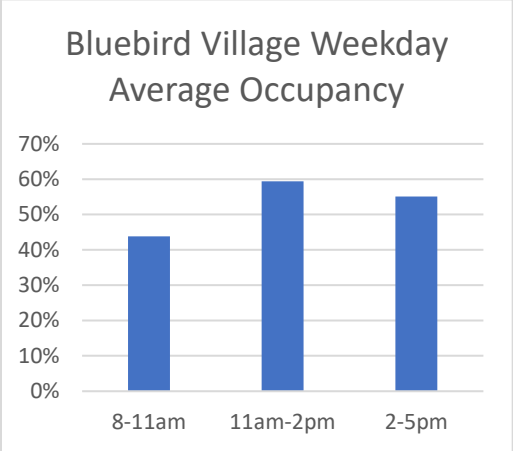
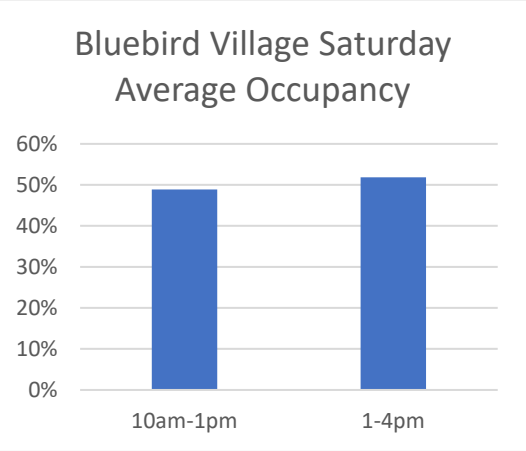


Figure 3: Bluebird Village project location with four analysis zones.

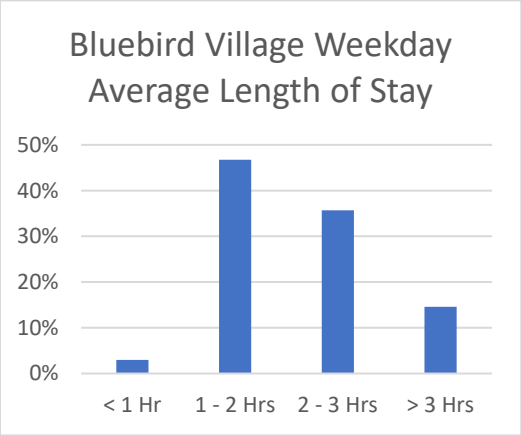
Bluebird Village Average Occupancy Percentage						
Street Segments	Inventory	Weekday			Saturday	
		8-11am	11am-2pm	2-5pm	10am-1pm	1-4pm
Immediately adjacent	79	45%	64%	61%	51%	59%
One block away	198	40%	56%	50%	44%	42%
Two blocks away	316	46%	59%	54%	52%	55%
Total	**593**	**44%**	**59%**	**55%**	**49%**	**52%**

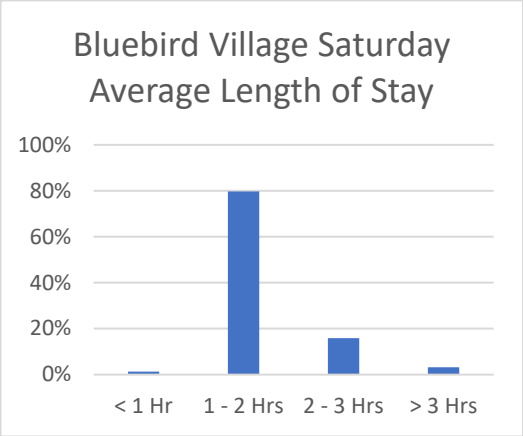




Average length of stay results within the Bluebird Village region follows similar trends within the entire study area. On weekdays, 86% of vehicles stayed less than three hours and 83% stayed 1-3 hours. On Saturdays, 97% stayed less than three hours and 96% stayed 1-3 hours. Most vehicles stayed an average of 1-2 hours, with 47% on weekdays and 80% on Saturdays. There was not much variance in the average stay between street segments that are immediately adjacent to the current City Hall, one block away, or two blocks away.

