



Town of Amherst
Downtown Parking Study

Parking Implementation Strategy

October 2019



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Executive Summary

The Amherst Downtown Parking Implementation Strategy represents the culmination of two parking studies conducted for the Town of Amherst over the last several years. The first, completed in 2016 included a comprehensive inventory and utilization assessment of all parking – public and private – within Downtown Amherst. It did not include a strategy to better manage parking assets, nor did it provide an implementation approach.

Building on the work from 2016, the Town commissioned a follow up study – this study – to update inventory and utilization figures given recent development, but primarily to develop a strategic vision to better manage downtown parking, identify projects and programmatic elements to enhance the parking experience, and most importantly, to provide a step-by-step implementation. The result is the Downtown Parking Implementation Strategy.

PARKING INVENTORY

The first task of this study was to confirm the total parking inventory in downtown. Based on the assessment, Downtown Amherst has a total of 3,294 parking spaces, inclusive of public on- and off-street metered, permit and unregulated spaces, and private spaces.

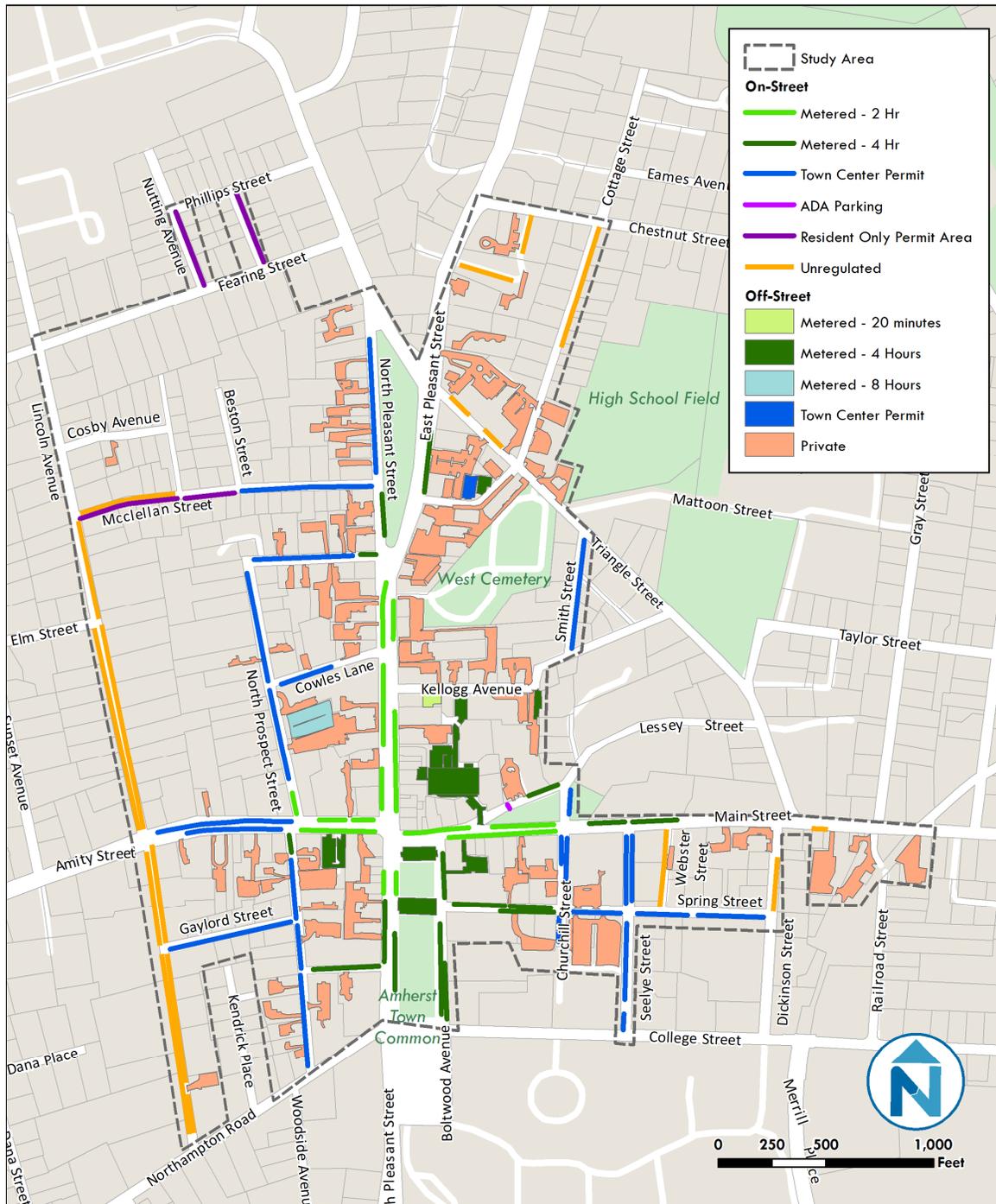
Of the total, only 40 percent of spaces are available to the public – including roughly 700 metered spaces, 350 permit (Town Center Permit) spaces and just under 300 unregulated spaces. However, the majority of spaces – 60 percent – are privately owned and controlled and include residential, employee and customer parking. These spaces are highly underutilized.

Key findings from the inventory analysis included:

- The majority of parking in the study area (60%) is private and not open to the general public.
- There are less than 700 total public metered spaces in the study area.
- Only 8% of parking is unregulated and is located at the periphery of downtown.
- Public parking is divided into 2-, 4- and 8-hour time limited spaces with different rate structures: \$0.50/hour in peripheral areas, \$1.00/hour in core areas.
- Enforcement hours are not consistent across the study area, leading to confusion (and citations) among users.
- Town Center Permit spaces are restricted to permit holders during the day, but open to all users after 5 PM and on weekends. Permit regulations are only enforced from September through May.
- Town Center Permit spaces are well-located on side streets adjacent to the downtown core.

Parking Type	Total Spaces	% Total
Permit	356	11%
Private	1,962	60%
Public Metered	696	21%
Unregulated	280	8%
Total	3,294	100%

