

DOWNTOWN WHITE RIVER JUNCTION PARKING STUDY

Submitted to:

TOWN OF HARTFORD, VERMONT

5.31.2017



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Submitted by:

Vital Communities

RSG

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1.0 EXECUTIVE SUMMARY

Following a decade and a half of development in White River Junction's historic downtown with no increase in parking capacity, the Town of Hartford applied for and received a VT Municipal Planning Grant in 2016 to examine strategies for addressing current and future parking shortages. Vital Communities and RSG were hired as consultants to work with the Town to complete the study. The project team examined the Town's semi-annual parking counts, which targets on- and off-street town owned parking available to the public within the project study area. Examination of this data over time shows historic trends in parking utilization and highlights areas of consistent parking demand as well as areas with additional capacity. While locations within the study area experience conditions nearing full capacity, the overall parking supply in downtown has remained well above the total demand. At most 66% of the total parking supply was being utilized in the winter midday observations from 2017.

The team projects that near-term parking occupancy within the project study area could reduce to approximately 11% during the midday peak period. With full development of the envisioned TIF program, projected parking demand would exceed parking capacity if no new on-site or public parking is created along with the envisioned full development program. In such a scenario, an increase of over 300 parking spaces would be needed to offset the increased parking demand and return overall parking occupancy in downtown to efficient levels (approximately 80%).

The project team relied heavily on public input to assess current parking conditions, identify issue areas, and develop strategies for the Town to consider. Beginning with the convening of a community steering committee that met five times over the course of the project, the project team also interviewed key downtown stakeholders, held two public meetings at the Town Hall, and administered an online survey of people living, working, and traveling to the downtown.

Issues identified by the project team through data gathering and community input included deficiencies in safety (real or perceived), accessibility, and wayfinding related to current parking assets as well as the reality that many prime parking spaces are used by employees and owners of downtown businesses, leaving visitors to locate and park in the more far-flung lots. The community was divided around the issue of parking enforcement and whether or not the Town should build a garage to accept the expected increase in parking demand.

The project team identified four broad strategies for the Town to pursue:

- 1.) **make the most of existing capacity**, which can be achieved through
 - a. safety and access improvements
 - b. wayfinding (signage) improvements
 - c. continued monitoring of parking conditions
 - d. optimizing zoning
- 2.) **reduce demand for parking**, which can be achieved through
 - a. encouraging employers to incentivize non-drive-alone travel

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- b. short- and long-term transit improvements
 - c. bike and walk infrastructure improvements
 - d. supporting shared mobility options
- 3.) **manage parking turnover**, which can be achieved through
- a. maintaining the enforcement status quo
 - b. increasing enforcement without meters (tire chalking)
 - c. charging for parking via parking kiosks
 - d. charging for parking with parking meters (with or without occupancy sensors)
 - e. developing clearer practices for enforcing winter parking bans
- 4.) **develop new parking capacity**, which can be achieved through
- a. converting the “Legion” lot into a parking deck
 - b. developing the private lot owned by Home Comfort Warehouse
 - c. developing the “Y” lot southeast of the train station
 - d. developing the lot behind Elixir and Vermont Salvage
 - e. developing several smaller lots to be used as interim parking

2.0 INTRODUCTION

After 15 years of significant economic development, downtown White River Junction has become a regional cultural center with a bustling arts scene, restaurants, retail shopping, office space, residential properties, and the nation's only independent graduate program in cartooning, the Center for Cartoon Studies. This development has occurred without major expansion of parking resources. While the 2017 Winter Municipal Parking Report found ample parking supply in many areas of downtown, certain lots and specific times of day experience parking capacity approaching or exceeding 100%. This capacity issue creates a public perception of inadequate parking supplies, as well as concerns about the adequacy of parking under projected growth scenarios.

This study is the latest in a series of efforts by the Town to plan for continued development. The 2009 White River Junction Revitalization Plan laid out the existing conditions and opportunities as the downtown grows. In 2011, the town passed tax increment financing (TIF) and laid out a plan for development in the downtown White River Junction TIF district. Subsequently much of that development occurred or is underway. In 2015, the Town applied for and received a VT Municipal Planning Grant based on the Town’s semiannual parking counts data and increasing development activity indicating a need to take action on parking in the downtown. Following a request for proposals, Vital Communities and Resource Systems Group were hired to assist the Town in this parking study.

FIGURE 1: COURTHOUSE AND TRAIN PARKING LOT

Overcapacity conditions in the courthouse and train station parking lot during a court session.

Downtown White River Junction comprises approximately 40 acres, and there is little support or desire to tear down historic buildings, affordable housing, and thriving businesses to make new room for parking. Indeed, starting with the 2007 version of the Hartford Master Plan, priority is given to the preservation of mixed architectural styles and features in the Historic District and the adaptive reuse of existing structures.¹ Future



growth scenarios indicate two or three story mixed-use infill development in the handful of vacant lots, alleys, and underused spaces in addition to extensive renovation/re-development/adaptive reuse of existing buildings in poor condition or that are underutilized.

The 2007 the Town Master Plan shows the Town beginning to grapple with the issue of parking adequacy. Prior to this, parking was regarded for many years parking was simply something “to be built” when needed. The 2007 Plan addressed parking management by encouraging a multimodal transportation system and preventing pollution such as storm water run-off.² The 2007 and subsequent Master Plan emphasize that sustainable long-term development necessitates that White River Junction provide adequate parking capacity while promoting alternatives to single-occupancy vehicles and preserving cultural and environmental resources.

Single-occupancy vehicle travel accounts for the bulk of transportation demand in White River Junction and Hartford as a whole. Seventy seven percent of respondents to the Vital Communities 2014 Smart Commute survey cited driving alone as their main mode of transportation, which is close to the 78.5% estimated by the 2012 American Community Survey. As development increases use of limited parking resources, transportation demand management must be pursued to get more people into downtown by bus, carpool, bike, foot, and vanpool. Providing alternatives to car ownership among residents, such as transit and carsharing, could also alleviate some pressure on White River Junction’s parking.

¹ Town of Hartford Master Plan, pp. 22 and 34 (2014).

² Town of Hartford Master Plan, pp. 212 (2014).

3.0 EXISTING CONDITIONS ASSESSMENT

Over 350 public parking spaces exist within the project study area, including both on-street spaces and off-street lots. All lots are within a quarter mile of the Main St/Joe Reed Rd intersection (by Tuckerbox), which translates to a walk of approximately 5 minutes or less. Figure 2 presents a map of parking supply in White River Junction.

FIGURE 2: PARKING INVENTORY



The Town of Hartford Department of Planning and Development has conducted parking utilization counts of public parking every year since 2005. These counts have been conducted twice annually, in the summer and winter, and include data for the four separate time-periods listed below.³

- Weekday AM (10:00 – 10:30 AM)
- Weekday Midday (12:15 – 1:00 PM)
- Weekday PM (2:30 – 3:30 PM)
- Weekday Evening (6:30 – 8:30 PM)

This data collection program has targeted town owned lots, including both on and off-street, within the project study area, and includes the public parking shown above, except for the Bugbee Senior Center lot, the court diversion lot, the train station lot, and the Town Hall lot.* Examination of this data over time shows historic trends in parking utilization and highlights areas of consistent parking demand as well as areas with additional capacity.

Figure 3 through Figure 6 present the historic trend in summer and winter parking occupancy for all surveyed parking within the project study area. While locations within the study area experience conditions nearing full capacity, the overall parking supply in downtown has remained well above the total demand. At most 66% of the total parking supply was being utilized in the winter midday observations from 2017.

Figure 7 through Figure 10 present maps of average 2017 observed parking occupancy within the project study area. Similar maps for all years back to 2005 are included as Appendix A to this report. Demand for downtown on-street spaces has been high since the count program began in 2005.

While evening demand has remained well within capacity throughout the count program, demand for on-street spaces in downtown has increased in recent years, along with an increasingly vibrant restaurant and entertainment scene in White River Junction. Daytime use of Railroad Row on-street spaces has been near 100% throughout the count program. Demand for on-street spaces on North and South Main Streets have increased over time, with occupancy rates over 85% occupied since 2008.

³ Parking utilization counts include data for five sampling days per season.

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FIGURE 3: HISTORIC WEEKDAY AM PARKING OCCUPANCY FOR ALL MUNICIPAL SPACES

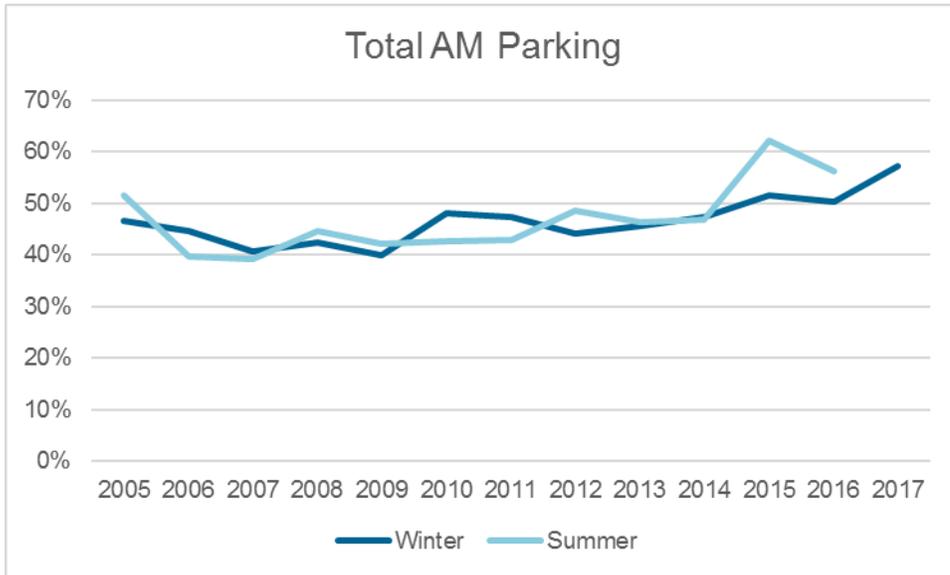


FIGURE 4: HISTORIC WEEKDAY MIDDAY PARKING OCCUPANCY FOR ALL MUNICIPAL SPACES

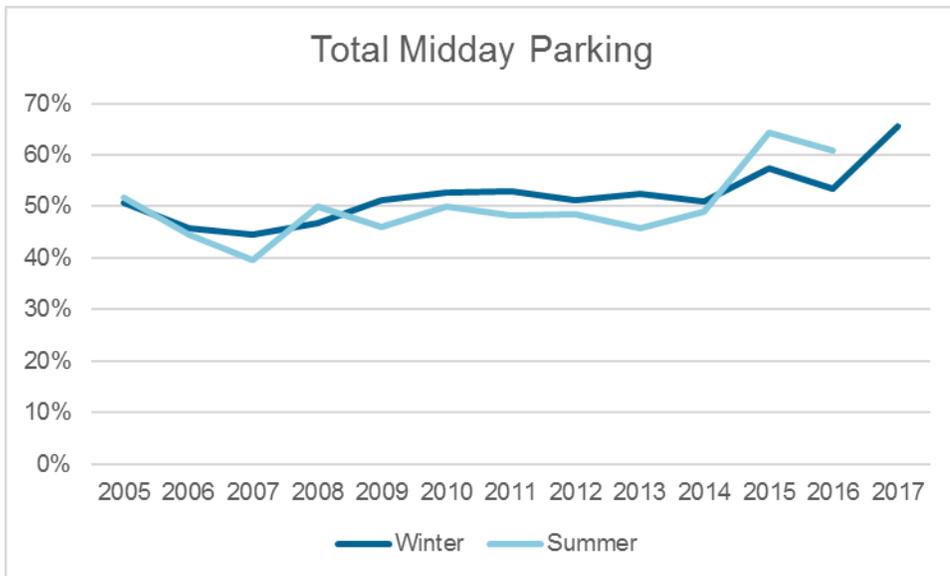


FIGURE 5: HISTORIC WEEKDAY PM PARKING OCCUPANCY FOR ALL MUNICIPAL SPACES

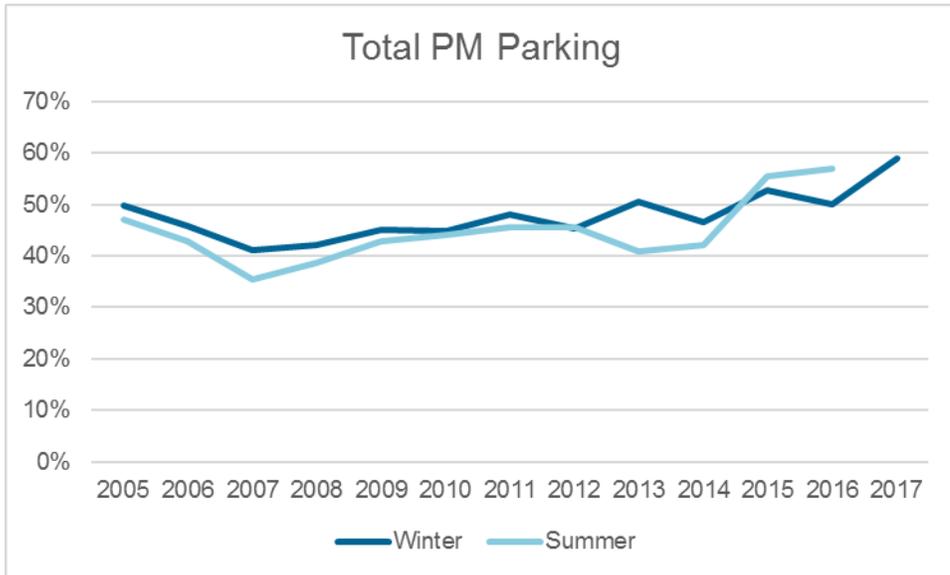
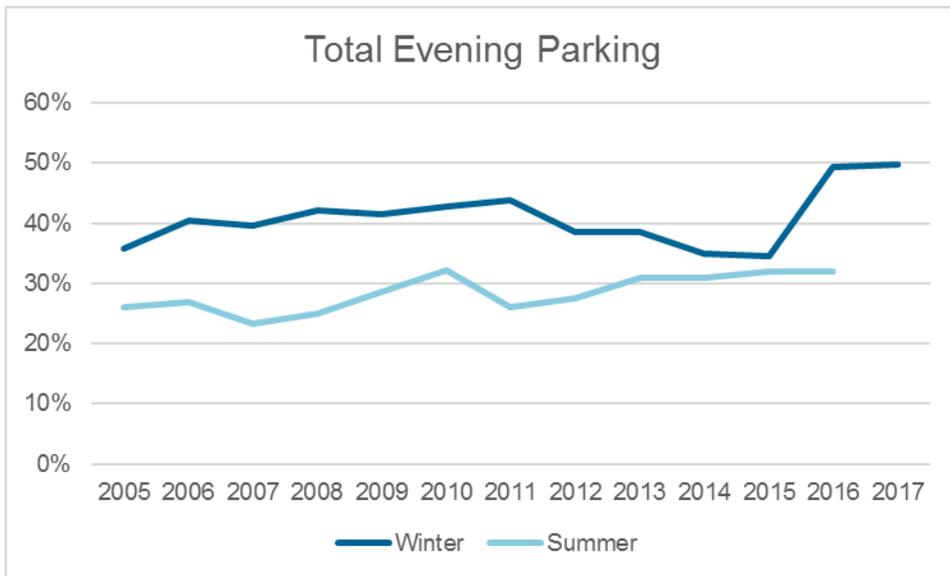


FIGURE 6: HISTORIC WEEKDAY EVENING PARKING OCCUPANCY FOR ALL MUNICIPAL SPACES



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FIGURE 7: 2017 AM PARKING OCCUPANCY



FIGURE 8: 2017 MIDDAY PARKING OCCUPANCY



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FIGURE 9: 2017 PM PARKING OCCUPANCY



FIGURE 10: 2017 EVENING PARKING OCCUPANCY



4.0 FUTURE CONDITIONS ASSESSMENT

While overall parking supply has historically remained greater than overall parking demand in the project study area, the strong potential for future development and redevelopment in coming years will likely increase the parking demand. Maintaining acceptable parking conditions going forward will require reducing parking demand and/or increasing parking supply.

To obtain a reasonable estimate for future parking demand within the project study area, we have examined two future parking scenarios – one examining the projected impacts from developments anticipated in the near term (including recently permitted projects), a second examining projected impacts from a larger-scale development scenario including developments previously envisioned for the White River Junction Tax Increment Finance (TIF) planning process.

The Near-Term parking demand analysis includes projected parking demand for the following projects. This scenario also accounts for net changes to existing parking supply (locations of increased or decreased supply) anticipated with these developments.

- Bridge and Main – 17 residential units and 2,000 sq. ft. of commercial space,
- Former Legion – 10,000 sq. ft. of commercial space,⁴
- Former Dry Cleaners – 36 residential units,
- Assisted Living – 87,000 sq. ft. assisted living facility.

The Long-Term parking demand analysis includes projected parking demand for near-term projects listed above as well as for the additional TIF projects listed below. This scenario accounts for net changes to existing parking supply (locations of increased or decreased supply) anticipated with the near-term developments. However, with no concrete plans in place for the long-term developments, no new parking supply is assumed for these projects. One strategy to accommodate this development would be to require some amount of additional on-site parking with new downtown development.⁵

- Northern Stage Block – 33 residential units and 79,100 sq. ft. of commercial space,
- Gates-Briggs - 10 residential units and 5,866 sq. ft. of commercial space,
- Gates East – 12 residential units and 20,577 sq. ft. of commercial space,
- Polka Dot – 3 residential units and 1,188 sq. ft. of commercial space.

Using parking generation rates provided by the Institute of Transportation Engineers (ITE)⁶ for similar land uses, along with the anticipated development program elements noted above, we project near-term parking capacity within the project study area could reduce to approximately 11% during the midday peak period. With full development of the envisioned TIF, parking demand would exceed parking capacity if no new on-site or public parking is created along with the envisioned development program. In such a scenario, an increase of over 300 parking spaces would be needed to offset the increased parking demand.

⁴ This project includes 22 units of housing that have already been completed. The 10,000 sq. ft. of commercial space is not yet occupied and is not reflected in the 2016 occupancy count data.

⁵ The long-term analysis assumes 1,100 sq. ft. per residential unit and assumes a 10% increase in parking demand for space that would be redeveloped/renovated rather than newly developed.

⁶ Institute of Transportation Engineers, *Parking Generation* 3rd Edition (Washington, D.C.: Institute of Transportation Engineers, 2004).

5.0 COMMUNITY INPUT PROCESS

STEERING COMMITTEE

The Project Team worked with Town staff to identify nine members to serve on the steering committee. Steering committee members were chosen for their range of roles in the downtown – as business owners or employees, as developers or property owners, as residents, or as Town staff or appointees. All brought a unique perspective on the current conditions and needs in the downtown area. The steering committee met five times throughout the year – in June, August, September, October, and November of 2016 – to guide the study planning process, review and discuss data, and provide feedback on recommendations.

FIGURE 11: STEERING COMMITTEE MEMBERS

Kim Souza, Owner	Revolution (Briggs-Gates Tenant)	Retail
Dave Lloyd, Operations Manager	Center for Cartoon Studies	Education
Bruce Riddle	Hartford Planning Commission	Town
Phil Kasten, Chief of Police	Hartford Police Department	Town
Everett Hammond, Assistant Director	Hartford Public Works Department	Town
Eric Bunge, Operations Manager	Northern Stage	Abutter to public lot; night use
Shawna Smith, Human Resources	Maponics (Railroad Row Tenant)	General business
Norm McMullen, Co-Manager	Upper Valley Co-Op	Retail, business landlord
Peggy Adams	Hotel Coolidge	Hotel, function space

PUBLIC MEETINGS

The project team held the first public meeting during the evening of July 18, 2016. The meeting was attended by approximately 40 members of the public, many who are downtown business owners and managers. This meeting provided an opportunity to collect thoughts on current conditions, though members of the public offered opinions on potential ways to change parking in the downtown.

A second public meeting occurred during the evening of May 22, 2017. About a dozen community members attended, many of them attendees of the July public meeting. The project team presented parking strategies identified in the study process. Feedback from the public was largely in support of and supplemental to the project strategies.

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ONLINE SURVEY

The project consultants, town staff, and the project steering committee collaborated on a survey to identify transportation and parking needs of people who come to the downtown for a variety of reasons (work, shop, take classes, etc.). Five hundred fifty-one people took the survey, including 414 people who completed it in its entirety.⁷ The survey grouped respondents into different populations (employees, business owners, residents, etc.). Respondents were asked general questions and then directed to questions unique to their experience. For example, a resident of the downtown received additional questions related to overnight parking and snow removal, while a business owner received additional questions related to hours of operation and client/customer needs. Full survey results are available in Appendix B.

STAKEHOLDER INTERVIEWS

In addition to the input gathered from the project Steering Committee, public meetings, and the community survey, Vital Communities staff conducted interviews of the following downtown stakeholders:

- Peggy Adams and David Briggs, owners of the Hotel Coolidge and Briggs-Gates building
- Eric Bunge, Managing Director at Northern Stage
- Bill Bittinger, property developer
- Mark FitzGerald, Rail Property Management Chief, Vermont Agency of Transportation
- Brandon Fox, Owner, Big Fatty's Barbecue and Maple Street Catering
- Reid Kotlas, General Manager, Tuckerbox Cafe
- Dana Michalovic, Executive Director of Good Neighbor Health Clinic
- Michelle Ollie, President of the Center for Cartoon Studies
- Shawna Smith, Human Resources Director at Maponics/Pitney Bowes
- Andrew Stone, Court Operations Manager at Vermont Superior Court

The stakeholders were chosen because they represent a diverse range of interests and understand client/customer/employee parking needs in the downtown. The participants answered up to 10 standard questions related to the adequacy and availability of parking, where people from their organizations tend to park, potential TDM strategies, and safety concerns. Transcripts of the interviews are available in Appendix C.

COMMUNITY PERCEPTIONS

Community members who gave input in one way or another generally agreed on the following points:

1. The Town should improve lighting in parking lots;
2. Downtown employees are using two-hour spaces for all-day parking; and
3. Improved signage would be helpful in directing people to appropriate parking.

⁷ The 75% completion rate likely reflects the length of the survey (approximately 30 questions) and the fact that the last two questions were open-ended essays that over 100 people seem to have skipped. Those questions asked respondents if they had any creative names for the parking lot behind the former American Legion and if they had anything else to add about parking and transportation in the downtown.

Participants at the first public meeting offered various opinions on whether the Town should develop a parking garage in the downtown, but there was no clear consensus on this topic. The project team was not proposing and did not present potential costs or conceptual designs for any new parking facility.

Overall, survey respondents reflected the diversity of people who come to the downtown and the variety of reasons people come to White River Junction, see Figure 10. Percentages indicate the ratio of people who answered a particular way on a question. For example of the 442 total people who answered the question below, 50% said they work in the downtown.

FIGURE 12: SURVEY RESPONDENT REASONS FOR VISITING WHITE RIVER JUNCTION

WHICH OF THE FOLLOWING DESCRIBES WHAT YOU DO IN DOWNTOWN WHITE RIVER JUNCTION—TOP 3 RESPONSES	
I dine out here.	265 respondents (60%)
I shop here.	242 respondents (54.8%)
I work here.	221 respondents (50%)

In addition to dining, shopping, and working in the downtown, respondents included 59 people who reported living in the downtown (however, some live outside the formal study area) and 34 people who own or manage a business here.

How Do People Get to White River Junction?

Most people who come to the downtown access the area by car. When asked how they travelled here for their most recent trip, 80.3% of survey respondents said they drove alone and 11.8% said they carpooled. This suggests that over 90% of trips made to the downtown result in a parking space being filled. While cars were the primary way people got to downtown, other transportation modes were popular among respondents including 5.7% who walked, 2% who biked and 1.1% who rode Advance Transit. However, when asked how they get to WRJ generally in the past, 41.9% of survey respondents indicated that they had carpooled sometime in the past.

FIGURE 13: HOW SURVEY RESPONDENTS GET TO WHITE RIVER JUNCTION

IN WHAT OTHER WAYS HAVE YOU TRAVELLED TO DOWNTOWN WHITE RIVER JUNCTION?	
Carpooled	182 respondents (41.9%)
Walked	86 respondents (19.8%)
Biked	76 respondents (17.5%)
Advance Transit	51 respondents (11.8%)

These numbers suggest strong potential for transportation demand management (TDM), discussed in further detail later in the report. Generally, TDM refers to any non-drive-alone travel method, including the use of telecommuting in lieu of driving to work.

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Availability of Parking and Parking Needs

The survey showed that people tend to use only one parking space once they arrive in downtown. 91.6% of respondents said they park and stay in one place or park once and travel between destinations by foot or bike. Only 18 respondents or 4.1% said they usually drive between locations in the downtown, which should be expected of a walkable downtown that comprises only 40 acres. Most respondents – 56.8% - said they nearly always find parking near their destination, and an additional 35.6% said they occasionally must park further out and walk a few minutes. Only 7.6% of respondents said they often cannot find parking near their destination. This figure supports the many years' worth of data on parking lot use collected by Town planning staff, which shows overall occupancy rates at or below 60% in many areas.

Fourteen individuals said they use accessible parking to accommodate a wheelchair, walker, or other mobility device. Six of these people said they nearly always find accessible parking, seven said they often find it, and one said parking is usually not available near a final destination. The open comments did not reveal much additional information, but respondents said in separate comments that (a) parking is available “within a short block” and (b) requested “more accessible parking places – especially near restaurants.” The Town could consider places to designate additional accessible parking, such as in front of the Gates-Briggs building.

Respondents were evenly split on whether parking has become more difficult to find over the past three years (40.4%) or stayed about the same (42.9%). Of the over 500 respondents, only 11 thought that parking has become easier to find, and 61 (14.2%) had no opinion, most often because they have not lived in the area long enough to say. Several open comments on this question are worth noting. One person said, “We moved our business in major part due to parking issues for our customers.” Another offered, “the courthouse parking area has no parking lines so people park in [a] disorderly fashion that creates a lack of optimal parking space. If the courthouse had lines...it would not cause the downtown surge on parking.” Finally, one person said that parking is “more difficult but still not close to bad.”

Parking Safety

A significant number of survey respondents – 76 people or 18.2% – said they feel unsafe parking in certain areas around the downtown. The top areas of concern are the parking areas behind the former American Legion Building (28 respondents), along South Main Street going toward Sykes Mountain Avenue (20 respondents), and the lot next to the Windsor County Courthouse (10 respondents). Responses about these areas were mostly focused on poor lighting, particularly during winter months when employees leave in the dark. This issue was addressed in the 2009 White River Junction Village Revitalization Plan. Some lighting improvements were made and additional improvements recommended in the Plan are scheduled for installation in 2017/18. Several people highlighted car break-ins and encounters with people who made them fear for their personal safety.

In addition to concerns about personal safety and lighting, people identified areas where they feel unsafe because of the physical layout of the downtown. One respondent pointed out that “blind spots and deferred maintenance make Currier St. and [the] Legion area unpleasant.” Another person said the area where North Main Street becomes South Main is dangerous because “people speed

around the corner.” Right past this corner, another individual echoed “I find it unsafe at times to park in front of the post office. While backing up, it is hard to see...” Finally, one person said “I’m sick of people speeding through the downtown. Some people treat Main Street like a drag strip race. I’d support putting in speed tables...”

Steering committee members and downtown stakeholders all agreed that the Town should prioritize better lighting and signage within the downtown. During meetings and stakeholder interviews, several said doing so is critical to people who work in the downtown all day and need long-term parking. Employees need to be clearly directed to all-day parking, and that parking should have adequate lighting that makes people feel safe. During the stakeholder interviews, all but one respondent said that expanding Advance Transit to nights and weekends would help their organization; the Courthouse, which is closed at those times, would not directly benefit.

Residential Parking

In the survey, 54 survey respondents identified themselves as downtown residents. While some of these people live outside the study area, even as far away as Wilder, most provided useful information on their parking needs. Only three individuals reported using on-street public parking for their residential needs. Indeed, 89% of residents reported having a private driveway or parking lot to use, and 92.3% said they have adequate parking where they live.

Parking Enforcement

When asked whether clients and customers are "satisfied with current parking options," meeting and interview participants were equally split into "Yes" and "No" responses. Nine interviewees opposed the possibility of installing parking meters, and two supported this option. Many noted that all-day employees and even business owners use two-hour spaces in front of their businesses. Several, notably restaurant managers, said that free parking is a boon to business because patrons have one fewer expense, do not face the obligation of paying a meter or kiosk, etc.

Among survey respondents, opinions on the effectiveness of parking meters at promoting parking turnover were split. About half the survey respondents said meters would not affect their trips to downtown, although about 37% said that they would travel to downtown less frequently if they had to pay for parking. Some survey respondents would use various non-drive alone options to get into downtown to avoid paying for parking, but 38% said they would not consider options beyond driving alone. When asked if the Town should keep or change its 2-hour parking, 70% favored “keeping it the same.” Only 22% of survey respondents were willing to pay for prime parking; the vast majority preferred to have to walk farther to their destination in order to park for free.

Winter Parking Management

The survey addressed several opportunities to manage winter parking bans and snow removal. Few people use on-street parking for overnight needs. The one exception is the former American Legion lot, which now has apartment dwellers who use spaces overnight. When a planned assisted living facility is completed nearby, staff who work overnight may take some additional spaces.

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The most popular option for notifying town residents and visitors of winter parking bans and snow removal needs is by far a text message alert system. Over 71% of respondents said they would prefer to receive instructions from the Town by text.

6.0 PARKING MANAGEMENT STRATEGIES

Parking capacity currently meets the needs of the downtown most of the time, but anticipated future development could lead to parking occupancy rates of 90% or more. This section outlines strategies to maximize the usefulness of existing resources, reduce parking demand, manage parking turnover, and develop additional parking capacity. See Appendix D for a stand-alone table showing the strategies and details.

6.1 | IMPROVEMENTS TO EXISTING FACILITIES

While current parking supply still exceeds parking demand, there are areas where demand is consistently high and areas where many visitors to White River Junction habitually do not park, either due to unawareness of the resource, unappealing characteristics of the option, or safety concerns. Several aspects of these underutilized parking areas could be improved to encourage more parking in these areas in the future so as to make the most of existing resources.

SAFETY IMPROVEMENTS

The community survey revealed serious concerns about the safety of existing parking, mainly inadequate lighting in the large lots near the former American Legion and the Windsor County Courthouse. Fortunately, in 2016, the Town voters approved a \$200,000 Tax Increment Financing project to repave and restripe the lot behind the former Legion building and improve lighting and clean-up vegetation. The project is scheduled for construction in the 2017/2018 construction season with the Currier Street extension project that runs through the parking lot, which includes additional sidewalk and lighting for implementation. All of these improvements will make the lot a more inviting and attractive place for visitors and downtown employees to park their vehicles. See Appendix E for proposed plans for improvement.

During this study, project consultants identified several vehicles that appeared abandoned in the municipal lot behind the former American Legion. The Hartford Police Department worked with the vehicle owners to remove them. Abandoned vehicles waste valuable parking capacity and add to an unappealing environment. Periodic monitoring of these public lots and a consistent policy on removing abandoned vehicles would help improve safety and the perceptions of safety at this lot.

Additionally, several blind corners exist along the sidewalks in downtown White River Junction. On the east side of Currier Street this situation is particularly noticeable due to the narrowness of the sidewalk, which is further pinched to the right by a lamppost in advance of a tight blind corner by the back of the Hotel Coolidge. The bulletin board by the Briggs Lot creates a physical obstruction for pedestrians walking on the sidewalk as well as an additional blind spot, negatively impacting the feeling of safety in the downtown. Replacement of this with an enclosed kiosk in a landscaped area is part of the Town's engineered plans for reconstruction of the Briggs parking lot, along with placement installation of new and replacement sidewalk along the parking lot between Joe-Reed Drive and Gates Street. These improvements also were recommended in the 2009 White River Junction Village Revitalization Plan. See Appendix E for more details.

Pedestrian safety in downtown White River Junction could also be improved for all users by increasing the accessibility of existing sidewalks and adding new sidewalk connections. The concrete

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steps on Currier Street create a physical barrier along the sidewalk for anyone in a wheelchair. However, these steps are privately owned by the adjacent property and serves as the entrance to the building. A design solution that has minimal impact on the building is needed. Both of these recommendations were identified in the White River Junction Village Revitalization Plan.

WAYFINDING IMPROVEMENTS

Another contributing factor to the underutilization of the Legion Lot parking area is a general lack of awareness that this resource exists. Through discussions with the public, it appears many employees and visitors to the downtown did not know the Legion Lot was a public lot or had trouble finding it. Improved signage and public education would help visitors find and utilize this lot. Additionally, the town could develop a guide for downtown businesses that explains all-day parking options available to employees. See Appendix E for example from the Town of Winooski. Such a guide would include a map of all-day, two-hour, and four-hour parking and could be displayed at local businesses, distributed to the Hartford Area Chamber of Commerce, and on linked on the Town website.



Downtown White River Junction signs that could be improved for better readability and visibility.

CONTINUED MONITORING OF PARKING CONDITIONS

In order to prevent parking issues in the future and to continue leveraging the existing parking resources in White River Junction, the Town should continue conducting its twice annual parking occupancy counts. This activity has provided much valuable information for determining the use and distribution of parking in the downtown. Continued monitoring will provide future insights into parking availability as additional projects are developed downtown and will provide a quantifiable way to determine when additional measures may be necessary to accommodate future parking demands.

6.2 | ZONING STRATEGIES

The Town of Hartford has progressive zoning regulations designed to encourage multimodal transportation and discourage the building of excessive parking capacity. Indeed, at the discretion of the Planning Commission, parking requirements for developments in the Central Business District "may be reduced beyond 50%" if developers co-locate with transit routes, share parking with abutting businesses, have staggered operating hours, anticipate heavy pedestrian traffic, feature employer-sponsored transit passes or carpool programs, or locate near safe and adequate on-street parking or near municipal lots.⁸ A reduction, however, can take the form of deferred parking,

⁸ Town of Hartford General Provisions 260-24 (9)(e)

whereby the Town can request developers to hold land for future parking needs and, after the need arises and a hearing affirms the need, develop it as parking.

The Town's Zoning Regulations are laudable for prioritizing efficient transportation and land use above new parking. The continued implementation should be carefully managed to ensure the Town's goals for a walkable and functioning downtown are maintained along with adequate transportation options for all users. Town staff have compiled years of useful data on parking utilization rates for on-street parking and in public lots. Moving forward, it would be beneficial to reevaluate the use of public parking spaces in lieu of on-site parking.

The Town of Hartford also could consider allowing developers to pay a fee in lieu of building new capacity to meet parking demand. As described by UCLA urban planning professor and parking expert Donald Shoup, the basic concept of in-lieu policies is that developers pay a municipality a per space fee in lieu of building new parking to meet their expected demand.⁹ Municipal governments then use the revenue to improve and develop public parking that can accommodate a wide range of uses. Shoup surveyed 46 cities that use this mechanism and summarized the overall advantages as follows:¹⁰

Advantages of Fees In Lieu of Parking

1. Provides developers a new option to meet parking demand beside difficult or expensive new spaces
2. Promotes shared parking
3. Allows for better urban design by reducing on-site parking, allowing more continuous storefronts, etc.
4. Reduces the number of variance requests developers make
5. Promotes historic preservation by limiting new parking development

While such a system is also noted to have the potential disadvantage of creating the potential for a lack of on-site parking or fewer overall parking spaces being available, the Town of Hartford is already allowing developers to rely on public spaces in lieu of constructing on-site spaces but is not currently charging an in-lieu fee for this benefit. Charging an in-lieu fee in the future could allow the Town more opportunity to improve existing public parking and to construct new shared parking for the downtown, and could be priced appropriately so as to remain an attractive option to developers, who would otherwise have to construct expensive on-site parking.

Cities with in-lieu fee structures use a variety of strategies to determine how to set fees, and fees at surveyed cities range from approximately \$2,000 per space to \$53,000 per space in Beverly Hills.¹¹ The latter example reflected Beverly Hills' former method of calculating fees, which were based on land value and not necessarily the cost of the space. Shoup recommends cities simplify their in-lieu fee programs, arguing that cities that assess fees on a project-by-project basis have also incurred more

⁹ Donald Shoup, "In Lieu of Free Parking," *Journal of Planning Education and Research*, 18:307-320 (1999), p. 1.

¹⁰ Ibid, p. 2.

¹¹ Ibid, pp. 3 and 5.

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project costs and delays because applicants usually appeal the appraisal on which their fees are based.¹²

Given the relatively small scale of downtown White River Junction, the fee structure that would likely work best is a uniform fee per space for all projects. Of the 46 cities that Shoup surveyed, 37 employ this method. If pursued, the Town should consider charging a fee high enough to pay for any parking that it develops but low enough not to discourage development.¹³

6.3 | REDUCE DEMAND FOR PARKING THROUGH TRANSPORTATION DEMAND MANAGEMENT

Transportation Demand Management (TDM) refers to a broad set of strategies that reduce single-occupancy vehicle travel in favor of biking, walking, taking transit, car/vanpooling, and telecommuting. This section outlines short- and long-term TDM strategies that the Town could pursue on its own or through partnerships.

SHORT-TERM TRANSIT IMPROVEMENTS

The Town of Hartford saw a significant improvement to local transit service when Advance Transit increased the frequency of Green Route service to stops every 30 minutes in 2014. Ridership in years since has increased by 100% because of the more convenient service. As with this improvement, most future advances in local transit are dependent on state and federal funding as well as support from local businesses and voters. They often take multiple years to achieve, from transit improvement planning to implementation.

To offset personal vehicle trips to downtown White River Junction, the Town could consider partnering with local transit agencies to help improve transit services to the downtown area. Four potential transit projects the Town could consider advocating for are presented below.

Promote Stagecoach's Planned Request-Only Downtown Stop on I-89er Route

This is one project that could occur without significant additional cost. Stagecoach is in the process of restructuring its "89er" commuter route service from Randolph. The new schedule will include request-only stops in downtown White River Junction on the return trip to Randolph, after the stops at the VA Hospital, Dartmouth-Hitchcock, and Dartmouth College.

Implement Recommendations of the Advance Transit Bus Stop Feasibility Study

Most improvements identified in the Two Rivers-Ottawaquechee Regional Commission's 2016 *Hartford and Norwich Bus Stop Study* fall outside the geographical scope of downtown White River Junction. However, three notable stop improvements could make transit a more convenient and attractive option in the downtown:

1. Improve the American Legion stop by advertising the real-time bus smart phone application, route and schedule information inside the shelter, and place the name of the stop visibly on the shelter.

¹² Ibid, p. 3.

¹³ Ibid, p. 3.

2. Improve the Veteran's Park stop by installing a bus shelter that incorporates the park's historic information.
3. Additionally, the Town and Advance Transit might consider bus stop improvements, such as a shelter or bench, at the South Main Street-Sykes Mountain Avenue intersection; the 2016 *Bus Stop Study* found that this stop is one of the busiest within Hartford with 310 average monthly boardings.¹⁴ Given the space constraints at that stop – a multiunit house is close to the sidewalk – it might be more feasible to install a modest bench there.

LONG-TERM TRANSIT IMPROVEMENTS

Support Efforts to Increase Frequency of Orange Route Service

The most recent Advance Transit *Transit Development Plan* (2012) identified ways to improve service in White River Junction, primarily by doubling the number of buses serving the Green and Orange Routes.¹⁵ Since that study was published, Advance Transit secured funding from the Vermont Agency of Transportation to add an additional bus to the Green Route. The improvement increased service to every 30 minutes in 2014 and has resulted in a 100% increase in ridership.

The 2012 plan identifies three possible opportunities to improve Orange Route service:

1. Incremental adjustments to improve on-time performance
2. Addition of a second bus to the Orange Route
3. Establish a Green Route Express

Of the different "incremental adjustments," the one most pertinent to this report highlighted the possibility of eliminating stops at the Gilman Center if state offices located there moved to downtown White River Junction. State offices have moved to Prospect Street since the 2012 study, but a Department of Motor Vehicles (DMV) Office is now located at the Gilman Center. While many people travelling to the DMV will need their own vehicle (ex: for a driver's test), having transit service to that building would help individuals who are trying to get back their license.