Average Parking Length of Stay Percentage								
Street Segments	Weekday				Saturday			
	< 1 Hr	1 - 2 Hrs	2 - 3 Hrs	> 3 Hrs	< 1 Hr	1 - 2 Hrs	2 - 3 Hrs	> 3 Hrs
Immediately adjacent	2%	41%	39%	18%	0%	85%	12%	4%
One block away	5%	48%	33%	14%	2%	84%	10%	4%
Two blocks away	2%	48%	36%	14%	1%	75%	21%	2%
Total	**3%**	**47%**	**36%**	**15%**	**1%**	**80%**	**16%**	**3%**



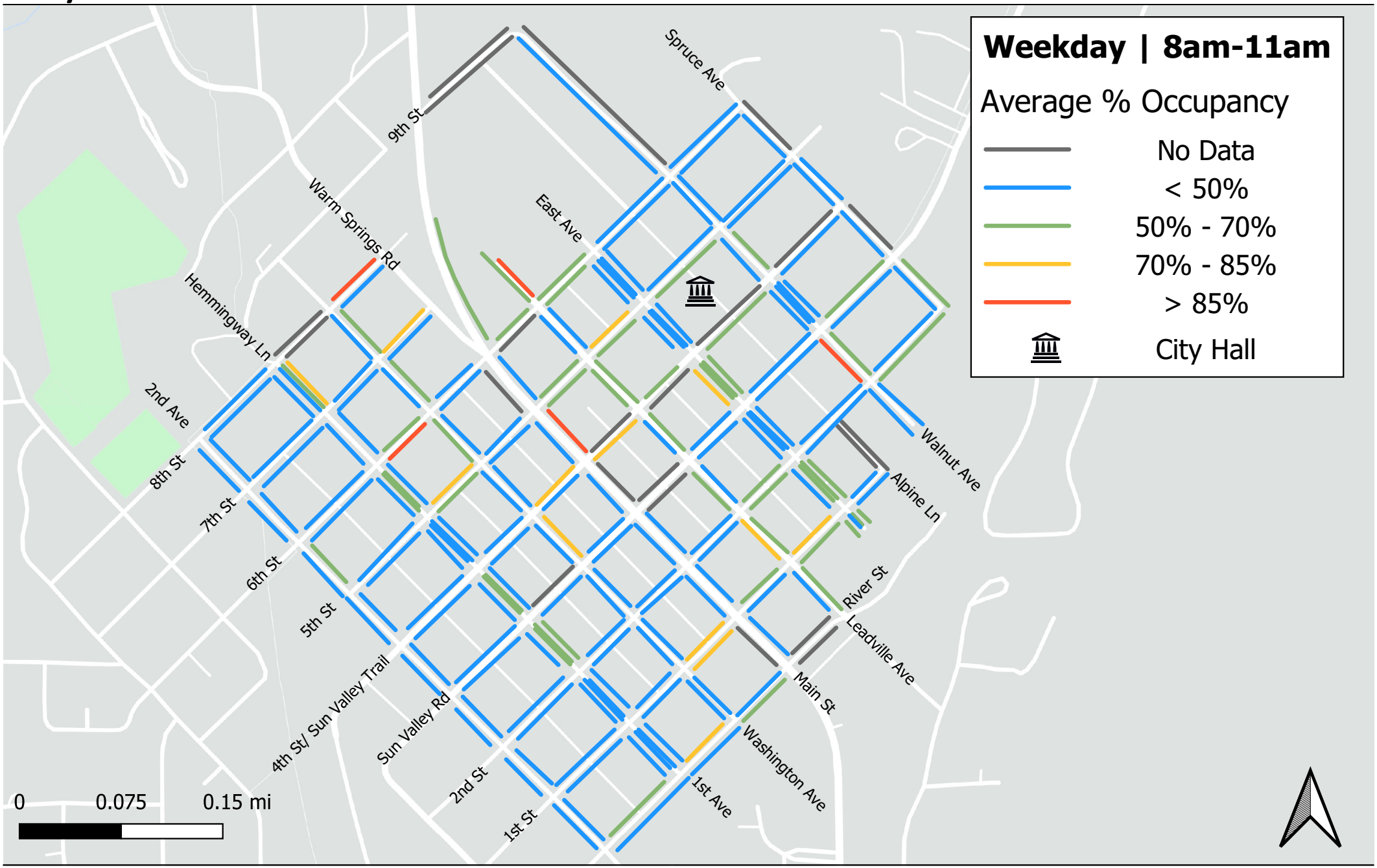


The data concisely shows ample parking available in the study area during all portions of the day. While some block faces become more congested at times, the results demonstrate that most, if not all, vehicles can park within reasonable walking distance to their destination.