Figure 1 Downtown Amherst Parking Inventory



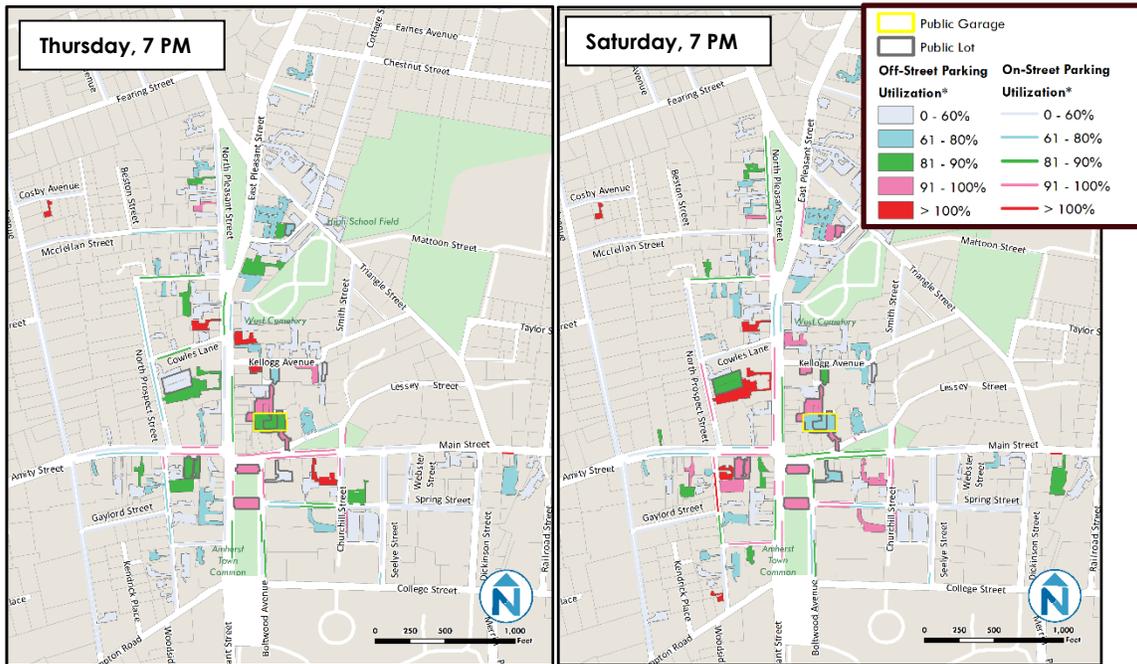
PARKING UTILIZATION

Once the inventory was confirmed, the project team updated parking utilization from the 2016 study by conducting field counts in Spring 2019. Parking utilization indicates the demand for and availability of parking in each area of Downtown Amherst throughout the day. This study builds off the parking utilization counts collected in the field in 2016 for the entire study area. Updated 2019 utilization counts were collected in the spring for one full weekday and one full weekend day for all public on- and off-street facilities and Town Center permit areas as well as in lots associated with new developments. Weekday counts were taken on Thursday, March 28, 2019, while weekend counts were taken on Saturday, March 23.

Key findings from the analysis included:

- Public parking is highly utilized, peaking at 86% utilization on Saturday at 7 PM.
- Parking demand peaks at 1 PM and 7 PM on both Thursday and Saturday.
- Parking demand is concentrated in public facilities, particularly those in the most convenient locations (i.e. core on- and off-street spaces).
- \$0.50/hr and \$1.00/hr spaces are equally utilized during the Saturday 7 PM peak, indicating that pricing strategies are spreading demand across the parking supply to some extent.
- Private parking is underutilized on both weekdays and weekends. It does not surpass 55% utilization (meaning many spaces are empty at all times).
- Town Center Permit spaces are well utilized during weekday work hours; however, they are underutilized after 5 PM and on weekends, representing a strong opportunity to alleviate public parking demand.
- Overall parking utilization does not exceed 60% on Thursday or Saturday, indicating that many spaces are available. This is due to underutilized private parking.

Figure 2 Peak Parking Utilization, Thursday and Saturday 7 PM



REGULATORY ENVIRONMENT

Understanding how a parking system is regulated, operated and managed is critical to an efficient parking system as the Town’s departments will be responsible for implementing any desired parking strategies strategy. As such, the project team assessed current department structures and procedures.

Management of the parking system in Amherst is not coordinated through one entity or department; rather, it is delegated through several departments and staff members. The Town Council creates regulations for parking. Economic Development is charged with overall coordination of parking management. Police handle parking enforcement, while the Collector deals with appeals, fees, fines and permits. Additionally, Planning contributes to parking coordination and development policy/parking requirements. However, it is unclear, based on this structure, who is ultimately responsible for procurement of new technology, enforcement protocols and practices (policy vs. practice), and more. This contributes to a confusing parking system for users and staff alike.

Key issues identified given current structures and programs include:

- Given many responsible parties, there is a lack of clarity over who to contact when parking issues arise.
- Confusion over permit programs and types (there are several) and who is eligible.
 - Related, reserved permit spaces in the Boltwood Garage are underused (all permits are purchased, but many spaces are rarely used, leaving open but inaccessible spaces during prime hours).

- Information from new technologies is not used to track and manage the parking system.
- Some feel enforcement is too strict, others too lenient, but few know who to contact regarding these issues.

However, despite these issues, many of the operations and management structures and initiatives have proven successful and popular, including:

- Increased parking payment options – kiosks and ParkMobile App – have been welcomed as evidenced by increased percentage of revenues collected through the app, in particular.
- Permit sales are up and indicate growing demand for the Town Center Permit.
- Parking revenues increased modestly between FY18 and FY19.

PUBLIC PROCESS

Critical to any downtown parking plan is a clear understanding of the issues faced by those who use the parking system most –visitors, business owners, and downtown residents and employees.

The Town of Amherst Downtown Parking Implementation Strategy was developed with input from Town Staff, Downtown property and business owners, employees, residents, and the Downtown Parking Working Group (DPWG). This included a series of interviews with downtown stakeholders, regular coordination with the DPWG, and two workshops where the public was invited to learn about the project process, present comments and questions, and prioritize strategies.

Stakeholder Interviews

The project team met with key stakeholders representing community groups, business owners, and other organizations with an interest in parking in and around Downtown Amherst. The purpose of the interviews was to provide the project team with an understanding of the parking experience in Downtown Amherst – the good and the bad; future needs and goals to achieve those needs.

Several themes that emerged from the interviews included:

- Parking can be difficult to find.
- Inconsistent time allowances, end-time hours (6pm in some areas, 8pm in others) creates confusion for visitors.
- Employees feeding meters needs to be more consistently addressed.
- Wayfinding and signage is not adequate for visitors.
- Adding additional parking should be considered – including looking at a garage.
- Education is needed to inform visitors and employees about parking options in downtown.

(See Appendix A, Key Issues and Opportunities Report for more information.)

Public Workshop #1

The first of two public workshops was held on April 11, 2019 at the Bangs Community Center. The meeting included a presentation of the study background, initial findings related to field observation and updated utilization, and key issues and potential strategies to address them. This presentation served to educate attendees regarding the observed parking issues in downtown and the constraints of the parking system. It also presented high level concepts regarding best practices in parking management. Following the presentation, ample time was offered to gather feedback from the public through a series of interactive activities and an open house comment period.

Among the activities, participants were asked to identify goals for downtown parking. To do so, they were able to review and vote on parking priority statements that best represented their perspectives. Based on the results, attendees were split on their preference for on-street versus off-street parking, but strongly preferred adding public parking supply, using data to inform policy and decision making, and prioritizing convenient and accessible parking. Less important to attendees was enhancing employee parking options and new technologies to make parking easier and more efficient. A full summary of the meeting is available in Appendix A.

Public Workshop #2

The second public workshop was held at Amherst Town Hall on August 28, 2019. The meeting included a detailed presentation of the Draft Parking Implementation Strategy developed by the project team. The presentation was organized around eight parking goals identified through the process. For each goal, supportive implementation strategies were presented, followed by an open question and answer period.

Questions at the meeting varied by goal; however, key themes emerged. Generally, there was support for creating additional inventory either through shared parking agreements, facility retrofits (e.g. striping efficiencies) and the potential for a new structure. Many supported increased technologies to better manage the system, provide a “first 15-minute free” option, and monitor utilization. Nearly all respondents preferred ending parking enforcement at 6pm and supported improving wayfinding and signage to parking. Adding a dedicated Parking Leadership position also had considerable support to better manage the entire system.

KEY ISSUES AND GOAL DEVELOPMENT

Based on the above findings, the project team identified several major concerns – key issues – to inform the development of parking goals and the associated implementation strategies to achieve those goals. These key issues are explored in more detail in Appendix A, the Key Issues and Opportunities Report. They include:

- Public parking is nearly full at peak times and presents difficulty for users.
- Privately-owned parking facilities are underutilized and could help to lessen parking pressures.
- Wayfinding and signage to and from parking needs to be improved.