A more promising approach – and one over which the town and its taxpayers could have greater control – would be to support the addition of a second bus to the Orange Route. In terms of reducing parking demand, the increased frequency from West Lebanon could make commuter service more attractive to people who otherwise drive the short distance from across the river.¹⁶

Support Recommendations of 2017-2018 Advance Transit Transit Development Plan

While the above improvements to the Orange Route could be a priority moving forward, the Town should stay abreast of potential new strategies as well. Advance Transit will complete a new *Transit Development Plan* over the next two years, which will take into consideration improvements already made to the Green Route as well as an updated outlook on funding. While details remain to be worked out, Advance Transit will likely examine ways to (1) improve core services, (2) target ways to incrementally add evening service, and (3) add limited weekend services.

¹⁴ Ibid, p. 75.

¹⁵ Tom Crickelair Associates, "Transit Development Plan for Advance Transit," (December 2012). Available at <http://advancetransit.com/AT2012%20Final.pdf>.

¹⁶ Ibid, see pp. 7-4 to 7-6 for more specifics.

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An Advance Transit Green Route bus heads to Hartford Village after stops in downtown White River Junction.

Support Efforts to Add Night and Weekend Service

Weekend and night service are laudable goals, but they are clearly long-term strategies considering the large expenses of additional drivers, dispatchers, fuel, etc. Still, the public has voiced strong desire for weekend and evening service. In the rider survey leading up to the 2012 plan, 16% of participants supported night and weekend service, even though they were not asked any questions about it.¹⁷ The Town could consider supporting these additional hours of operation if they become a possibility in the future.

IMPROVE BICYCLE AND PEDESTRIAN INFRASTRUCTURE

Improving bicycle and pedestrian accommodations would also help encourage visitors to downtown White River Junction to leave their cars at home, which would help reduce parking demand in the downtown area. Three high value bicycle and pedestrian improvement strategies are listed below.

Install More Bike Racks Downtown

The downtown has relatively few bicycle racks, public or private. Small racks accommodating two to four bikes are available at Veterans Park and the Bugbee Senior Center. The best bike parking is arguably at the Upper Valley Food Co-op, which can hold 8-12 bikes over the space of two racks. The rack in the rear of the Co-op building even houses a bikeshare program available to employees at Vital Communities.

¹⁷ Ibid, p. 1-9.

FIGURE 14: DOWNTOWN BIKE PARKING



The quality and availability of bike parking – public and private – varies throughout the downtown. The Upper Valley Co-op (left) provides secure bike parking for patrons and tenants. Another rack in the downtown (right) is not secured to the ground and is in a far-off corner where few cyclists are likely to see a bike rack.

Bikes are often seen chained to light posts along Main Street. Retail, dining, and employment centers in that area make it a wise place to install bike parking. Additional promising places for new bike racks include the bus stop in front of the former American Legion, the Briggs Lot, and the former Post Office. The Town could also install racks that can be removed during the winter, which Dartmouth College did when it started a bikeshare program in 2016.

Improve Pedestrian Access from Sykes Mountain Avenue to South Main Street

The 2009 *Hartford Pedestrian and Bicycle Plan* lists as a major goal: "Ensure sidewalks are provided along all Advance Transit bus routes." While sidewalks exist near all stops in the downtown, developing sidewalks along the entire length of Sykes Mountain Avenue would achieve stronger bus and pedestrian connectivity to the downtown. The Town has successfully secured funding to build sidewalks on Sykes Mountain Avenue from South Main Street to Lower Butternut Road and Upper Butternut Road to the US Postal Service Driveway, which will result in improved pedestrian access at the Orange Route bus stops near Walsh Avenue and Bowling Lane.

Explore Opportunities to Improve Bike Access from West Lebanon

Coming across the Connecticut River bridge from West Lebanon, a cyclist enjoys a separated bike lane that converges with a normal travel lane on the Vermont side of Route 4. The first left turn onto Bridge Street can be intimidating even for experienced cyclists – the left lane is not left-turn only, and there's little space for a cyclist to get out of the way of traffic from either direction. The Town could consider restriping the westbound approach of this intersection to include a dedicated left-turn lane and a dedicated through lane. A more ambitious project to consider for the future could add a protected left-turn phase for left-turns on Route 4.

During the Upper Valley Intermodal Facility planning project in 2009-2010, some discussions centered on making the train station in White River Junction more multimodal by establishing biking and walking access on the rail bridge from the Westboro Railyard in West Lebanon. While this project would involve significant cost, engineering and legal hurdles, it would be physically possible to modify the existing bridge to accommodate a bike lane. As the Mascoma River Greenway nears

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completion, such an improvement would also provide off-road biking and walking access from White River Junction to the Northern Rail Trail.

SHARED MOBILITY OPTIONS

Carshare and bikeshare programs also have the potential to encourage non-single-occupancy vehicle trips to downtown White River Junction, and help offset parking demands downtown.

Upper Valley Carshare (“UV Carshare”) is a small nonprofit carshare program based in downtown White River Junction. It is currently in the start-up phase. The program plans to provide affordable motor vehicle access to residents, students, and people working in the White River Junction area to increase mobility while helping to reduce greenhouse gas emissions, the need for parking and road infrastructure, and an individual’s transportation costs.

For its launch, UV Carshare plans to acquire two cars, one to be parked at the municipal parking lot behind the former American Legion and the other at the Center for Cartoon Studies. Both locations are within walking distance of the Advance Transit Green and Orange Route buses (providing easy access to Wilder, Hartford Village, Hanover, and West Lebanon), the Amtrak station, the Hotel Coolidge, workplaces, restaurants, grocery and retail stores, and residences.

UV Carshare plans to establish an individual and business membership structure and use an online reservation and scheduling system. UV Carshare will encourage any area resident or employee to become a member with a specific focus on two groups: a.) people without cars and b.) bike, carpool, and transit commuters who need daytime transportation.

A predecessor organization, Upper Valley Community Car Cooperative, was founded nearly a decade ago. Housed at the Main Street Museum in White River Junction, this single car operation provided reliable transportation for Center for Cartoon Studies students and residents in the White River Junction area and had the support of many community leaders. In early 2015, the corporation’s registration lapsed after the then-president and sole board member moved out of the area without leaving in place a succession plan.

In October 2015, a new (current) board convened and reinstated the corporation as UV Carshare due to continued interest by the community for shared vehicles.

Several informal bikeshare programs also exist or have existed in downtown White River Junction. Vital Communities has a single shared bike for staff. The Center for Cartoon Studies has experimented with a small fleet of shared bikes for students and staff, but has struggled keeping bikes maintained and from disappearing. UV Carshare has discussed incorporating bikes into its vehicle program. A downtown-wide bikeshare program could be developed in conjunction with the UV Carshare or as a separate entity.

6.4 | INCORPORATING RENEWABLE ENERGY INTO PARKING

The Town could consider the potential to co-locate renewable energy resources with parking. Solar energy is increasingly common as a component of parking – both surface and structured – and it can generate revenue for the Town through net metering. Solar shelters – sometimes called canopies –

provide covered parking like carports. Solar arrays can also produce energy on top of structured parking.

FIGURE 15: SUNCOMMON SOLAR CANOPY



Governor Phil Scott attended a January 2017 ribbon cutting ceremony for a SunCommon Solar Canopy in the parking lot of Hunger Mountain Co-op, Montpelier. Credit: SunCommon

6.5 | MANAGE PARKING TURNOVER

While overall parking occupancy in downtown White River Junction has historically remained well below capacity, specific downtown locations including many areas of on-street parking currently experience demand near or at total capacity. With future developments in White River Junction, additional areas may begin to experience demand near or at capacity as well. Even with additional parking within a 5-minute walk, such localized conditions can negatively impact restaurant and retail businesses which rely on the availability and turnover of proximate parking for patrons.

Through discussions with the Project Steering Committee and with the public, it is generally understood that employees of local businesses often park in on-street and 2-hour parking spaces in downtown and likely account for a significant portion of the existing demand in these key locations. A lack of available on-street spaces makes it necessary to encourage all-day visitors such as employees to use parking that is already designated for all-day use, such as the lot behind the former Legion, or any new lots to be designed for long-term parking.

To increase parking turnover and parking availability in prime locations, the Town should consider ways of effectively enforcing the existing two- and four-hour parking limits. Options for enforcement have been discussed with the project steering committee and are presented below. All enforcement options would require some additional effort from Town staff, including police staff. Implementation of paid parking in the study area would greatly improve the Police Department's ability to enforce parking time limits consistently and effectively. Enforcement in the absence of paid parking would create the greatest burden on Town staff time.

Parking pricing, it must be emphasized, is as much or more a method of enforcement and management as it is a potential source of revenue for the Town. When placed appropriately, priced parking encourages turnover of prime parking spaces (which helps retail and restaurant owners), encourages employees in the downtown to use alternatives to driving alone, and maximizes the use of appropriate all-day parking.

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Todd Litman of the Victoria Transport Policy Institute recommends setting priced parking to achieve 85-90% occupancy rates.¹⁸ While the downtown currently does not experience occupancy rates that high in most areas and at most times, high-demand on-street parking currently operates at or above this level and future development will likely increase parking demand. Litman further suggests that parking should be priced to equal marginal costs. In the case of existing parking supply, marginal costs typically refer to operating and maintenance expenses. New parking capacity, however, would include parking expansion costs in a marginal pricing scenario.¹⁹

Projected growth scenarios will likely require the Town to make difficult decisions about future parking pricing and enforcement strategies. The following discussion highlights different alternatives to parking enforcement for downtown White River Junction. Should the Town develop a parking structure, additional strategies can be used for revenue collection and enforcement, such as parking attendants, controlled access through gates, etc.

In considering priced parking options, it should be remembered that some portion of the existing two-hour parking spaces in downtown are currently being occupied by all-day parkers and that enforcement of parking time restrictions in the absence of adding new capacity, could result in long-term parking shortage as new developments come online and overall parking demand increases in downtown. Ideally, enforcement of parking time restrictions should be accompanied by increases to all-day parking in designated areas, as needed, to ensure both all-day and short-term visitors to downtown White River Junction are accommodated together.

NO CHANGE

The Hartford Police Department currently does not have the staff to regularly monitor two- and four-hour restrictions on parking, but does respond to complaints and periodically patrols. Although some people parking in downtown prefer this, it does not encourage parking turnover in proximate to local businesses, and does not address long-term growth.

ENFORCE PARKING TIME LIMITS WITHOUT PRICED PARKING (TIRE CHALKING)

The Town could decide to enforce existing time restrictions without charging for parking. This would require the old-fashioned method of chalking tires and requires significant resources from local law enforcement. Revenue under this scenario would come from fines. Additional police staff time will be required when drivers contest tickets in court. Assuming a 0.5 FTE at an annual cost of \$30,000, an appropriate fine might be \$15. Costs would be recovered if enforcement occurred 100 days per year and resulted in 20 tickets per day.

This would likely encourage greater use of designated all-day parking and increase turnover in key areas, but would require significant investment of police staff time, diverting this valuable resource from more important community issues and may require hiring additional police staff. It is also unlikely to win many popularity points with the public. The Police Department opposed this alternative in several meetings of the project steering committee.

¹⁸ Todd Litman, "Parking Pricing Implementation Guidelines," Vancouver: Victoria Transport Policy Institute (September 2016), p. 4. Available online at www.vtpi.org/parkingpricing.pdf.

¹⁹ Ibid, p. 8.

ENFORCE PARKING TIME LIMITS WITH PRICED PARKING

Implementation of priced parking in downtown White River Junction would increase parking availability and turnover in key areas by encouraging all-day visitors to park in designated all-day spaces, which would remain free to the public. Priced parking would also allow police staff to more easily enforce parking limits by providing an easy method of determining which vehicles are violating parking regulations.

Implementation of priced parking could be achieved through deployment of several potential technologies, each with its own advantages and costs.

Parking Kiosks

The Town could decide to enforce existing parking time restrictions by implementing paid parking through the installation of parking kiosks. Assuming approximately eight spaces could be served by one on-street kiosk and that the Briggs Lot along South Main Street could be served by a single kiosk, 18 total kiosks would be required to serve the entire study area. Based on conversations with parking meter supply companies, we estimate the initial investment to install kiosks would be approximately \$140,000 and that annual operating costs would be between \$10,000 and \$20,000.²⁰ Assuming a 0.5 FTE at an annual cost of \$30,000 and \$15,000 per year of additional administrative costs, we project this system could be revenue positive within a 5-year period based on historic parking trends and assuming a parking fee of \$0.50 per hour.

This would encourage turnover by charging for prime parking locations, facilitate enforcement by tracking parking with displayed receipts, and would require the fewest overall parking pay stations. The Police Department said in project steering committee meetings that kiosks are preferable to tire-chalking, but may incur more labor costs than individual parking meters, which allow patrol officers to quickly identify which spaces have expired. Parking kiosks would allow for priced parking with the

FIGURE 16: SOLAR-POWERED PARKING KIOSK



The Town of Hanover, NH uses a variety of methods to collect parking fees, including solar-powered kiosks on the Dartmouth Green.

²⁰ Credit card processing fees can either be incorporated into the hourly parking cost rate or charged to the user as a surcharge, as is done in Hanover, NH.

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smallest initial investment but would result in the lowest long-term revenue generation, compared to priced parking with other technologies.

Parking kiosks also require more time for users to park and walk between kiosk and car than individual parking meters and are not as familiar to the public as individual meters. Although they take up less sidewalk space than meters, their impact on useable sidewalk space and on sidewalk plowing must be considered.

Individual Parking Meters

The Town could decide to enforce existing parking time restrictions by implementing paid parking through the installation of individual parking meters. There are approximately 140 two- and four-hour on-street spaces in downtown and an additional 39 spaces in the Briggs Lot. Assuming individual meters for on-street spaces and a single kiosk for the Briggs Lot, we estimate the initial investment to install meters would be approximately \$150,000 and that annual operating costs would be between \$10,000 and \$35,000.²¹ Assuming a 0.5 FTE at an annual cost of \$30,000 and \$15,000 per year of additional administrative costs, we project this system could be revenue positive within a 5 to 10-year period based on historic parking trends and assuming a parking fee of \$0.50 per hour.

As compared to parking kiosks, individual meters are generally more easily recognized and understood by the public and require minimal time for users to pay for parking. They also require less time for police to monitor as violations are clearly displayed at each vehicle. However, individual meters would utilize additional sidewalk space for meter poles (one pole per two meters) and may make snow removal on sidewalks more difficult or time consuming for Town staff. The project steering committee debated whether to meter some or all spaces in the downtown. It concluded that charging for all time-limited spaces makes the most sense given the relatively small size of the downtown.

Individual Parking Meters with Parking Occupancy Sensors

With implementation of individual parking meters, the Town could choose to also install radar parking sensors to detect and monitor the presence of parked vehicles. These sensors would be mounted along with the meter heads and would actively relay information to the Town on parking occupancy and violations. This system would also clear out unused time when a vehicle vacates a parking space, eliminating piggybacking on parking fees and increasing total revenue. The system can also be programmed to prevent meter feeding by displaying a violation at the end of the two- or

²¹ Credit card processing fees can either be incorporated into the hourly parking cost rate or charged to the user as a surcharge, as is done in Hanover, NH.

four-hour parking maximum, if the vehicle has not vacated the space. Such a system would require an additional investment of approximately \$300 per space and additional monthly operating fees. However, the benefits of parking sensors have been shown to increase overall revenue by 10% to 50%. In addition to facilitating enforcement, this system would also provide the Town with detailed analytics on parking occupancy and behavior over time.

Based on conversations with parking meter supply companies, we estimate the initial investment for individual meters with parking sensors to be approximately \$190,000 and that annual operating costs would be between \$15,000 and \$40,000.²² Based on feedback from the Hartford Police Department, enforcement with such a system could likely be pursued with no additional staff. Assuming \$15,000 per year of additional administrative costs, we project this system could be revenue positive within a 5-year period based on historic parking trends and assuming a parking fee of \$0.50 per hour.

Such a system is projected to result in the greatest long-term revenue generation.

WINTER PARKING MANAGEMENT

Currently, the Town allows for overnight parking, which can make snow removal difficult. The City of Burlington addresses this issue by requiring residents who live in 24-hour parking zones to move their vehicles to public parking garages, where they are allowed to park for free while the parking ban is in effect. Residents are notified that the ban is in effect through a series of yellow lights mounted on utility poles throughout the City. Violations of the ban result in a \$75 fine and Department of Public Works relocates vehicles to the nearest designated drop-off.²³ Looking at a smaller-scale example, South Royalton simply bans overnight parking around the village green during the winter and tows vehicles when snowstorms occur after 2 am.²⁴

If a parking garage were built in downtown White River Junction, a system similar to Burlington's would be by far the easiest way to efficiently manage snow removal. Without a parking garage, some options exist for managing winter parking.

- (1) Designate a single lot as overnight parking during snow bans

FIGURE 17: PARKING METER



The City of New Haven, CT uses smart parking meters for individual spaces.

²² Credit card processing fees can either be incorporated into the hourly parking cost rate or charged to the user as a surcharge, as is done in Hanover, NH.

²³ City of Burlington Police Department, "Winter Parking," <https://www.burlingtonvt.gov/Police/Winter-Parking>.

²⁴ Aaron Brown (co-author of this report), personal experience.

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Pros: simple enforcement and public outreach; requires little infrastructure except flashing and wayfinding signs; could accommodate text alert system; two logical lots exist to choose between (former American Legion and Town Hall)

Cons: may force some residents to walk further than others during a snow storm

- (2) Alternate between lots for overnight parking during snow bans based on day of the week

Pros: may alleviate some concern that residents of a particular area are forced to walk longer distances than others during a snow storm

Cons: requires additional signage to convey which lots are open to public use on given days

FIGURE 18: WINTER PARKING SIGNAGE



The City of Winooski, VT uses signs with flashing lights to indicate when parking bans go into effect.

6.6 | OPTIONS FOR INCREASED PARKING CAPACITY

While a goal for downtown White River Junction is to provide access to all visitors, employees, and business patrons, without preference to a single mode of transportation, it is impossible to ignore that most visitors to downtown White River Junction travel by personal vehicle and that there may be need to add parking capacity in the future. If and when new parking capacity is deemed necessary in White River Junction, there are several potential locations and forms this could take (surface or structured).

The most obvious financing option for a parking structure is Tax Increment Financing (TIF). Of the nearly \$29 million of infrastructure improvements identified in the Town's TIF District Plan,

approximately \$6.8 million is tied to this "parking and roadway improvement." During the public outreach process for this project, the public was quiet in its support or disapproval of a parking garage, but several downtown business managers supported the concept. With the increased redevelopment activity in the Downtown over the past few years, the likelihood of additional activity over the next few years, and the Downtown reaching maximum parking capacity in the near future, it would be prudent for the Town to review the parking deck recommendation in the TIF District Plan. Six potential locations for new parking capacity are presented below.

THE FORMER AMERICAN LEGION LOT

The existing public lot behind the former American Legion would likely be the easiest location to develop additional public parking capacity because it is municipally owned and has existing public access in place. A few new spaces could be developed by excavating the southern hillside that abuts the current lot. Many more spaces could be built in the form of a garage, and a parking structure could accommodate additional uses, such as commercial space.

The approved Hartford TIF District plan for WRJ includes a 240-space parking deck to on the parking lot behind the former Legion Building to serve future parking demand related to redevelopment in the downtown.²⁵

THE LOT BY THE MAIN STREET MUSEUM AND ADJACENT TO THE HOME COMFORT WAREHOUSE

The area off Bridge Street behind the Main Street Museum currently serves as private parking for adjacent buildings, and at least one Railroad Row tenant leases spaces for employees there. The wooded area to the west (upstream) of the existing lot could provide additional parking capacity if cleared. While this area falls within a 100-year flood zone, parking is one allowed use for such land. (There is a 100' riparian buffer requirement and the forested buffer serves an important storm water management role.) Public parking at this location would be more attractive to many downtown businesses if a pedestrian connection to Main Street could be constructed. While this lot is privately owned, the Town could consider pursuing public parking options here with Home Comfort Warehouse, the landowner, particularly since parking is one of the few uses allowed in this area.

THE "Y LOT" NEAR THE TRAIN STATION

Southeast of the train station in an area sometimes referred to as the "Y Lot" or "Wye Lot" there is a 5.69-acre parcel of state land that could be converted to public parking. In 2009, this lot, in conjunction with the Westboro Rail Yard, ranked as the 4th most preferred option for the development of an Upper Valley Intermodal Center. The Upper Valley Lake Sunapee Regional Planning Commission estimated the combined Wye-Westboro development could accommodate 300 parking spaces, with a majority being developed in White River Junction. However, this estimate

²⁵ Vermont Agency of Commerce and Community Development, "2015 TIF District Annual Report," p. 38. Available online at <http://accd.vermont.gov/sites/accdnew/files/documents/DED/VEPC/2015TIFAnnual%20ReportFinal2.pdf>. Retrieved December 6, 2016.

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likely assumed that the development would devote space to a building and bus transfer/boarding areas.

Redevelopment of the site as a regional multimodal center was attractive because of connections to rail, little impact to local tax revenue, and bike-pedestrian connectivity. However, the site was not chosen for further study because of potentially negative impacts to public transit schedules, proximity to home location of intercity bus riders, and potential environmental impacts.²⁶

The Town has investigated this lot for public parking use in the past and successfully negotiated arrangements for the railroad crossing. However, future use of this area may require significant new negotiations with the railroad owner. Any development of this area would require new signage and lighting.

THE LOT BEHIND ELIXIR AND VERMONT SALVAGE

The lot behind Elixir and Vermont Salvage is owned by the local railroad and leased at least in part to a private developer. Land stretching from Vermont Salvage to the building that houses Elixir and the Engine Room (shared office space) could provide additional parking. The railroad divides the parcel into two sections. The eastern side, which has substantially more land, requires a railroad crossing. The long and narrow western side can be accessed from existing driveways. Interviews with downtown stakeholders and a visual inspection during this project confirmed that some people already park on both sides of the railroad track. Development of this area into public parking would require lighting upgrades and new signage.

Formalization of public parking at this location would require a railroad crossing agreement and would also require significant investment in landscaping, stormwater and lighting improvements.

THE LOT ON MAIN STREET ACROSS FROM THE FORMER AMERICAN LEGION

A small privately owned lot exists across the street from the former American Legion. This lot is not likely to fit more than 12-15 spaces, but it would be easy to sign and could be part of the strategy to meet future parking needs. However, this lot is small, privately owned, and has potential for future redevelopment. It also would require investment in paving, landscaping, storm water and lighting improvements.

THE FAIRPOINT /ST. ANTHONY CHURCH LOT

The existing FairPoint/St. Anthony's lot at the corner of Gates and Church Streets, adjacent to the FairPoint Building and across the street from St. Anthony's Church, has 74 parking spaces. In addition to serving the needs of FairPoint employees and church attendees, lot owner FairPoint allows patients of the Red Logan Dental and Good Neighbor Health Clinics to park there. Despite different demands for the lot, it usually has many unused spaces.

Illinois-based Consolidated Communications announced plans to acquire FairPoint in early December 2016, but the sale must still go through regulatory approval in Vermont and other states.

²⁶ RSG, "Upper Valley Intermodal Transportation Facility Study: Upper Valley Region NH & VT," (June 2010), prepared for the Upper Valley Lake Sunapee Regional Planning Commission and New Hampshire Department of Transportation.

It is unclear whether FairPoint would negotiate a deal prior to this sale to allow its lot to be used as a public resource. If the Department of Public Service approves the acquisition, the Town might seize the opportunity to discuss shared parking with Consolidated Communications.

7.0 RECOMMENDATIONS

For the past 10 years the Town has actively pursued Downtown redevelopment outlined in the 2007 Revitalization Plan, Town Master Plan and 2011 approved TIF district. As shown in this parking study, the existing parking and options for increased surface parking are presently reaching capacity and could be over capacity in the near future. To meet the parking demand in the future the study identifies several strategies and specific actions. We recommend the following near-term and long-term improvements be pursued by the Town moving forward.

7.1 | NEAR-TERM IMPROVEMENTS

Based on research conducted for this project and public feedback received through the online survey, interviews, and public meetings, we recommend the Town pursue all low-cost improvements in the near-term.

These include strategies for improving safety (increased lighting, maintenance of vegetation around lot perimeters, and improved sidewalk connections) as well as increasing public awareness of parking options (a map of downtown parking for public dissemination and improved signage).

The Town should also continue its twice annual parking occupancy surveys and should continue to consider the availability of public parking when considering zoning waivers for on-site parking requirements for new developments.

The town should also pursue low-hanging fruit in terms of increased parking capacity in the near-term by engaging the owners of underutilized private parking regarding potential public use.

7.2 | MID/LONG-TERM IMPROVEMENTS

In the mid to long-term, the Town should pursue more ambitious projects to maintain an efficient parking system in town. In the longer term, additional parking capacity will likely be needed if additional developments are constructed without dedicated on-site parking. If sufficient capacity cannot be obtained through agreements with private landowners (ex. Fairpoint and Home Comfort Warehouse lots), additional parking should be pursued at the “Y” lot and at the lot behind the former American Legion.

If additional long-term parking is added in the downtown area, the Town should consider pursuing a parking enforcement strategy that includes pay-for-parking. Such a strategy would help increase turnover in front of downtown businesses and encourage long-term parking in more remote locations.



WRJ 2017 Yearly Parking Occupancy AM



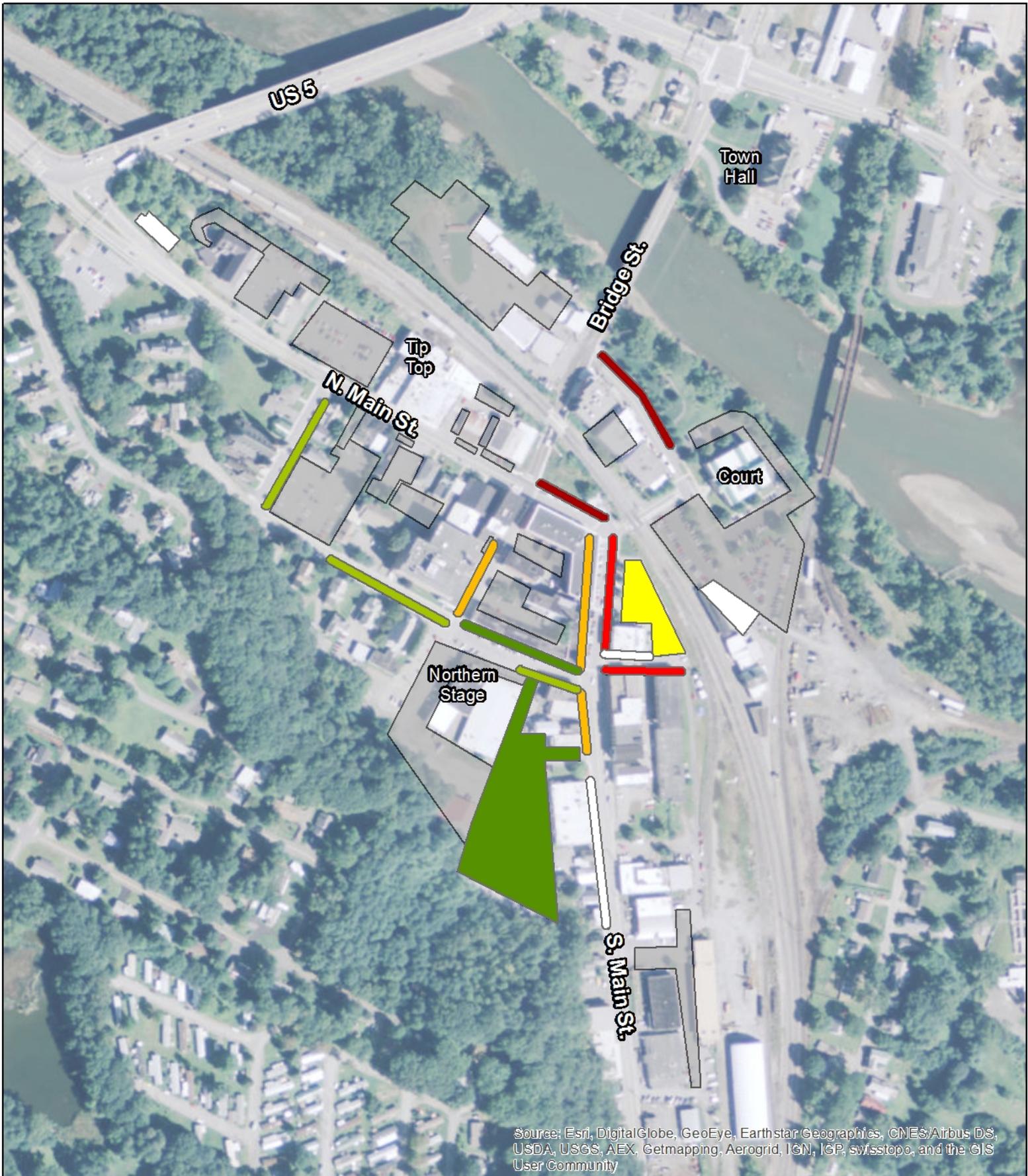
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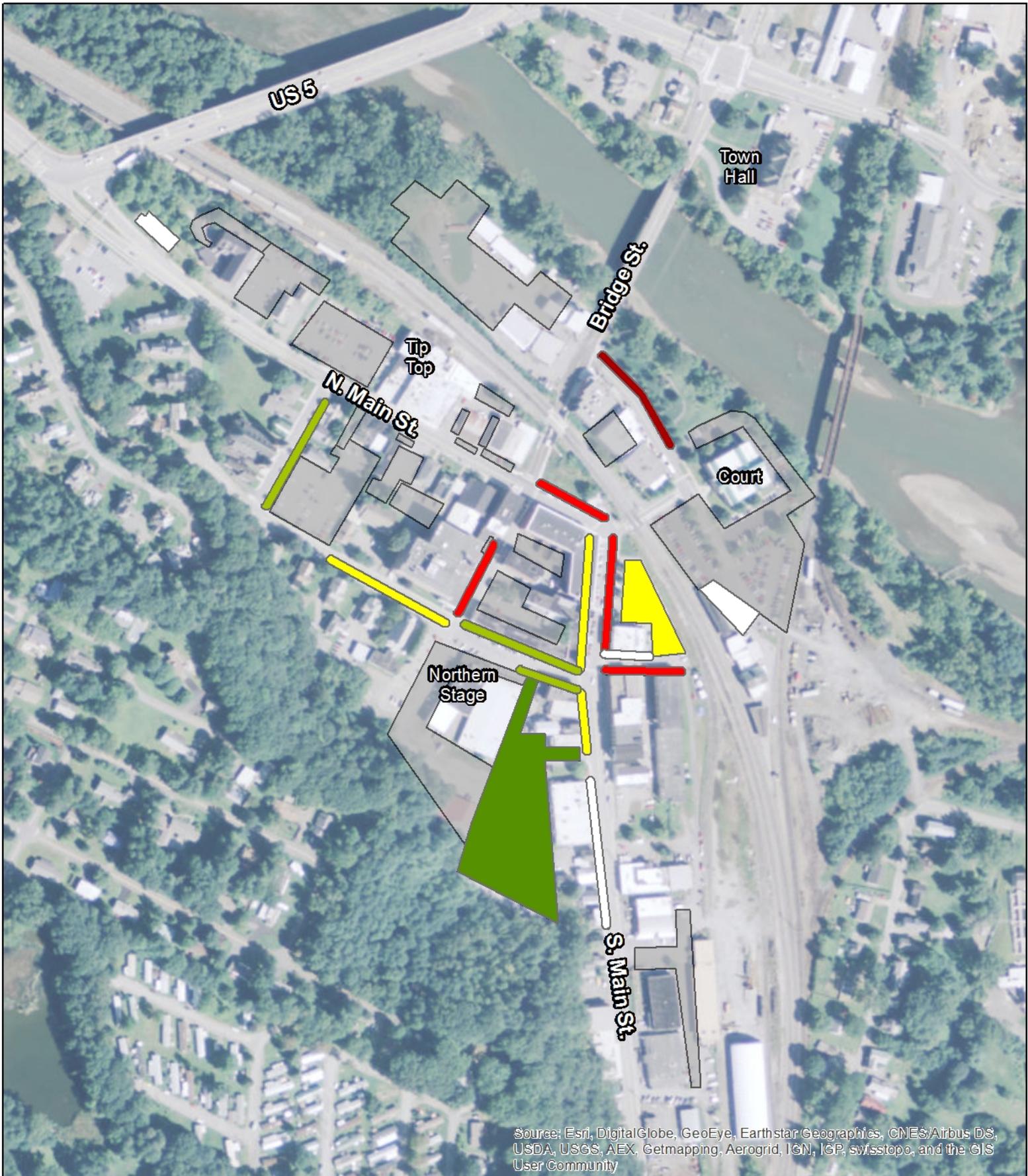
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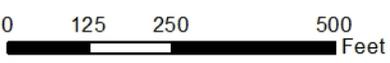
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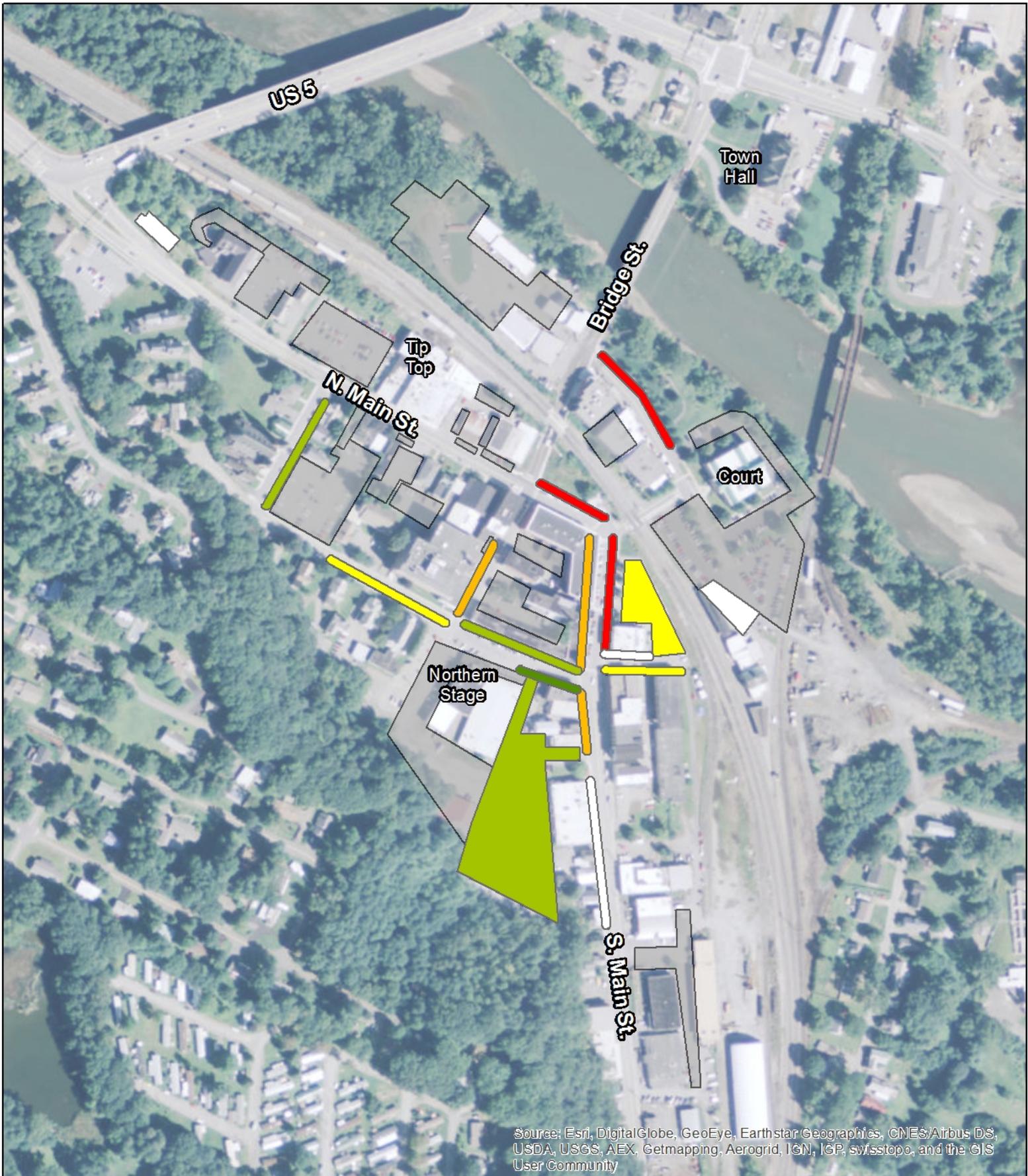
 Public Lots No Available Data	 Less than 30%	 70% to 85%
 Private Lots No Available Data	 30% to 50%	 85% to 100%
	 50% to 70%	 Greater than 100%
	 No Data	



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

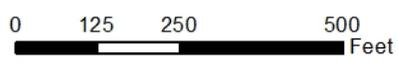
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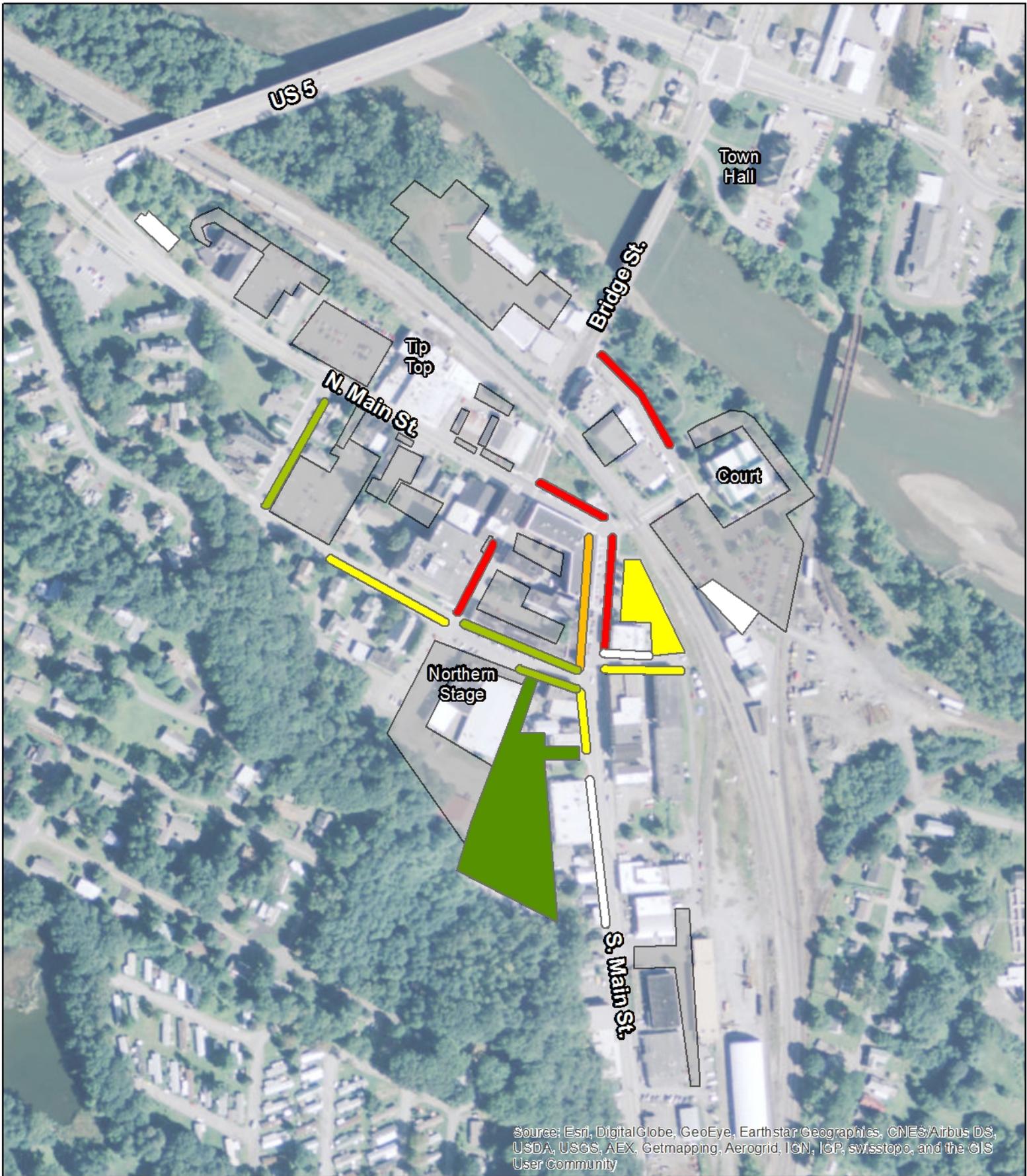