Appendix A: Heat Maps

Rapid Parking Report
City of Ketchum

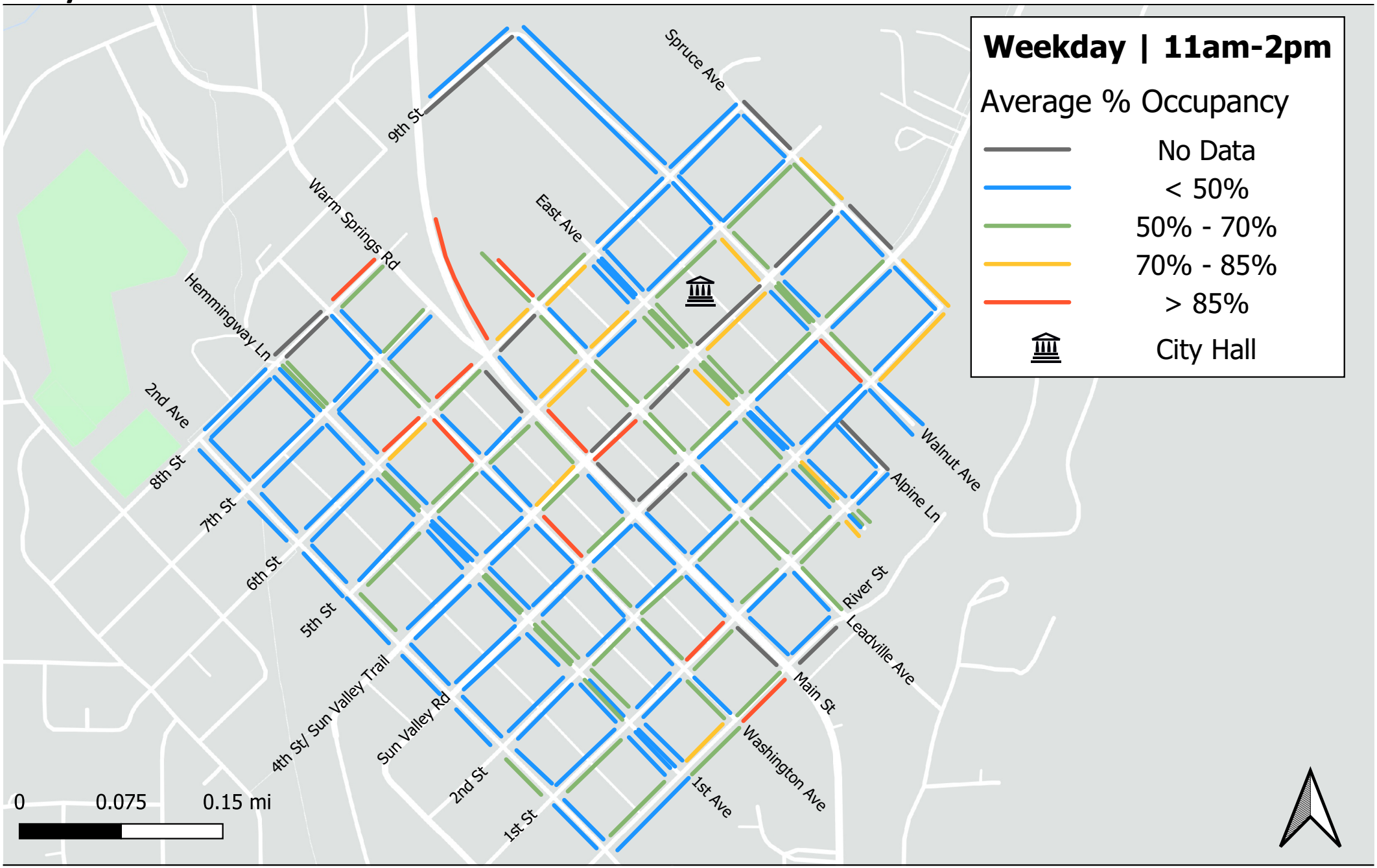
DIXON
RESOURCES UNLIMITED



Data Collected in 2021 on 6/3, 6/4, 6/7, 6/8, 6/9, 6/10, 6/11, 6/14, 6/15, 6/16, 6/17, 6/18, 6/21, 6/22, 6/23, 6/24, and 6/25