- Employees sometimes occupy prime metered spaces and impact the supply available to customers.
- Time limits, prices, and enforcement hours are not consistent across Downtown Amherst, leading to confusion among some users.
- Parking decision-making and ownership are not streamlined in the existing Town management structure.
- Enforcement is currently punitive-based, not performance-based, and does not promote desirable user behavior through its policies.
- Parking users do not feel confident using all parking options due to poor lighting and wayfinding and unclear regulations.
- The Town does not require new downtown development to provide parking, nor does it require other mobility mitigation.
- Options to increase publicly available parking are limited (the town owns limited land) and are cost prohibitive.
- Communications around parking programs and changes could be more robust.

Based on the above, the below set of overarching goals was developed to guide the final implementation plan that follows this executive summary.

Downtown Parking Goals

1. Create an efficient, responsive parking management structure that serves all downtown stakeholders.
2. Create a downtown parking system that provides convenient, predictable and flexible parking for all downtown residents, workers and visitors.
3. Maximize use of existing, underused private parking, for public use before making high cost municipal parking capital investments.
4. Move to a more user-friendly, accessible, and predictable parking permit program.
5. Utilize parking technology that enhances parking availability, system performance and convenience.
6. Implement programs that make parking in Downtown Amherst more inviting and convenient to customers.
7. Improve wayfinding and signage to intuitively guide visitors to, from, and between parking and downtown attractions and amenities.
8. Add new parking facilities when utilization regularly surpasses 85%.

RECOMMENDED STRATEGIES

Finally, a set of recommended implementation strategies were developed to achieve each goal. These strategies were identified by the project team based on experiences in both Amherst and other communities. They are intended to serve as a guide, as the team understands that in any community, priorities and funding allocations are likely to shift. It is the responsibility of the Town to prioritize and implement changes based on their shared values and goals.

A summary of implementation strategies is provided below by goal. For a full description, see the full Parking Implementation Strategy that follows.

Goal 1: Create an efficient, responsive parking management structure that serves all downtown stakeholders.

- 1A Create a dedicated Transportation and Parking leadership position in charge of all transportation policy, planning and implementation.
- 1B Develop a comprehensive parking implementation communication program.
- 1C Establish a Parking Benefit District to fund downtown parking and infrastructure improvements.

Goal 2: Create a downtown parking system that provides convenient, predictable and flexible parking for all downtown residents, workers and visitors.

- 2A Set parking availability and turnover goals and define performance-based zones accordingly.
- 2B Conduct routine parking counts to track utilization and inform future parking system changes.
- 2C Adopt a graduated pricing scheme with performance-based pricing.

Goal 3: Maximize use of existing, underused private parking, for public use before making high cost municipal parking capital investments.

- 3A Identify opportunities for shared parking in the Downtown.
- 3B Develop sample Shared Parking agreement language in advance of and to be ready to negotiate potential shared agreements.
- 3C Facilitate shared parking agreements between individual property owners and as part of a town-wide shared parking system.

Goal 4: Move to a more user-friendly, accessible, and predictable parking permit programs.

- 4A Refine the Town Center Permit Program to best meet the needs of downtown stakeholders.
- 4B Ensure other parking initiatives and recommendations complement and/or support parking permit programs.
- 4C Develop a more robust communication strategy for downtown stakeholders to increase awareness of parking permit programs.

Goal 5: Utilize parking technology that enhances parking availability, system performance and convenience.

- 5A Enhance parking experience through updated technologies to provide more information, consistency and predictability to parkers.
- 5B Adopt License Plate Reader (LPR) technology for enforcement.
- 5C Enhance communication efforts regarding available spaces in Downtown Amherst.

Goal 6: Implement programs that make parking in Downtown Amherst more inviting and convenient to customers.

- 6A Create a parking validation system.
- 6B Advocate for a shared valet program.
- 6C Shift to a Parking Ambassador model of enforcement.

Goal 7: Improve wayfinding and signage to intuitively guide visitors to, from, and between parking and downtown attractions and amenities.

- 7A Implement high visibility and consistent signage in key locations.
- 7B Improve lighting, pedestrian infrastructure, and other safety amenities on side streets.

Goal 8: Add new parking facilities when utilization regularly surpasses 85%.

- 8A Expand the public parking supply through design interventions at existing facilities.
- 8B Add new parking facilities via public-private partnerships, dedicated private investment, or municipal investment.
- 8C Implement progressive mobility requirements to leverage private dollars for mobility improvements.

II. Parking Implementation Strategy

Introduction

This document represents the culmination of a comprehensive parking planning process founded in both data analytics and stakeholder and public feedback. The parking management strategies contained here will serve as a roadmap for Amherst's parking future. These strategies cover management structures, parking rates, technology enhancements, new parking supplies, and innovative requirements for new development. These strategies are organized under a set of key goals, each linked to an issue identified during the planning process. These goals are:

- 1) Create an efficient, responsive parking management structure that serves all downtown stakeholders.
- 2) Create a downtown parking system that provides convenient, predictable and flexible parking for all downtown residents, workers, and visitors.
- 3) Maximize use of existing, underused private parking, for public use before making high cost parking capital investments.
- 4) Move to a more user-friendly, accessible, and predictable parking permit program.
- 5) Utilize parking technology that enhances parking availability, system performance, and convenience.
- 6) Implement programs that make parking in Downtown Amherst more inviting and convenient to customers.
- 7) Improve wayfinding and signage to intuitively guide visitors to, from, and between parking and downtown attractions and amenities.
- 8) Add new parking facilities when utilization regularly surpasses 85%.

Each goal is supported by a series of strategies that include design elements, new policies, management structures, and more. This narrative document, the **Parking Implementation Strategy**, contains a detailed description of each strategy piece. Alongside this document, the **Implementation Matrix** (Appendix E) contains a detailed set of action steps to implement each strategy within the Town's current and future framework. Each strategy is provided with a priority level, a list of key impacts and challenges, a set of cost considerations, and a list of likely partners during the implementation process.

Note that these strategies often interlink and rely on each other for implementation. Furthermore, parking problems are complex and require thoughtful, context-sensitive solutions. Town leadership must strive to regularly evaluate the most suitable solution for individual parking issues within this set of strategies. In many cases, multiple strategies may apply to a given issue. The Town of Amherst, with the guidance of this document, is equipped to select strategies that address new issues as they arise and serve the interests of all stakeholders now and in the future.

Issue: Parking Management Structure is Decentralized and Clear Decision-Making Authority is not in Place

The current Town management structure divides parking responsibilities across a large number of departments. While some departments are charged with overall coordination, decision-making is not streamlined or consolidated. No singular permanent position exists with sole responsibility over parking management.

GOAL 1 Create an efficient, responsive parking management structure that serves all downtown stakeholders

This plan is founded on the need for a centralized decision-making position that can pursue and implement the strategies outlined here. The various parking policy, technology, supply expansion, and shared parking strategies here require a dedicated parking management structure to guide and calibrate their implementation while working directly with key stakeholders and partners.

Strategies in this section focus on the creation of a dedicated Parking Management position, an effective and ongoing parking outreach program, and the potential for a Parking Benefit District model in Amherst's future.