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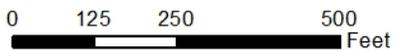
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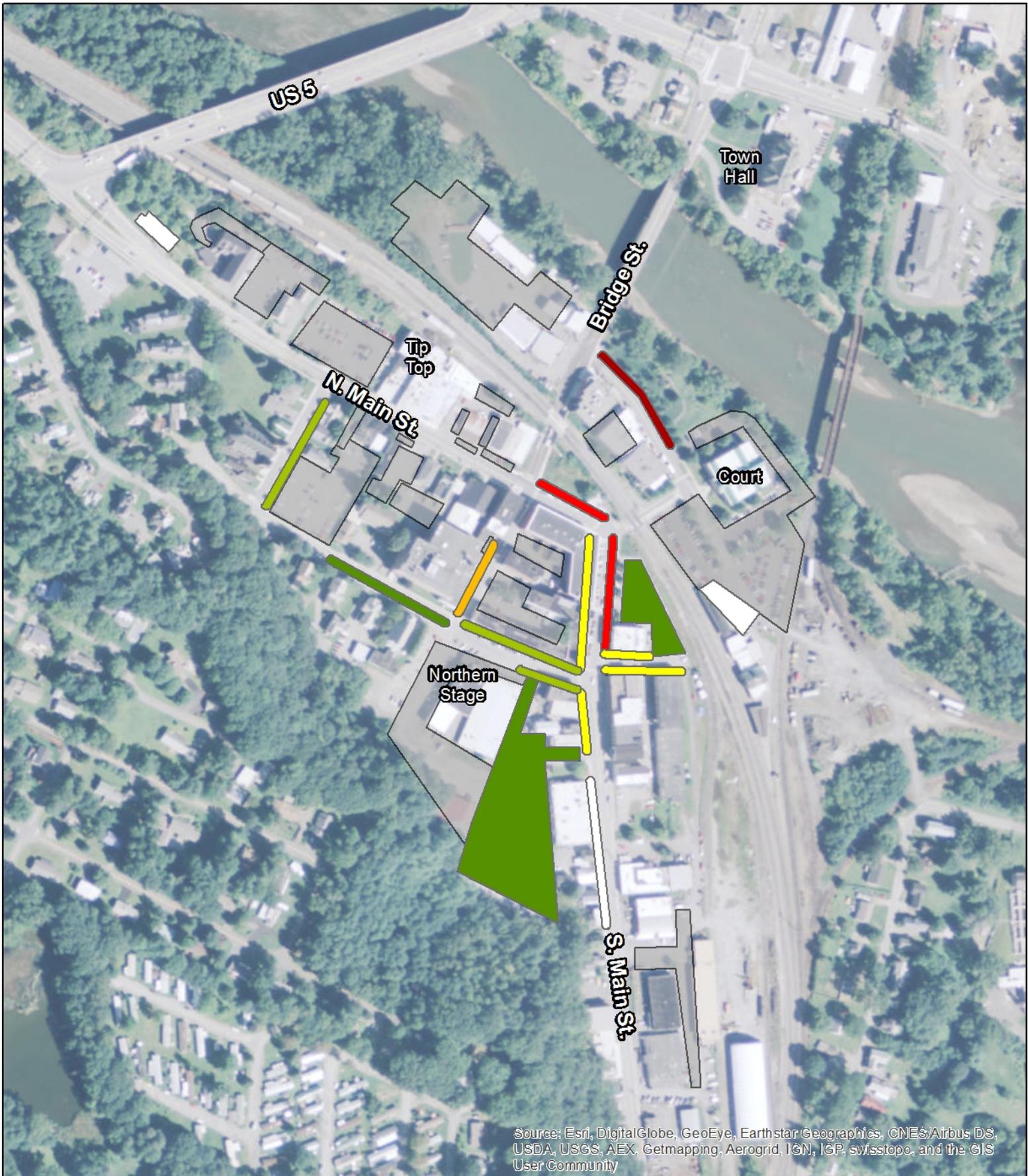




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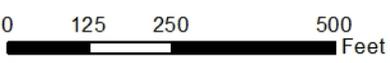
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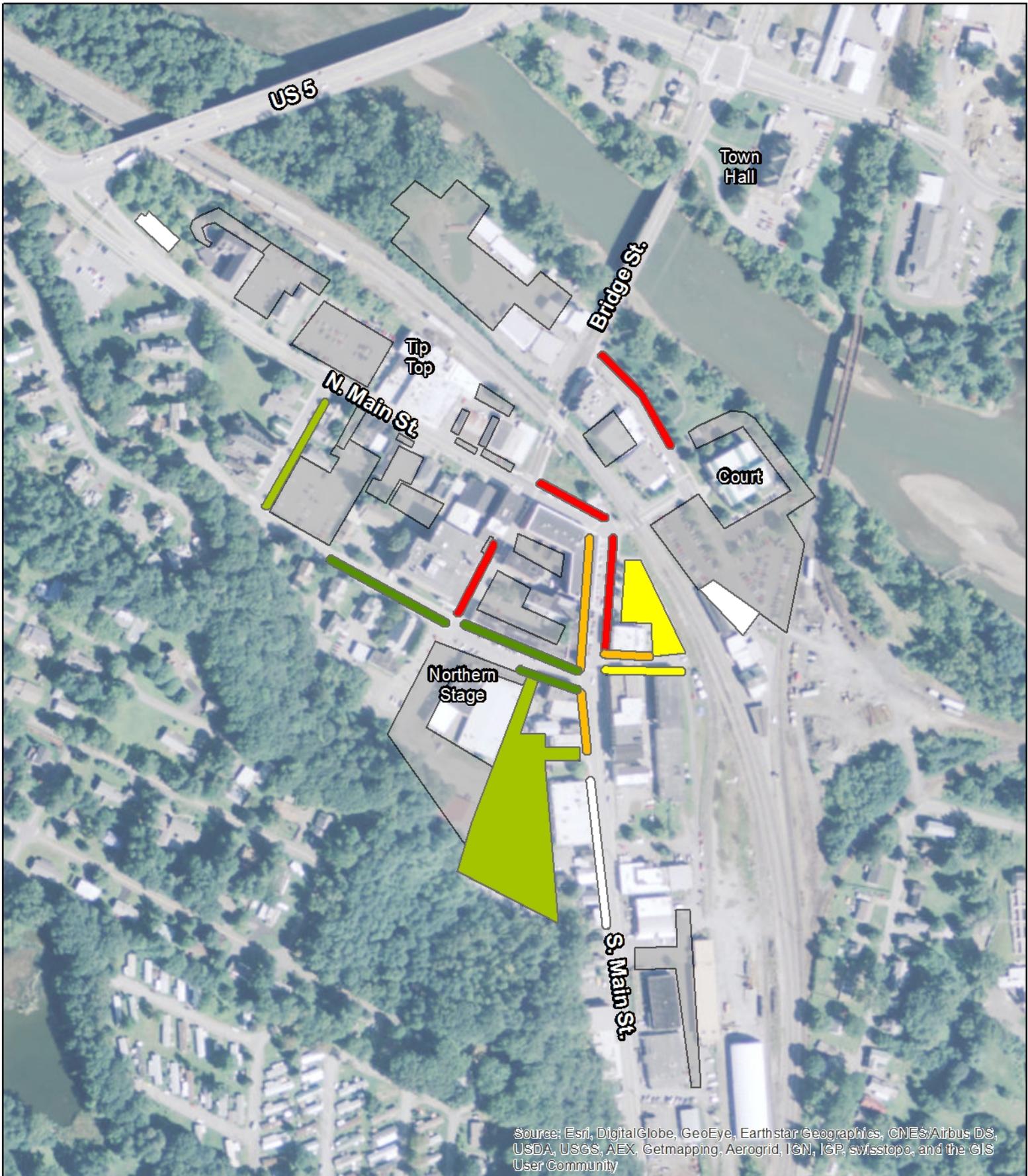




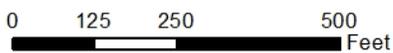
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WRJ 2011 Yearly Parking Occupancy AM





WRJ 2010 Yearly Parking Occupancy AM



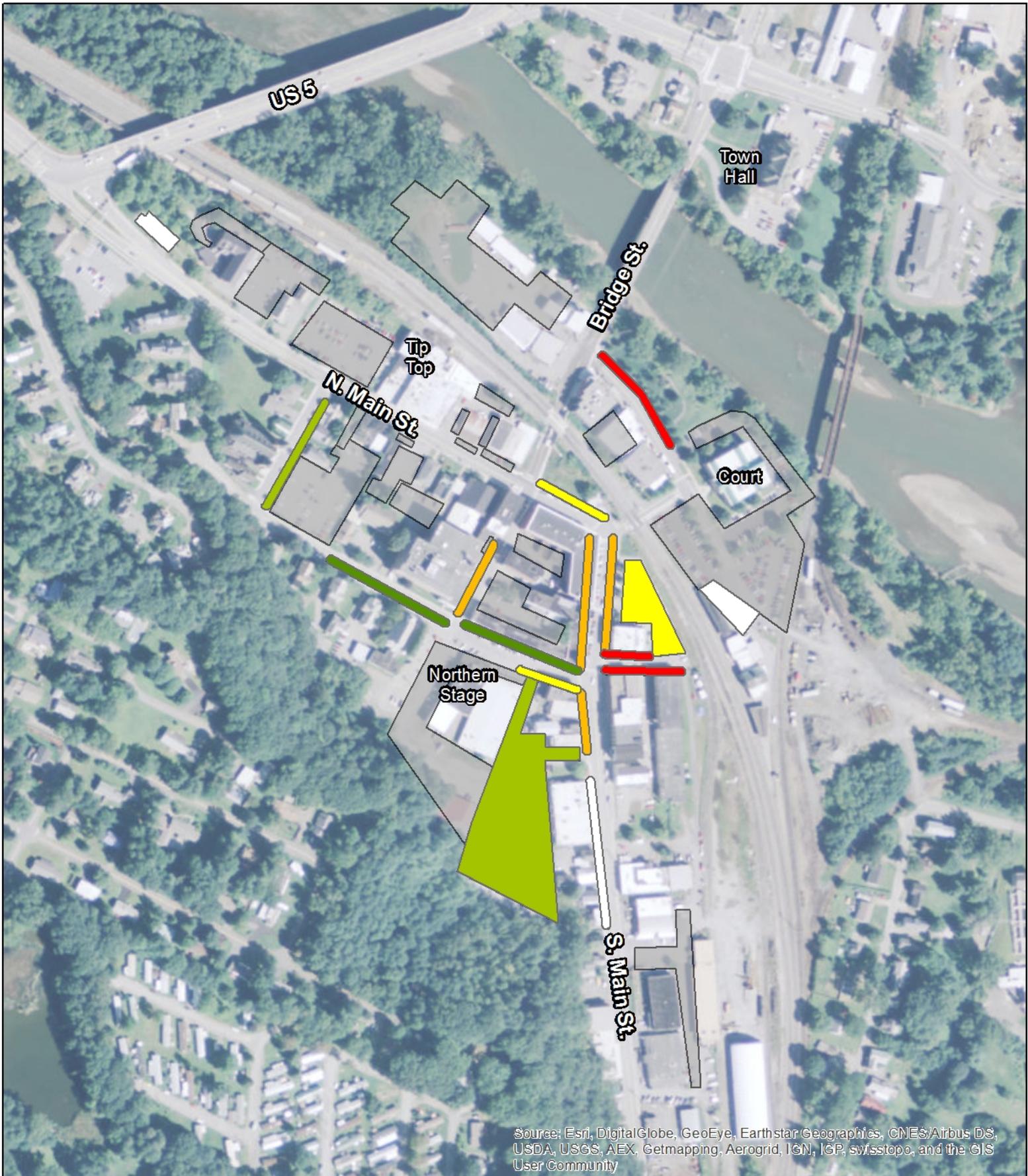


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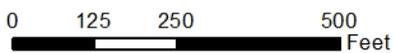
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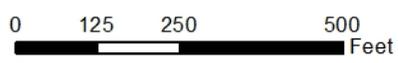
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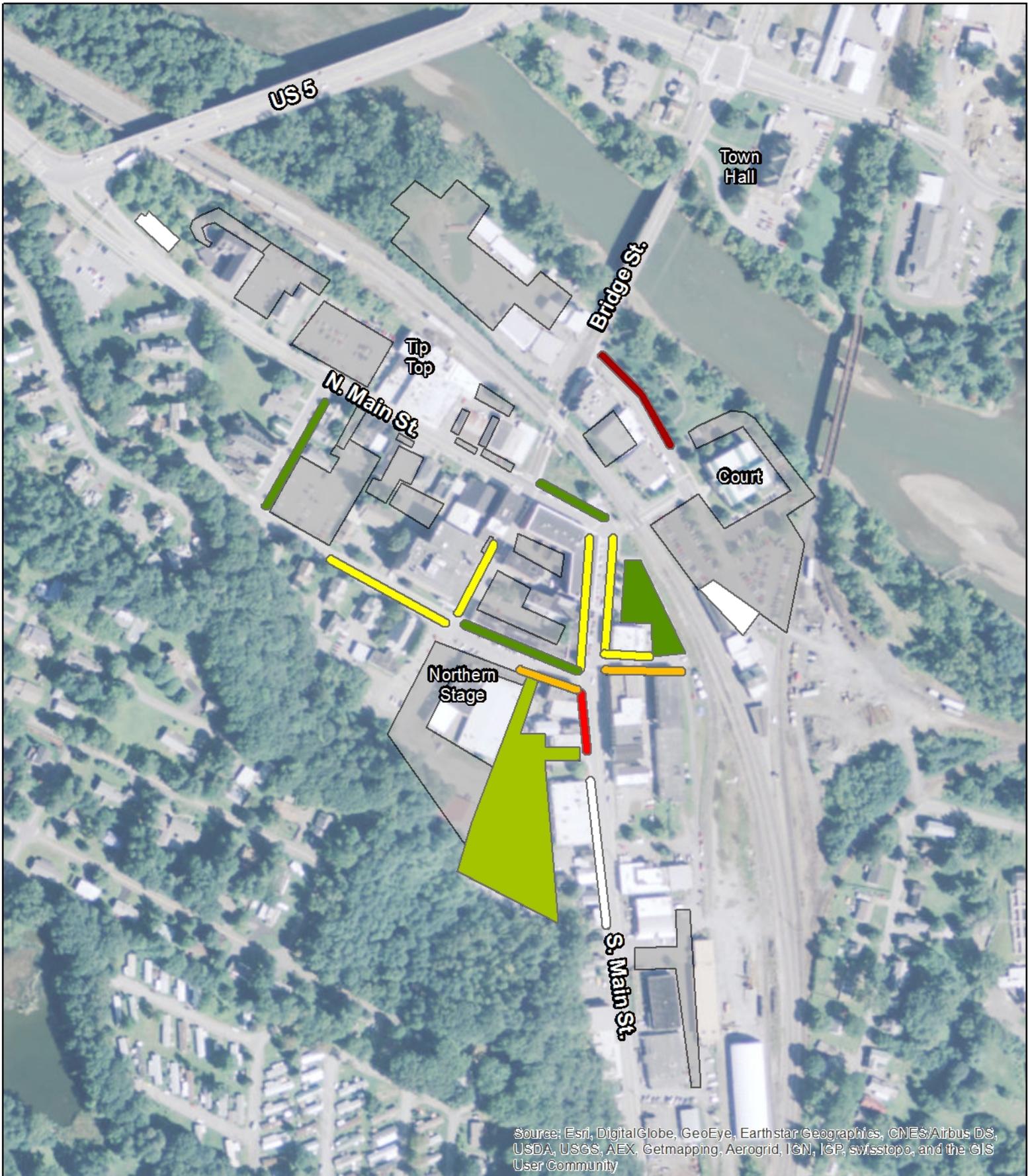




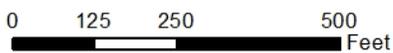
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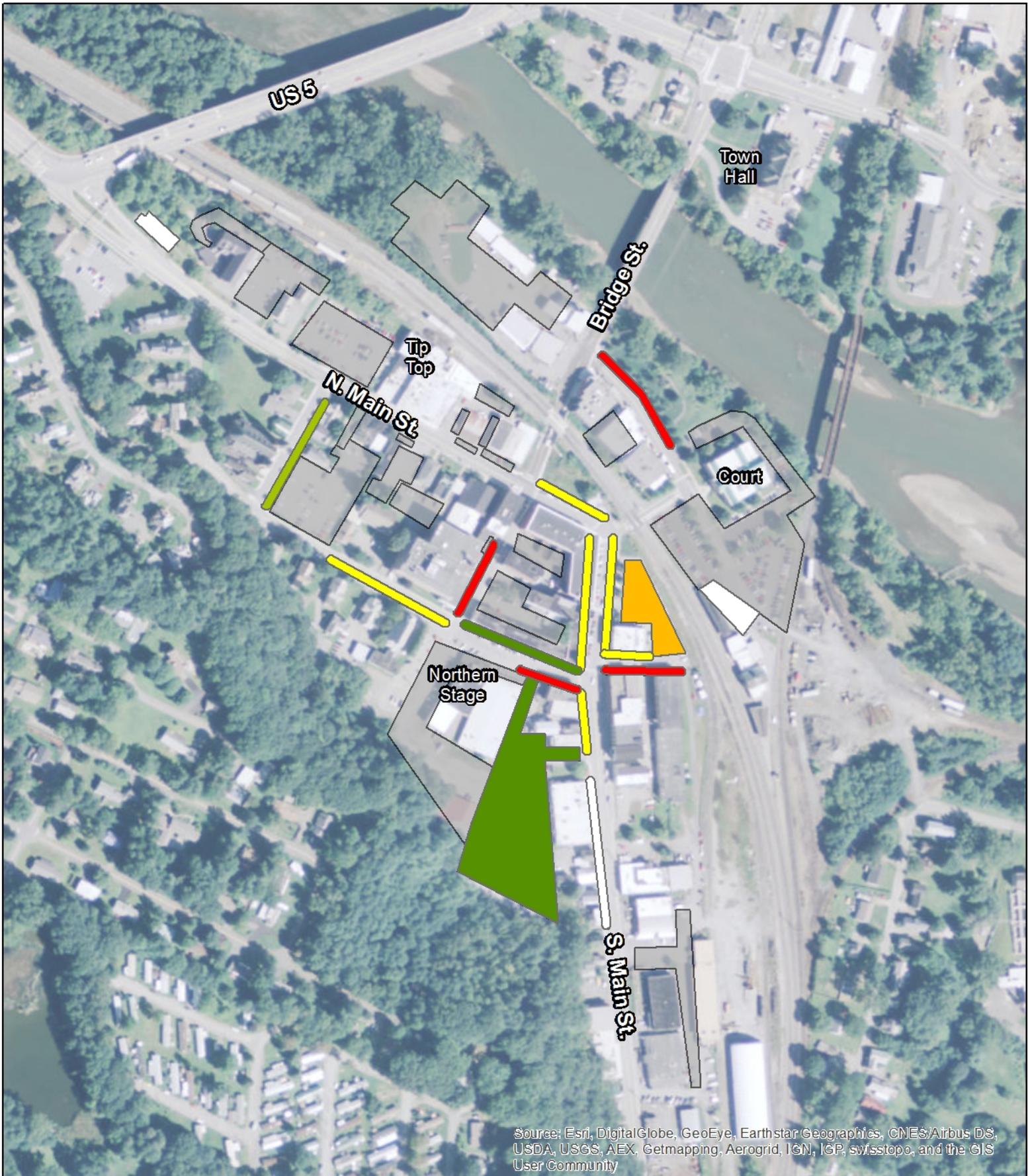
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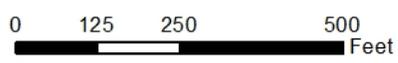
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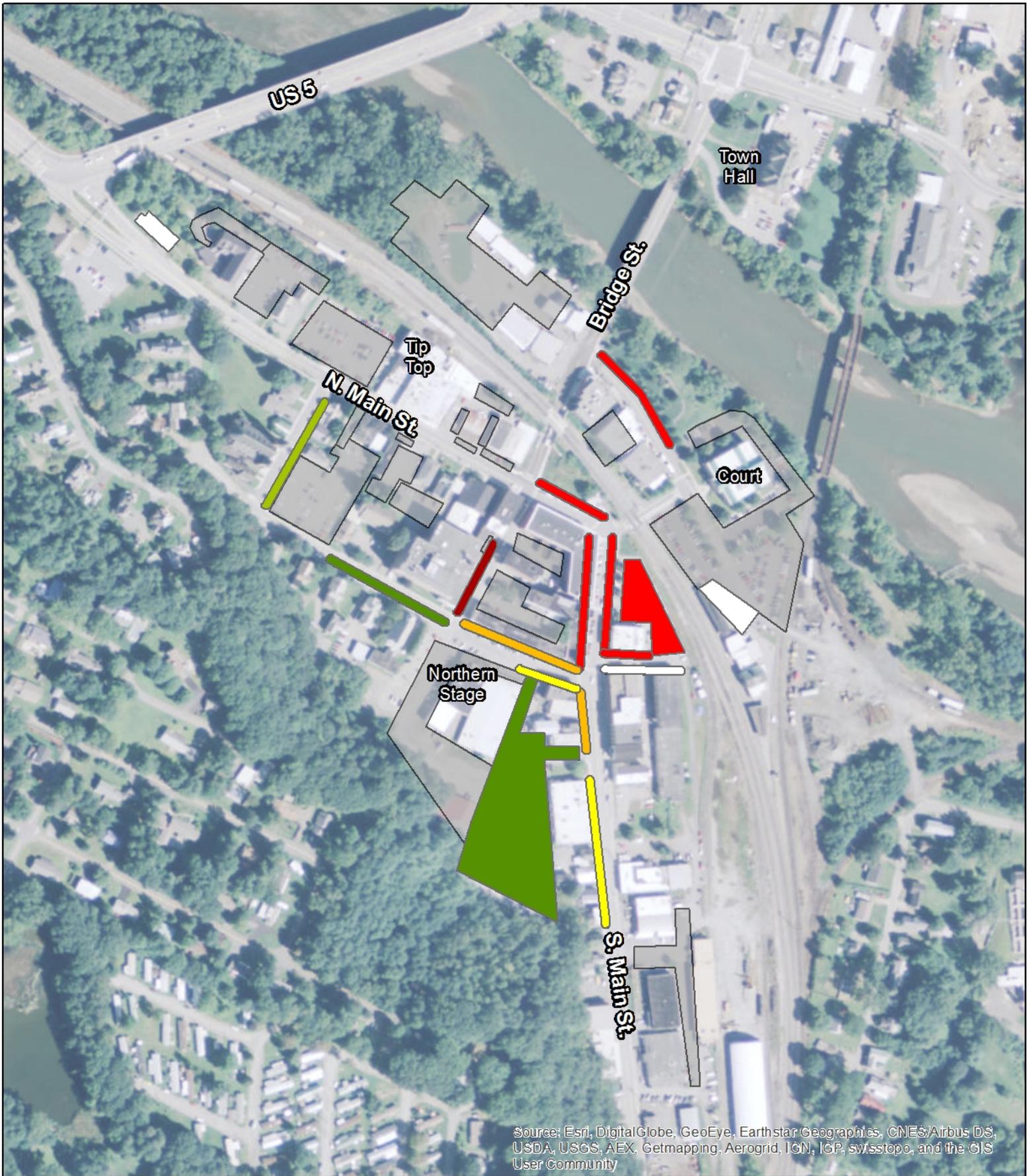




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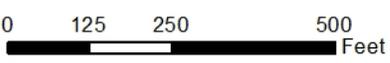
WRJ 2005 Yearly Parking Occupancy AM





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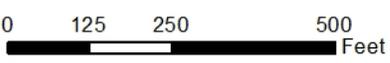
WRJ 2017 Yearly Parking Occupancy MID





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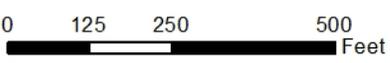
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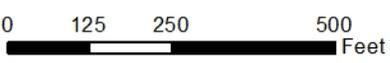
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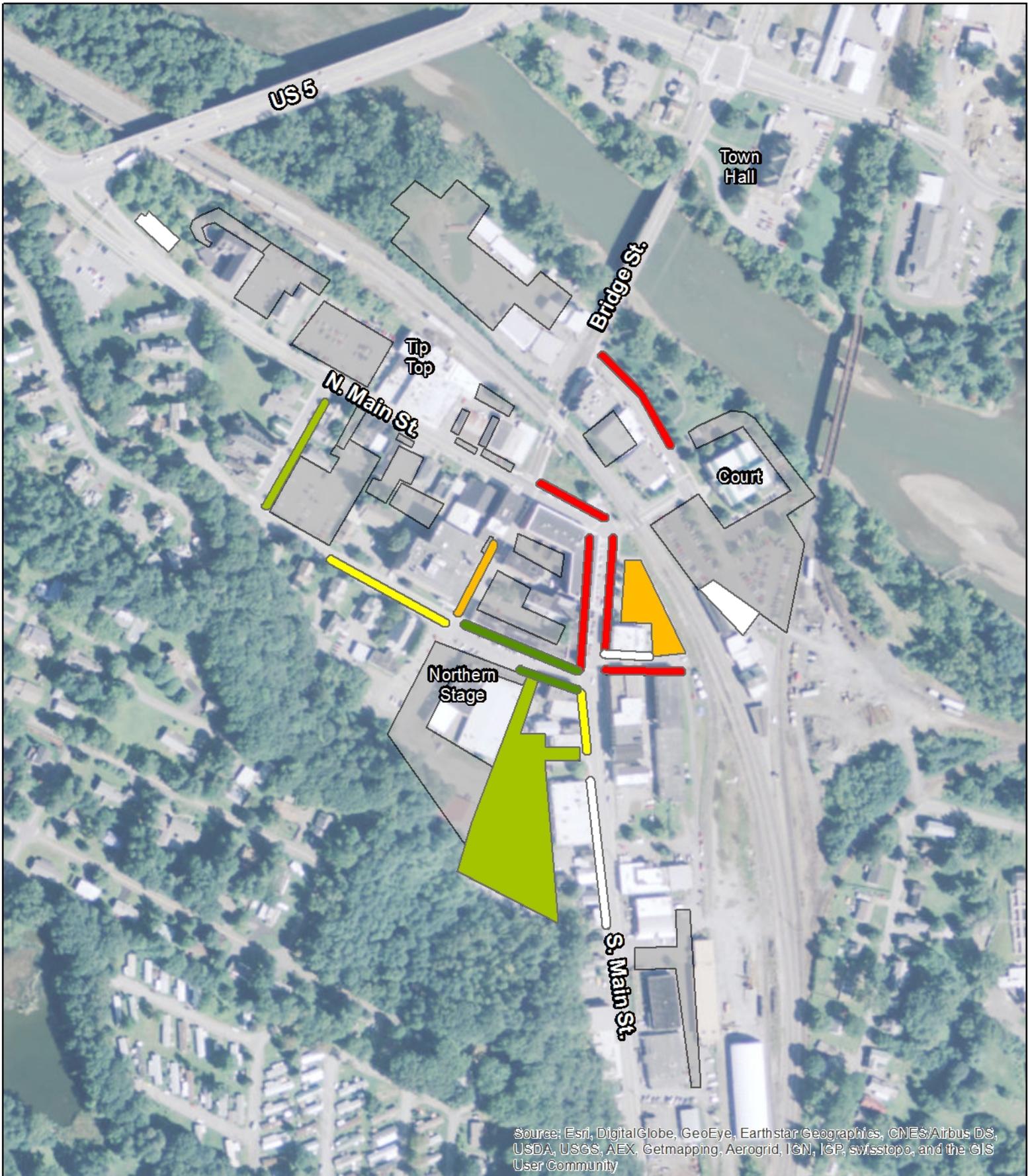




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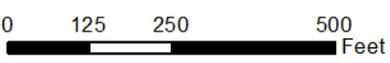
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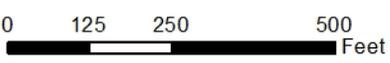
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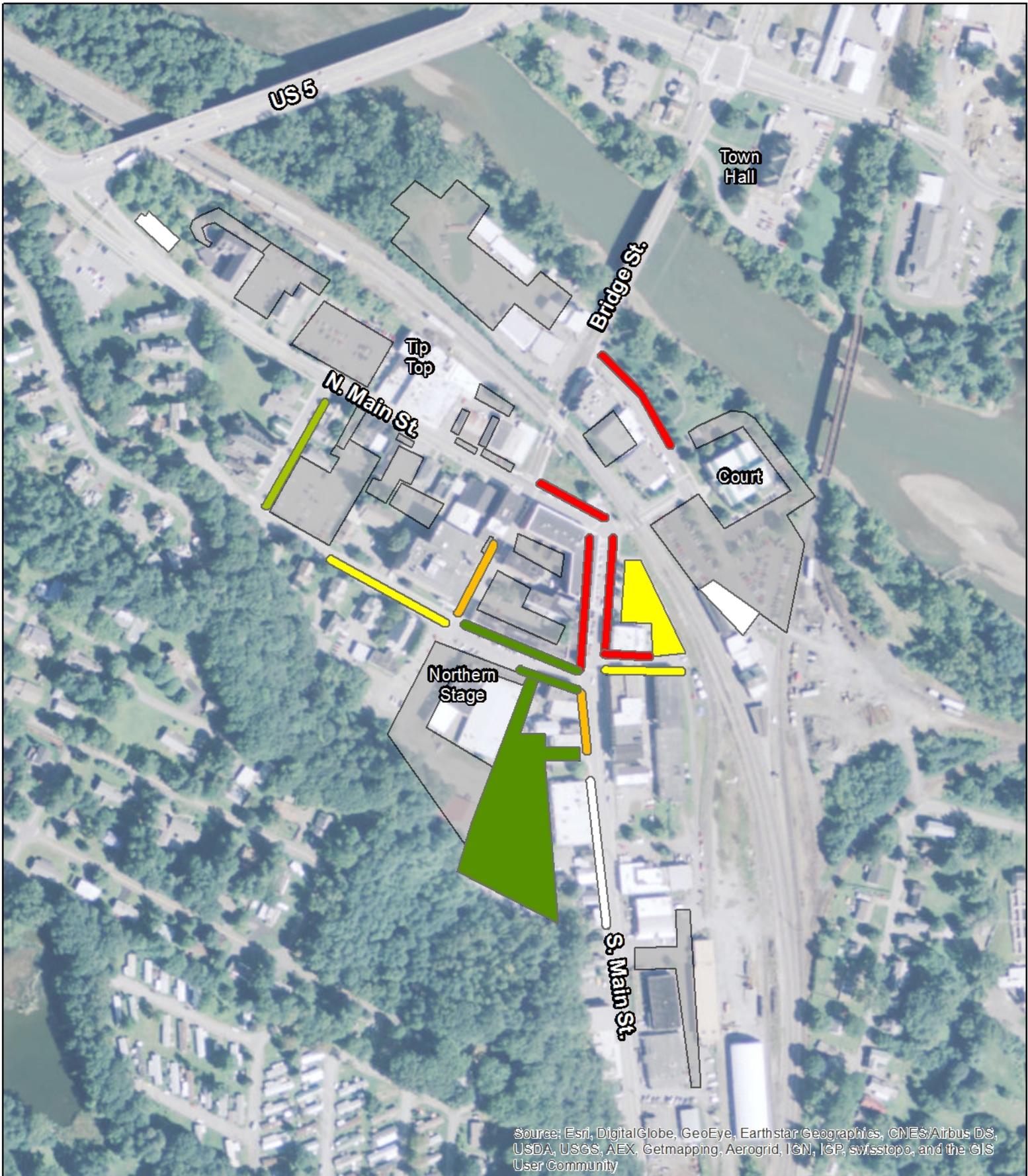




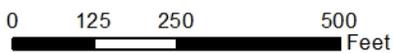
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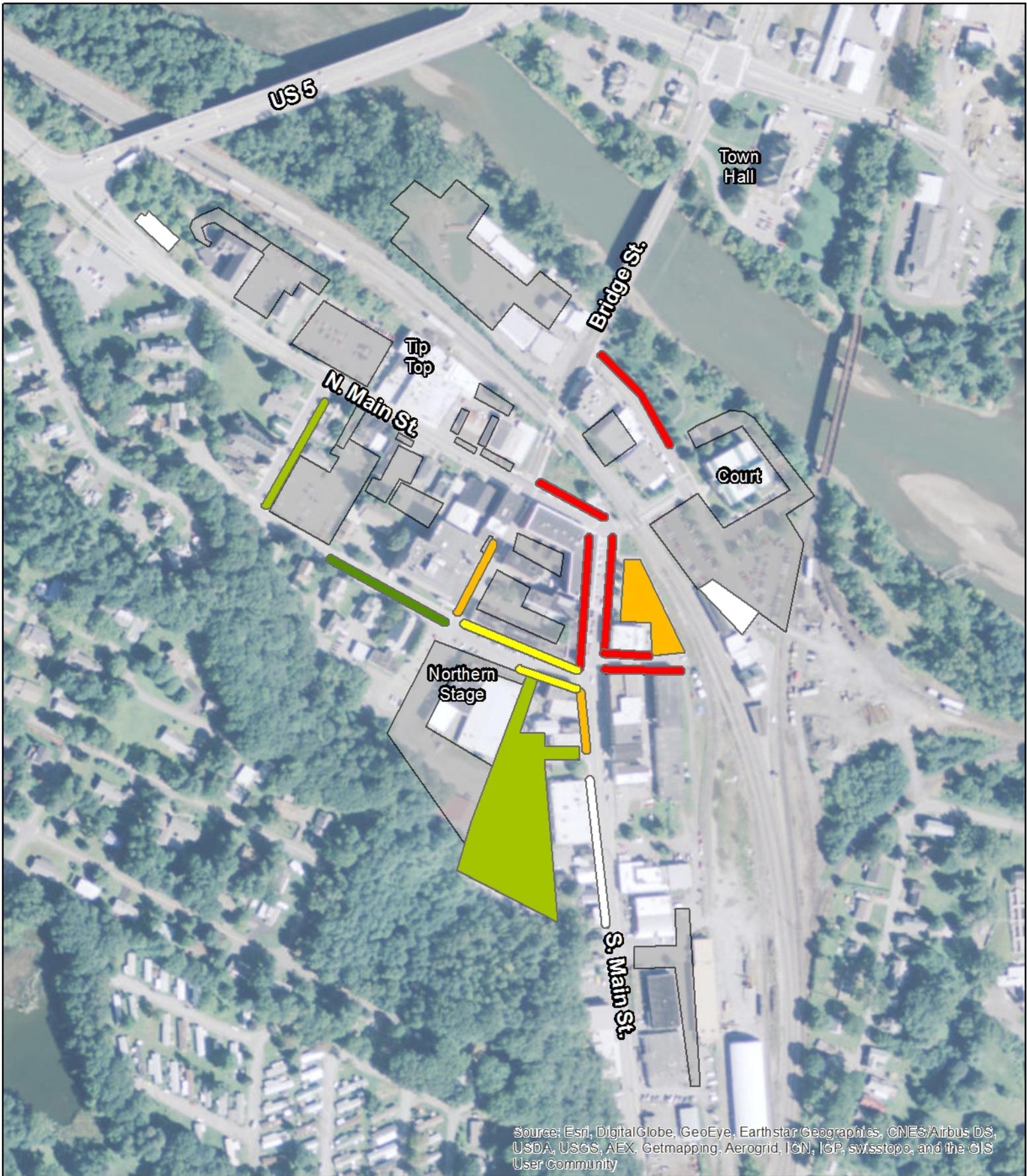
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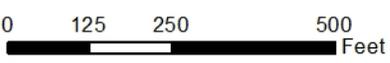
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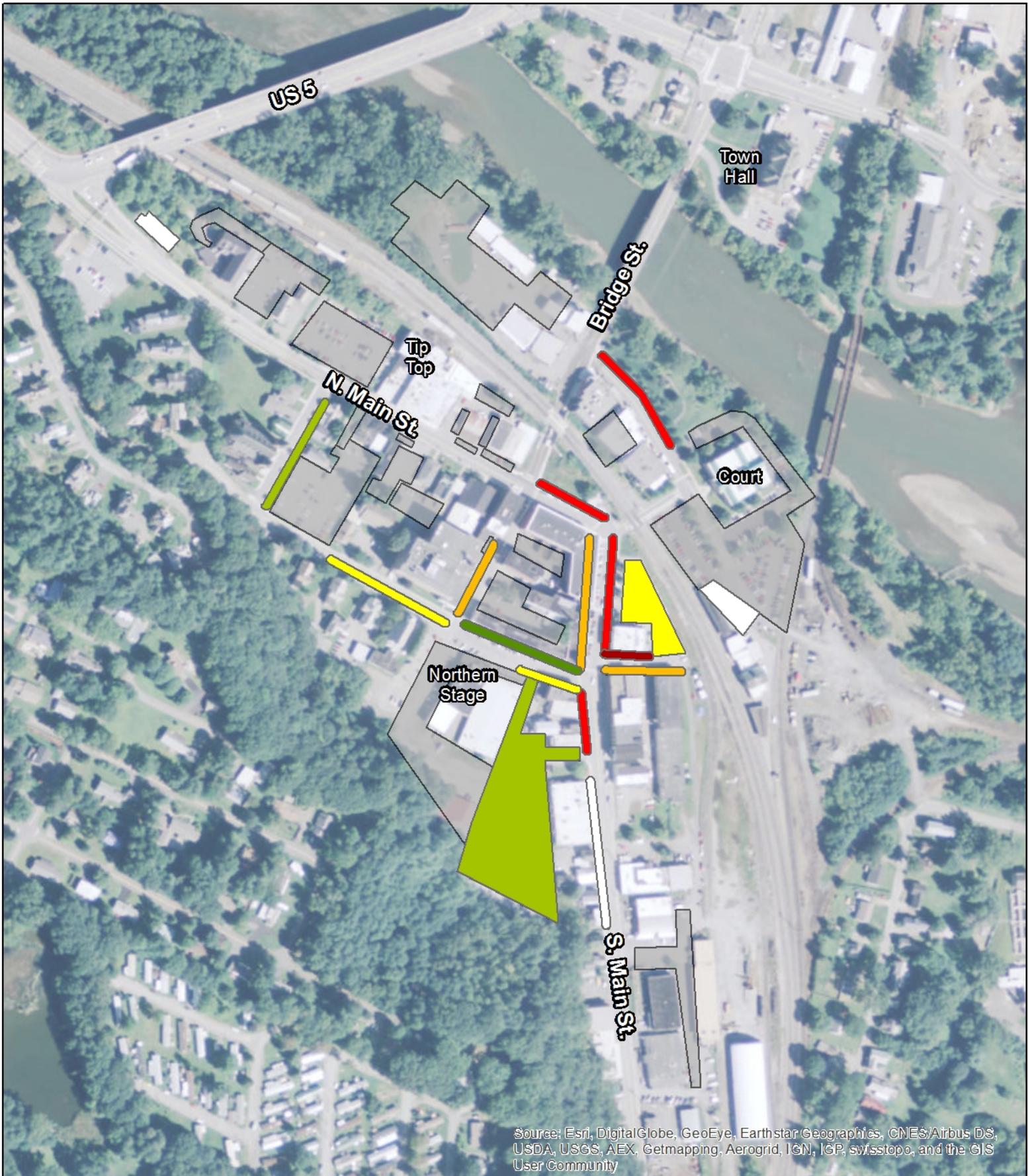