Rapid Parking Report
City of Ketchum

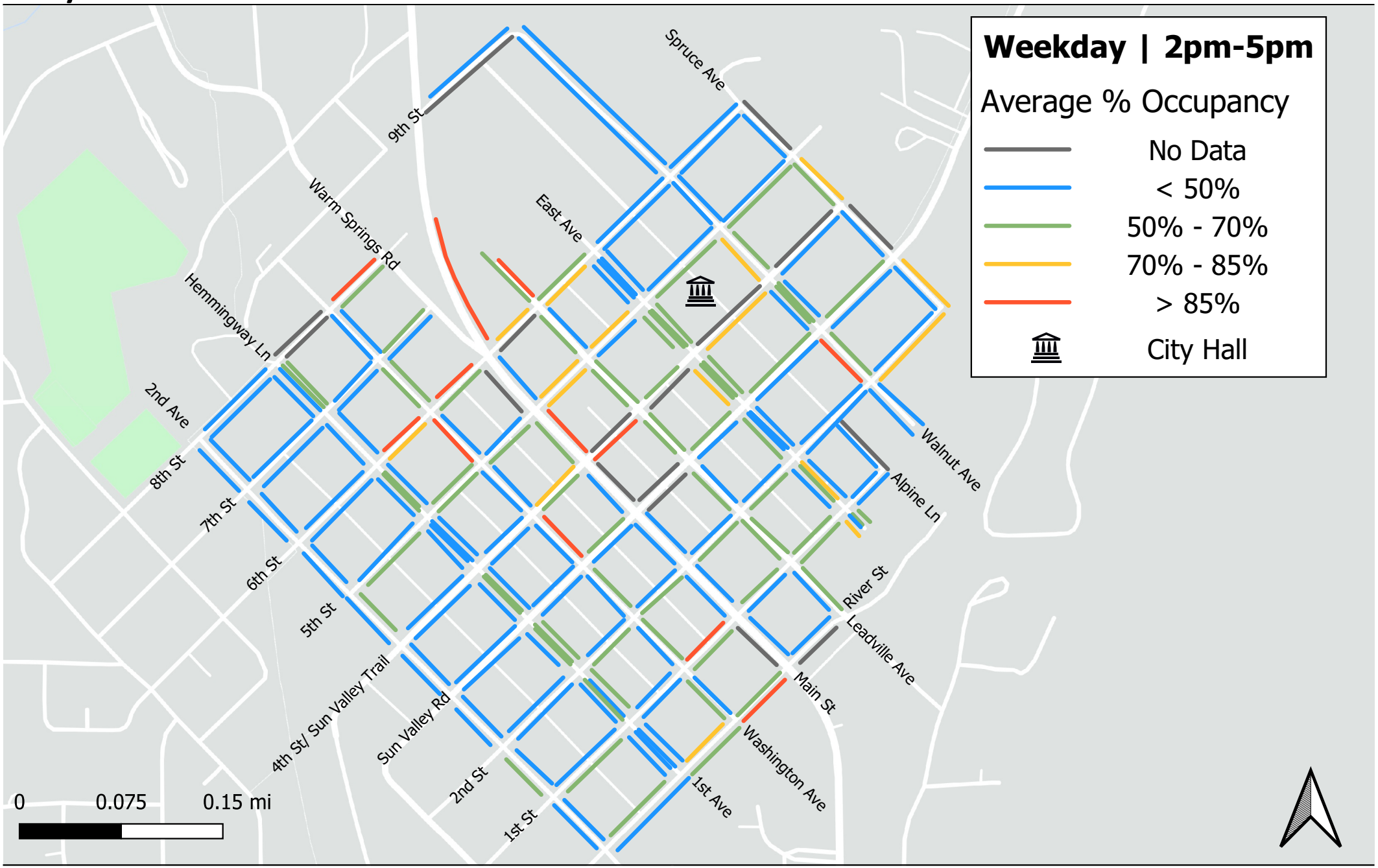
DIXON
RESOURCES UNLIMITED



Data Collected in 2021 on 6/3, 6/4, 6/7, 6/8, 6/9, 6/10, 6/11, 6/14, 6/15, 6/16, 6/17, 6/18, 6/21, 6/22, 6/23, 6/24, and 6/25

Rapid Parking Report
City of Ketchum

DIXON
RESOURCES UNLIMITED



Data Collected in 2021 on 6/3, 6/4, 6/7, 6/8, 6/9, 6/10, 6/11, 6/14, 6/15, 6/16, 6/17, 6/18, 6/21, 6/22, 6/23, 6/24, and 6/25

Rapid Parking Report
City of Ketchum

DIXON
RESOURCES UNLIMITED

Data Collected in 2021 on 6/12, 6/19, and 6/26

Rapid Parking Report
City of Ketchum

DIXON
RESOURCES UNLIMITED

Data Collected in 2021 on 6/12, 6/19, and 6/26

Rapid Parking Report
City of Ketchum

DIXON
RESOURCES UNLIMITED

Data Collected in 2021 on 6/3, 6/4, 6/7, 6/8, 6/9, 6/10, 6/11, 6/14, 6/15, 6/16, 6/17, 6/18, 6/21, 6/22, 6/23, 6/24, and 6/25

Rapid Parking Report
City of Ketchum

DIXON
RESOURCES UNLIMITED

Data Collected in 2021 on 6/12, 6/19, and 6/26