Strategy 1A: Create a dedicated Transportation and Parking leadership position in charge of all transportation policy, planning and implementation

Amherst should create a dedicated Transportation and Parking leadership position that is empowered to make decisions regarding parking management, negotiate shared parking agreements and other partnerships, and lead parking communication and advocacy efforts. This individual will be charged with the implementation of strategies outlined in this document as well as ongoing management and outreach efforts that support Amherst’s parking ecosystem.

The Transportation and Parking leader will ideally be a full-time position staffed by a transportation planner. Alternatively, an existing staff member may split part of their time to fill the parking related aspects of this role. However, the level of execution demanded by many strategies in this plan points to the need for a full-time staff member who can dedicate the entirety of their time and expertise to parking and transportation issues. Adding staff members will require approval within town budgets.

An example job description for this position is included in Appendix C of this report.

Key Actions

- **1A.1:** Confirm Town department in which position is based. (Planning is preferred.)
- **1A.2:** Draft job description to include roles and a reporting structure for staff (e.g. enforcement personnel).
- **1A.3:** Allocate funding for position through annual budget process.
- **1A.4:** Initiate hiring process.
- **1A.5:** As an interim / backup plan, assign parking aspects of this role to an existing staff person.

KEY IMPACTS:

- Centralize and empower parking management to implement key strategies
- Streamline stakeholder coordination
- Add value through dedicated transportation planning expertise

PRIORITY:

- High

PARTNERS:

- None

COST:

- 1 full time employee

CHALLENGES:

- Additional staff are a permanent expense that must be factored into Town budgets

Strategy 1B: Develop a comprehensive parking implementation communication program

A robust and responsive parking management system requires regular and ongoing outreach regarding new policies, parking rates, payment technologies, and permit programs. Amherst’s incoming Transportation and Parking leadership position should spearhead the development of communications protocols regarding parking and downtown mobility issues.

The Downtown Parking Working Group (DPWG) was intended as a temporary working group to spearhead solutions to Amherst’s parking issues. However, the DPWG is a valuable resource to continue coordination among key parking stakeholders and should be continued, perhaps in a more limited role, throughout the implementation of high priority strategies contained in this document.

Much of Amherst residents’ and visitors’ frustrations over parking policy are tied to a lack of clear communication surrounding policy changes. Each policy change for downtown parking should be accompanied by:

- A press release explaining in easily understood language the goals of the change and its specific implementation.
- A point of contact for stakeholders to reach out to directly with questions and concerns.
- Ongoing communication regarding the change(s) via regular outreach to the public and stakeholder groups such as the Downtown Parking Working Group, Business Improvement District, and others.
- Larger policy changes and developments should be accompanied by public workshops to refine and communicate the parking strategies.

Key Actions

- **1B.1:** Develop communication protocols (e.g. Town contact, press release guidelines, press requests, constituent inquiries/complaints, etc.).
- **1B.2:** Continue to engage key downtown stakeholders during the implementation process.
- **1B.3:** Engage with local educational institutions to ensure parking program changes and requirements are communicated and understood.
- **1B.4:** Develop informational materials highlighting parking changes.

KEY IMPACTS:

- Promotes public knowledge of parking policies and communicates Amherst’s long-term parking goals
- Provides a consistent contact point for stakeholder questions and feedback
- Promotes successful strategy implementation by making policies transparent

PRIORITY:

- High

PARTNERS:

- Stakeholder groups, BID, DPWG

COST:

- Existing and future staff time

CHALLENGES:

- Building consensus around specific policy changes can be time consuming

- **1B.5:** Create a Parking in Amherst website with all parking information in one place (e.g. www.parkinginamherst.com).

Strategy 1C: Establish a Parking Benefit District to fund downtown parking and infrastructure improvements.

A Parking Benefit District (PBD) means that parking revenues from within a specific district boundary directly support initiatives that further improve parking and downtown transportation. These revenues can be directed toward parking operations and equipment, improved wayfinding, streetscape and gateway improvements, validation and valet programs, and more. While Amherst already maintains a Transportation Fund, this Fund is not earmarked specifically for downtown improvements and covers transportation issues throughout the jurisdiction. A PBD will ensure that parking revenues are reinvested in the area which needs the most assistance accommodating future growth: downtown.

Revenues captured via the parking benefit district can directly support the new technologies, signage, and wayfinding materials that are outlined in this plan.

Figure 3 Example Signage for PBD



KEY IMPACTS:

- Capture parking revenue for mobility improvements to ensure that downtown mobility continues to grow
- Reap the rewards of effective parking management
- Promote alternative modes with a dedicated revenue stream

PRIORITY:

- High

PARTNERS:

- BID, DPWG

COST:

- Existing and future staff time

CHALLENGES:

- Downtown parking revenues can no longer be used as part of a broader Transportation Fund, but are limited to the downtown area
- Regular stakeholder coordination is needed to ensure that goals are appropriate

Key Actions

- **1C.1:** Establish PBD Boundaries (e.g. Downtown Parking Study Area) in which parking revenues can be allocated for improvements.
- **1C.2:** Define PBD improvement program categories or "buckets" – e.g. parking operations/equipment, streetscape improvements, parking facility enhancements/expansion (including shared parking compensation, etc.).
- **1C.3:** Draft PBD and fund framework - e.g. Enterprise Fund or Special Fund (under General Fund).
- **1C.4:** Establish a parking revenue baseline (revenues collected in previous full fiscal year) to estimate total funds available for improvements.
- **1C.5:** Formally adopt PBD through Town Council process.

Case Study – Pasadena, CA

Pasadena, CA was one of the first municipalities to adopt the Parking Benefit District model. Beginning in 1993, Pasadena installed meters in PBD area with the intent of leveraging the parking revenues for a future streetscape project. The new mobility projects funded through the parking district helped to reverse downtown Pasadena’s decline and over time increased sales tax revenue through a cycle of reinvestment. As of 2011, the Parking Benefit District gathered \$1.5 million per year for the funding of streetscape, parking, maintenance, and other mobility projects.

Figure 4 Parking Benefit District – Old Pasadena, CA



Issue: Public Parking is Overutilized

Public parking reaches 86% occupancy at 7 PM on Saturday, and approaches this figure during weekday peaks as well. While 86% can be considered an efficient use of the parking supply, it is also nearing the 90% threshold at which parking begins to feel difficult to find. A utilization level of this magnitude requires highly effective wayfinding, circulation patterns, management and payment systems, and enforcement to ensure that users have a positive parking experience within the limited availability of open spaces.

GOAL 2 Create a downtown parking system that provides convenient, predictable and flexible parking for all downtown residents, workers, and visitors

The following strategies address Downtown Amherst’s public parking utilization issue and strive to achieve a downtown parking system that conveniently serves all parking users, including residents, workers, and visitors. These strategies include progressive pricing schemes, availability goals, and routine data tracking methods.

Strategy 2A: Set parking availability and turnover goals and define performance-based zones accordingly

Amherst already implements performance-based pricing to some extent. Public parking spaces in the high-demand core area are more expensive than areas further away from the Downtown core. In order to formalize, sustain, and expand the demand-based pricing scheme, Amherst should establish a Parking Availability Goal and Parking Turnover Goal and conduct regular parking utilization and turnover counts to determine what parking facilities are under- or over-utilized. This performance-monitoring program would facilitate rate-setting for progressive pricing schemes and work to manage demand for parking through well-calibrated rates.