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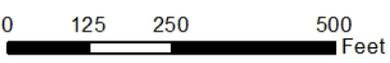
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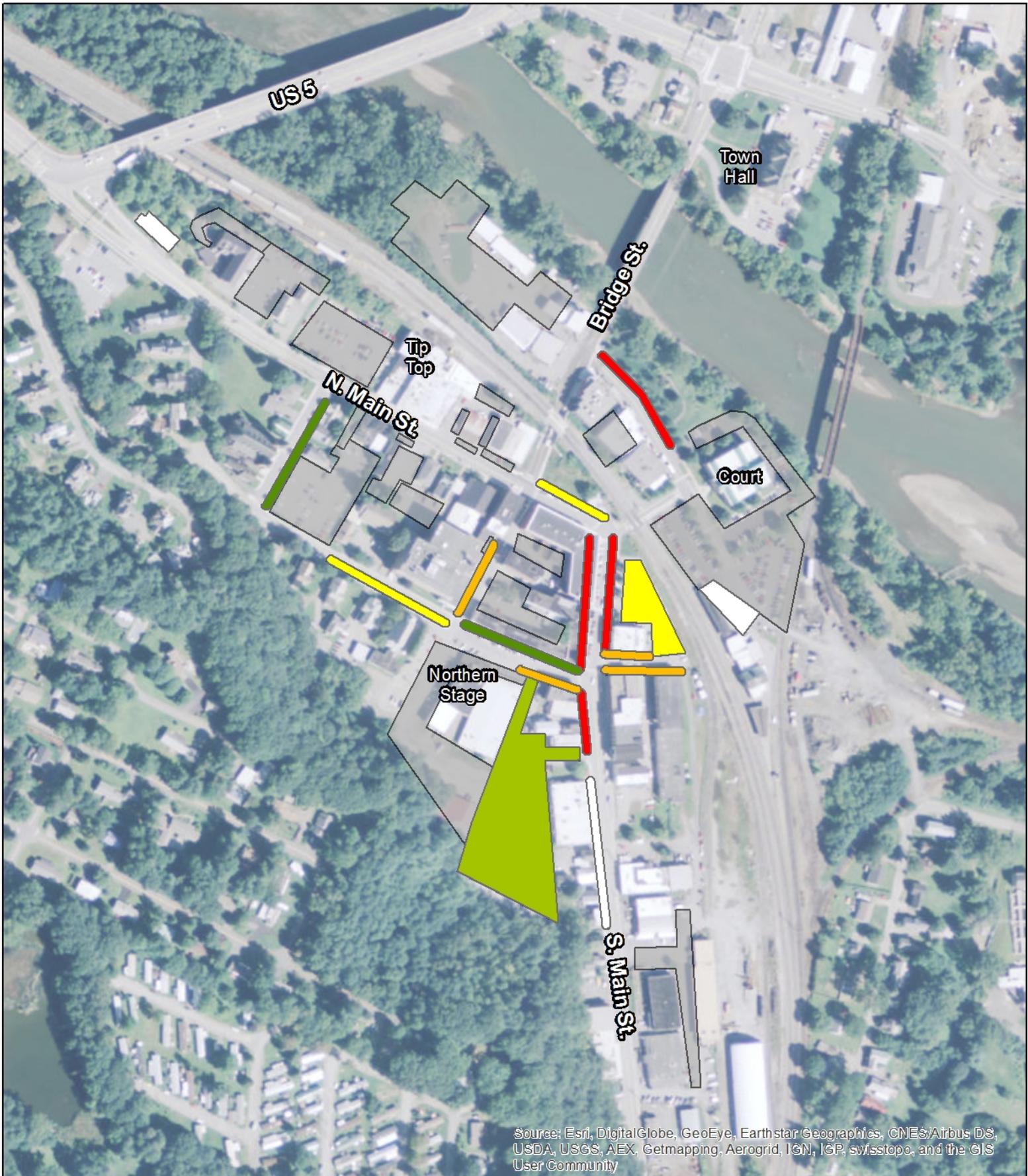




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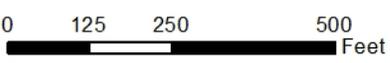
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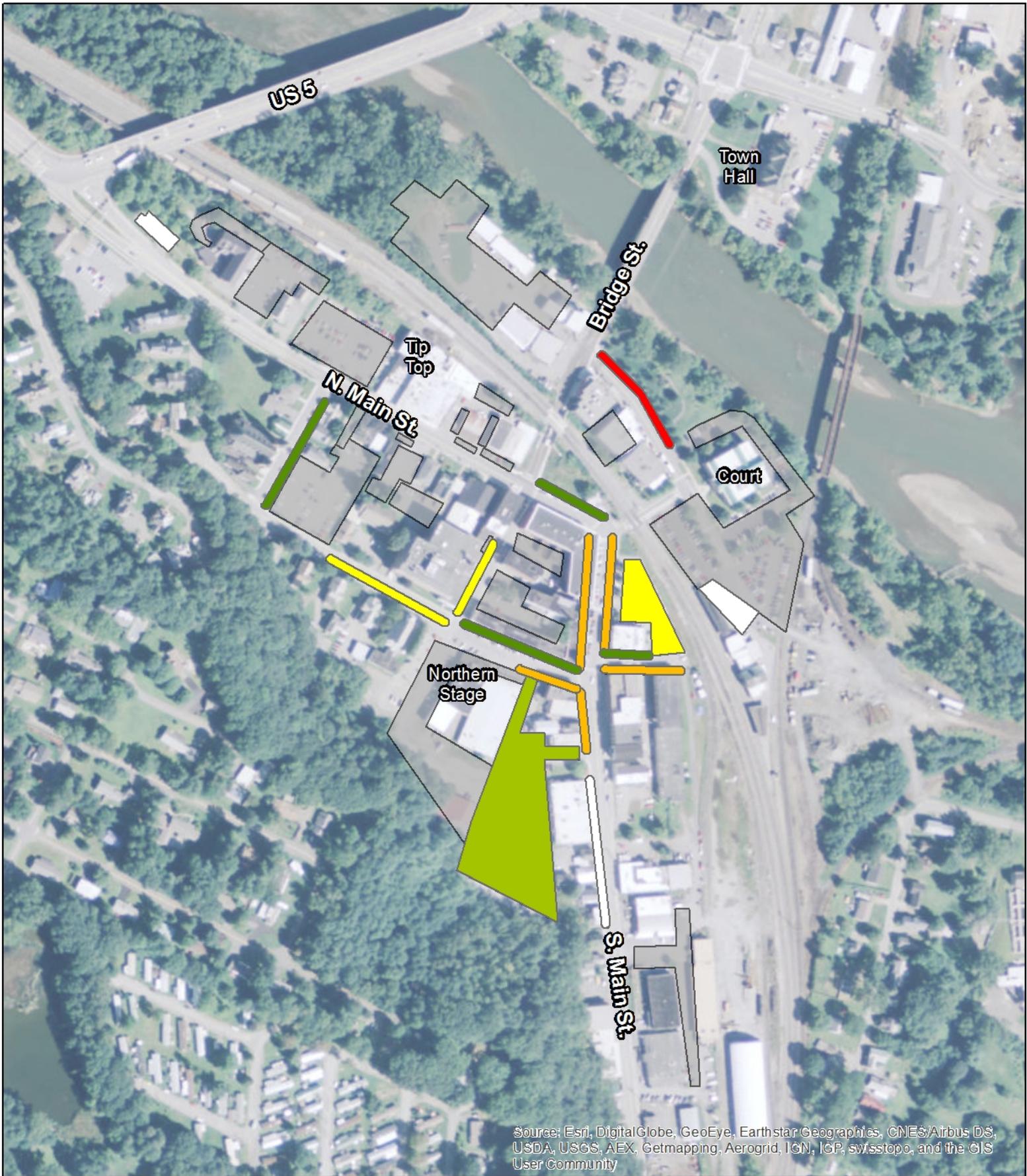




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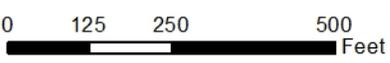
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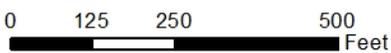
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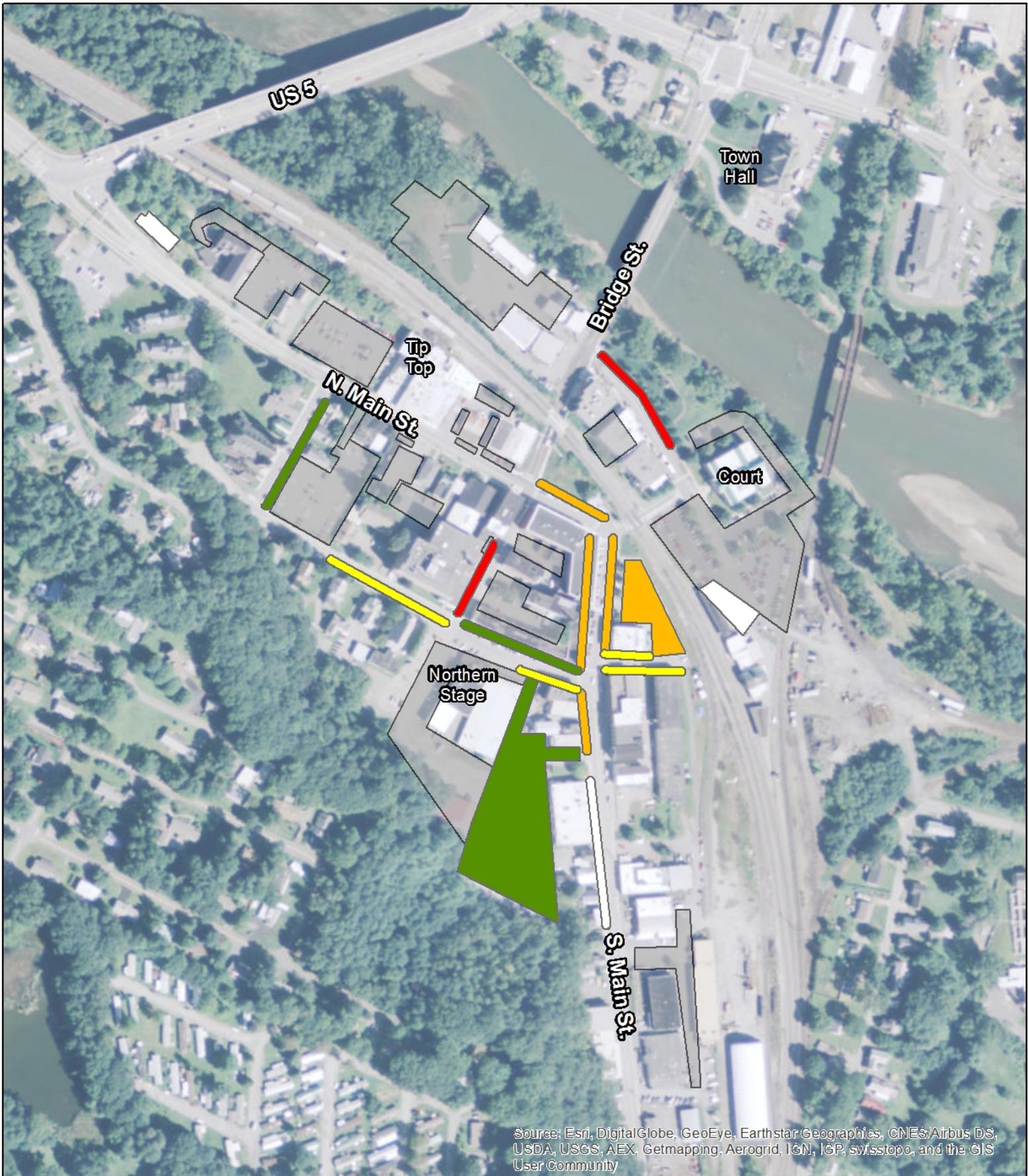
WRJ 2007 Yearly Parking Occupancy MID





WRJ 2006 Yearly Parking Occupancy MID

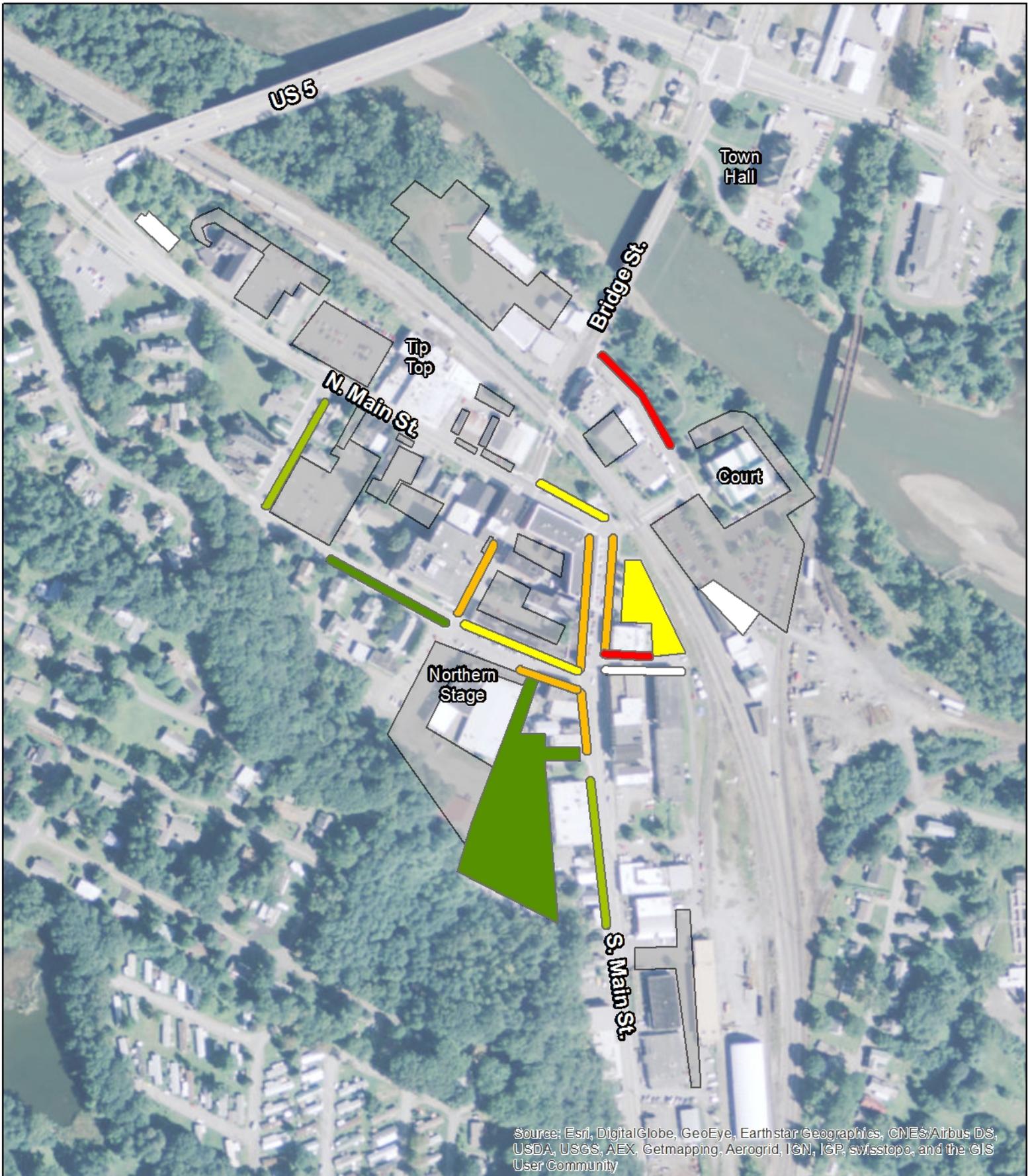




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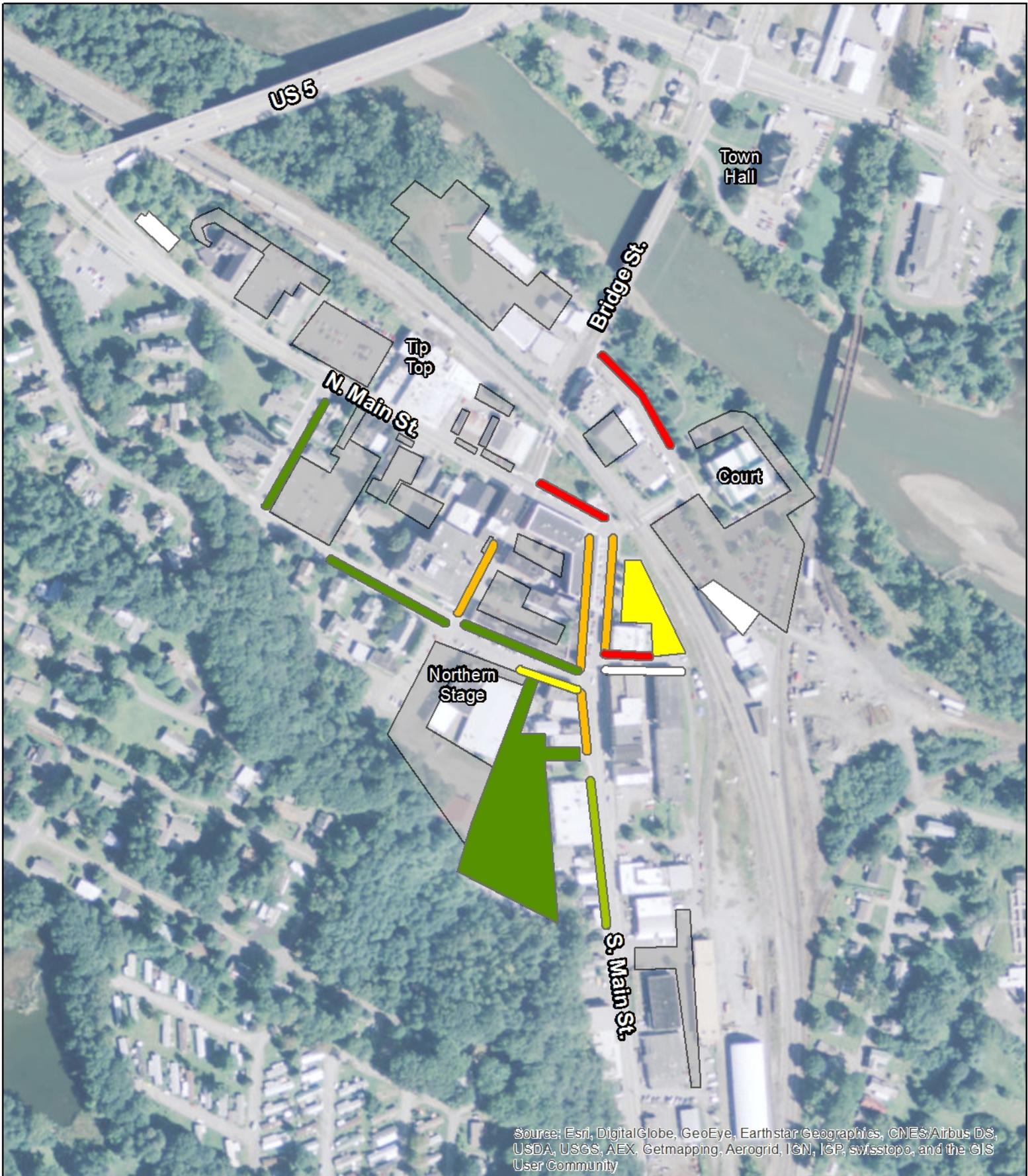




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WRJ 2017 Yearly Parking Occupancy PM



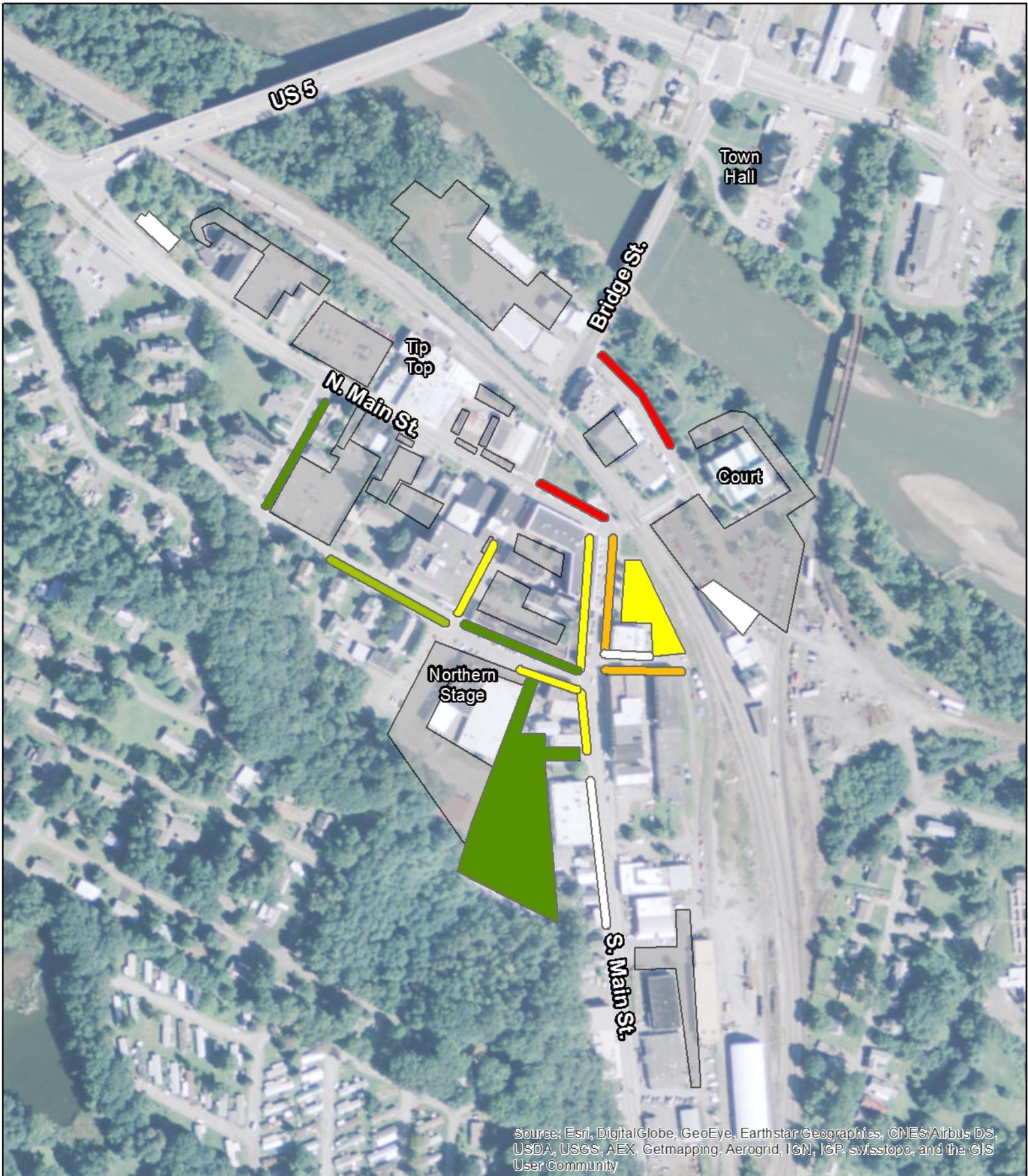


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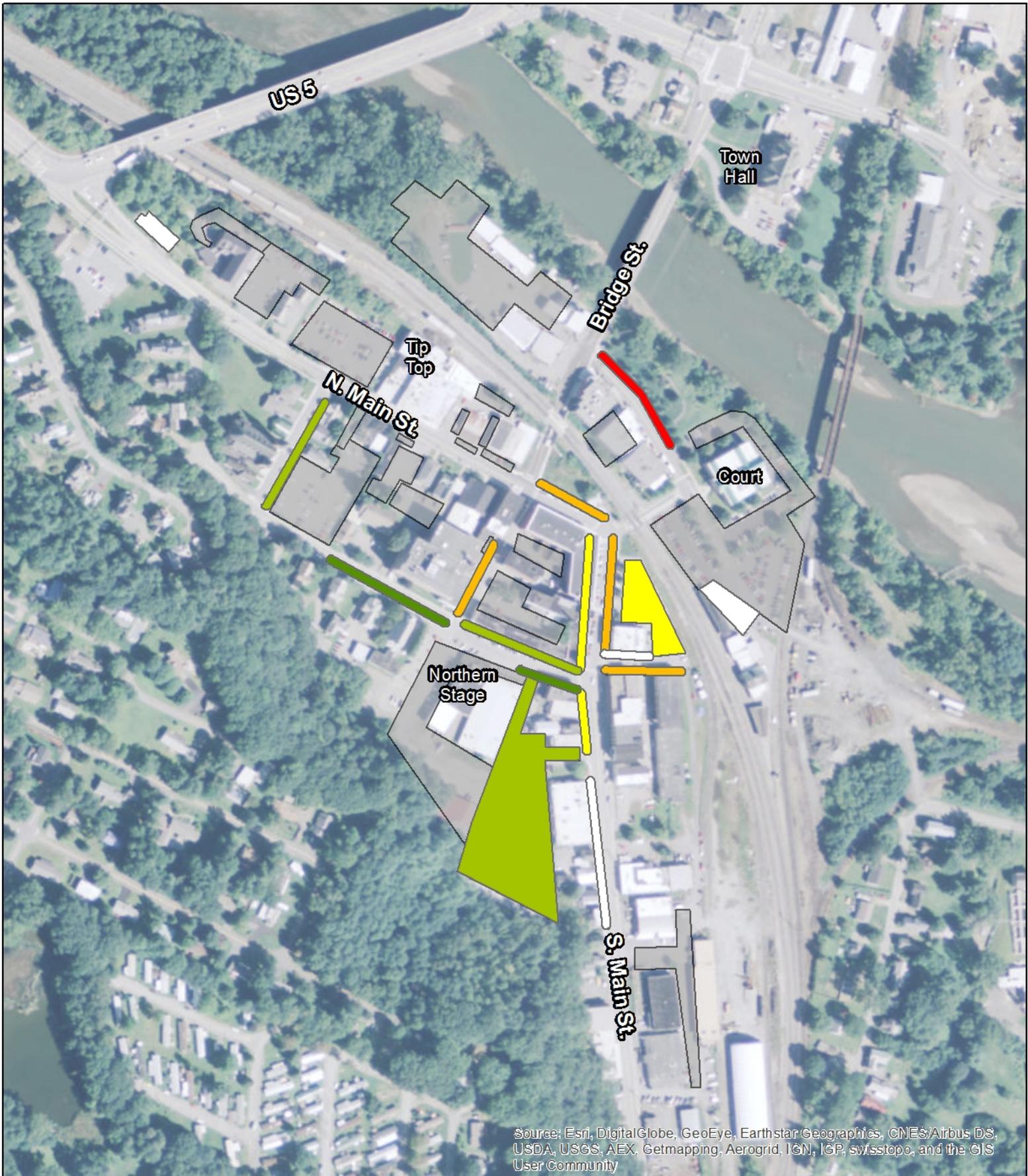
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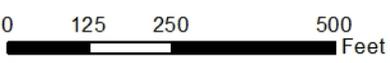


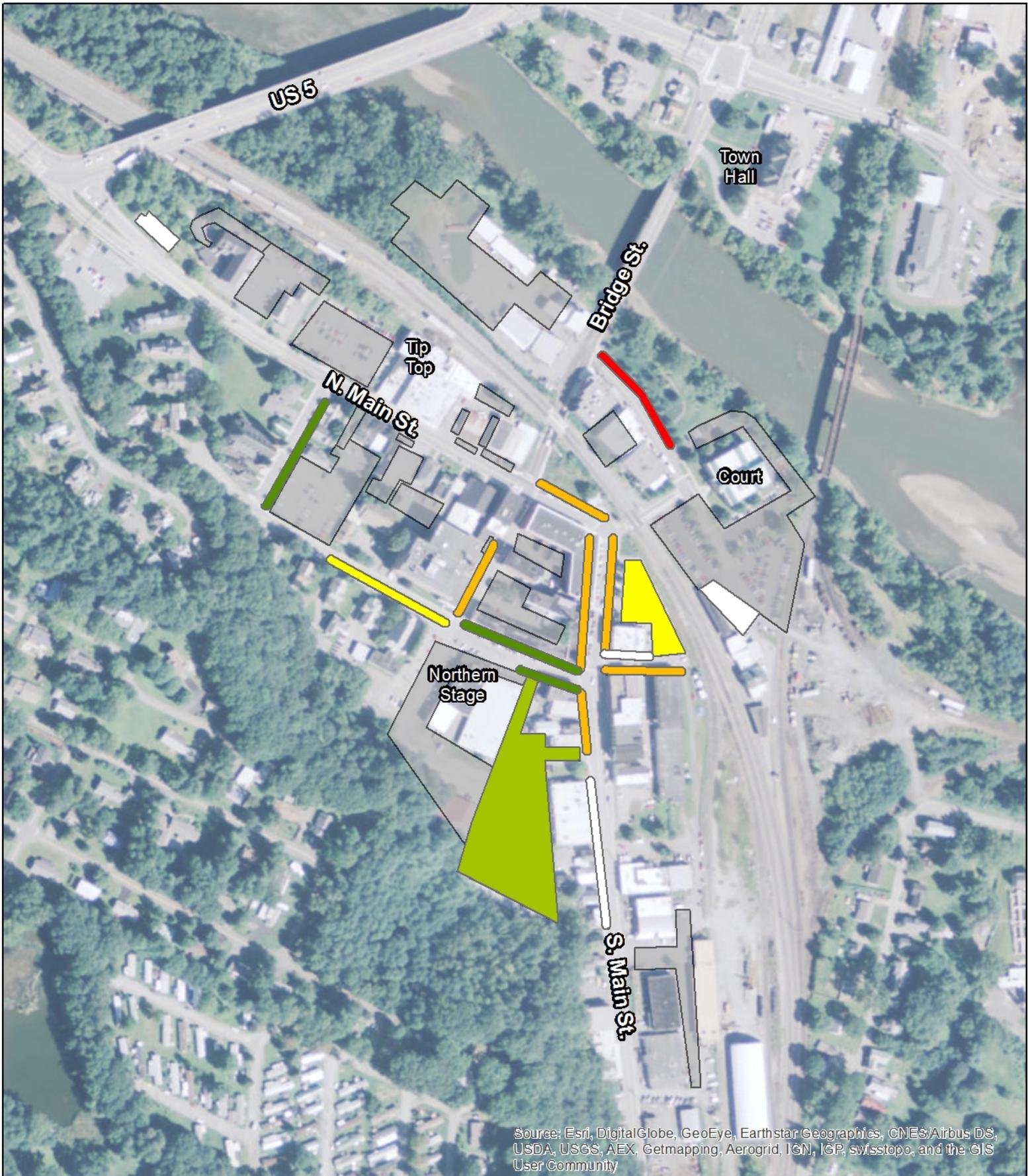
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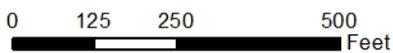
WRJ 2014 Yearly Parking Occupancy PM

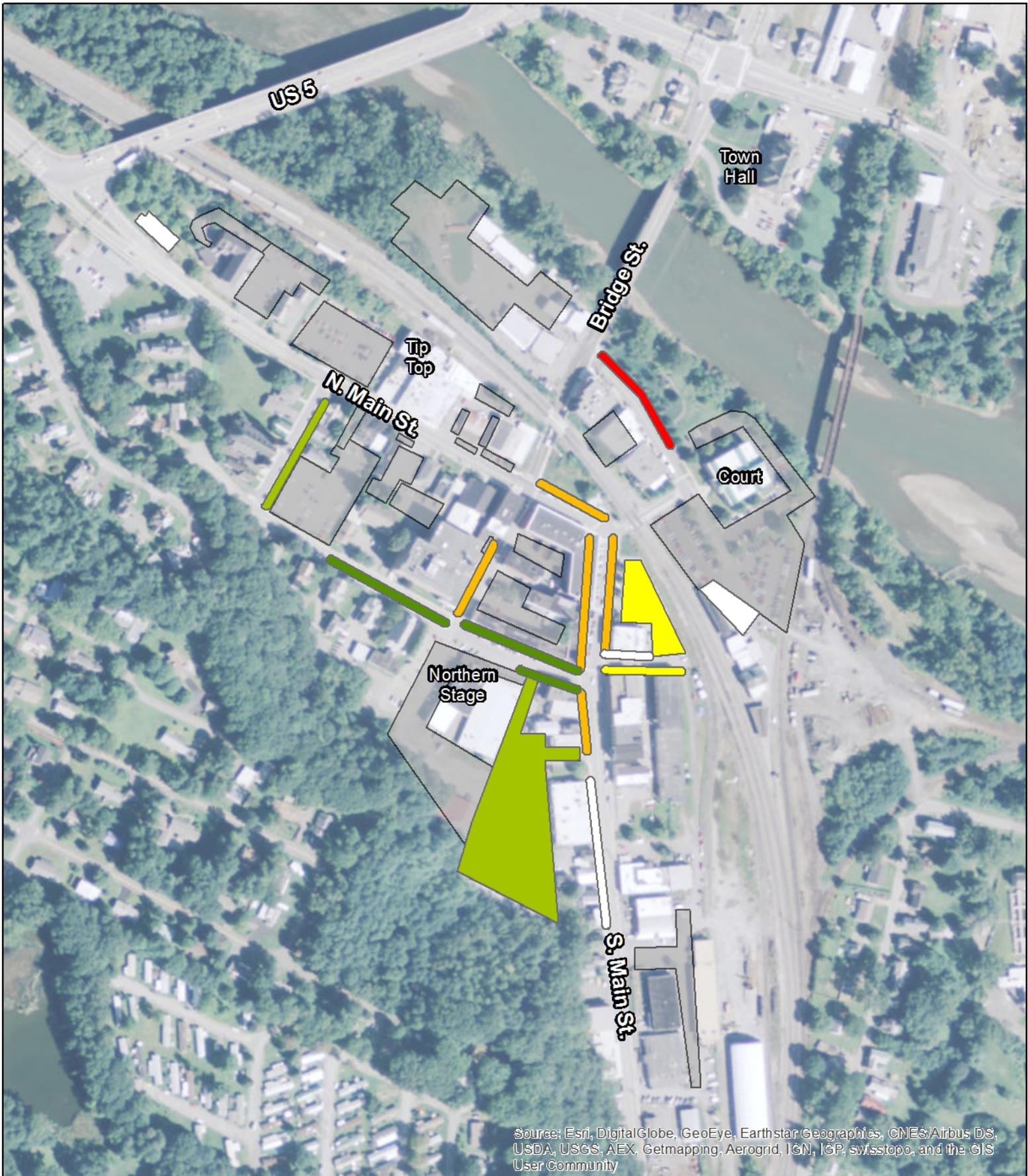




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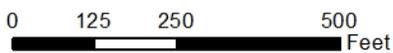
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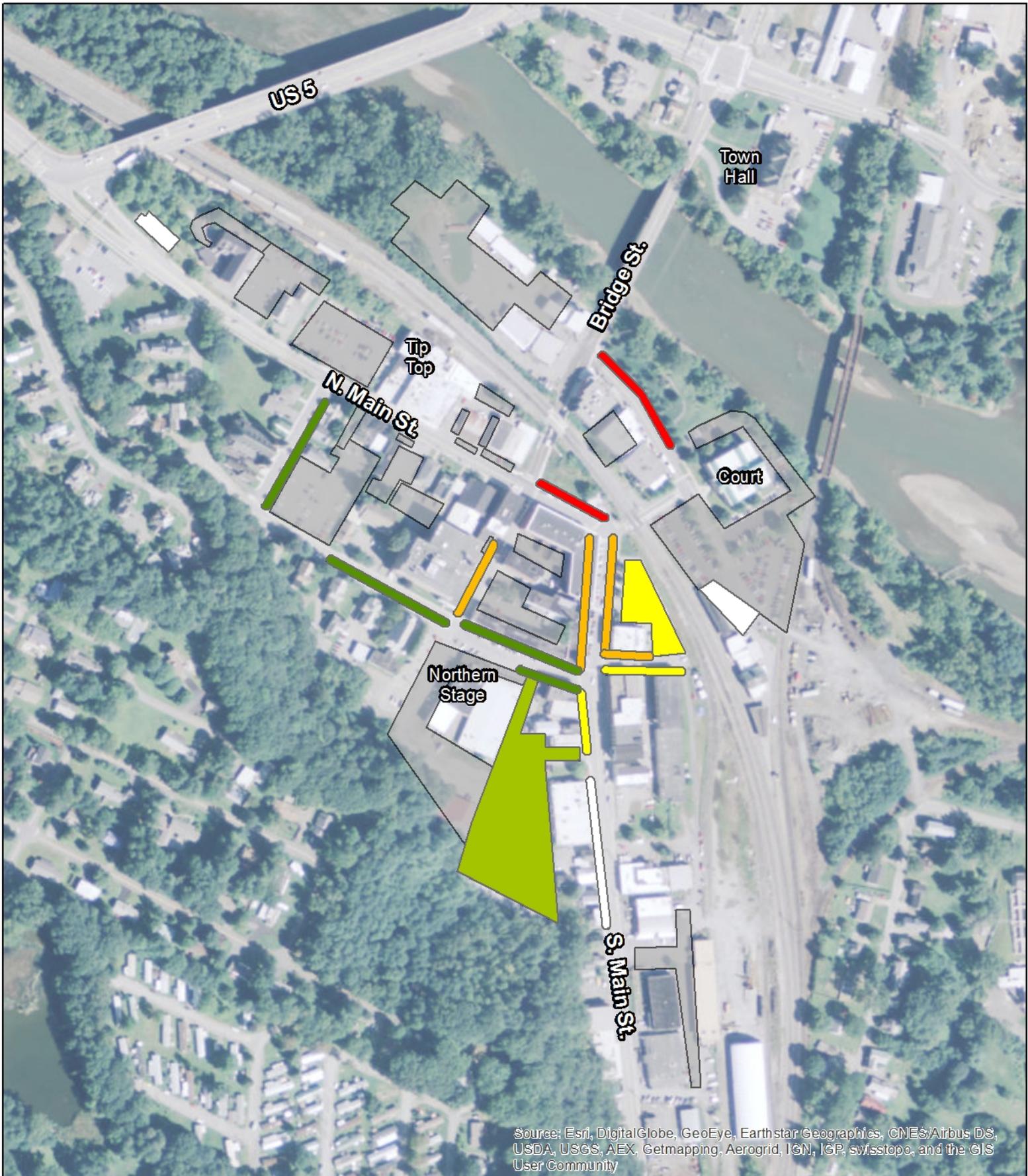




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WRJ 2012 Yearly Parking Occupancy PM

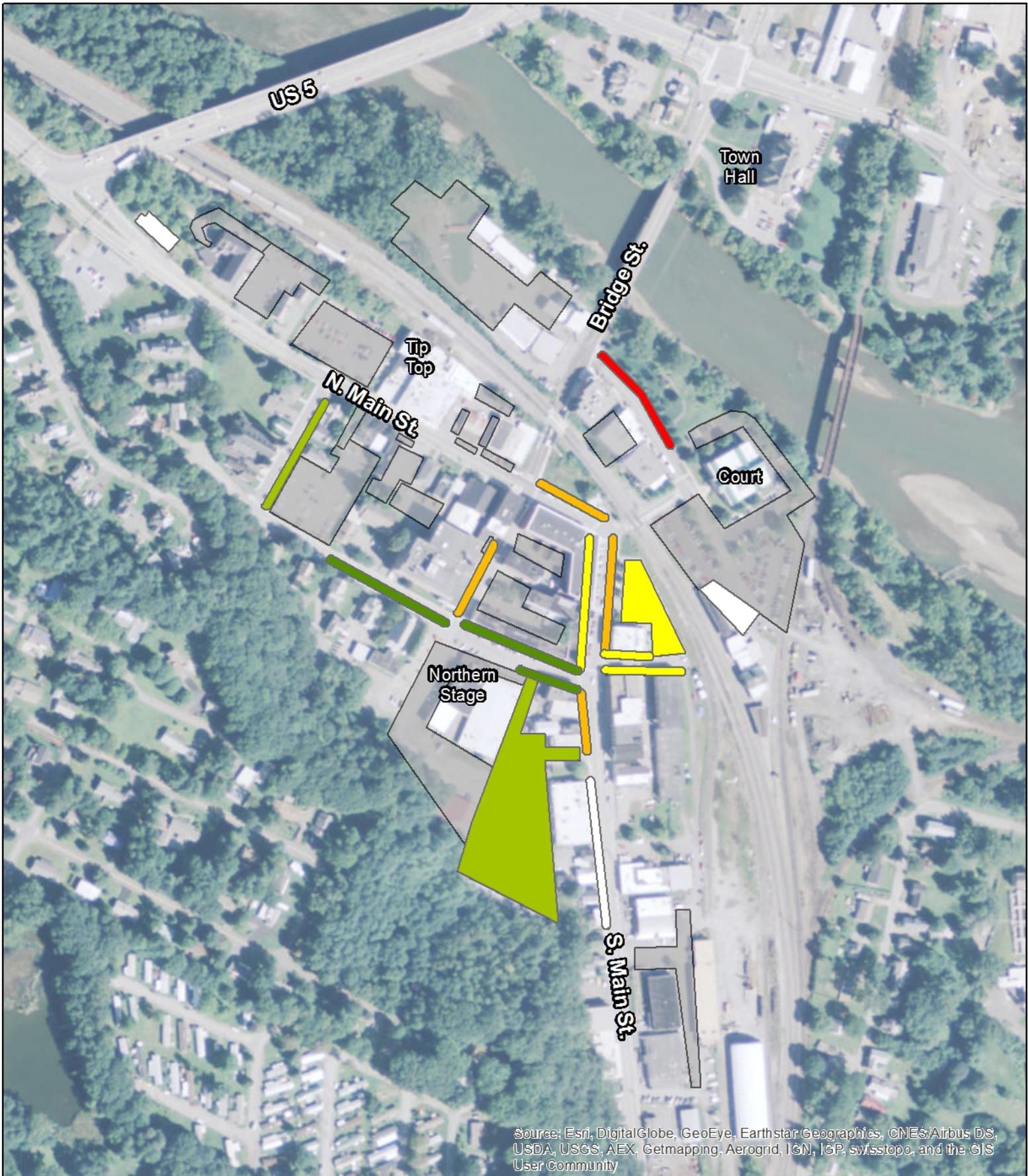




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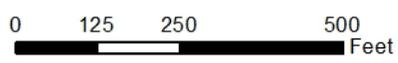
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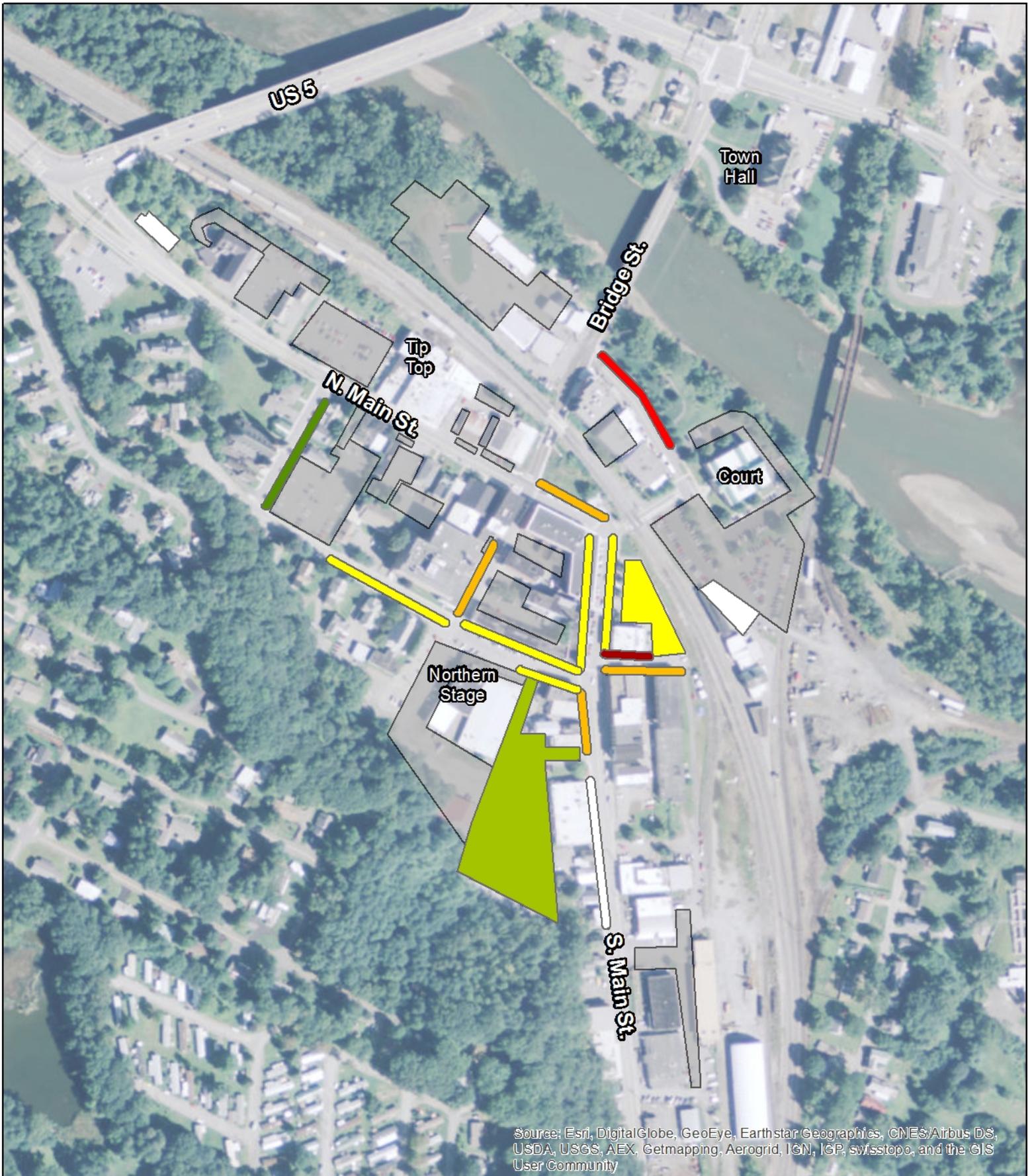




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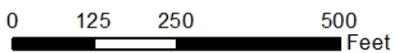
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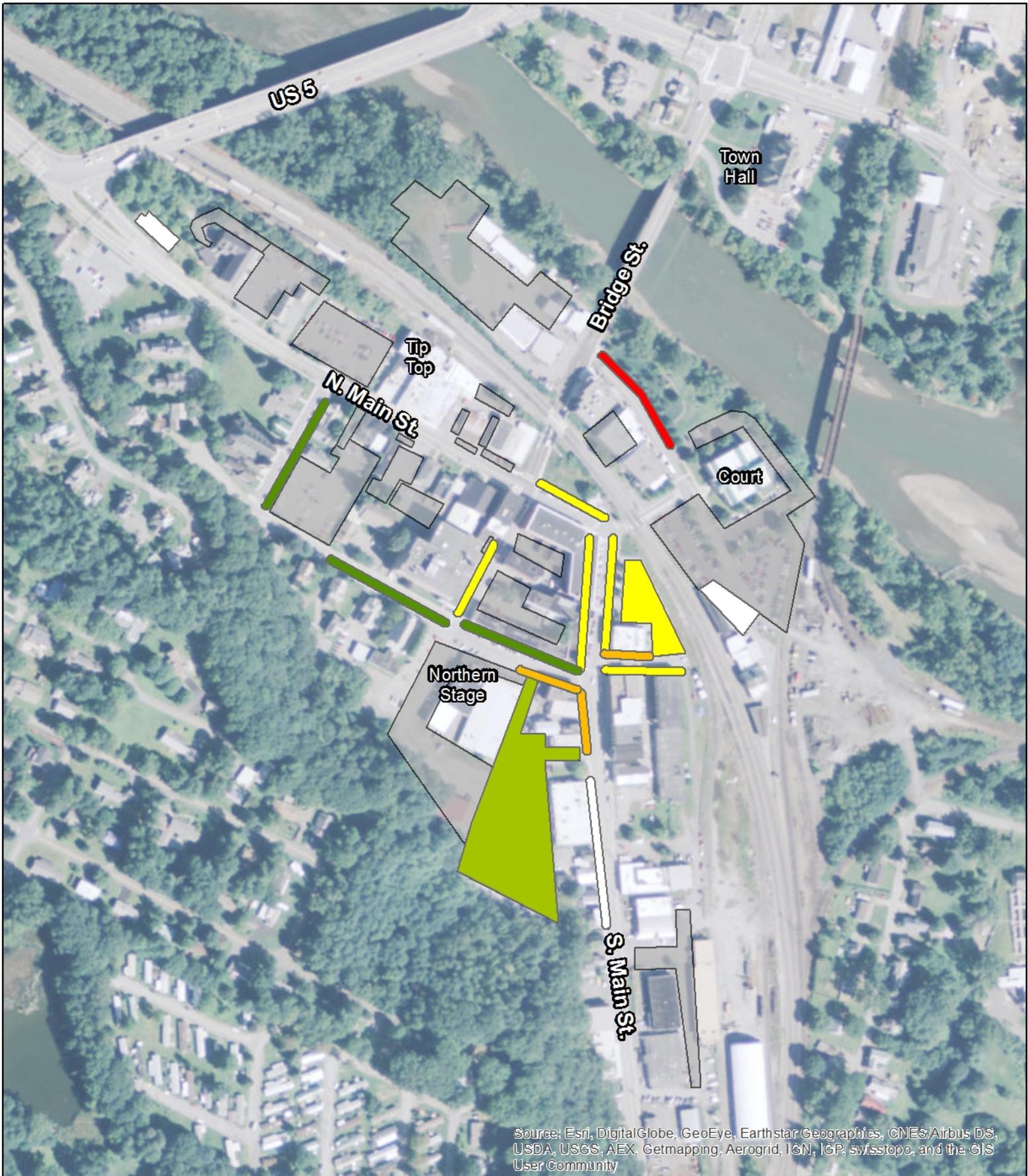




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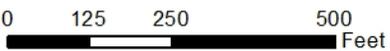
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Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

WRJ 2008 Yearly Parking Occupancy PM





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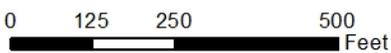
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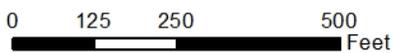
WRJ 2006 Yearly Parking Occupancy PM





Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

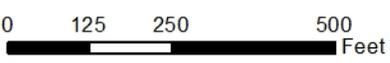
WRJ 2005 Yearly Parking Occupancy PM





Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

WRJ 2017 Yearly Parking Occupancy EVE





WRJ 2016 Yearly Parking Occupancy EVE

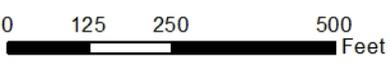


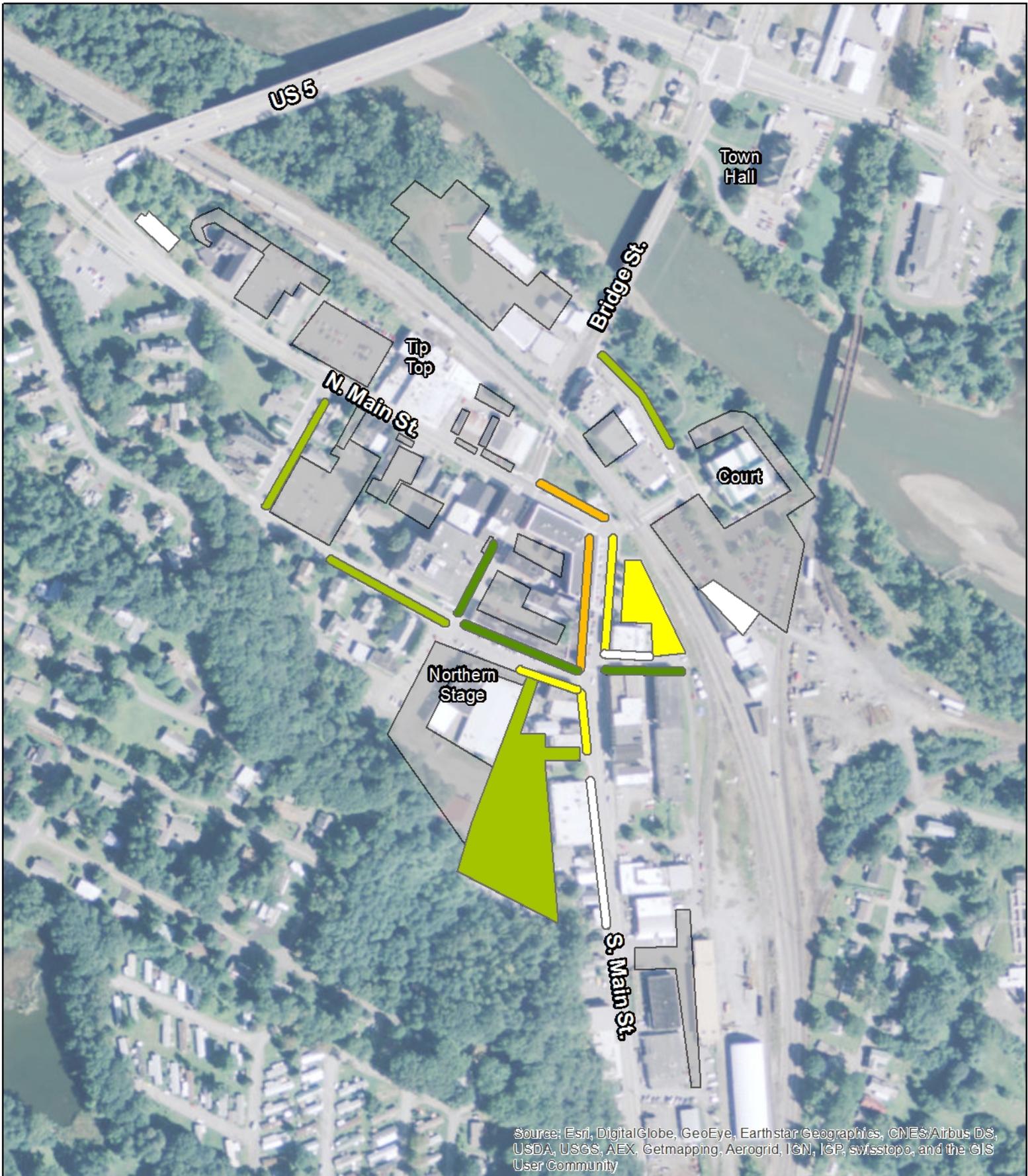
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Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

WRJ 2015 Yearly Parking Occupancy EVE





WRJ 2014 Yearly Parking Occupancy EVE

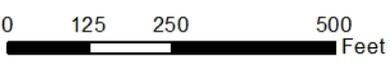


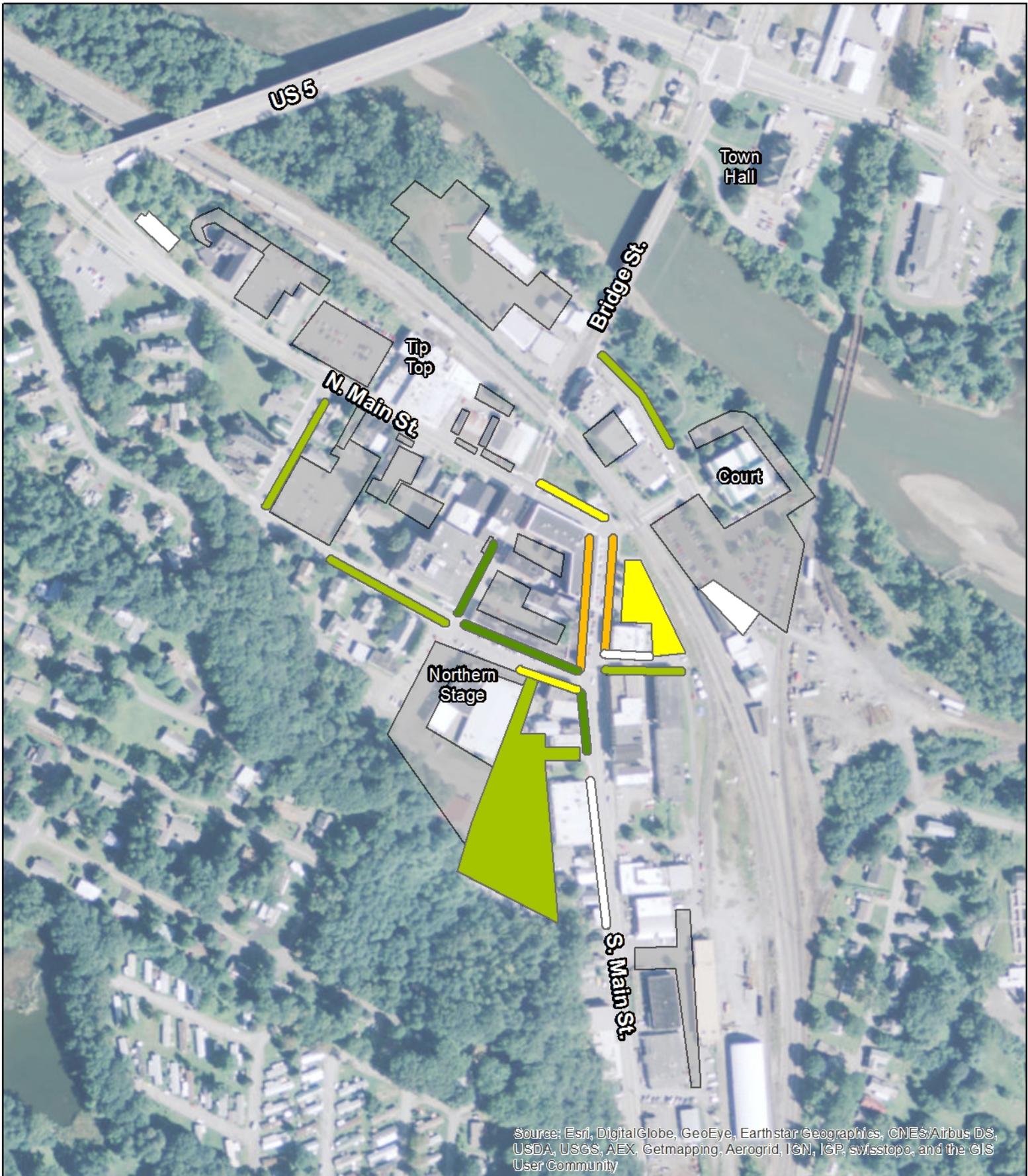
0 125 250 500
Feet



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

WRJ 2013 Yearly Parking Occupancy EVE





Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

WRJ 2012 Yearly Parking Occupancy EVE

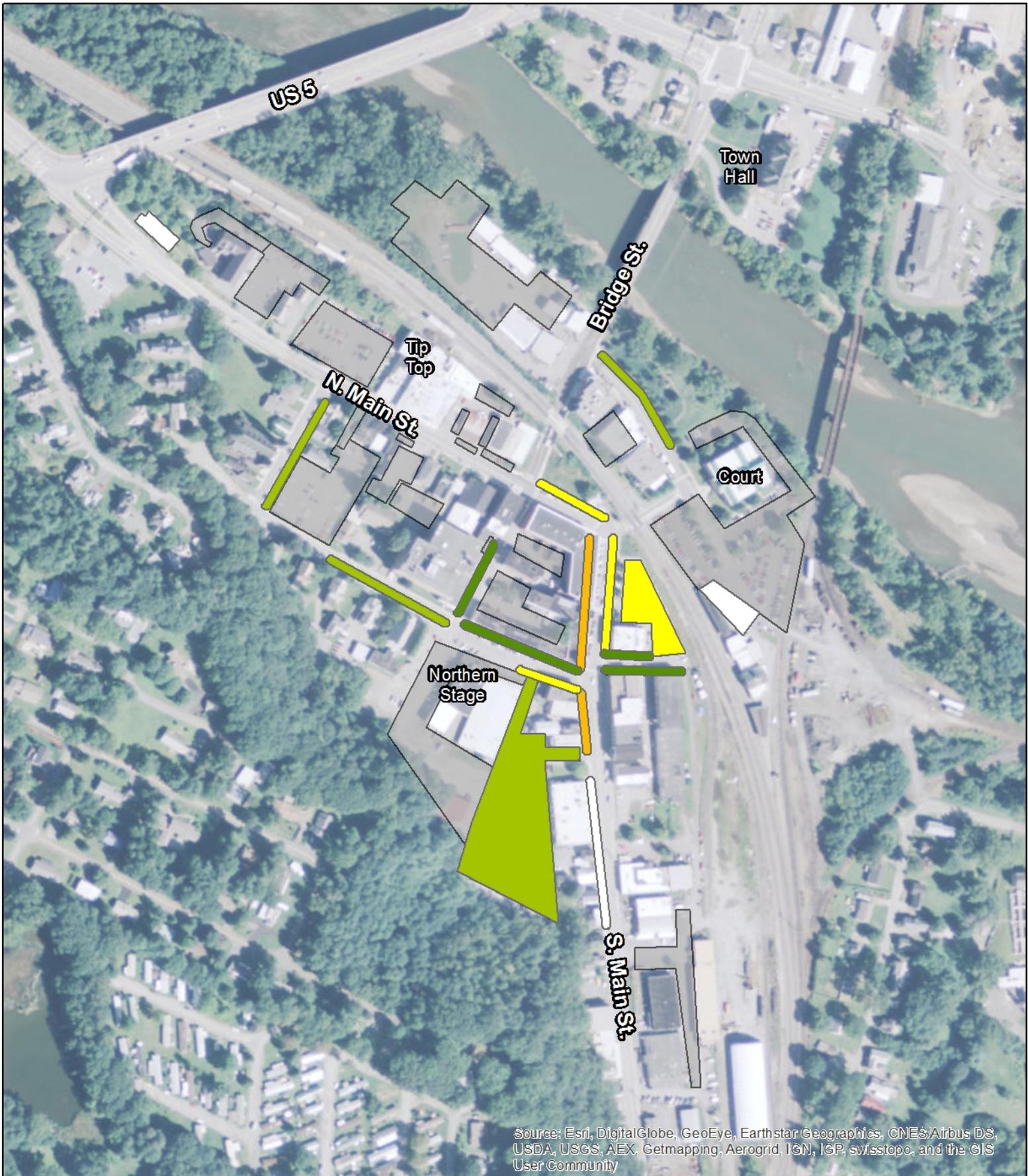




WRJ 2011 Yearly Parking Occupancy EVE



0 125 250 500 Feet



WRJ 2010 Yearly Parking Occupancy EVE

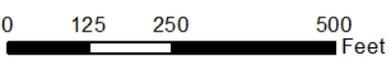


0 125 250 500
Feet



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

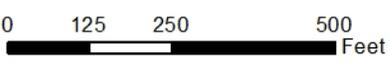
WRJ 2009 Yearly Parking Occupancy EVE





Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

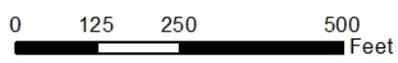
WRJ 2008 Yearly Parking Occupancy EVE





Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

WRJ 2007 Yearly Parking Occupancy EVE





Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

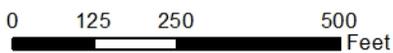
WRJ 2006 Yearly Parking Occupancy EVE



0 125 250 500 Feet



WRJ 2005 Yearly Parking Occupancy EVE



Appendix B

Downtown White River Junction Parking & Transportation Survey Results
Conducted by Aaron Brown

White River Junction Parking and Transportation Survey

Prepared for the Town of Hartford
Vermont September 14, 2016
Aaron Brown, Vital Communities



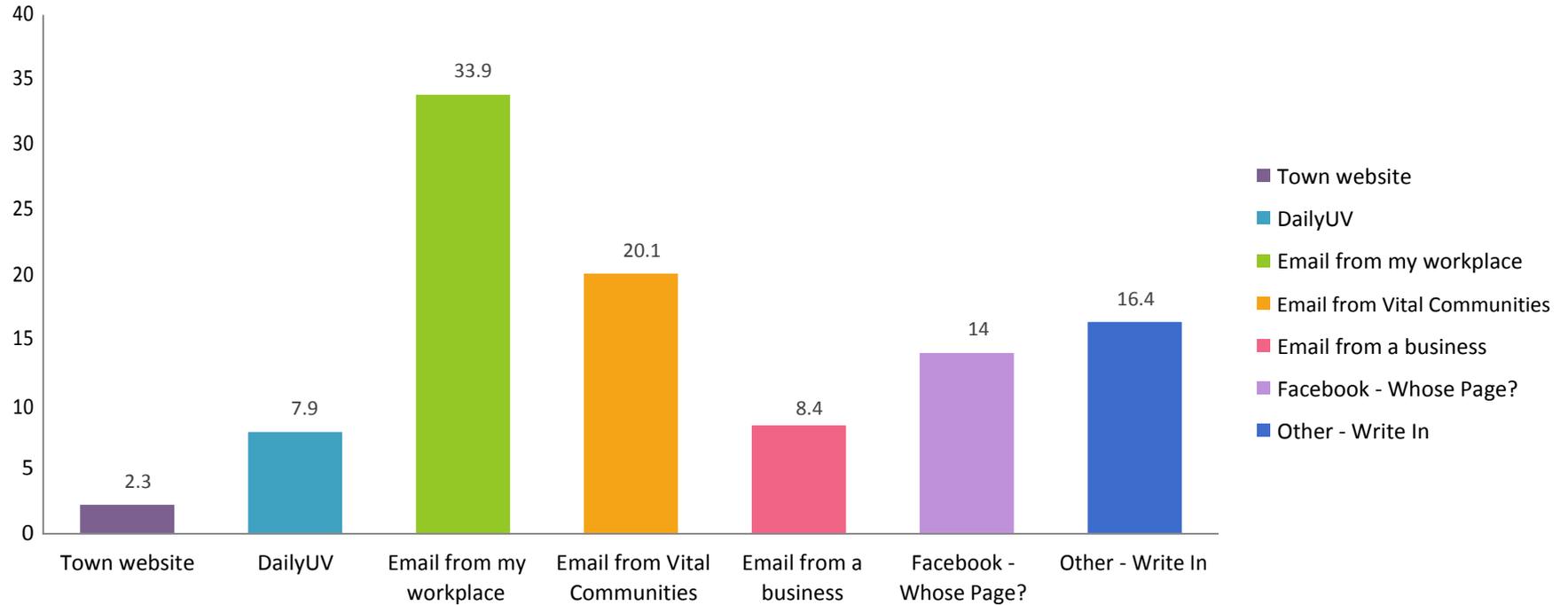
Great Response Statistics

	Count	Percent
Complete	414	75.1
Partial	137	24.9
Disqualified	0	0
Total	551	

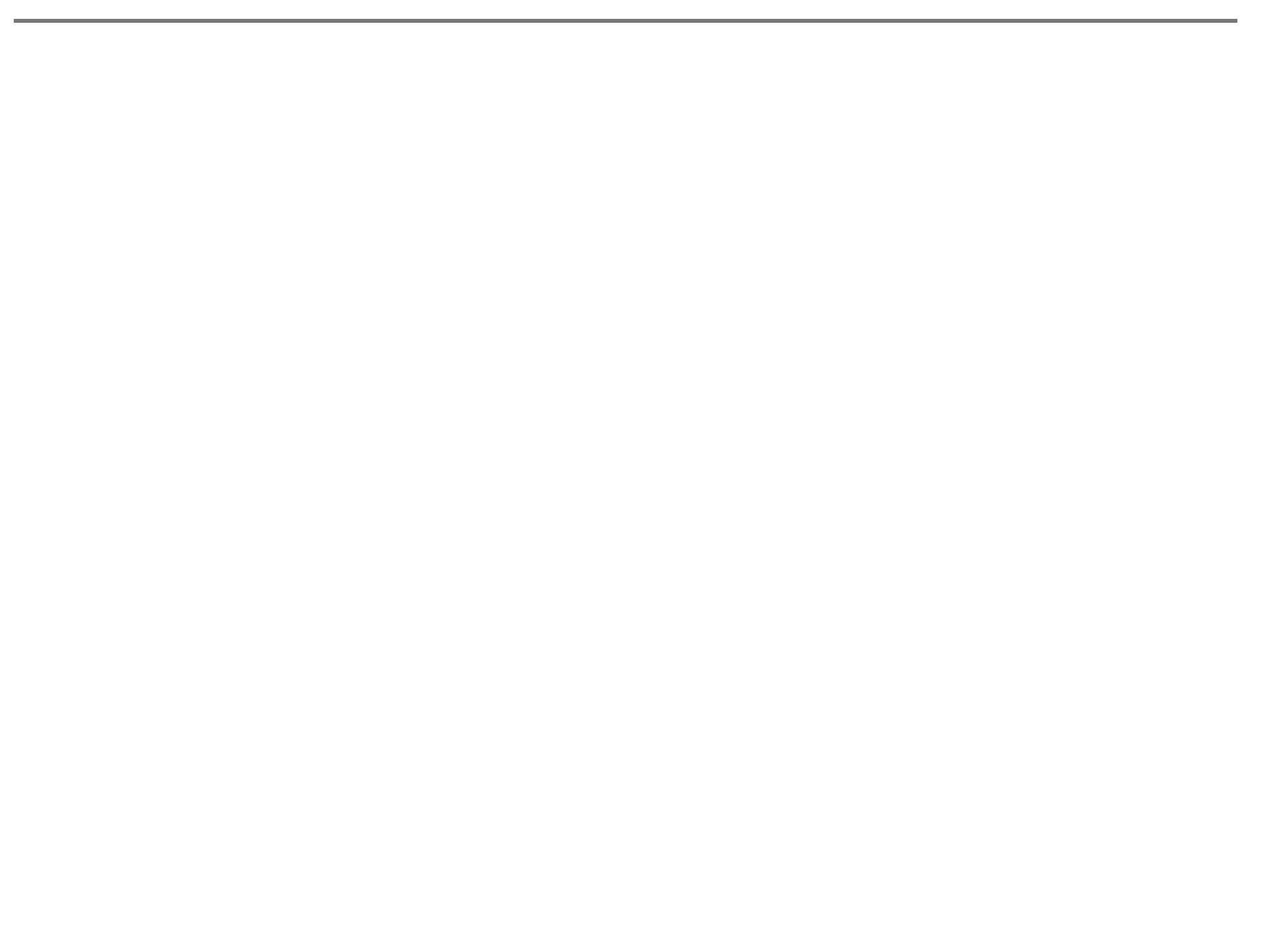


General Information

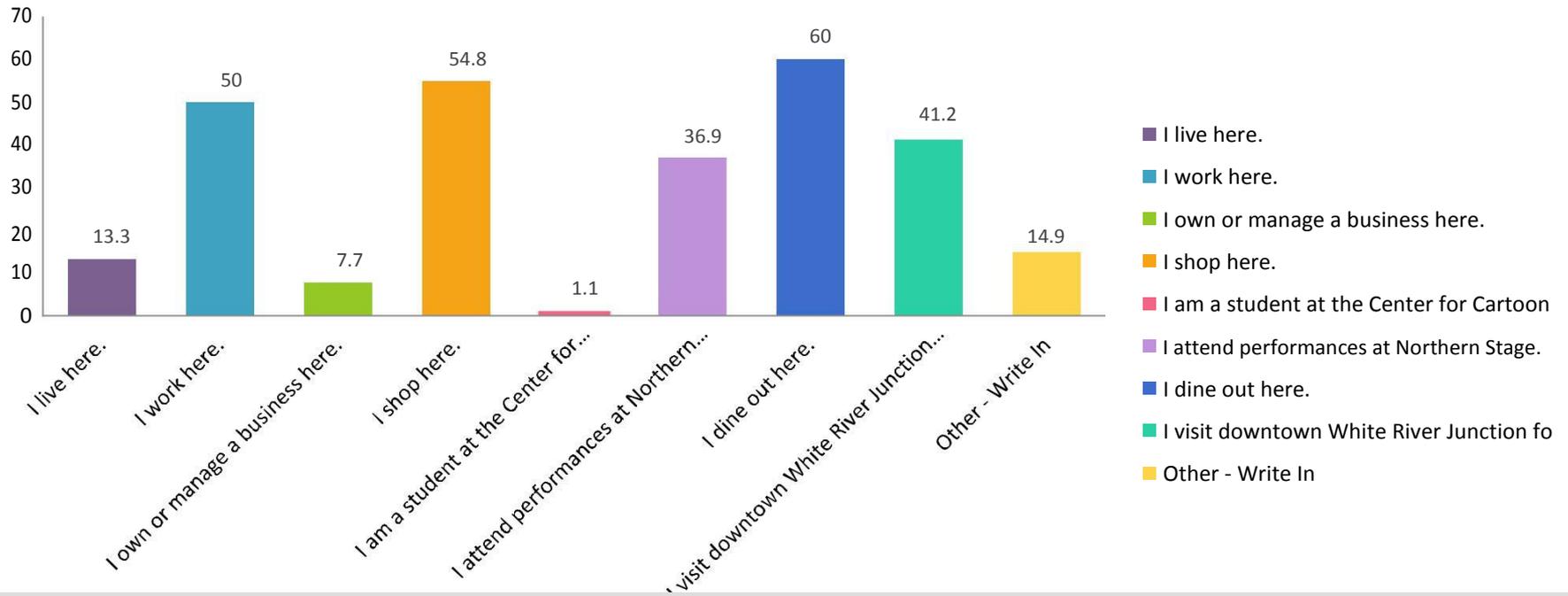
How did you hear about this survey?



Value	Percent	Count
Town website	2.3%	10
DailyUV	7.9%	34
Email from my workplace	33.9%	145
Email from Vital Communities	20.1%	86
Email from a business	8.4%	36
Facebook - Whose Page?	14.0%	60
Other - Write In	16.4%	70

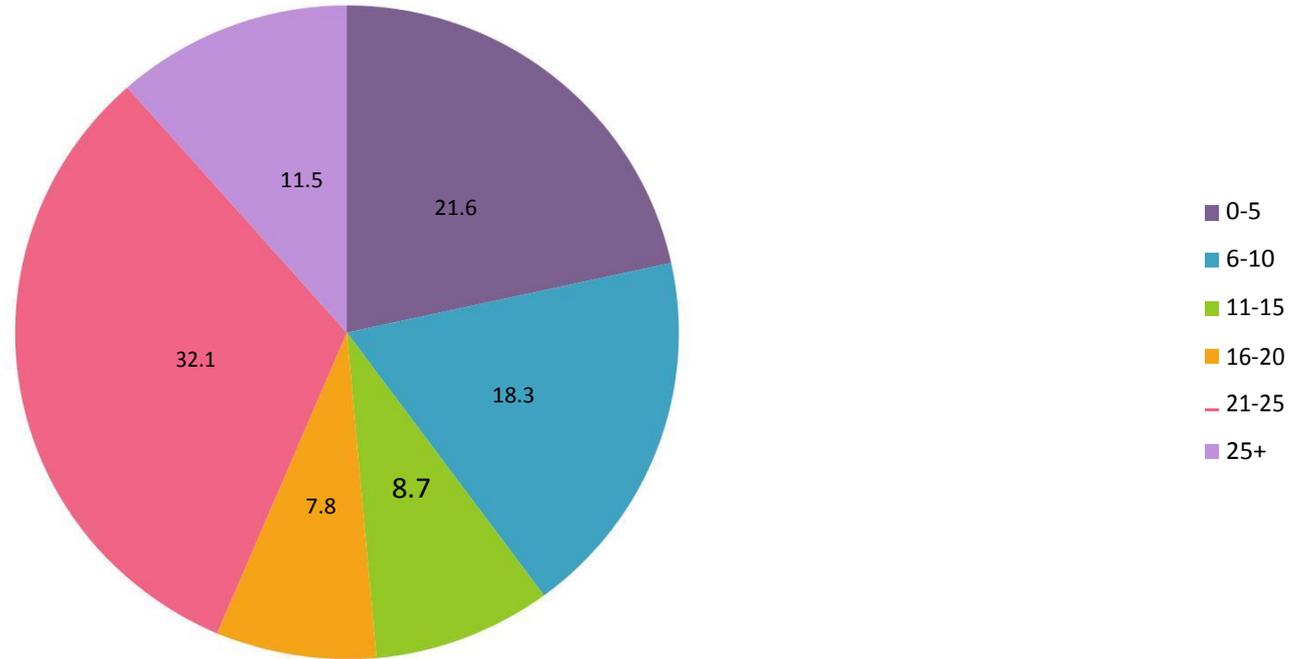


Which of the following describes what you do in downtown White River Junction? Check all that apply.



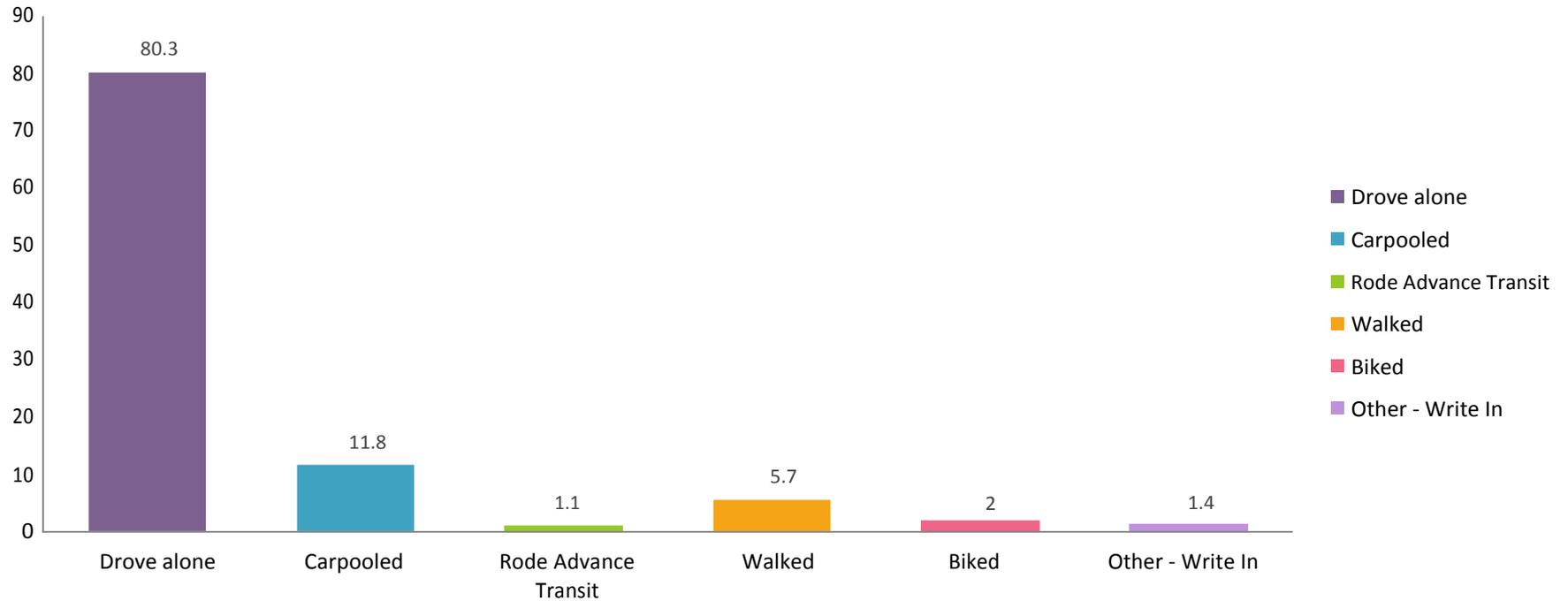
I live here.	13.3%	59
I work here.	50.0%	221
I own or manage a business here.	7.7%	34
I shop here.	54.8%	242
I am a student at the Center for Cartoon Studies.	1.1%	5
I attend performances at Northern Stage.	36.9%	163
I dine out here.	60.0%	265
I visit downtown White River Junction for other arts or cultural activities, such as First Friday or Main Street Museum happenings.	41.2%	182
Other - Write In	14.9%	66

How many days per month are you typically in downtown White River Junction? A 5 day/week job would total about 22 days per month.



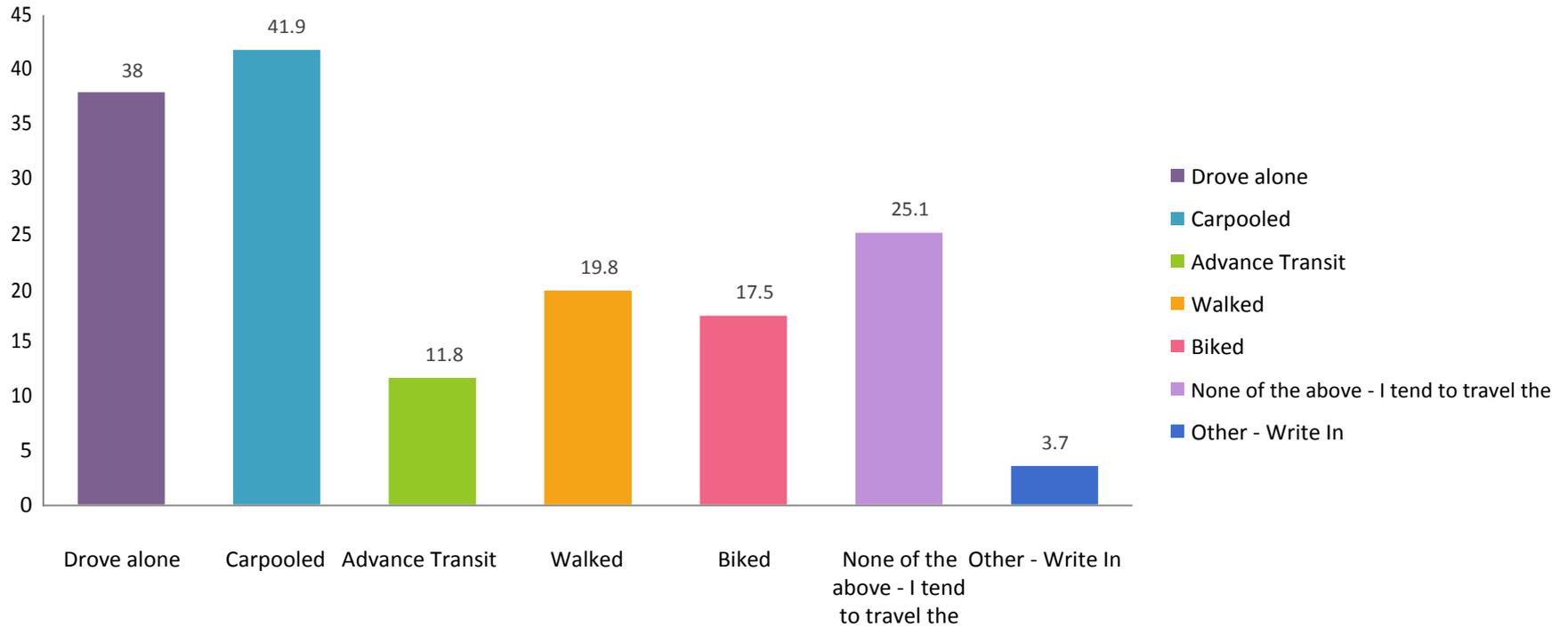
Value	Percent	Count
0-5	21.6%	94
6-10	18.3%	80
11-15	8.7%	38
16-20	7.8%	34
21-25	32.1%	140
25+	11.5%	50
	Total	436

How did you travel to downtown White River Junction on your most recent trip?