Amherst should set parking turnover goals independently for each parking zone and facility type. The following represents an effective initial set of turnover goals:

- Average turnover of up to 2 hours for on-street spaces in the core area.
- Average turnover of up to 4 hours for on-street spaces in non-core areas.
- Average turnover of up to 4 hours for all off-street spaces.
- Parking utilization goals should be set at 85% for all facilities. This threshold represents the point at which users feel a parking space is almost always available in a given block or facility.
- Parking utilization and turnover goals can be adjusted annually if stakeholder feedback and Town priorities shift. However, the scheme presented here reflects Amherst's conditions and goals as of the publication of this report.

Key Actions

- **2A.1:** Establish an 85% utilization target for all parking facilities to ensure parking is generally available within a short walk of most areas.
- **2A.2:** Establish a 2-hour turnover target for core on-street parking, and 3- or 4-hour turnover goal for off-street lots and discount areas to better ensure parking is available throughout the day.

KEY IMPACTS:

- Formalize goals for the parking system
- Provide a framework to adjust rates to reflect demand on a regular basis

PRIORITY:

- High

PARTNERS:

- ParkMobile, Parkeon, other vendors, business owners, BID

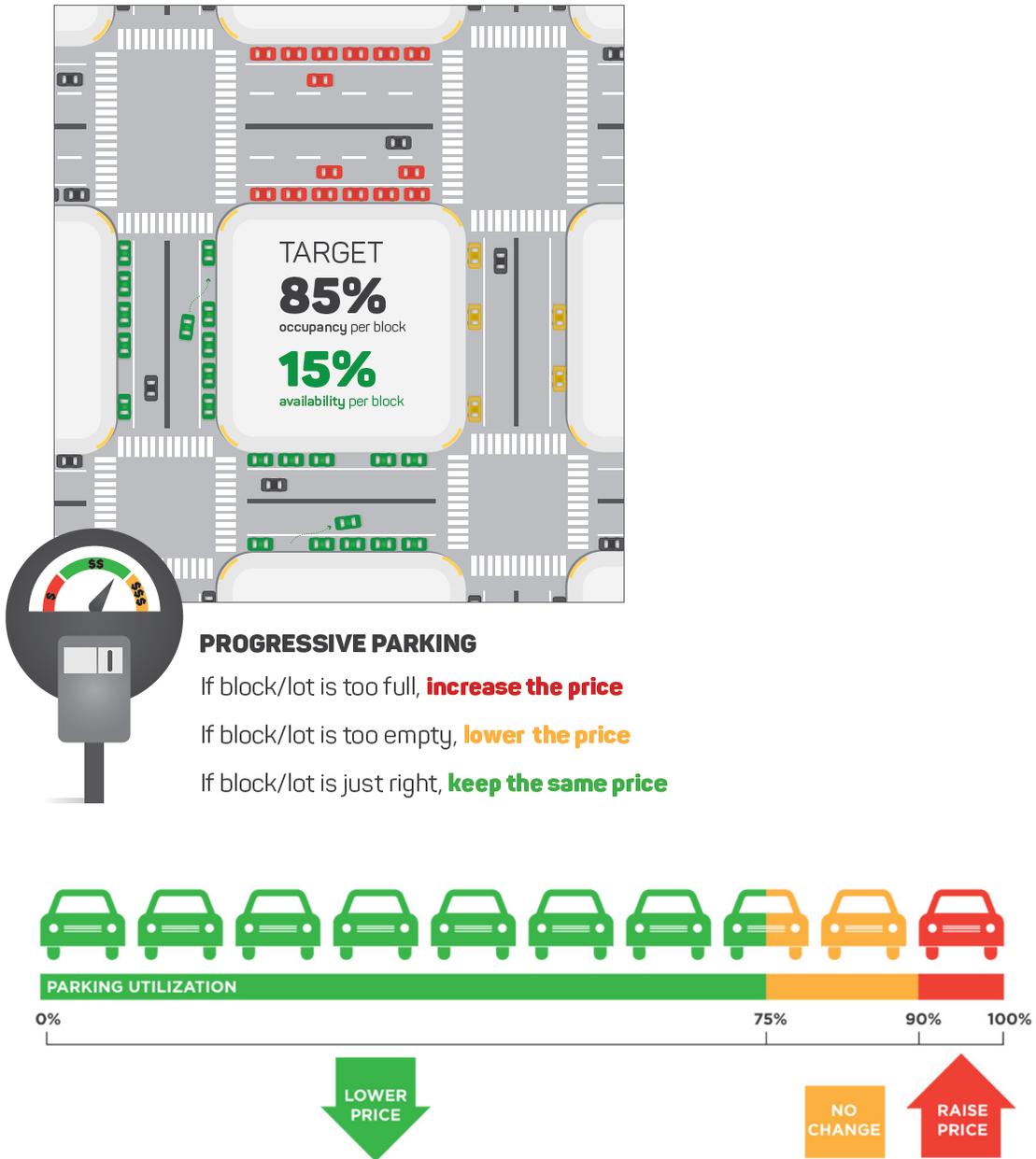
COST:

- Existing and future staff time

CHALLENGES:

- Regular field work must be conducted to calibrate goals
- Regular stakeholder coordination is needed to ensure that goals are appropriate

Figure 5 Parking utilization goal-setting



Strategy 2B: Conduct routine parking counts to track utilization and inform future parking system changes

Regular analysis and collection of critical parking-related data supports Amherst’s need for flexible policy-setting that engages stakeholders and aligns with community goals. Vendors that Amherst already works with, including Parkeon and ParkMobile, provide an assortment of parking utilization and other data that provides insight into parking trends as they develop over time. This data should be integrated to allow parking decision-makers to gain a holistic understanding of parking conditions.

While existing data sources are an excellent foundation, Amherst should also regularly collect in-field utilization and turnover counts to supplement these sources, evaluate utilization of traditional coin metered spaces, and gain an on-the-ground perspective of daily parking conditions. These counts should be conducted in regular (two-hour) intervals for one complete weekday and one complete Saturday, thereby tracking parking utilization throughout a daily period. Observed changes in utilization over time will support changes to parking rates.

KEY IMPACTS:

- Empower decision makers with critical information
- Provide a basis to update policies and rates as conditions change

PRIORITY:

- High

PARTNERS:

- ParkMobile, Parkeon, other vendors

COST:

- Existing and future staff time

CHALLENGES:

- Regular field work may require temporary or intern staff
- Integration of data from multiple payment platforms may be difficult or time consuming.

Key Actions

- **2B.1:** Analyze parking utilization monthly using available data including Parkeon kiosk data, ParkMobile data, and parking revenue collection (e.g. traditional meters).
- **2B.2:** Perform manual utilization counts quarterly to supplement data analysis and gain on the ground perspective to potentially identify parking behaviors not shown in data.
- **2B.3:** Analyze all data (from 2.B.1 and 2.B.2) annually to identify potential changes in parking utilization.
- **2B.4:** Based on findings from 2.B.3. consider changes to the parking system as needed (e.g. pricing changes, supply changes, etc.).

Strategy 2C: Adopt a graduated pricing scheme with performance-based pricing

Time limits are a potential pitfall for highly utilized public parking systems. When spaces are difficult to find, users may choose to park in a time-limited space even if the allowed limit does not match their needs. Furthermore, time limits can discourage customers from spending additional time in a downtown where they may engage in further consumer activity.

Elimination of time limits to encourage visitors to stay as long as they wish while ensuring that adequate parking turnover takes place can be accomplished via a graduated pricing scheme. For example:

- Parking for the first 15 minutes is free.
- Charge \$1 per hour for the first two hours of parking.
- Charge \$2 per hour for the third and fourth hours of parking.
- Charge \$3 per hour for any parking beyond four hours.