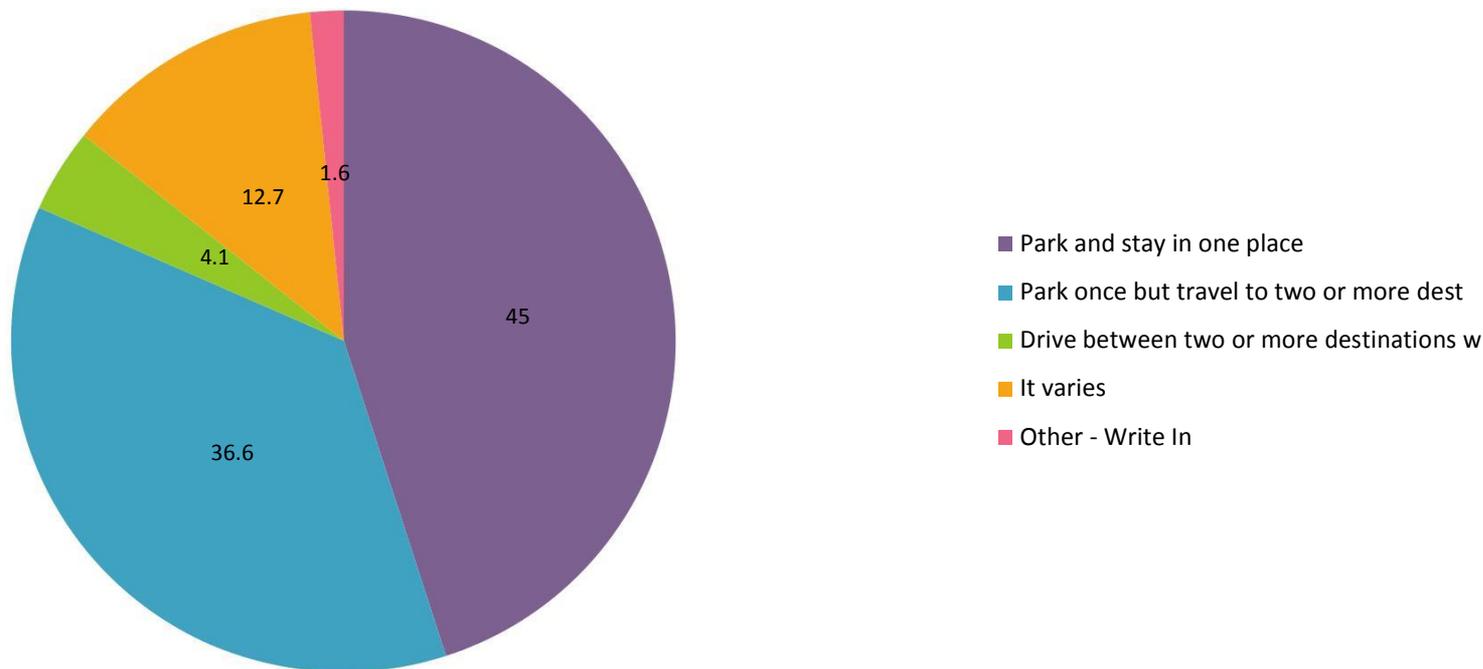
Value	Percent	Count
Drove alone	80.3%	354
Carpooled	11.8%	52
Rode Advance Transit	1.1%	5
Walked	5.7%	25
Biked	2.0%	9
Other - Write In	1.4%	6

In what other ways have you travelled to downtown White River Junction? Check all that apply.



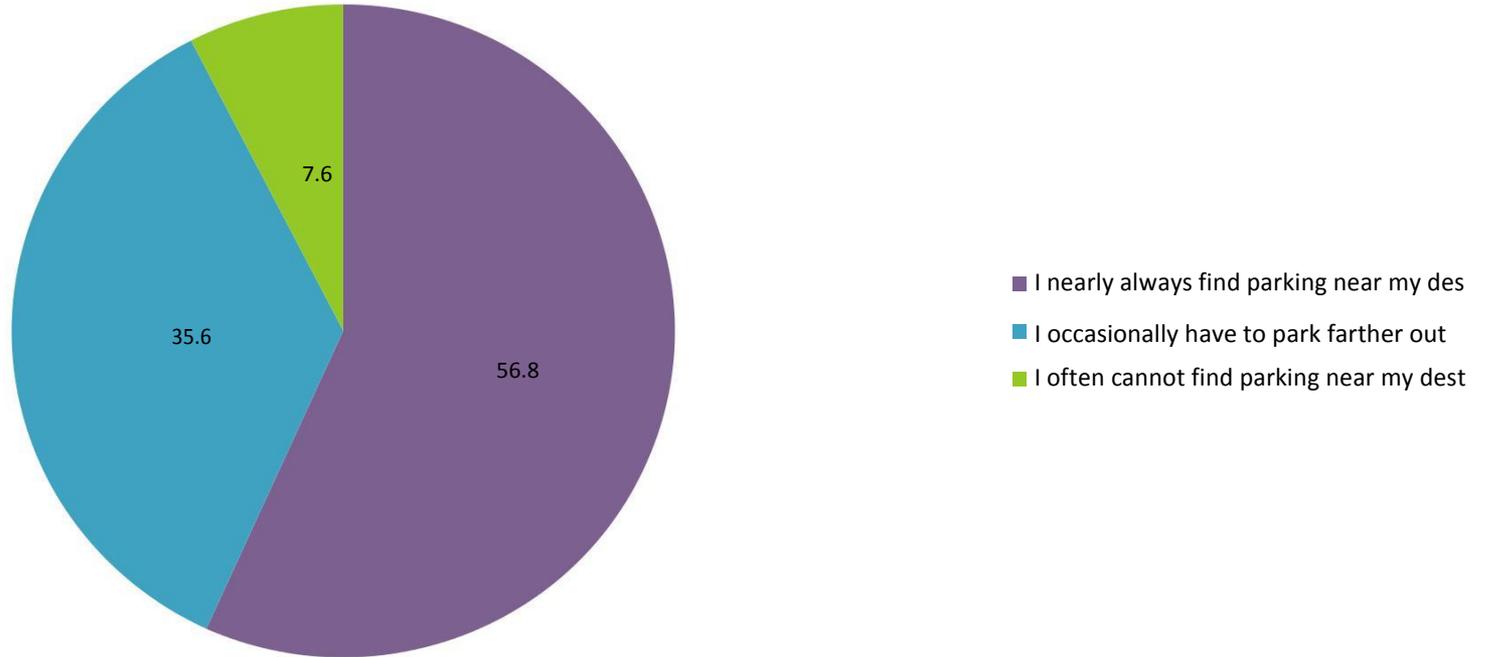
Value	Percent	Count
Drove alone	38.0%	165
Carpooled	41.9%	182
Advance Transit	11.8%	51
Walked	19.8%	86
Biked	17.5%	76
None of the above - I tend to travel the same way every time	25.1%	109
Other - Write In	3.7%	16

Once you arrive in downtown White River Junction, do you tend to...



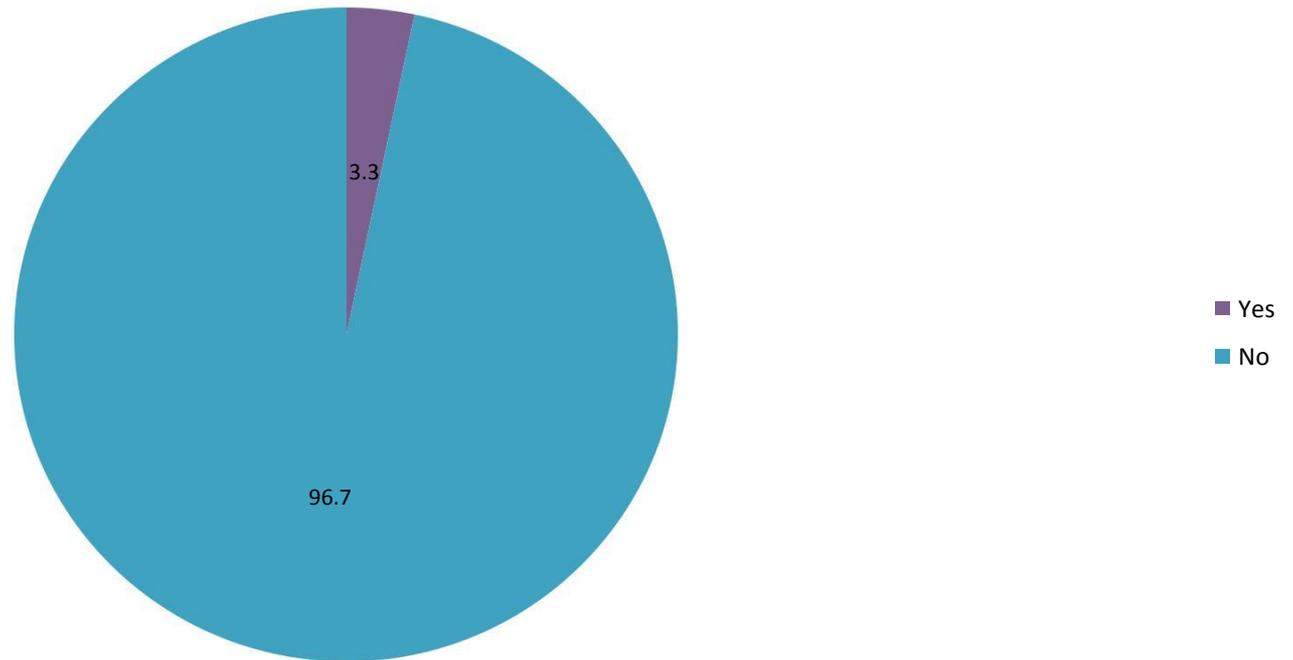
Value	Percent	Count
Park and stay in one place	45.0%	198
Park once but travel to two or more destinations in downtown by foot or bike	36.6%	161
Drive between two or more destinations within the downtown	4.1%	18
It varies	12.7%	56
Other - Write In	1.6%	7
Total		440

In general, which of the following best describes your experience parking in White River Junction?



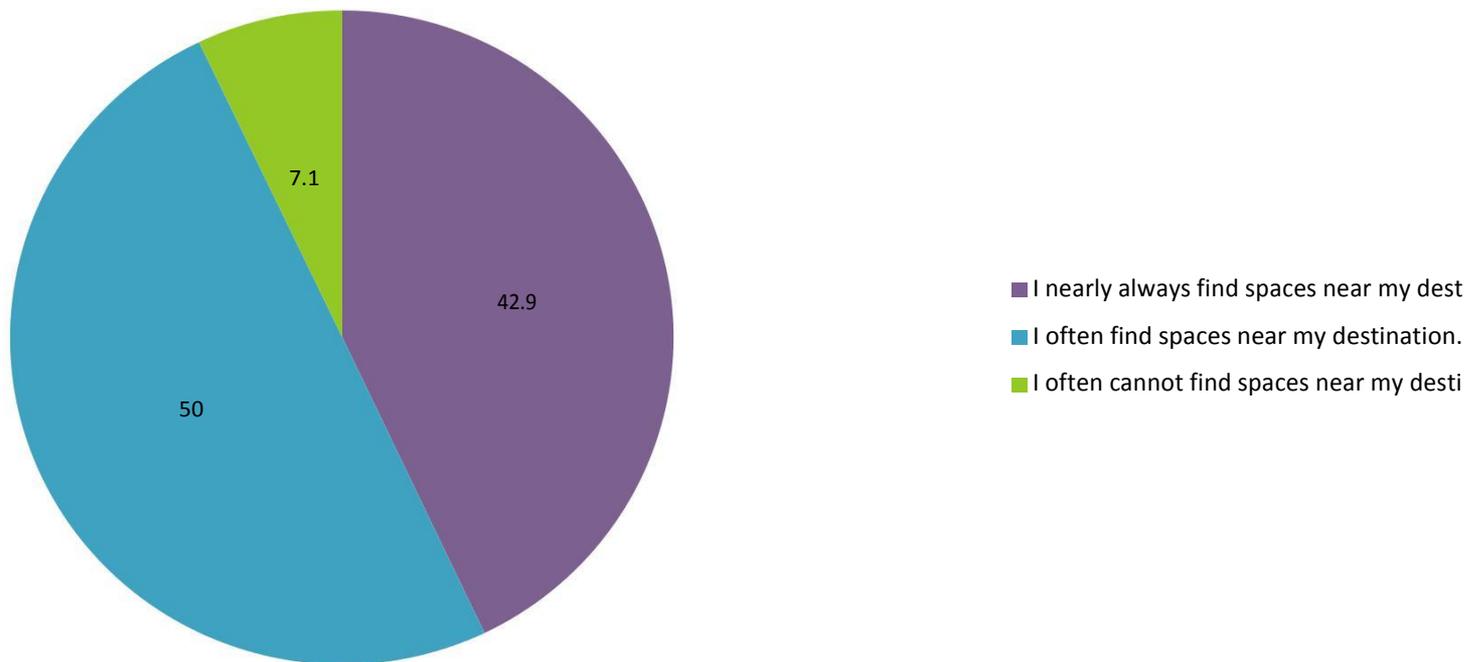
Value	Percent	Count
I nearly always find parking near my destination.	56.8%	239
I occasionally have to park farther out and walk a few minutes to my destination.	35.6%	150
I often cannot find parking near my destination.	7.6%	32
	Total	421

Do you use accessible parking to accommodate a wheelchair, walker, or other mobility device?



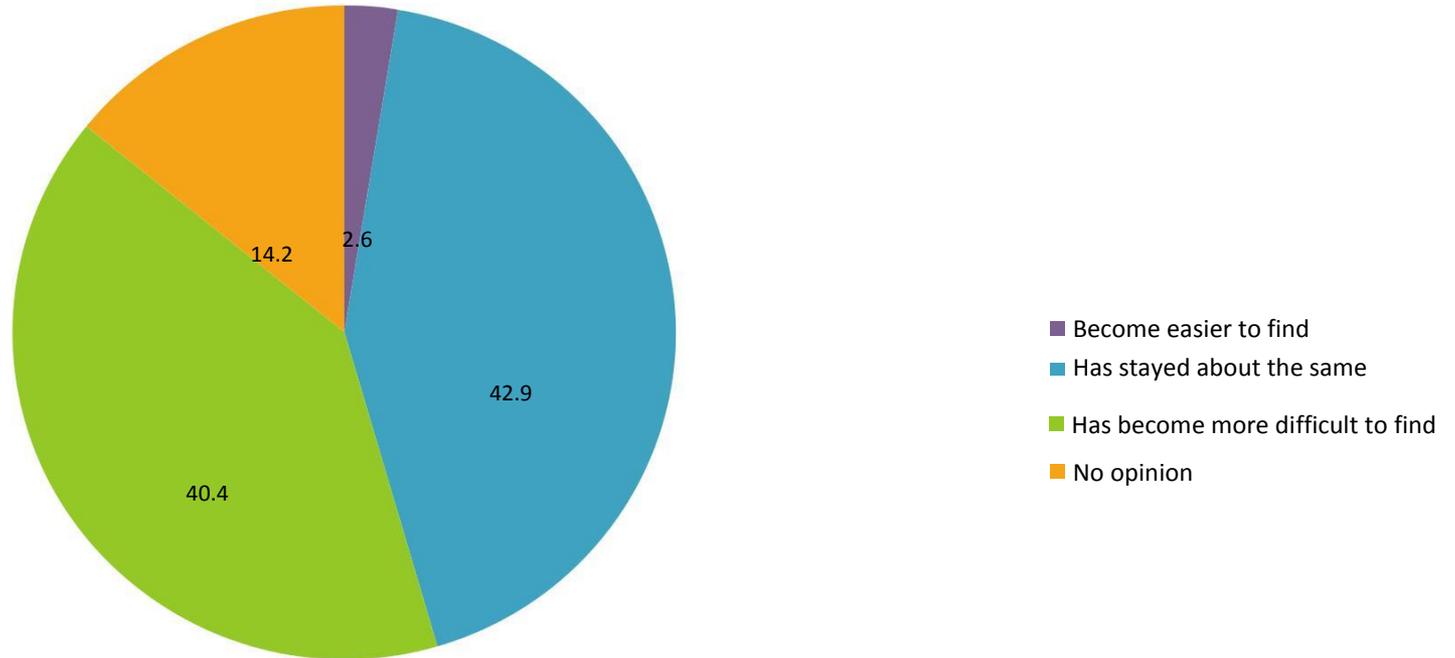
Value	Percent	Count
Yes	3.3%	14
No	96.7%	414
	Total	428

How would you describe your experience finding accessible parking?



Value	Percent	Count
I nearly always find spaces near my destination.	42.9%	6
I often find spaces near my destination.	50.0%	7
I often cannot find spaces near my destination.	7.1%	1
	Total	14

Do you think parking in White River Junction over the past three years has:

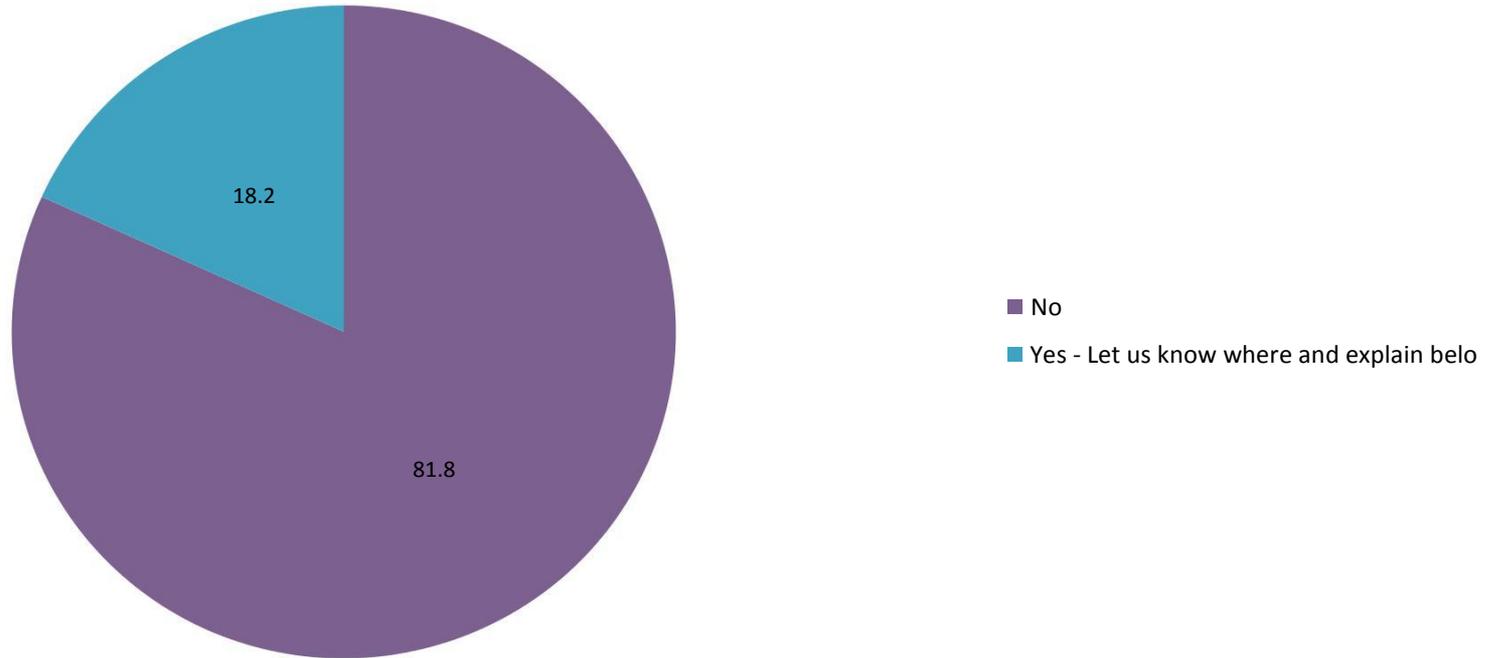


Value	Percent	Count
Become easier to find	2.6%	11
Has stayed about the same	42.9%	185
Has become more difficult to find	40.4%	174
No opinion	14.2%	61

Total

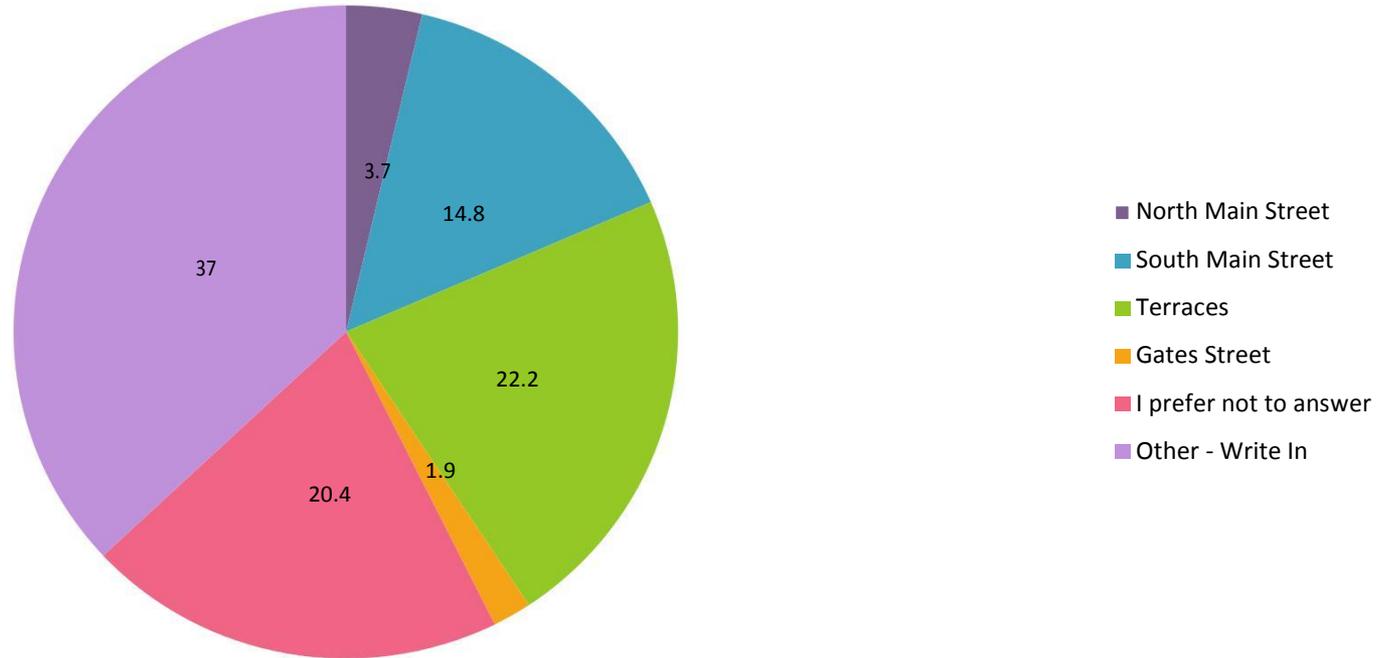
431

Are there places where you feel it's unsafe to park?



Value	Percent	Count
No	81.8%	341
Yes - Let us know where and explain below	18.2%	76
Total		417

In what area of downtown do you live?



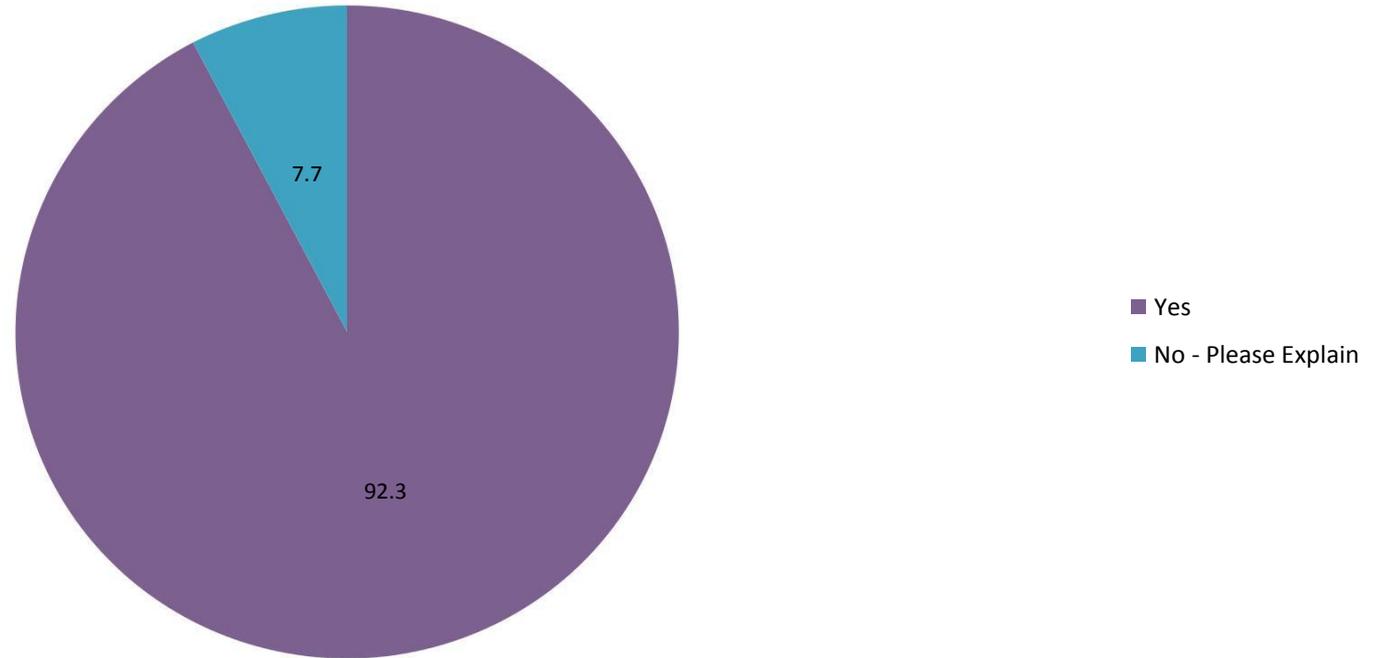
Value	Percent	Count
North Main Street	3.7%	2
South Main Street	14.8%	8
Terraces	22.2%	12
Gates Street	1.9%	1
I prefer not to answer	20.4%	11
Other - Write In	37.0%	20
Total		54

What kind of parking is available at your home?



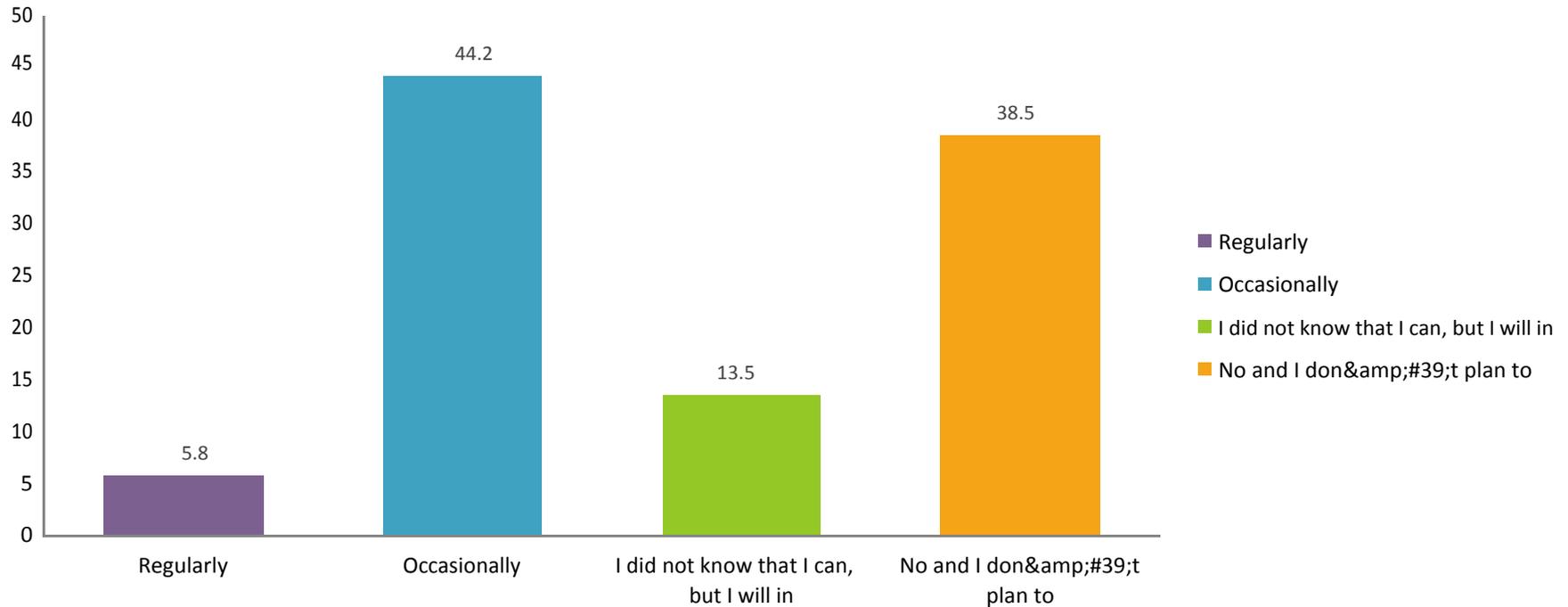
Value	Percent	Count
On-street	5.5%	3
Shared private lot	21.8%	12
Private driveway	67.3%	37
No parking is available on-site	7.3%	4
Other - Write In	5.5%	3

Do you have adequate parking at home?



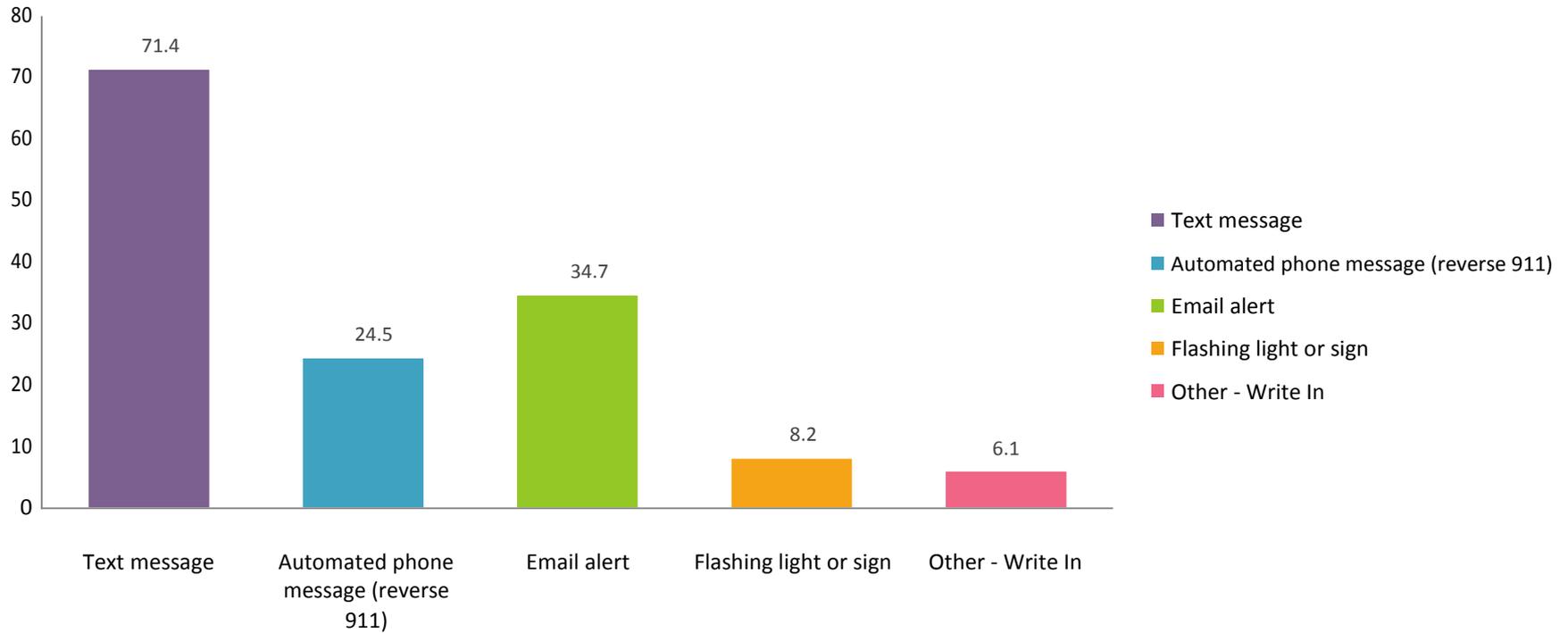
Value	Percent	Count
Yes	92.3%	48
No - Please Explain	7.7%	4
	Total	52

During winter months, do you park in the lot behind the Former Legion/Northern Stage/Barrette Center for the Arts...



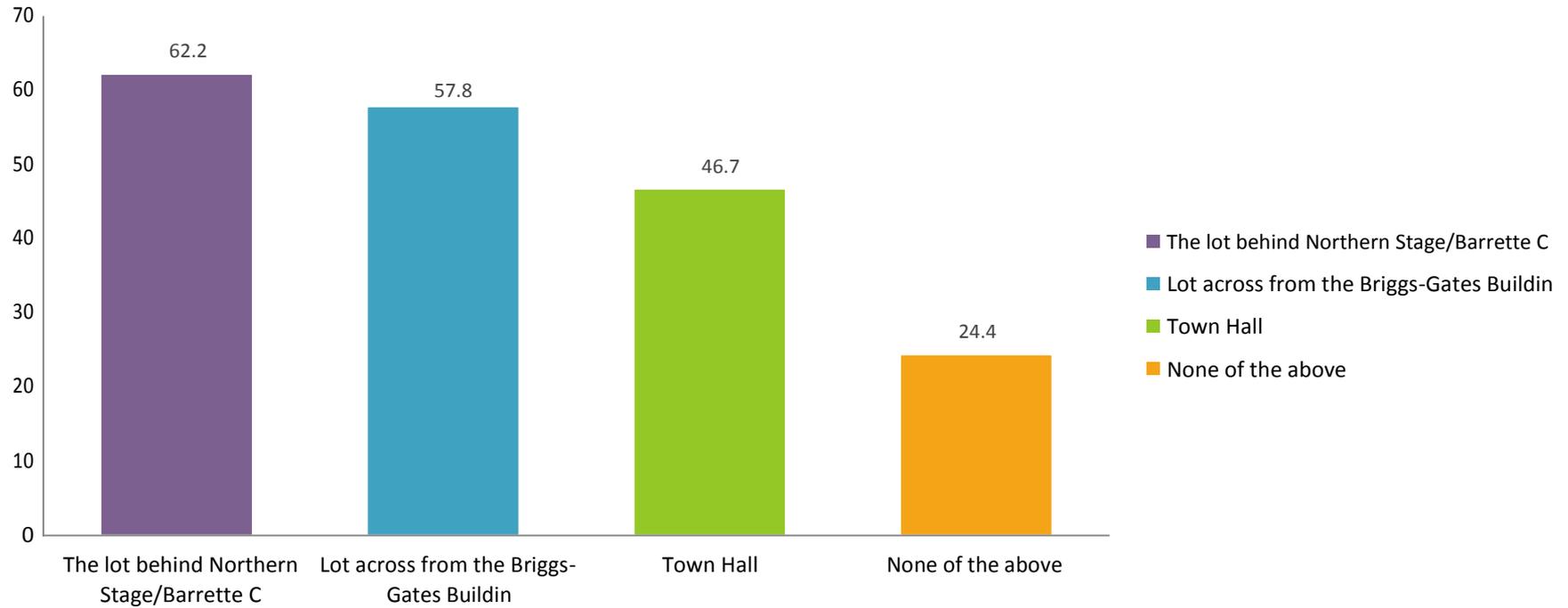
Value	Percent	Count
Regularly	5.8%	3
Occasionally	44.2%	23
I did not know that I can, but I will in the future	13.5%	7
No and I don't plan to	38.5%	20

If the Town needs you to move your vehicle due to a snow storm or other weather event, what's the best way to notify you?



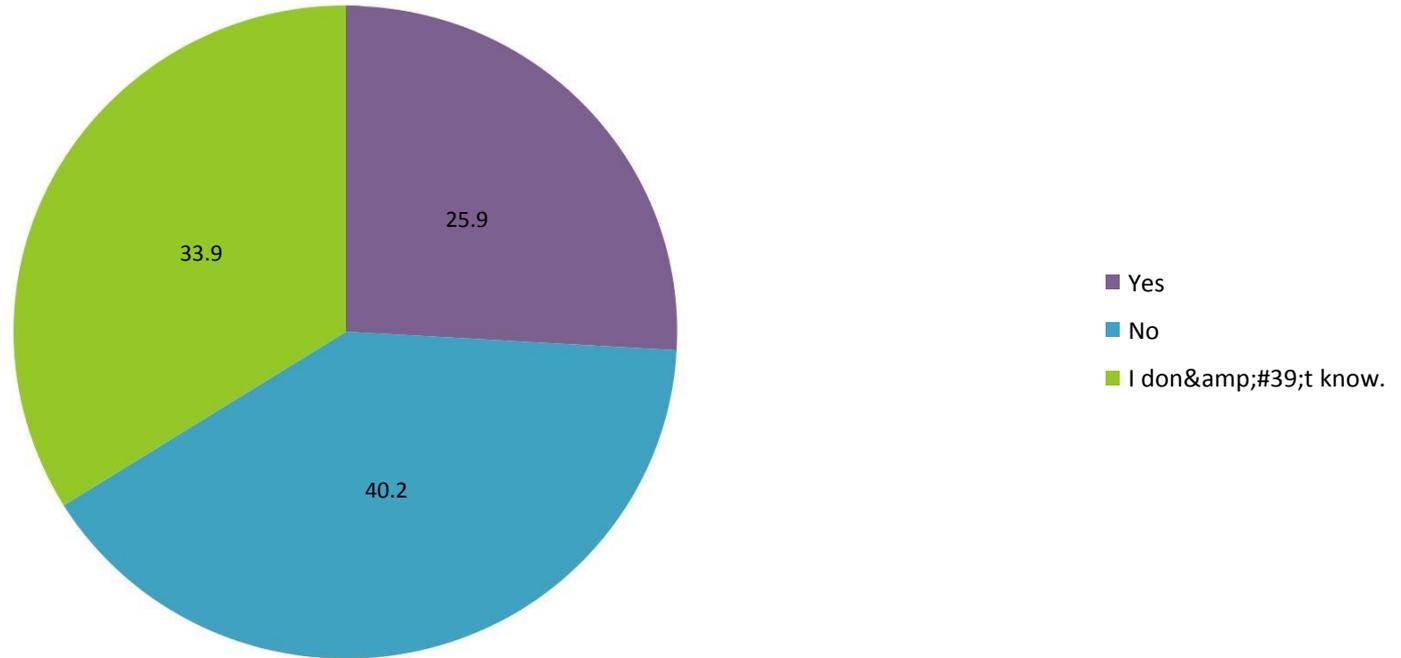
Value	Percent	Count
Text message	71.4%	35
Automated phone message (reverse 911)	24.5%	12
Email alert	34.7%	17
Flashing light or sign	8.2%	4
Other - Write In	6.1%	3

If the Town designated a lot for residents to use during an overnight storm, would you be willing to park in any of the following town lots?



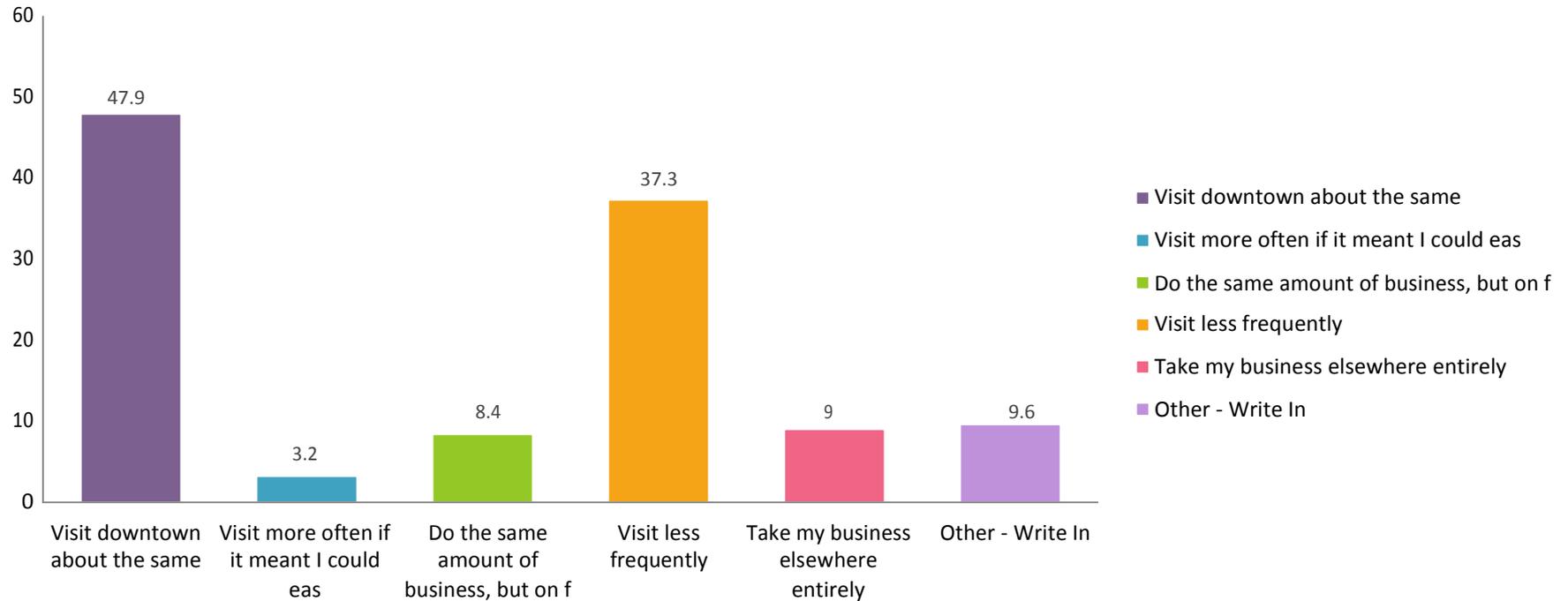
Value	Percent	Count
The lot behind Northern Stage/Barrette Center for the Arts	62.2%	28
Lot across from the Briggs-Gates Building	57.8%	26
Town Hall	46.7%	21
None of the above	24.4%	11

Do you think parking meters in the downtown would encourage more turnover of spaces?



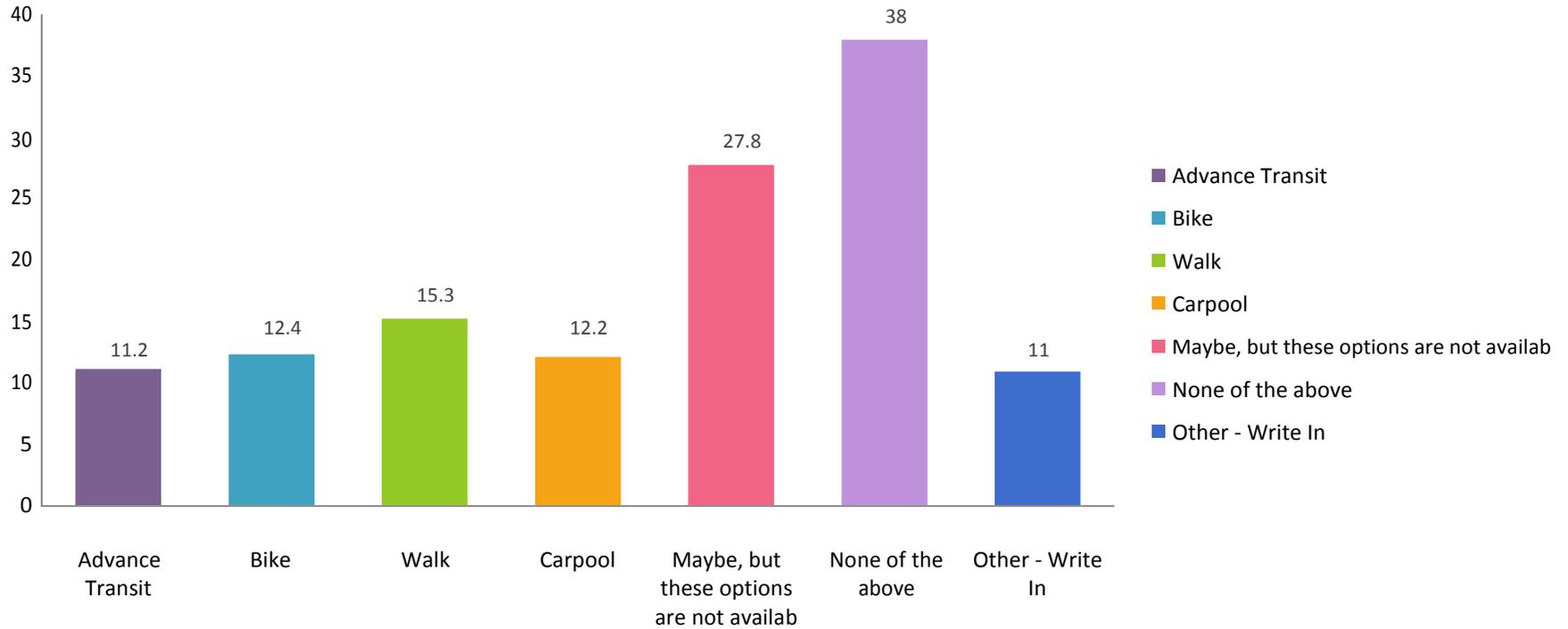
Value	Percent	Count
Yes	25.9%	106
No	40.2%	165
I don't know.	33.9%	139
	Total	410

If downtown White River Junction had hourly parking meters, would you...[check all that apply]



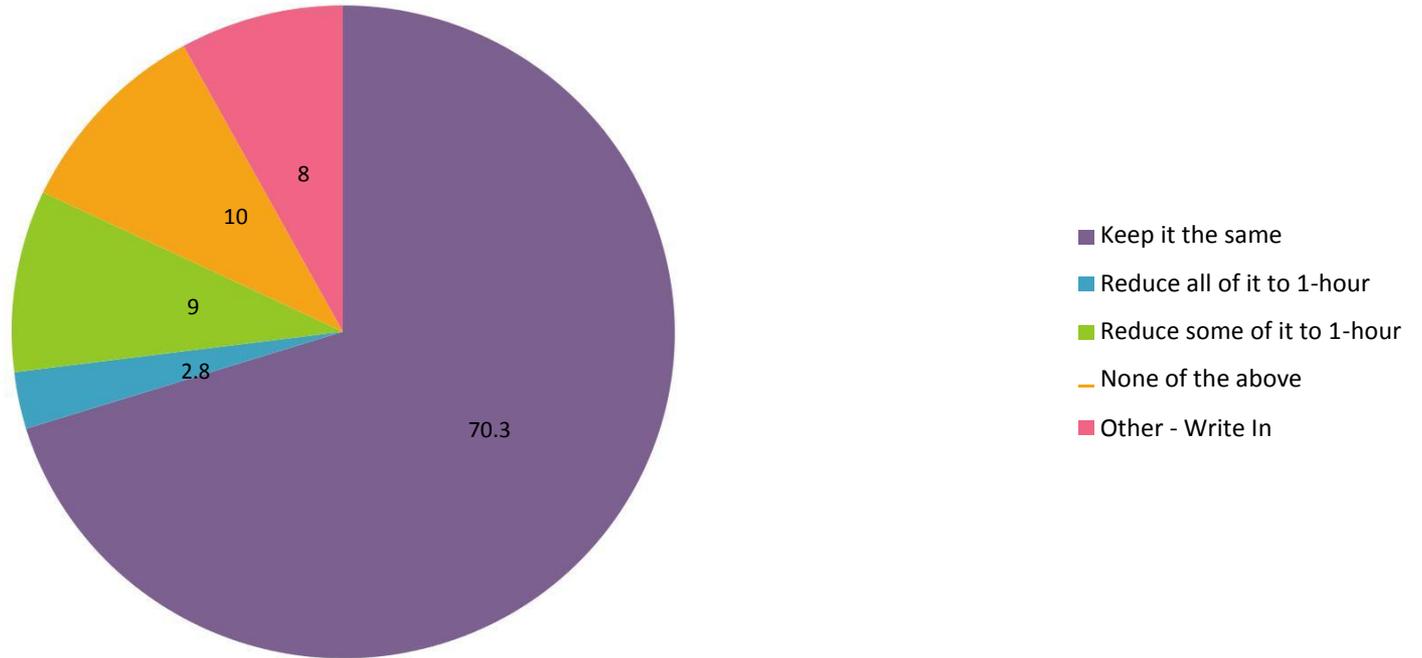
Value	Percent	Count
Visit downtown about the same	47.9%	149
Visit more often if it meant I could easily find a space near my destination	3.2%	10
Do the same amount of business, but on fewer trips	8.4%	26
Visit less frequently	37.3%	116
Take my business elsewhere entirely	9.0%	28
Other - Write In	9.6%	30

If it cost money to park in White River Junction, would you consider using any of the following resources to get into downtown?



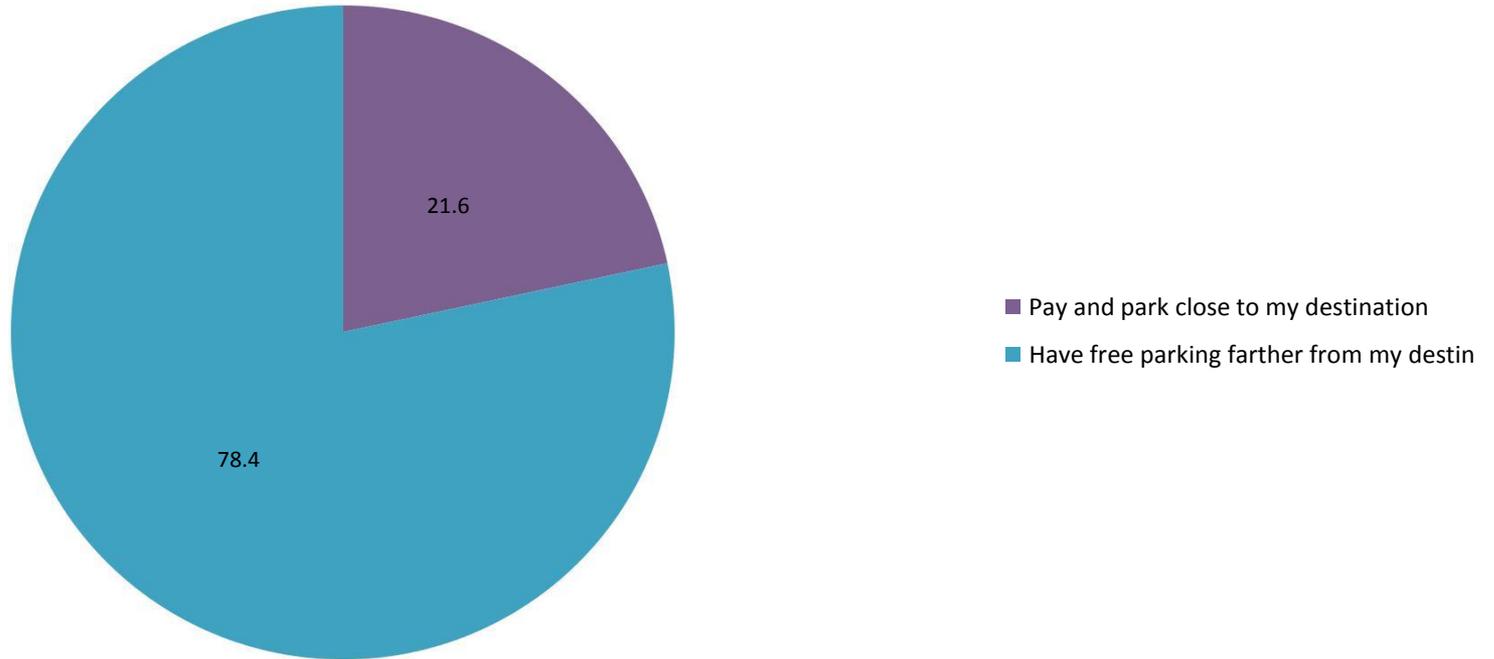
Value	Percent	Count
Advance Transit	11.2%	47
Bike	12.4%	52
Walk	15.3%	64
Carpool	12.2%	51
Maybe, but these options are not available to me	27.8%	116
None of the above	38.0%	159
Other - Write In	11.0%	46

The downtown has 2-hour on-street parking. Do you think the Town should...



Value	Percent	Count
Keep it the same	70.3%	281
Reduce all of it to 1-hour	2.8%	11
Reduce some of it to 1-hour	9.0%	36
None of the above	10.0%	40
Other - Write In	8.0%	32
	Total	400

I would rather



Value	Percent	Count
Pay and park close to my destination	21.6%	87
Have free parking farther from my destination	78.4%	316
	Total	403

Employee Needs and Habits



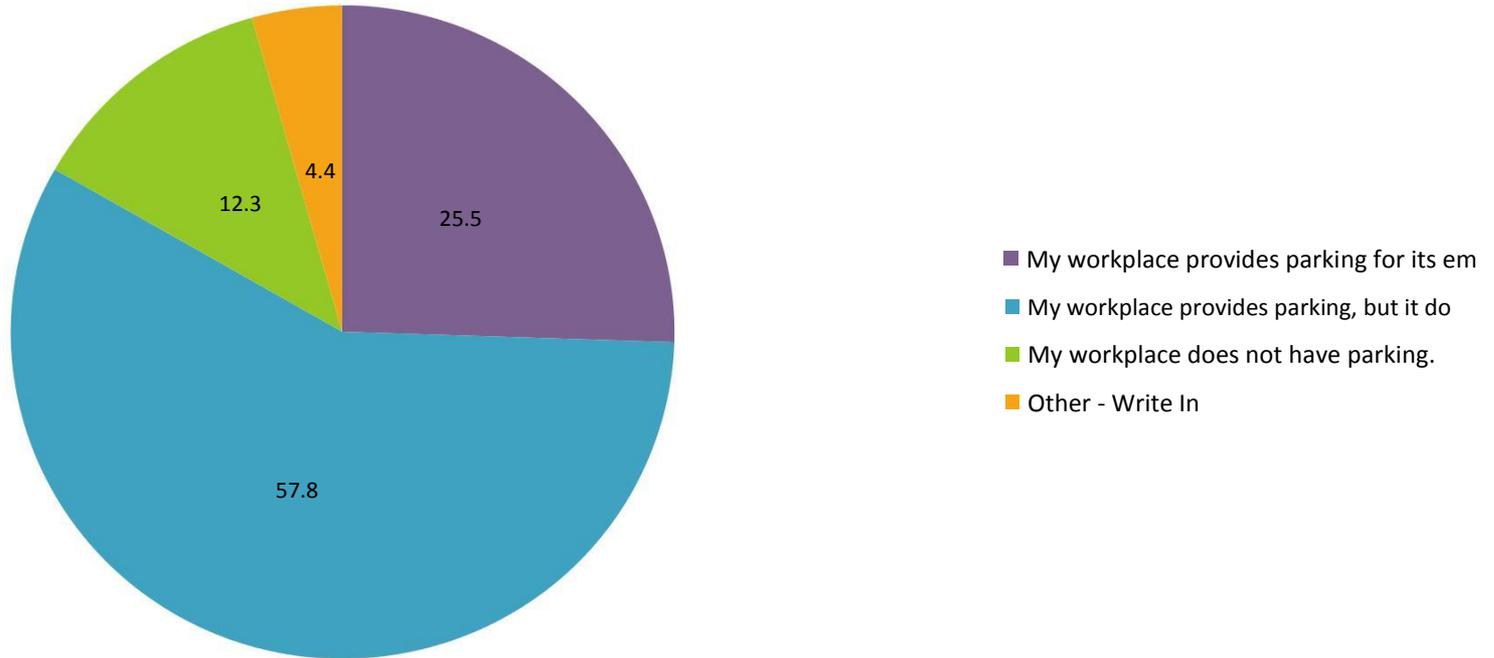
This bike is part of
Vital Communities' Bike Share

Save gas, cut down on traffic, and get fresh air and exercise - form your own workplace bike share for daytime trips around town.

Contact us for more info:
UVTMA@VitalCommunities.org or
802.391.9100

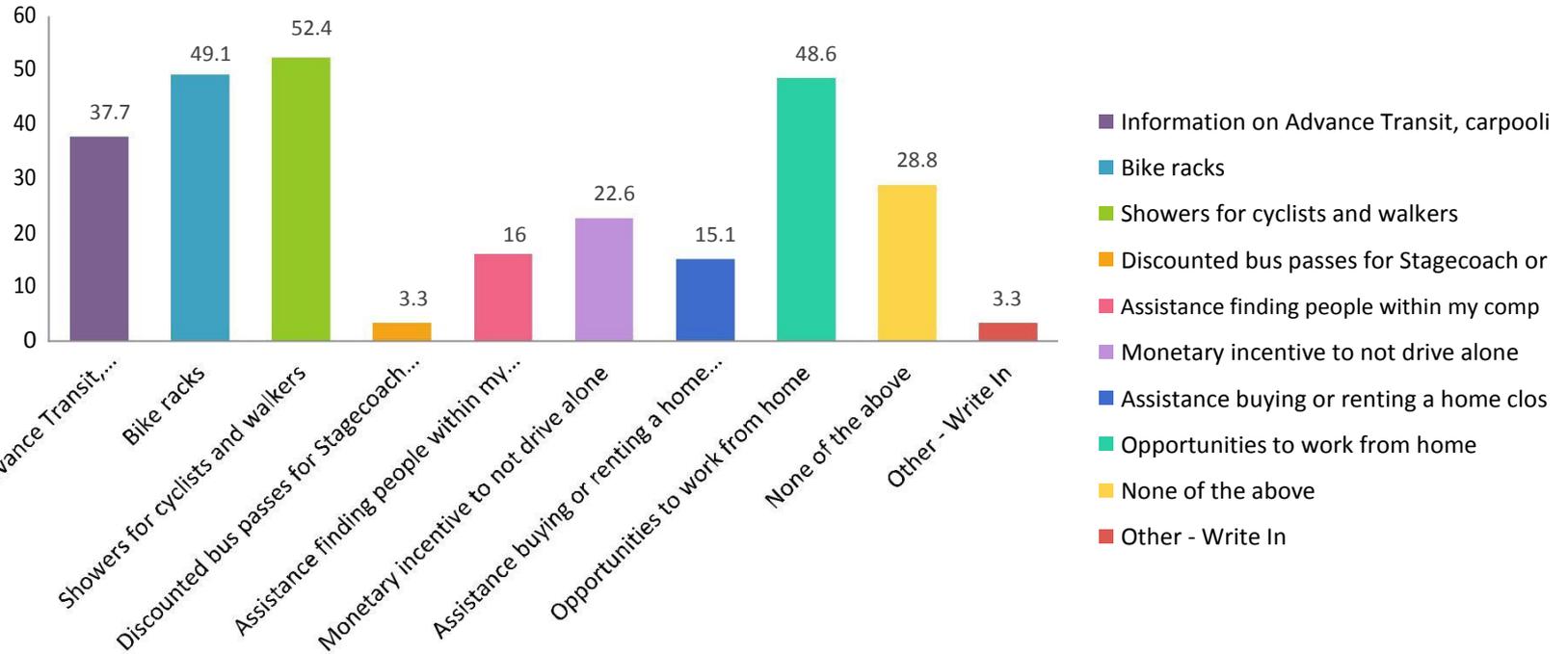
Working Together for
VITAL COMMUNITIES
VitalCommunities.org
195 North Main Street
White River Junction, Vermont 05001

Which of the following best describes parking available to employees at your workplace?



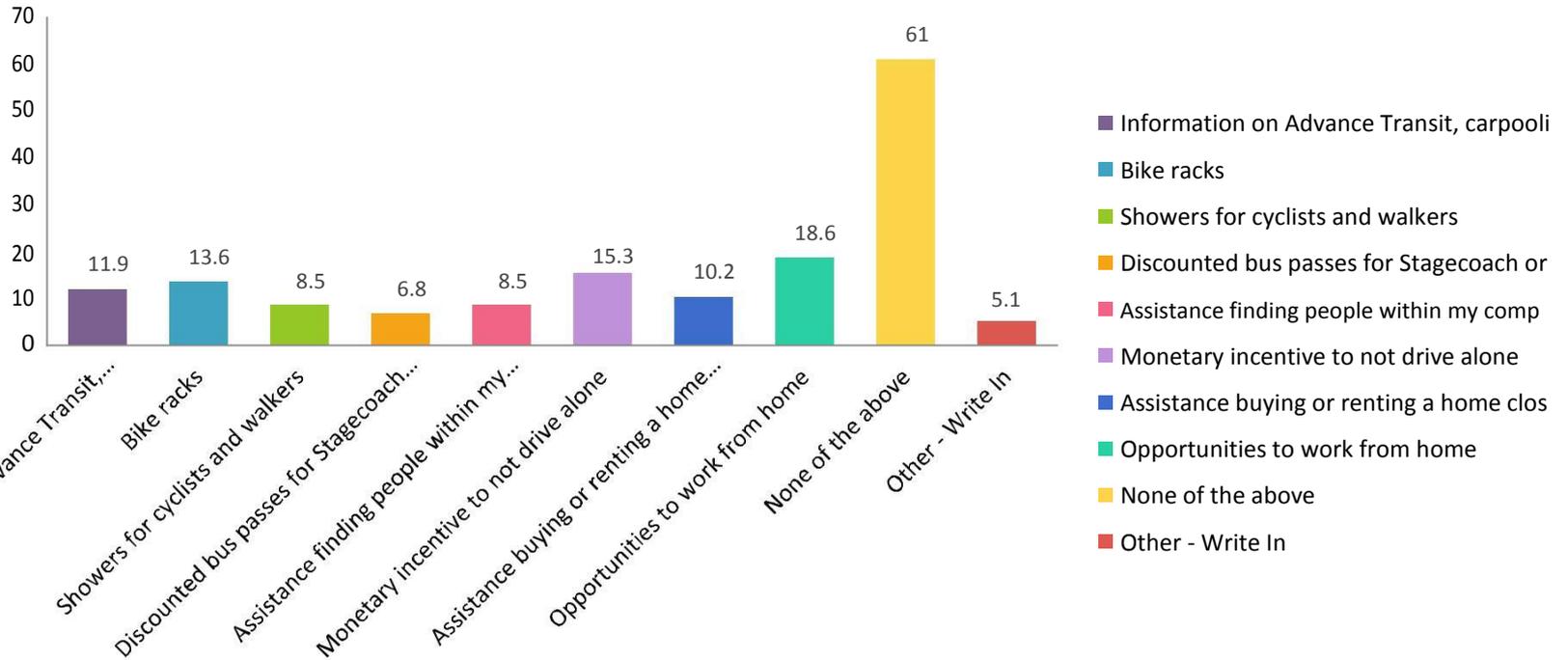
Value	Percent	Count
My workplace provides parking for its employees.	25.5%	52
My workplace provides parking, but it does not guarantee a space for all employees.	57.8%	118
My workplace does not have parking.	12.3%	25
Other - Write In	4.4%	9
	Total	204

Which transportation programs does your workplace offer? Check all that apply.



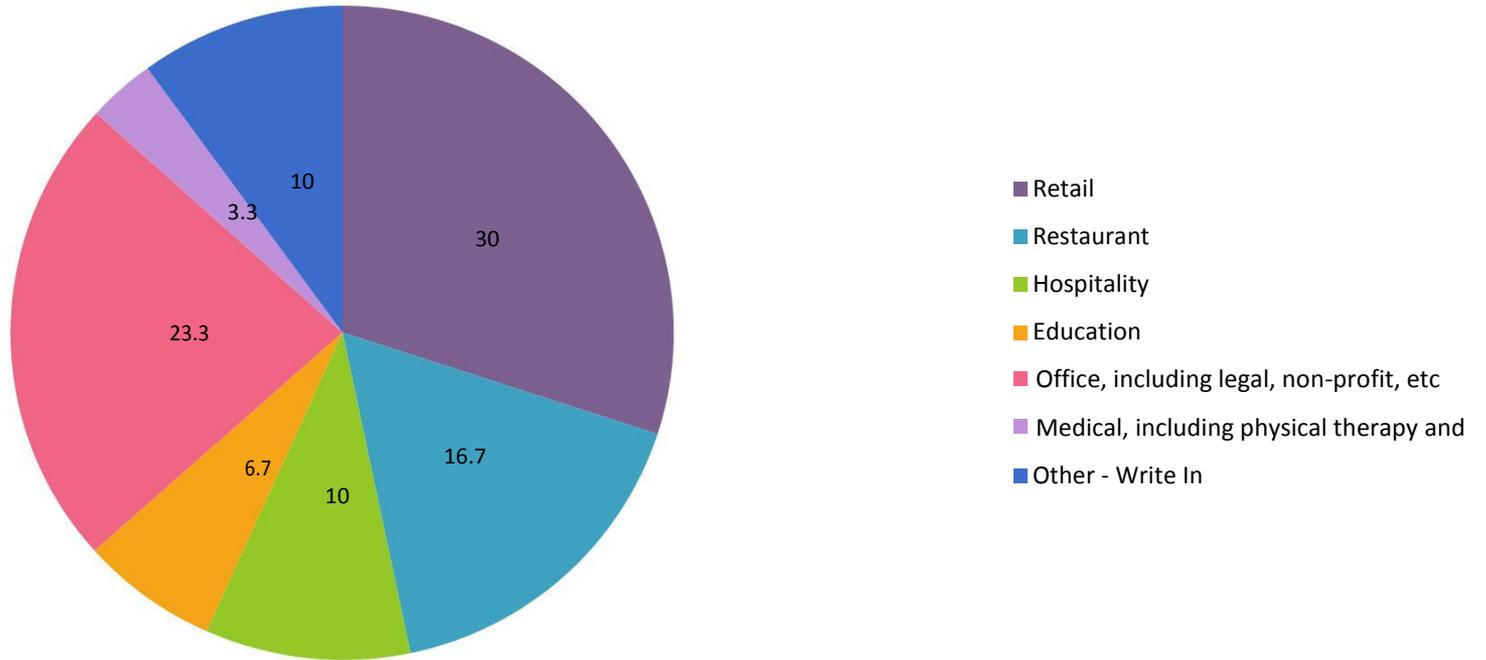
Information on Advance Transit, carpooling, biking, or walking	37.7%	80
Bike racks	49.1%	104
Showers for cyclists and walkers	52.4%	111
Discounted bus passes for Stagecoach or the Current	3.3%	7
Assistance finding people within my company who could carpool with me	16.0%	34
Monetary incentive to not drive alone	22.6%	48
Assistance buying or renting a home close to work	15.1%	32
Opportunities to work from home	48.6%	103
None of the above	28.8%	61
Other - Write In	3.3%	7

Which of the following would you use if it were available? Check all that apply.



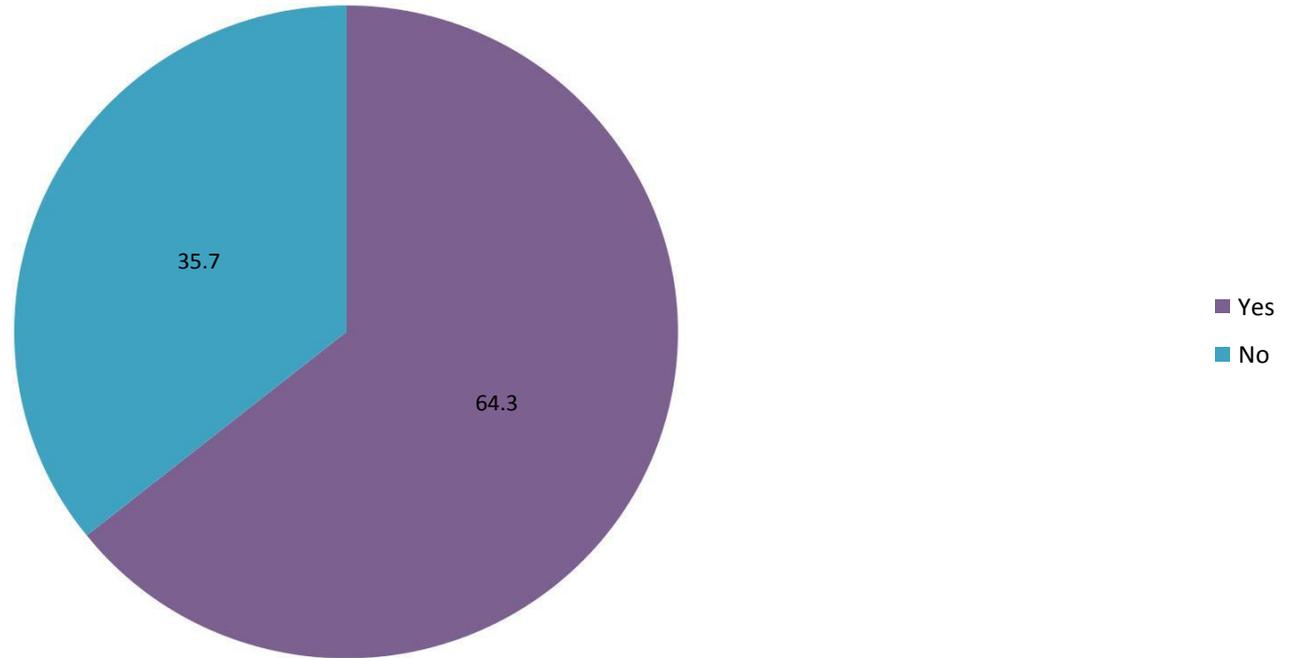
Value	Percent	Count
Information on Advance Transit, carpooling, biking, or walking	11.9%	7
Bike racks	13.6%	8
Showers for cyclists and walkers	8.5%	5
Discounted bus passes for Stagecoach or the Current	6.8%	4
Assistance finding people within my company who could carpool with me	8.5%	5
Monetary incentive to not drive alone	15.3%	9
Assistance buying or renting a home close to work	10.2%	6
Opportunities to work from home	18.6%	11
None of the above	61.0%	36
Other - Write In	5.1%	3

Different types of businesses and organizations have different parking needs. How do you describe your business?



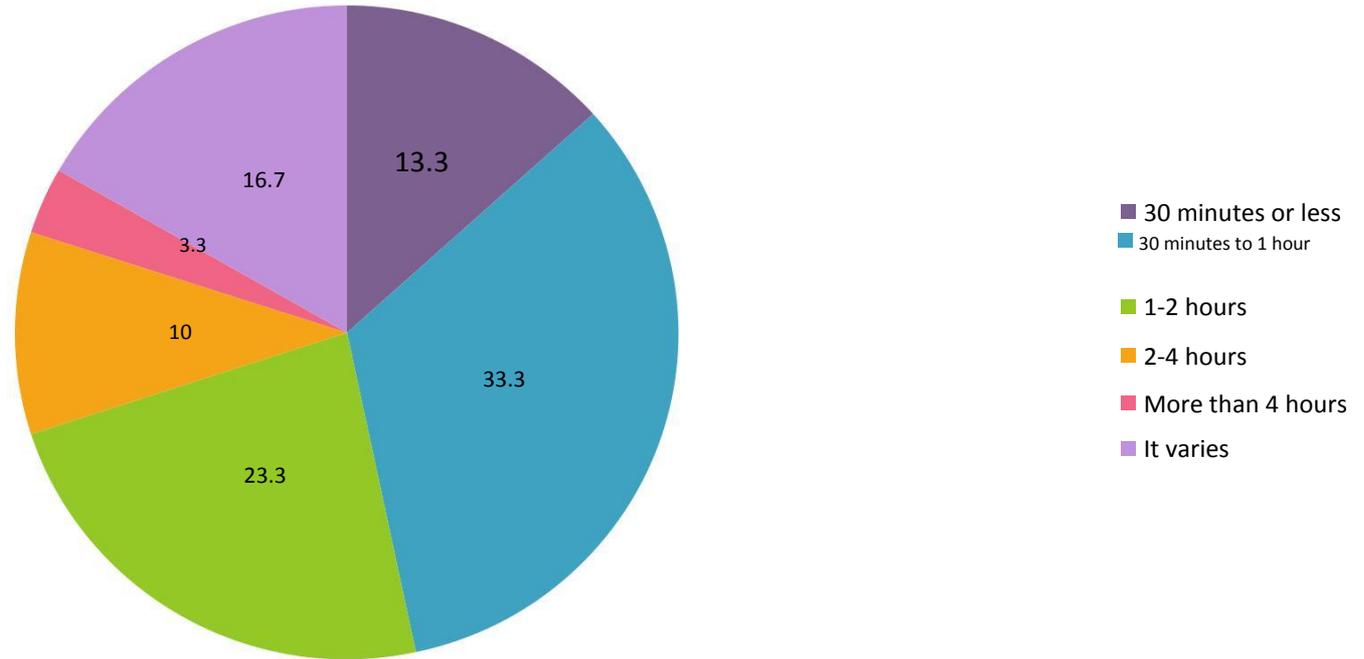
Value	Percent	Count
Retail	30.0%	9
Restaurant	16.7%	5
Hospitality	10.0%	3
Education	6.7%	2
Office, including legal, non-profit, etc.	23.3%	7
Medical, including physical therapy and psychotherapy	3.3%	1
Other - Write In	10.0%	3
Total		30

Does your business operate during typical office hours, such as 8:00 or 9:00 AM to 5:00 PM?



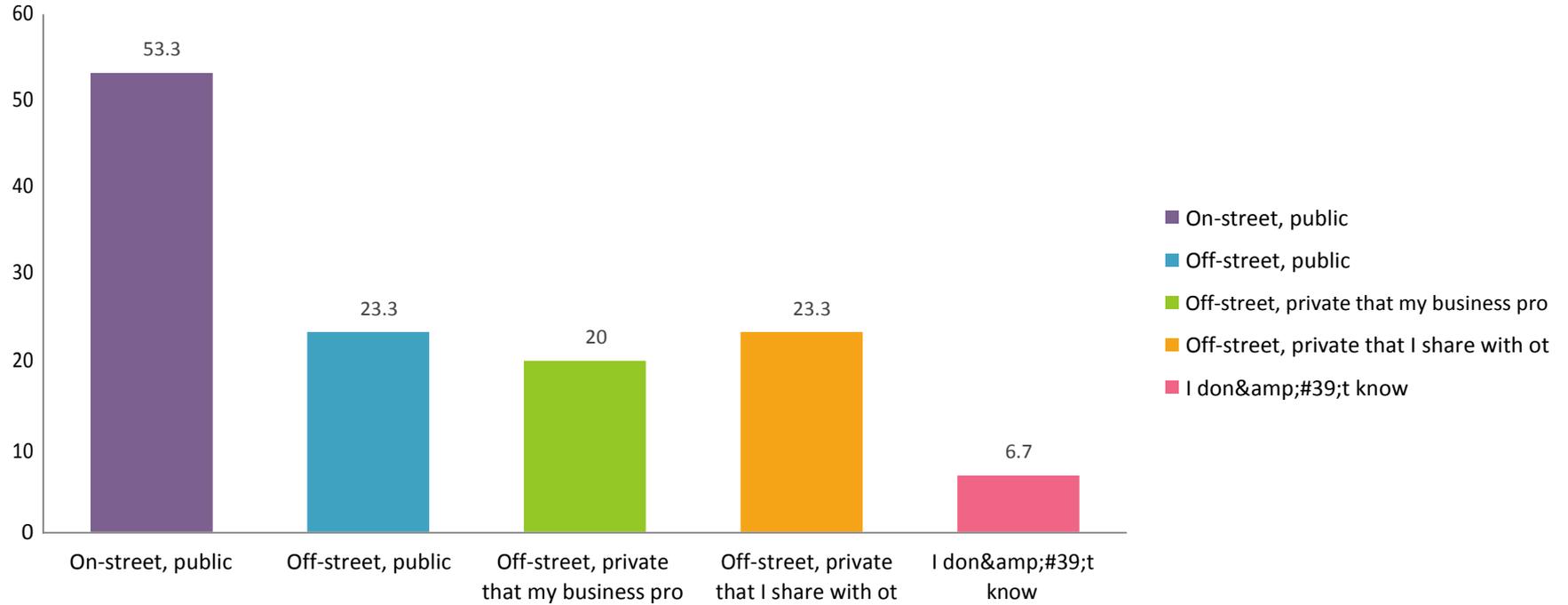
Value	Percent	Count
Yes	64.3%	18
No	35.7%	10
Total		28

How long do most of your clients or customers need parking?



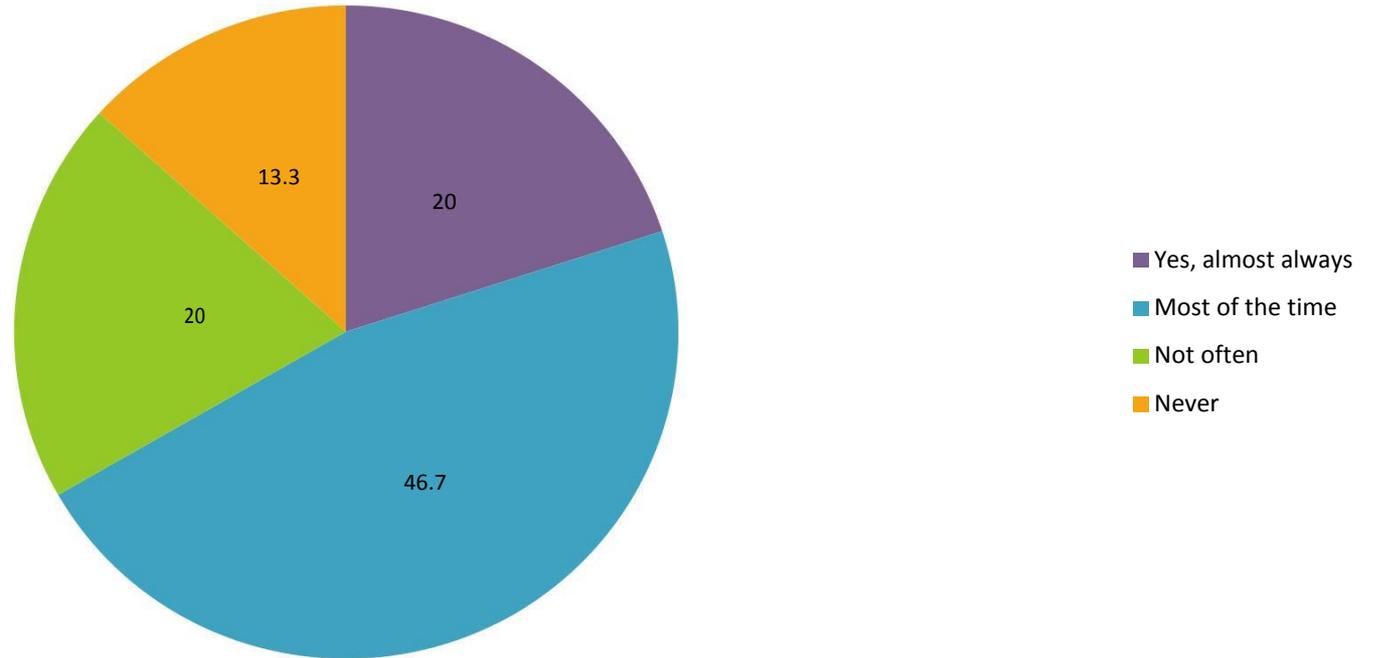
Value	Percent	Count
30 minutes or less	13.3%	4
30 minutes to 1 hour	33.3%	10
1-2 hours	23.3%	7
2-4 hours	10.0%	3
More than 4 hours	3.3%	1
It varies	16.7%	5
Total		30

What type of parking do your clients/customers most often use?