In this scenario, no parking users will have to move their vehicle (or receive a citation) after reaching an arbitrary time limit if they need to stay longer. Instead, they will be given the opportunity to pay a premium up front to park as long as they need (or extend their parking time via ParkMobile when staying longer than intended). This benefits the user by offering increased flexibility while also capturing a premium rate for users who are committed to a lengthy stay. The increased rates will deter users who only require a short stay from parking beyond what they reasonably need. This added flexibility can reduce the frustration associated with seeking a suitable short- or long-term parking space within a highly utilized and decentralized parking system such as Downtown Amherst’s. Further, some facilities could remain as long-term parking with a flat hourly rate in areas where parking is in less demand.

While graduated rates are not as simple as flat rates, they can be adjusted depending on changing needs of utilization and turnover. This also creates a need for calibrations over time to ensure that adequate turnover occurs. However, should a graduated structure be put in place, internal protocols should be in place related to rate adjustments – i.e. limiting rate changes to no more than once every 6 to 12 months based on supporting data gathered over the timeframe – to avoid confusing customers.

KEY IMPACTS:

- Increase parking system flexibility by allowing people to stay as long as they want in all areas
- Improve user experience by making violations less likely

PRIORITY:

- Medium

PARTNERS:

- ParkMobile, Parkeon, other vendors, business owners, BID

COST:

- Existing and future staff time
- Staff time to monitor utilization and turnover
- Additional kiosks for full implementation (approx. 1 kiosk per 10 spaces on-street)

CHALLENGES:

- Calibration of rates is needed on a regular basis
- More kiosks are needed for full on-street implementation

Amherst's existing parking payment platforms, ParkMobile and Parkeon Kiosks, are already capable of implementing graduated pricing in desired locations. Low-tech meters however cannot easily implement this rate structure; therefore, all on-street meter spaces should be replaced with Parkeon kiosks.

Implementation Steps

- **2C.1:** Replace on-street meters with Parkeon kiosks for full implementation (on- and off-street).
- **2C.2:** Establish parking turnover baseline (Likely 2 hours in core areas, and 3 or 4 in outer zones and off-street lots). See 2A.2.
- **2C.3:** Formalize utilization and turnover count process on a quarterly basis (see 2B.1 and 2B.2).
- **2C.4:** Work with stakeholders to establish initial rate scheme (base rate extends up to desired turnover baseline).
- **2C.5:** Contact vendors to implement new scheme (off-street lots to start since Parkeon kiosks are already available at these facilities).
- **2C.6:** Install signage throughout downtown to convey rate structure.
- **2C.7:** Adjust rates to promote desired turnover by facility type until utilization and turnover targets are met.

(Note: Graduated pricing could be implemented over time starting with lots already fitted with Parkeon kiosks. On-street could be added once kiosks replace manual coin-only meters.)

Case Study – Santa Cruz, CA

The City of Santa Cruz implemented a graduated pricing scheme for downtown parking in order to add flexibility, remove time limits, but maintain adequate turnover to support local businesses. Using smart meters, the City worked with a vendor to implement graduated pricing in multiple zones, as displayed below:

Figure 4 City of Santa Cruz Graduated Parking Pricing

Zone	1 st Hour	2 nd Hour	3 rd Hour	4 th Hour	Over 4 hours	Max Daily
Variable 1	\$0.50	\$0.50	\$1.00	\$1.00	\$2.00 / hr	\$15.00
Variable 2	\$1.50	\$1.50	\$3.00	\$3.00	\$6.00 / hr	\$45.00
Variable 3	\$0.75	\$0.75	\$1.25	\$1.25	\$2.00 / hr	\$16.00
Variable 4	\$1.00	\$2.00	\$2.00	\$2.00	\$2.00 / hr	\$15.00
Variable 5	\$0.75	\$0.75	\$1.50	\$1.50	\$1.50 / hr	\$15.00

Rates are higher in core zones than in outer zones. However, all zones have some form of graduated pricing to encourage turnover while eliminating time limits. The City found that:

- 55% of users stay for 1–2 hours.
- 23% of users stay for 2–4 hours.
- 8% of users stay for longer than 8 hours.

The City found that the number of citations related to overstaying meter lengths decreased but overall parking revenue increased due to longer stays. These extra funds are utilized in a benefit district to further improve mobility infrastructure. Santa Cruz parking manager Marlin Granlund stated,

“We used to get so many upset parkers when they were cited for feeding their meters longer than the time restrictions or for staying too long in our 3 hour time limited surface lots. Since we instituted the pay-by-space in our time limited lots, going with a variable rate on on-street meters and letting parkers pay by cell phone we have reduced the number of citations written by 30%. ParkMobile usage has increased from 8,000 users the first year to 128,000 users last year. We have not received a complaint from either parkers or businesses about vehicles being able to park longer than the old 1 or 2 hour on-street meter time limits.”

Issue: While Amherst's Public Parking is Highly Utilized, Private Parking is Underutilized

Visitors to Amherst may experience difficulty finding parking during peak hours. However, many of Amherst's non-public parking facilities are not fully utilized during these times. Given the high utilization of public parking, it is important that all available parking facilities are used to the greatest extent possible. The lack of a consistent shared parking policy fails to encourage attempts to unlock this available parking through agreements between individual private owners as well as comprehensive Town-wide shared parking initiatives.

GOAL 3 Maximize use of existing, underused private parking, for public use before making high cost municipal parking capital investments

While the high demand for parking in Downtown Amherst points to a need for more public parking spaces, not all of these new spaces have to come from expensive municipal capital investments in new parking facilities. Amherst should strive to maximize usage of all existing parking spaces through shared parking agreements and consistent outreach to lot owners and other key stakeholders. The strategies in this section are intended to promote shared parking agreements and provide lot owners with a foundation for implementing shared parking effectively.

Strategy 3A: Identify opportunities for shared parking in the Downtown

The first step toward unlocking the available parking supply via shared parking is to identify and track key sharing opportunities throughout Downtown Amherst. While not all lot owners will be willing to participate in a Town-wide sharing program, tracking these lots and communicating sharing options to the owners is a key first step in promoting a larger shared parking community. Lot owners should be educated about the ease of joining a shared parking program via ParkMobile and the potential for additional revenue at underused lots.

All private parking lots should be tracked in a database indicating their space supply, ownership, and shared status. Each entry can be tracked with notes indicating communications between the Town and the lot owner regarding the potential for sharing. As lot owners become more amenable to sharing, coordinate with them directly to implement the shared parking formats (both direct agreements with the Town and ParkMobile-based sharing) described in Strategy 3C.

Key Actions

- **3A.1:** Create a database of private parking facilities/parcels with ownership, total parking, and existing use (e.g. customer, worker, resident, etc.).
 - Create two categories: Town-Managed Shared Opportunities (20 or more space lots); Private Shared Opportunities (Under 20 spots).

KEY IMPACTS:

- Allow easy tracking of private parking and sharing opportunities
- Facilitate better coordination with lot owners

PRIORITY:

- Medium

PARTNERS:

- Private lot owners, business owners, BID

COST:

- Existing and future staff time

CHALLENGES:

- Small private lots may be difficult to incorporate into shared parking
- Consistent signage can be a challenge to provide given many individual lot owners

Strategy 3B: Develop sample Shared Parking agreement language in advance and to be ready to negotiate potential shared agreements

Preparation of standard shared parking language and agreement templates in preparation for brokering shared parking will streamline the sharing process and make lot owners more likely to agree to share. Please see Appendix F for examples of private-private and public-private shared parking agreements.

Typical shared parking agreement elements:

- Term and Extension
- Use of Facilities (location, times, users, etc.)
- Maintenance (responsible parties, categories, cost share)
- Operations (responsible parties, revenue allocation, customer service, etc.)
- Utilities and Taxes (responsible parties, cost share)
- Signage
- Enforcement/Security (type, responsible parties, etc.)
- Cooperation/Communication
- Improvements (rights, cost share, duration, etc.)
- Insurance
- Indemnification (during times of control; parties, litigation cost share)
- Termination/Cancellation

Other factors to consider during the preparation of shared parking agreements include:

- The reputation/image of the Town
- Regulatory and minimum design standards (zoning, other regulatory structures, data reporting)
- Leases (current tenant relationships/ retention, previous lease agreements, competition for leasing)
- Private terms are dictated by the local market and particularly the local objectives
- Taxes/financing (property valuation/ assessment, more taxes, bank financing)
- Development (changing/growing development, land banking)

KEY IMPACTS:

- Streamline the shared parking agreement process
- Clarify the expectations for private and public shared parking lot operations

PRIORITY:

- Medium

PARTNERS:

- Private lot owners, business owners, BID

COST:

- Existing and future staff time

CHALLENGES:

- Template agreements may not cover the nuances associated with specific lots

- Private-private structures: Private partners facilitate development amongst themselves. The Town is the holder of an agreement for community benefit, but not involved directly in the development facilitation.
- Joint development: The public provides some up-front garage construction capital in return for public parking; private partners receive capital discount in return for doing private operation/maintenance
- The story (making the case, information/knowledge/ education)
- Have a kickoff with shared partner to determine needs, ala carte options, base standard of care
- Parking competition (free adjacent parking)
- Apps and other technology
- Staffing/capacity

Key Actions

- **3B.1:** Draft Private Shared Parking agreement language that can be provided to parties interested in entering into a shared agreement (not operated by the Town).
- **3B.2:** Draft Public/Private Shared Parking agreement language for Town-initiated opportunities.

Shared Parking Agreement Types

Public Leases Private

The municipality or public entity would directly lease parking from a private landowner or entity for use of public parking or a specific need (e.g. events). This may mean that the entire facility or part of the facility is open for public use, or that the facility is publicly available for certain hours or days of the week. These types of stipulations may vary by facility and need from both parties.

Get started by:

- Meeting with landowners to determine needs
- Developing a base standard of care for maintenance and operations
- Creating a standard legal agreement with terms and conditions that can be adapted/refined

Figure 5: Shared Parking Agreement Considerations

Leesor/ Leesee	Terms & Extension	Use of Facilities	Maintenance	Operations	Enforcement & Security
Public	Evaluate return on investment (per individual facility or system as a whole)	Need available hours (and number of spaces) to be ample enough for investment	Evaluate added cost of maintenance and operations	Revenue collection; posting signage; could include maintenance	May assume enforcement role (if no gate)
Private	Long enough to ensure adequate return on investment May want to ensure terms that allow for potential redevelopment	Need to ensure base user can get use at end of sharing period (need to provide flexibility in extenuating circumstances)	If maintenance and operations already exists and is effective, it will likely want to be continued	If maintenance and operations already exists and is effective, it will likely want to be continued	Not necessary if gated (already can tow)

Private Leases Private

A private entity would work directly with another private entity to lease parking. The municipality or a third party may be involved for facilitation purposes. This arrangement works particularly well with land uses that have complementary uses/parking demand, or between facilities where one has excess parking supply. These arrangements may include the entire facility or part of the facility. These types of stipulations may vary by facility and need from both parties.

Get started by:

- Defining goals and objectives of municipality and shared parking purpose
- Defining role for the municipality, if any
- Understanding zoning impact
- Exploring real estate agents or property management companies as brokers, including identification of supply/demand sharing gaps
- Developing local case studies to serve as examples

Figure 6: Shared Parking Agreement Terms

Leasor/ Leesee	Terms & Extension	Use of Facilities	Maintenance	Operations	Enforcement & Security
Public	May be approached for transition plan or facilitation if needed May be needed as a resource or due to parking requirements	If zoning/waiver needed	Could be contracted for maintenance	Annual reporting	If ticketing needed
Private	3-year term, no out (typical) Up to 5 years with 90-day cancel	Entirely private	Landlord	Shared costs or landlord	Shared costs or landlord (may be on as-needed basis)

Strategy 3C: Facilitate shared parking agreements between individual property owners and as part of a town-wide shared parking system

Shared parking is the only way to fully unlock the parking supply and ensure that privately owned parking is not underutilized during large swaths of the day. While the small size and configuration of many of Amherst’s privately held parking facilities poses a challenge to successful shared parking, shared parking strategies are critical to the success of the overall parking environment. The shared parking demand model prepared as part of this report as well as in-field observations indicate that much of Amherst’s private parking is underutilized. True peak parking demand is well below the total space supply. Several key initiatives can bolster the shared parking ecosystem and unlock these spaces:

- Broker shared parking agreements directly by working with key stakeholders.
 - Many stakeholder groups have expressed concern about Amherst’s parking future. Continue to coordinate with these groups and actively pursue shared parking opportunities. The Business Improvement District, other local business owners, and private developers are all key stakeholders that should be regularly engaged in the pursuit of new shared parking agreements.
- Advocate for a Downtown Shared Parking District and coordinate between ParkMobile and interested property owners.
 - ParkMobile allows private parking owners to make their spaces available to the public at the times and rates of their choosing. Private parking that is underutilized for large portions of the day can be listed on the ParkMobile app alongside the Town’s dedicated public parking supply. Appropriate signage can be put in place at the location in question, and the property owner receives all or a portion of the revenue from the spaces. This flexible shared parking solution that works for lots of all sizes and piggybacks on the existing success of Amherst’s ParkMobile program.

KEY IMPACTS:

- Maximize usage of all available parking supply
- Provide intuitive and easy shared parking arrangements via ParkMobile

PRIORITY:

- Medium

PARTNERS:

- ParkMobile, private lot owners, business owners, BID

COST:

- Existing and future staff time

CHALLENGES:

- Small private lots may be difficult to incorporate into shared parking
- Consistent signage can be a challenge to provide given many individual lot owners

Key Actions

- **3C.1:** Reach out to all property owners with private parking to determine interest in participating in shared parking program - private or shared. Highlight revenue opportunities to the owner as an added source of income.
- **3C.2:** Implement public shared parking agreements between the Town of Amherst and private property owners. Refer to Strategy 3B for guidance on parameters.
- **3C.3:** Use current and other mobile parking apps to manage shared parking and to create additional low-effort sharing opportunities. Shared parking agreements can be brokered directly between lot owners and ParkMobile, with the Town serving as intermediary.

Case Study: Shared Parking in Asheville, NC

Drivers in downtown Asheville can pay for the City’s on-street parking using the Passport Parking App. Signage denotes the parking zone and provides instructions to pay for parking using a cell phone. If users do not have a smartphone, they can still pay using their phone by calling a number and specifying the zone or by texting a code (after registration).