Value	Percent	Count
On-street, public	53.3%	16
Off-street, public	23.3%	7
Off-street, private that my business provides	20.0%	6
Off-street, private that I share with other businesses	23.3%	7
I don't know	6.7%	2

Is there adequate and convenient PUBLIC parking for your clients/customers?



Value	Percent	Count
Yes, almost always	20.0%	6
Most of the time	46.7%	14
Not often	20.0%	6
Never	13.3%	4
	Total	30

For more info, contact Aaron Brown: aaron@vitalcommunities.org or 802.291.9100



Appendix C

Downtown White River Junction Stakeholder Interviews
Conducted by Aaron Brown

Stakeholder Interview: Bill Bittinger

1. What is your name and affiliation with the downtown?

Bill Bittinger, property owner, White River Film Festival, Hartford Development Corporation. Owner of Railroad Row (3 buildings), Dreamland Building, Bridge and Main.

2. What kind of parking is available at your location(s)?

Railroad Row: on-site under buildings (20 spaces), street, and remote. The longstanding issue here is the Town's decision not to apply the two-hour limit along Veterans Park. The tenants are powerful in the Town, and the Town won't resolve the problem. The same parking standard should apply to that street and help clients who are visiting those businesses.

Dreamland: none

Bridge and Main: none

The 14 acres beyond the train station belongs to the State and could be a great place for long-term parking. VTTrans said that they would allow railroad crossing there and studied it, but that hasn't happened.

3. What kind of parking do clients/customers at your location need? Overnight? One-hour?

Clients one or two hours. Tenants need all-day parking. 15 Railroad Row has residential space and could use spaces overnight.

4. Are your clients/customers satisfied with current parking options? Please explain.

Matters aren't stellar. People love the downtown, but not the parking. Businesses have raised concerns.

5. What kind of transportation do people use to get to your location?

People tend to drive. A park-and-ride near Sykes could help shuttle people downtown.

6. Over time, do you expect your organization to need about the same amount of parking, more parking, or less parking? On what information do you base that assessment?

Probably about the same.

7. Have you noticed any change in how people access your location? For example, do more people seem to bike or take Advance Transit to get there than in previous years?

Bike lanes would help, but no major change has probably occurred. Winter makes it difficult. Office spaces include showers on each floor to help bikers and walkers.

8. Do you think your organization would benefit from any of the following?

- a. Parking meters: no. The suburban mentality would prevent meters from working.
- b. Enforcement of existing two-hour parking limits: a resounding yes.
- c. Expansion of Advance Transit to nights and weekends: it would help many, but perhaps not business tenants. Bridge and Main will have affordable housing and residents could benefit. A carshare program or Uber-like service could also help provide alternatives to car ownership.

- d. Better lighting: American Legion needs better lighting. The lighting in the park could be improved.
 - e. Better parking signage: no thoughts. Make it clear where long-term parking exists.
9. For employers:
- a. How do your employees get to work?
 - b. Where do they park?
10. Is there anything else you'd like us to know about parking and transportation in White River Junction?

Implement two-hour parking on Railroad Row, improve lighting at the Legion, and expand long-term parking behind the train station. People are rooting for the continued investment in the downtown. Let's support it.

Stakeholder Interview: Big Fatty's

1. What is your name and affiliation with the downtown?

Brandon Fox, owner of Big Fatty's Barbecue and Maple Street Catering

2. What kind of parking is available at your location(s)?

Approximately 15-20 on-site spaces, nearby on-street parking. Some employees and customers might park around the downtown.

3. What kind of parking do clients/customers at your location need? Overnight? One-hour?

Customers who need parking range from five minutes for pick-up order to 1-1.5 hours for dine-in customers.

4. Are your clients/customers satisfied with current parking options? Please explain.

Absolutely not. The main complaint is about lack of spaces. Staff complain about the lack of lighting, including in the privately owned lot behind the restaurant.

5. What kind of transportation do people use to get to your location?

It's a mix of biking, walking, and cars during lunch. A lot of downtown office workers walk to the restaurant. Mostly cars at night.

6. Over time, do you expect your organization to need about the same amount of parking, more parking, or less parking? On what information do you base that assessment?

At least double. I did not expect Big Fatty's to grow as much as it has.

7. Have you noticed any change in how people access your location? For example, do more people seem to bike or take Advance Transit to get there than in previous years?

More walkers during the day.

8. Do you think your organization would benefit from any of the following?
- a. Parking meters.

It would encourage more turnover, but free parking is a nice asset.

- b. Enforcement of existing two-hour parking limits

No.

- c. Expansion of Advance Transit to nights and weekends

Yes.

- d. Better lighting

Yes.

- e. Better parking signage

Yes.

- 9. For employers:
 - a. How do your employees get to work?

A couple bus or walk, but most drive.

- b. Where do they park?

Front of the restaurant, lot behind it, near Vermont Salvage.

- 10. Is there anything else you'd like us to know about parking and transportation in White River Junction?

Parking is the biggest issue that customers complain about.

Stakeholder Interview: Peggy Adams and David Briggs, Gates-Briggs Building

- 1. What is your name and affiliation with the downtown?

Peggy Adams and Dave Briggs: owners and managers of the Hotel Coolidge, landlords to offices in the Gates-Briggs building (state attorney, physical therapists, other consultants). One office has five spaces – shared office concept. That building also has the Briggs opera house. Lynn Capel has taken over food and beverage business in the hotel.

- 2. What kind of parking is available at your location(s)?

On-site parking behind the hotel (30 spaces), on-street municipal parking. The hotel lot is signed.

- 3. What kind of parking do clients/customers at your location need? Overnight? One-hour?

Hotel guests – long- and short-term – need overnight. There are currently 23 monthly guests. Business tenants have access to one space each in the back lot, but they often use street spaces.

- 4. Are your clients/customers satisfied with current parking options? Please explain.

Tourists are happy to use street parking except for winter. Briggs is part owner of the Methodist church, which can lend parking to the hotel, but that is likely to go away when ground is broken for the new assisted living facility. The hotel has had this arrangement for about three years.

- 5. What kind of transportation do people use to get to your location?

Maybe 5% of hotel guests arrive by Amtrak. This would be about 300 of 6000 annual guests.

- 6. Over time, do you expect your organization to need about the same amount of parking, more parking, or less parking? On what information do you base that assessment?

Not necessarily if the status quo remains in place. Hotel guests use to send their cars to where Northern Stage now exists (Coolidge Valet service). It would be great to orient people to parking in that direction again.

7. Have you noticed any change in how people access your location? For example, do more people seem to bike or take Advance Transit to get there than in previous years?

Business tenants all drive. Employees of the hotel – maybe 30 people in total with Coventry Catering. 5 or 6 get here in something other than a car, primarily dropped off or AT.

8. Do you think your organization would benefit from any of the following?
 - a. Parking meters – in favor (Dave) and against (Peggy). Peggy favors a garage.
 - b. Enforcement of existing two-hour parking limits – not sure how this would affect business tenants. Business owners really ought not park in front of their own business, but some do. Ultimately, it has to be enforced, but we are in a state of harmony and that's good for office building owners.
 - c. Expansion of Advance Transit to nights and weekends

Yes. Employees and guests would benefit. Guests are starting to expect Uber.

- d. Better lighting
It's essential for the American Legion lot. Peggy said a parking garage could promote a sense of safety.

- e. Better parking signage

Big vivid signs would help. The desired traffic pattern should dictate where they go.

9. For employers:
 - a. How do your employees get to work?
 - b. Where do they park?

See above.

10. Is there anything else you'd like us to know about parking and transportation in White River Junction?

The police department could consider a substation in downtown to help with enforcement and the sense of safety.

Dave would like to know about the evolution of this discussion and where the consensus is coming. It's important not to let a vocal minority decide the fate.

Stakeholder Interview: Michelle Ollie, Center for Cartoon Studies

1. What is your name and affiliation with the downtown?

Michelle Ollie, president of the Center for Cartoon Studies, the nation's only independent MFA program in cartooning. CCS averages 30-40 graduate students per year and has 8 staff members. Summer workshops bring in approximately 150 younger students, and special events typically draw 40-50 people. Michelle also served as the chair of the Downtown Development Corporation, was a volunteer for the Town's most recent master plan process, and serves on the board of the Upper Valley Community CarShare.

2. What kind of parking is available at your location(s)?

CCS has three locations: the former Post Office building, the former Colodny department store, and the former Telegraph building. The Post Office location has 3 parking spaces. The site previously had about six, but CCS gave half to the Town. Parking exists behind the former Colodny store, but those spaces belong to

the Vermont Housing Authority and its apartments on South Main Street. No on-site parking exists at the Telegraph building, which houses lab space.

3. What kind of parking do clients/customers at your location need? Overnight? One-hour?

Most students live nearby and bike or walk to school. Events are rare, but they do occur and typically last several hours. Staff needs vary. Some teach only one day per week. The operations manager comes and goes frequently some days.

4. Are your clients/customers satisfied with current parking options? Please explain.

Yes.

5. What kind of transportation do people use to get to your location?

Again, most students walk or bike. Some staff live nearby and walk. Several drive.

6. Over time, do you expect your organization to need about the same amount of parking, more parking, or less parking? On what information do you base that assessment?

Parking demand could increase during the summer if those special programs continue to grow.

7. Have you noticed any change in how people access your location? For example, do more people seem to bike or take Advance Transit to get there than in previous years?

Students have always tended to live close.

8. Do you think your organization would benefit from any of the following?
 - a. Parking meters: No
 - b. Enforcement of existing two-hour parking limits: No
 - c. Expansion of Advance Transit to nights and weekends: Yes
 - d. Better lighting: Yes
 - e. Better parking signage: Yes
9. For employers:
 - a. How do your employees get to work?

Staff either drive or walk. Two live nearby and don't own cars. All eight student employees walk.

- b. Where do they park?

Staff use a mix of on-site parking at the old Post Office and on-street parking.

10. Is there anything else you'd like us to know about parking and transportation in White River Junction?

It would be great to resume package pickup and delivery at the downtown Post Office. The need to take packages up to Sykes Mountain Avenue requires staff at CCS and other downtown workplaces to bring a car to work.

Stakeholder Interview: Mark Fitzgerald, Rail Property Manager

1. What is your name and affiliation with the downtown?

Mark Fitzgerald, Rail Property Manager at VTrans. VTrans has a field tech who goes to the building a few times per month. The property management is contracted.

2. What kind of parking is available at your location(s)?

The parking is shared with the Courthouse. It is paved and white-lined. Mark says the parking is split about half and half with them.

3. What kind of parking do clients/customers at your location need? Overnight? One-hour?

Most people get dropped off. The welcome center probably has a few cars there. New England Central employees park on the south side of the building. Few people use overnight parking, but that happens. There's some spill over from the courthouse.

4. Are your clients/customers satisfied with current parking options? Please explain.

VTrans hasn't heard complaints from Amtrak users. The Welcome Center sometimes complains about too much spill over from the Court. The tenants on the second floor (Children and Family counseling) has some need. Events can strain available parking. But, for the station itself, there is enough parking.

5. What kind of transportation do people use to get to your location?

Most people get dropped off. Some people obviously use the train to get there.

6. Over time, do you expect your organization to need about the same amount of parking, more parking, or less parking? On what information do you base that assessment?

Long-term goal is to make that location a transportation hub with a bus station, which would require more parking. It depends on what other buildings move in. A restaurant could go where the Welcome Center currently is located. The Center could move closer to the track and provide an attendant. One person inquired about putting in an ice cream shop there spring 2016.

7. Have you noticed any change in how people access your location? For example, do more people seem to bike or take Advance Transit to get there than in previous years?

No change.

8. Do you think your organization would benefit from any of the following?
 - a. Parking meters: meters are good to for income for maintenance. Any meter arrangement should include kiosks.
 - b. Enforcement of existing two-hour parking limits: N/A
 - c. Expansion of Advance Transit to nights and weekends: Yes
 - d. Better lighting: It seems adequate. VTrans may add better lighting at the entry doors.
 - e. Better parking signage: VTrans has plans to better sign the lot.
9. For employers: N/A
 - a. How do your employees get to work?
 - b. Where do they park?
10. Is there anything else you'd like us to know about parking and transportation in White River Junction?

Stakeholder Interview: Good Neighbor Health Clinic

1. What is your name and affiliation with the downtown?

Director, been here for two years. Good Neighbor has been here for twelve years. The organization was given the building last year. The Clinic has 175 volunteers who provide all the care.

2. What kind of parking is available at your location(s)?

Parking is owned by Fairpoint. The building has six spaces. They prefer staff not to use them. The Clinic did focus groups last year, and parking was one of the major issues that clients brought up.

3. What kind of parking do clients/customers at your location need? Overnight? One-hour?

Staff and patients have permission to use the St. Anthony's/Fairpoint lot. Patients with appointments less than two hours are asked to use that lot or on-street. The Clinic pays for sidewalk shoveling but Fairpoint plows the lot. Staff need all-day parking. Most patients are here for 2-2.5 hours.

4. Are your clients/customers satisfied with current parking options? Please explain.

No.

5. What kind of transportation do people use to get to your location?

Many patients use AT and others drive. Staff primarily drive. A few carpool. One lives close enough to walk but drives.

6. Over time, do you expect your organization to need about the same amount of parking, more parking, or less parking? On what information do you base that assessment?

They already need more patient parking and they expect to serve more patients over time. The Clinic has about 3000 appointments per year. There's no predictable flow to that.

7. Have you noticed any change in how people access your location? For example, do more people seem to bike or take Advance Transit to get there than in previous years?

Patients have always used AT.

8. Do you think your organization would benefit from any of the following?

- a. Parking meters

No

- b. Enforcement of existing two-hour parking limits

No

- c. Expansion of Advance Transit to nights and weekends

Yes. That would be huge. The Clinic is open during the evenings some days.

- d. Better lighting

Yes. This would be a major improvement.

- e. Better parking signage

9. For employers:

- a. How do your employees get to work?

- b. Where do they park?

10. Is there anything else you'd like us to know about parking and transportation in White River Junction?

Employees tend to live so close that driving alone is affordable and easiest. One former employee lived in Bradford and used Stagecoach, but most are in Wilder, White River, Norwich, or Lebanon. The Clinic's primary concern is always patients.

Stakeholder Interview: Shawna Smith of Maponics

1. What is your name and affiliation with the downtown?

Shawna Smith, HR Director at Maponics.

2. What kind of parking is available at your location(s)?

Maponics has five spots under the building provided by the landlord. They are losing one of those spaces. Nine on-streets spots are outside the building. Maponics leases 8 spaces from Home Comfort. Maponics has 66 employees.

3. What kind of parking do clients/customers at your location need? Overnight? One-hour?

More and more customers come to the office. Maponics was acquired and its parent company, Pitney Bowditch, has staff coming to White River Junction. Visitors tends to need all-day parking.

4. Are your clients/customers satisfied with current parking options? Please explain.

No. Particularly during the winter, people don't want to walk from Northern Stage. People park illegally at the train station. Parking at the municipal building isn't attractive during the winter.

5. What kind of transportation do people use to get to your location?

It's pretty mixed. A few bikers and walkers, but a majority drive. One carpool exists. One person used to take Advance Transit.

6. Over time, do you expect your organization to need about the same amount of parking, more parking, or less parking? On what information do you base that assessment?

Maponics expects to need more over time – maybe 15 over the next year and half.

7. Have you noticed any change in how people access your location? For example, do more people seem to bike or take Advance Transit to get there than in previous years?

Nothing. It's stable.

8. Do you think your organization would benefit from any of the following?

a. Parking meters

No.

b. Enforcement of existing two-hour parking limits

No.

c. Expansion of Advance Transit to nights and weekends

No

d. Better lighting

Yes.

e. Better parking signage

Yes.

9. For employers:

a. How do your employees get to work?

b. Where do they park?

10. Is there anything else you'd like us to know about parking and transportation in White River Junction?

Stakeholder Interview: Eric Bunge, managing director of Northern Stage

1. What is your name and affiliation with the downtown?

Eric Bunge, managing director of Northern Stage. Northern Stage is a producing theatre company and performing arts center. The producing piece means that the theatre manufactures live professional theatre from the ground up, and this requires more people. Northern Stage has 45-50 people on staff, including 5 Dartmouth students. 15 are year-round, full-time. 30 or so are seasonal (6 weeks to 9 months).

2. What kind of parking is available at your location(s)?

Northern Stage itself has approximately 40 spaces. The lot abuts the public lot.

3. What kind of parking do clients/customers at your location need? Overnight? One-hour?

Patrons typically need 2.5-hour parking, almost exclusively in the evening. Some matinees exist on Thursdays, Saturdays, and Sundays. 3/8 of shows are on the weekend, a few parking issues exist then. Thursday morning shows, which cater to older and school age crowds, faced more problems when people drove and bingo was going on. However, many of the retirement facilities and schools use buses.

When people receive tours of the facility, Northern Stage points out the public parking options.

4. Are your clients/customers satisfied with current parking options? Please explain.

Yes. The public parking is adjacent. Lighting could be improved.

5. What kind of transportation do people use to get to your location?

Primarily personal vehicles, but schools and retirement homes use buses.

6. Over time, do you expect your organization to need about the same amount of parking, more parking, or less parking? On what information do you base that assessment?

Slightly more parking. It's hard to say because Northern Stage had many full houses last season and few complaints about parking. Matters could change when the retirement facility goes in next door.

7. Have you noticed any change in how people access your location? For example, do more people seem to bike or take Advance Transit to get there than in previous years?

No.

8. Do you think your organization would benefit from any of the following?
 - a. Parking meters

No.

- b. Enforcement of existing two-hour parking limits

No.

- c. Expansion of Advance Transit to nights and weekends

Yes.

- d. Better lighting

Yes

- e. Better parking signage

Yes.

9. For employers:
 - a. How do your employees get to work?

Several walk from nearby apartments, some bike. Primarily, though, it's a personal vehicle or one of 12-14 fleet vehicles. Union contracts require the theatre to provide transportation. The theatre has some apartments in Quechee, which lacks public transit.

- b. Where do they park?

Primarily on-site. Occasionally someone will try across the street, but employees, actors, designers, etc. are told not to do so.

10. Is there anything else you'd like us to know about parking and transportation in White River Junction?

We need to build parking capacity for what we need in five or ten years, not just what we need now. The Town should be proactive in building out more parking resources for future development. There's a ton of investment in the downtown and we need parking to match that. A 250- to 300-space structured parking unit could spur further development in the downtown. Developers would flock to White River if parking were more available. Compare White River to Lanesborough, MN, a small town that has 500,000 visitors per year because of its theatre company. White River Junction doesn't yet have a shared vision, but it is ripe to become a destination for the arts.

Stakeholder Interview: Tuckerbox Café

1. What is your name and affiliation with the downtown?

Reid Kotlas, manager at Tuckerbox and resident of South Main Street.

2. What kind of parking is available at your location(s)?

Parking for the café is available on-street and in the Gates-Briggs lot.

3. What kind of parking do clients/customers at your location need? Overnight? One-hour?

It's a mix. Some people stay for an hour; others stay all day. The ratio is probably 3:1 for one-hour to all-day.

4. Are your clients/customers satisfied with current parking options? Please explain.

The café hears very few regular complaints. Sometimes special events can lead to complaints.

5. What kind of transportation do people use to get to your location?

Most drive or walk.

6. Over time, do you expect your organization to need about the same amount of parking, more parking, or less parking? On what information do you base that assessment?

The restaurant just expanded due to increased demand over time. It's unclear how much more growth could occur. As other businesses move into the downtown, however, the availability of current parking is likely to be limited.

7. Have you noticed any change in how people access your location? For example, do more people seem to bike or take Advance Transit to get there than in previous years?

Not really.

8. Do you think your organization would benefit from any of the following?

- a. Parking meters: not at this point. Maybe if parking gets worse.
- b. Enforcement of existing two-hour parking limits: not at this point.
- c. Expansion of Advance Transit to nights and weekends: Yes!
- d. Better lighting: seems okay around Main Street
- e. Better parking signage: Don't know.

9. For employers:

- a. How do your employees get to work?

It's about a 50/50 mix of driving and walking.

b. Where do they park?

Unsure, but probably on-street.

10. Is there anything else you'd like us to know about parking and transportation in White River Junction?

No.

Stakeholder Interview: Andy Stone, Vermont Superior Court

1. What is your name and affiliation with the downtown? *Andy Stone, Court Operations Manager, Vermont Superior Court*
2. What kind of parking is available at your location(s)? *Small lot reserved for court personnel, several large lots shared with town and train station. Other than our staff lot which has +/- 30 spaces, we share other parking lots with the town and train station so I don't know how many parking spots are "ours". We average about 150-200 people a day coming in the courthouse depending on what is going on any given day.*
3. What kind of parking do clients/customers at your location need? Overnight? One-hour? *Varying- from several minutes up through full day, depending on nature of court activities/proceedings.*
4. Are your clients/customers satisfied with current parking options? Please explain. *No- on busier court days when many people are here in the building (such as trials/jury draws, etc) there is inadequate parking and people complain about having to park many blocks away. This is especially problematic in poor weather.*
5. What kind of transportation do people use to get to your location? *Mainly private cars. Public transportation options are not frequent enough and do not provide enough geographic coverage to meet most people's needs.*
6. Over time, do you expect your organization to need about the same amount of parking, more parking, or less parking? On what information do you base that assessment? *Our needs are generally consistent- the court will continue to be a busy place.*
7. Have you noticed any change in how people access your location? For example, do more people seem to bike or take Advance Transit to get there than in previous years? *No- people have consistently been driving here from all over Windsor County for many years, with the exception of those who live right downtown in WRJ and can walk.*
8. Do you think your organization would benefit from any of the following?
 - a. Parking meters – *No. People would likely just park farther away.*
 - b. Enforcement of existing two-hour parking limits – *If possible without expending significant resources.*
 - c. Expansion of Advance Transit to nights and weekends – *No. The court is closed on nights and weekends.*
 - d. Better lighting – *Yes. This would alleviate safety concerns when people leave the court after dark.*
 - e. Better parking signage – *Yes. This would alleviate confusion about where the court parking options are.*
9. For employers:
 - a. How do your employees get to work? *Everyone drives or carpools.*
 - b. Where do they park? *In the employee parking lot.*
10. Is there anything else you'd like us to know about parking and transportation in White River Junction?
No.

Appendix D

White River Junction Downtown Parking Study Parking Management Strategies

Possible Improvements To Existing Facilities	Make the Most of Existing Parking Capacity
	<i>Safety and Access Improvements</i>
	Repave and restripe the lot behind the former American Legion - UNDERWAY
	Improve lighting in the “Legion” lot - UNDERWAY
	Maintain a consistent policy on removing abandoned vehicles - UNDERWAY
	Improve and better maintain landscaping - UNDERWAY
	Widen the sidewalk on Currier Street
	Replace bulletin board by the Briggs Lot with an enclosed kiosk in a landscaped area - PLANNED
	Increase accessibility of existing sidewalks and adding new sidewalk connections, e.g. new and replacement sidewalk along the parking lot between Joe Reed Drive and Gates Street
	<i>Wayfinding Improvements</i>
	Invest in signs that clearly designate 2-hour, 4-hour, and all-day parking
	Develop a guide for downtown businesses that explains all-day parking options available to employees and visitors
	<i>Continued Monitoring of Parking Conditions</i>
	Continue to conduct twice annual parking occupancy counts

Possible Zoning Strategies	<i>Optimize Conditions Allowed Under Current Zoning</i>
	At the discretion of the Planning Commission, parking requirements for developments in the Central Business District "may be reduced beyond 50%" if developers co-locate with transit routes, share parking with abutting businesses, have staggered operating hours, anticipate heavy pedestrian traffic, feature employer-sponsored transit passes or carpool programs, or locate near safe and adequate on-street parking or near municipal lots.
	The Town can request developers to hold land for future parking needs and, after the need arises and a hearing affirms the need, develop it as parking.
	<i>Zoning/Parking Changes</i>
	Reevaluate use of public parking in lieu of on-site parking requirements given downtown public parking reaching capacity.
Allow developers to pay a fee in lieu of building new capacity to meet parking demand	
Pros: Allows developers to forgo constructing expensive on-site parking spaces; Promotes shared parking; Allows for better town design by reducing on-site parking, allowing more continuous storefronts; Reduces the number of variance requests developers make; Promotes historic preservation by limiting new parking development adjacent to buildings; Helps fund improvements to existing public parking construction of new shared parking for the downtown.	
Cons: Creates the potential for a lack of on-site parking or fewer overall parking spaces being available if no new spaces are created by the Town; the Town of Hartford is already allowing developers to rely on public spaces in lieu of constructing on-site spaces through variances but is not currently charging an in-lieu fee for this benefit.	

Transportation Demand Management Strategies	Reduce Demand for Parking
	<i>Encourage Employers to Incentivize Non-Drive Alone Commutes</i>
	Promote carpooling, transit, bike and walk, and telecommuting
	<i>Short-term Transit Improvements</i>
	Promote Stagecoach’s Planned Request-Only Downtown Stop on I-89er Route
	Display route and schedule information inside the downtown bus shelter and place the name of the stop visibly on the shelter
	Improve the Veteran's Park stop by installing a bus shelter that incorporates the park's historic information
	Add bus stop improvements, such as a shelter or bench, at the South Main Street-Sykes Mountain Avenue intersection
	<i>Long-term Transit Improvements</i>
	Support incremental evening service and limited weekend service
	Support efforts to increase frequency of Orange Route buses
	Support other efforts identified in upcoming Advance Transit Development Plan (2018)
	<i>Improve Bike/Walk Infrastructure</i>
	Install new bike racks along South Main Street, by the bus stop in front of the former American Legion, the Briggs Lot, and former Post Office
	Develop sidewalks along the entire length of Sykes Mountain Avenue, which also results in improved pedestrian access to the Orange Route bus
Restripe the westbound approach of the Maple, Pine, and Bridge Street intersection to include a dedicated left-turn lane and a dedicated through lane; Add a protected left-turn phase for left-turns	

	Establish biking and walking access on the rail bridge from the Westboro Railyard in West Lebanon, which would eventually provide off-road biking and walking access from White River Junction to the Northern Rail Trail.
	<i>Shared Mobility Options</i>
	Support Upper Valley Carshare (“UV Carshare”), a small start-up nonprofit carshare program based in downtown White River Junction.
	A downtown-wide bikeshare program could be developed in conjunction with the UV Carshare or as a separate entity.
	<i>Incorporating Renewable Energy into Parking</i>

Strategies to Address Parking Turnover...	Manage Parking Turnover
	<i>No Change (Enforcement Limited, Prompted By Complaints)</i>
	Pros: Requires no new burden on police department personnel; popular among the public because of no tickets. Cons: does not encourage parking turnover proximate to local businesses and does not address long-term growth.
	<i>Frequent and Consistent Enforcement Parking Time Limits Without Meters (Tire Chalking)</i>
	Pros: Would likely encourage greater use of all-day parking and free-up valuable on-street spaces for business patrons. Cons: Would divert valuable police staff time; may require hiring additional police staff; impact on town budget; unlikely to win many popularity points with the public; could result in long-term parking shortage in the absence of new parking supply, if all-day parking is diverted to “Legion” lot.

Strategies to Address Parking Turnover, Enforcement, & Paid Parking	<i>Parking Kiosks (2 and 4 hour zones)</i>
	<p>Pros: Encourages turnover by charging for prime parking locations; displayed receipts makes enforcement easier; requires the fewest overall parking pay stations; smallest initial investment and least sidewalk space.</p> <p>Cons: Meters are more familiar; requires more enforcement time; generally less popular due to increased time to park; results in the lowest long-term revenue generation compared to other pay-for parking options; could result in long-term parking shortage in the absence of new parking supply, if all-day parking is diverted to “Legion” lot; will require outreach to the public and business community on the benefits of paid parking.</p>
	<i>Individual Parking Meters (2 and 4 hour zones)</i>
	<p>Pros: Encourages turnover by charging for prime parking locations; facilitates enforcement by clearly displaying when vehicles are in violation; easily recognized and understood by the public; requires minimal time for users to pay for parking, requires less time for police to monitor as violations are clearly displayed.</p> <p>Cons: Would utilize additional sidewalk space for meter poles; snow removal on sidewalks more difficult and time consuming for Town; could result in long-term parking shortage in the absence of new parking supply, if all-day parking is diverted to “Legion” lot; will require outreach to the public and business community on the benefits of paid parking.</p>
	<i>Individual Parking Meters with Parking Occupancy Sensors</i>
	<p>Pros: Encourages turnover by charging for prime locations; violations are clearly displayed & transmitted to the police department, reducing enforcement time; easily recognized and understood by the public; requires minimal time for users to pay for parking; results in the greatest long-term revenue generation to cover enforcement costs</p> <p>Cons: Additional sidewalk space occupied by meter poles; snow removal on sidewalks more difficult or time consuming; could result in long-term parking shortage in the absence of new parking supply if all-day parking is diverted to “Legion” lot; will require outreach to the public and business community on the benefits of paid parking</p>
<i>Designate a single lot as overnight parking during snow bans</i>	
<p>Pros: Simple enforcement and public outreach; requires little infrastructure except flashing and wayfinding signs; could accommodate text alert system; two logical lots exist to choose between (former American Legion and Briggs Lot)</p> <p>Cons: May force some residents to walk further than others during a snow storm</p>	
<i>Alternate between lots for overnight parking during snow bans based on day of the week</i>	

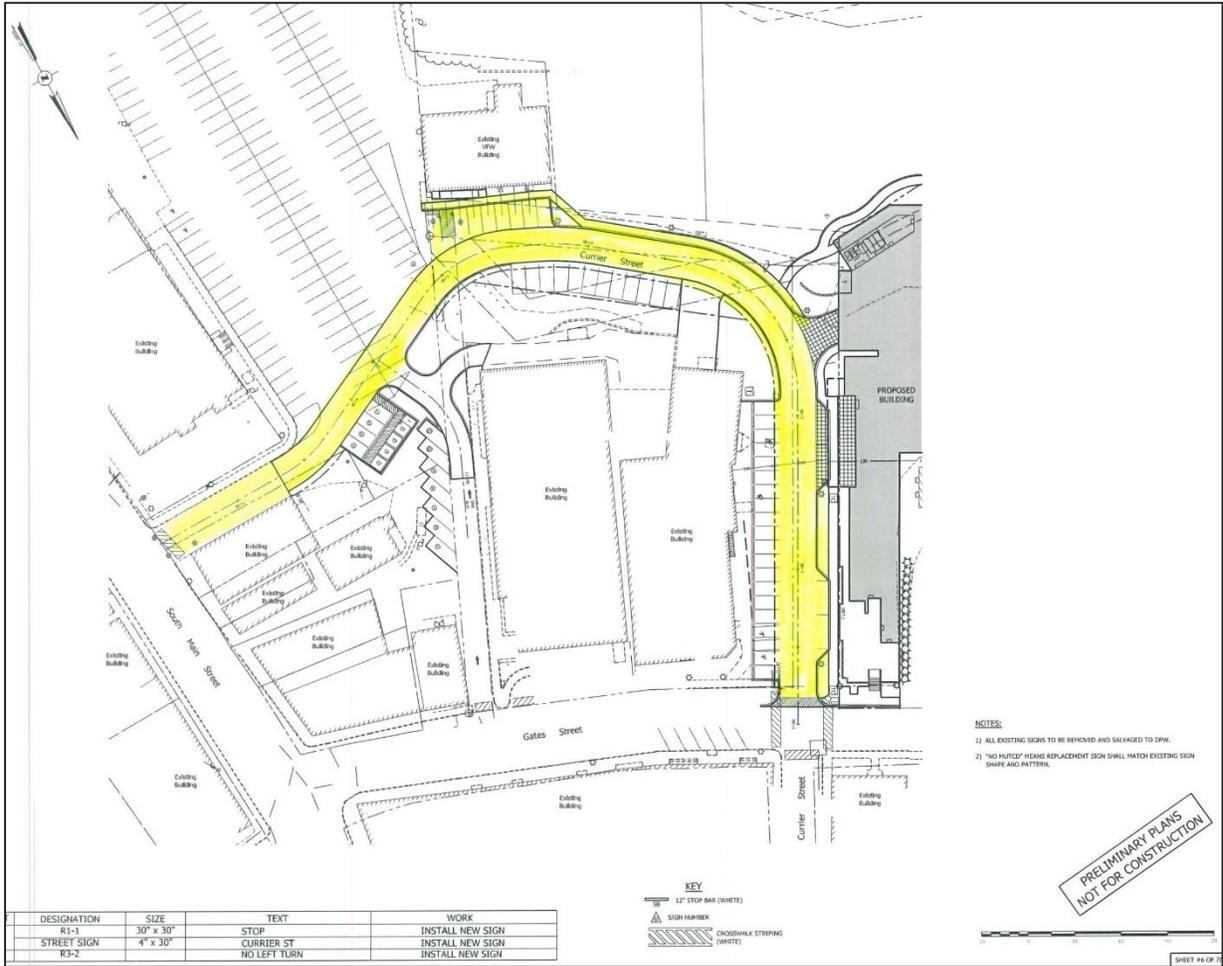
	<p>Pros: May alleviate some concern that residents of a particular area are forced to walk longer distances than others during a snow storm</p> <p>Cons: Requires additional signage to convey which lots are open to public use on given days; could be confusing</p>
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Additional Parking Capacity	Meet Future Parking Needs
	<i>Convert the public lot behind the former American Legion into a parking deck</i>
	<p>Pros: Town already owns the land; could provide 230+ spaces to meet long-term needs; could generate additional revenue through hourly fees and leases of co-located commercial spaces</p> <p>Cons: Is one of several competing interests for the use of finite TIF funds; expensive; requires voter approval.</p>
	<i>Develop the lot behind Home Comfort Warehouse (private)</i>
	<p>Pros: Parking is one use allowed in the flood zone; located close to employment along Railroad Row and to employment and entertainment at the Tip Top Building; Town could potentially lease monthly spaces to nearby workplaces OR lease from private developer for some public parking spaces, rather than purchasing entire lot.</p> <p>Cons: Lot is privately owned; requires investment to develop as expanded parking lot; location might not be attractive to people travelling to South Main Street, Carrier Street, etc.; development requires significant tree clearing.</p>
	<i>Develop the "Y Lot" southeast of the train station (private)</i>
	<p>Pros: Could alleviate pressure on Windsor County Court House parking and provide additional all-day parking for people who work on Railroad Row; could raise status of rail connection in the downtown; sizeable lot</p> <p>Cons: Railroad-controlled, potentially lengthy negotiation process with railroad company and state; site is currently used for storage of railroad-transported goods; requires investment to develop as parking lot</p>
	<i>The lot behind Elixir and Vermont Salvage (private)</i>
<p>Pros: Close to major developments (new, existing, and proposed) on South Main Street; could provide attractive parking for many employees in the core downtown</p>	

<p>Cons: Requires railroad crossing agreement; requires investment to develop as parking lot; area currently has an unwelcoming, industrial quality and may require substantial landscaping; may be difficult to lease or purchase the land for public use as is owned by Railroad company and privately leased.</p>
<p><i>The small lot across the street from the former American Legion (private)</i></p>
<p>Pros: Location right off Main Street; close to largest town owned lot; could be used as interim parking before more long-term solution is developed.</p> <p>Cons: Small size – 12-15 spaces; may not be for sale; may be used for residential parking in nearby apartments; could have a small, but negative impact on local tax base.</p>
<p><i>Portion of the FairPoint/St. Anthony's lot at the corner of Gates and Church Streets</i></p>
<p>Pros: Existing source of significant, underutilized parking; could be achieved at low or no cost; close proximity to new development and downtown employment; could be used as interim parking before more long-term solution is developed.</p> <p>Cons: Ease of negotiating deal uncertain; St. Anthony's Church occasionally needs most of lot for mid-week funerals.</p>
<p><i>Small private lots on Gates Street</i></p>
<p>Pros: Could be leased as interim parking before more long-term solution is developed, then returned to private use</p> <p>Cons: Scattered & small; signage could be a challenge; lease details to be determined</p>

Appendix E

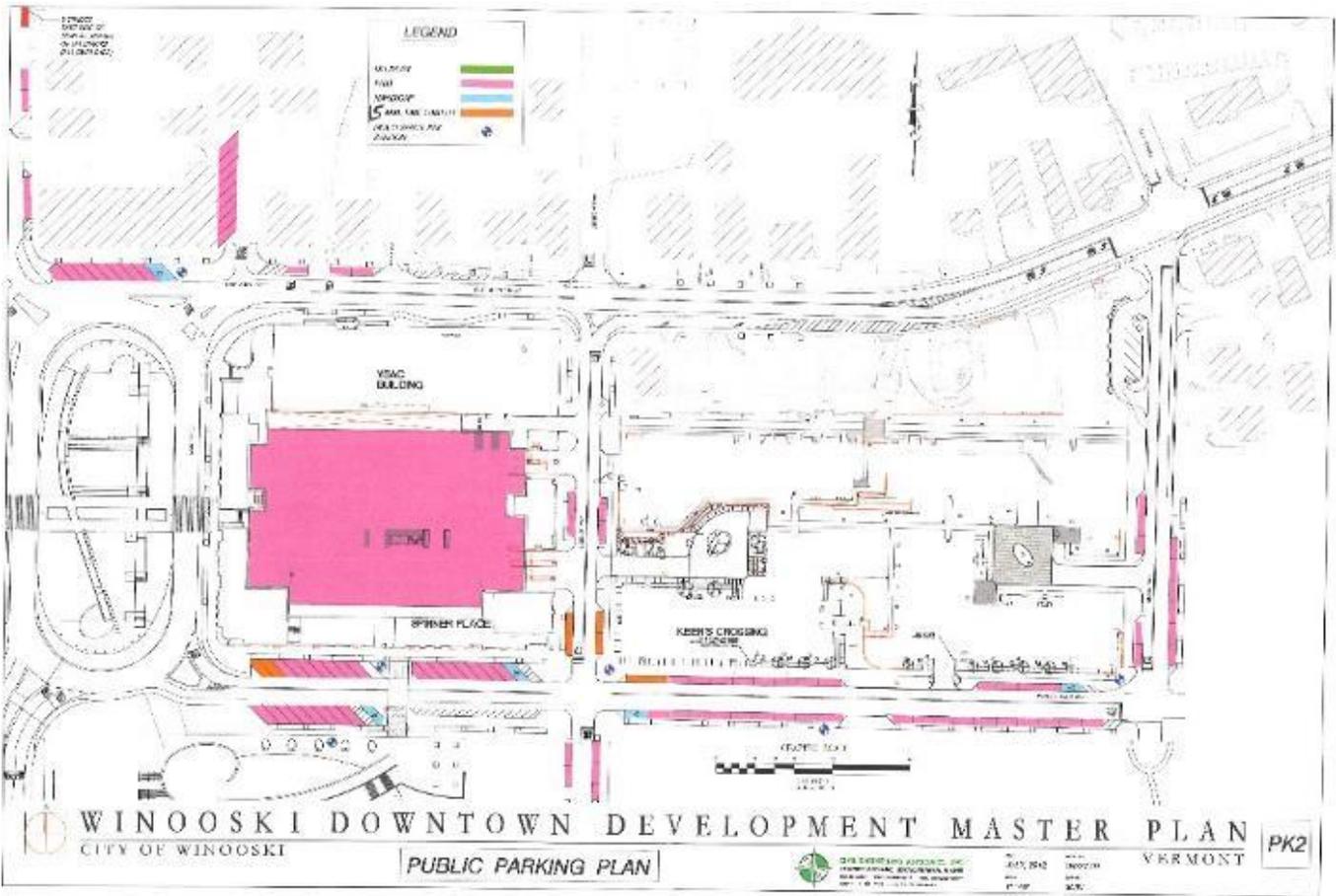
Improvements Planned



Planned improvements to Currier Street extension and the "Legion" parking lot



Planned Improvements for the Briggs Parking Lot & Currier Street



The City of Winooski developed this map to identify parking areas impacted by a transition to paid parking