Figure 6 Private parking being utilized as public parking and communicated through signage



Recently, private lot owners approached Passport, the third-party provider of Asheville’s parking app, to become part of the same payment system. Passport assigns the lot a “Zone,” and incorporates the lot into the app with the other Asheville parking resources. The lot owner posts signage describing the rates and regulations for the lot. Some lots maintain their private parking for periods of the day and convert to public parking in off-hours. Others operate as privately-owned, public parking throughout the entire day. Either way, private lot owners are able to take advantage of the city’s easy-to-use parking system without giving up control of the lot itself.

Issue: Employee Parking is Challenging and Impacts Customer Supply

Many business owners report that employees encounter difficulty finding parking and choose to or feel forced to feed meters during their work shifts. Communication is not consistent across businesses and prime spaces can sometimes be taken by employees rather than customers.

GOAL 4 Move to a more user-friendly, accessible, and predictable parking permit program

The Town Center Permit program is an excellent option for small business and municipal employees in need of affordable parking. Multiple employers just outside the existing Town Center Permit boundary, including the Emily Dickinson museum, have expressed interest in joining the Permit program. The following strategies focus on streamlining the Town Center Permit, expanding access to the permit system, and using effective communication strategies to promote employee usage of permit systems.

Strategy 4A: Refine the Town Center Permit Program to best meet the needs of downtown stakeholders

The first step toward improving the Town Center Permit program is refinement of its core structure. The Town Center Permit should be expanded to operate all year, ensuring that parking management is consistent at all times. While the current months of enforcement from September through May represent the likely peak parking periods in Amherst due to the significant college-related population, all-year permits will create a sense of permanence and reliability that is more attractive to potential users. The inclusion area for the permit should also be evaluated to ensure that nearby employers who may benefit from permit use are able to do so. Finally, regular utilization counts of permit areas should be conducted to ensure that rates are increased to reflect growing demand. However, given that permits are currently underutilized, no increases should be made to the current rate in the short term. In the future, the number of permits issued can be capped based on total permit spaces to ensure that permit-holders are always able to find a space.

Key Actions

- **4A.1:** Convert seasonal Town Center permit to be all year.
- **4A.2:** Expand Town Center Permit eligibility to include more employers/areas adjacent to downtown (e.g. Dickinson Museum).
 - Reach out to employers in areas just outside of current boundary to gauge interest/need to determine boundaries.
 - Evaluate total number of passes issued compared to spaces available prior to expanding.
- **4A.3:** Consider increasing Town Center Permit fee structure when utilization exceeds 85% during permit hours.
- **4A.4:** Convert to "virtual permit system" once LPR is procured. (See 5B)
- **4A.5:** Limit number of resident permits issued to downtown units (maximum of 2).

KEY IMPACTS:

- Maximize usage of Town Center Permit spaces
- Reduce small business employees parking in key on-street metered spaces

PRIORITY:

- High

PARTNERS:

- Employers

COST:

- Existing and future staff time, associated materials, supportive technologies

CHALLENGES:

- There is no mechanism to force employees to use the permit, but they can be strongly encouraged to do so
- As the Town Center Permit grows in popularity, space will become more limited and rates may need to increase

Strategy 4B: Ensure other parking initiatives and recommendations complement and/or support parking permit programs

The Town of Amherst recently extended some meter enforcement until 8 PM in the core areas of Downtown. While this effort met with opposition from some members of the community, meter enforcement until 8 PM represents an opportunity to effectively manage employee parking demand and general peak parking demand that may not otherwise be possible.

Opposition to the 8 PM enforcement stems largely from confusion related to the variable enforcement hours seen throughout Town. Consistent enforcement hours, whether at 6 PM or 8 PM, will remove this issue.

Given the scarcity of on-street spaces near key activity centers during the evening restaurant rush, enforcement should continue until 8 PM. Although many stakeholders state a preference for ending enforcement at 6 PM, this would continue to allow evening restaurant employees to feed meters for only a few hours before receiving free parking all evening, likely in a prime location that ideally would serve customers. 8 PM enforcement will deter restaurant employees from this behavior.

While enforcement currently begins at 8 AM, utilization data indicates that enforcement start time may safely be delayed until 10 AM. This change in start time would allow early morning users who may be making quick stops to do so without the hassle of paid parking.

Key Actions

- **4B.1:** Extend meter enforcement hours to 8 PM consistently across the study area to discourage employees from parking in front of businesses.
- **4B.2:** Ensure signage clearly indicates parking restrictions (see 7A).

KEY IMPACTS:

- Ensure that critical on-street spaces are for customers, not employees
- Promote further usage of the Town Center Permit system

PRIORITY:

- High

PARTNERS:

- Employers, BID

COST:

- Existing and future staff time, signage to convey enforcement policy

CHALLENGE:

- Business owners may be concerned about the impact of later enforcement on their customers
 - Valet and validation programs can mitigate this concern (see Goal 6)
 - Lack of convenient on-street spaces for customers is a greater deterrent than a few dollars of additional parking payment until 8 PM

Strategy 4C: Develop a more robust communication strategy for downtown stakeholders to increase awareness of parking permit programs.

The public input process for this study revealed that many small business owners believe that their employees feed meters rather than finding more permanent parking options. Improved and regularized communications with business owners regarding employee permit parking options will be a critical supplement to the revised Town Center Permit system outlined in Strategies 4A and 4B.

Key Actions

- **4C.1:** Enhance communication efforts with business owners.
 - Develop presentation highlighting parking permit programs including cost savings to employees.
 - Host information sessions for downtown businesses and employees highlighting program offerings/benefits (cost), etc.

KEY IMPACTS:

- Maximize usage of Town Center Permit spaces
- Reduce small business employees parking in key on-street metered spaces

PRIORITY:

- Medium

PARTNERS:

- Employers, developers, BID

COST:

- Existing and future staff time

CHALLENGES:

- Promoting employer participation in outreach can be a challenge

Figure 7 Town Center Permits – Potential Savings



Issue: Some Parking Payment and Management Technologies are Inflexible

Much of Amherst's parking is managed through modern, flexible systems such as ParkMobile and Parkeon kiosks. These platforms enable critical data tracking and flexible payment systems that make parking more convenient. However, Amherst's highly utilized on-street parking remains outfitted with traditional meters that lack this functionality and make parking less convenient. Furthermore, enforcement is conducted without the aid of new technologies such as License Plate Readers (LPR) which make enforcement more efficient and enable advanced parking management features.

GOAL 5 Utilize parking technology that enhances parking availability, system performance, and convenience

The strategies in this section identify key technology enhancements that will improve Amherst's parking experience, enable advanced management systems, and improve data tracking for an incoming Parking Leadership position. These technologies include LPR, additional Parkeon kiosks to make on-street parking more efficient, and integration with ParkMobile and other apps that support shared parking and innovative practices.

Strategy 5A: Enhance parking experience through updated technologies to provide more information, consistency and predictability to parkers

Advanced parking payment and management technologies ensure that Amherst’s parkers experience the most convenient and accessible parking system possible. Replacement of on-street meters with modern kiosks ensures that all payment types are accepted, advanced pricing schemes such as that outlined in Strategy 2C are possible, and improved trend-tracking for parking managers is available. Coins, cash, credit cards, and mobile payments should all be accepted in a modern parking system.

Kiosks also allow for the removal of painted space lines, if desired, to maximize usage of available space. They also remove the need for physical meters at each space, allowing the sidewalk area previously used for meters to be repurposed and opened for pedestrian use.

Typically, pay-by-plate kiosks are installed at a rate of 1 per 10 spaces in an on-street environment. Siting of new kiosks should take into account the walk distance from all nearby spaces to the new kiosk site to ensure that parkers are not expected to complete a lengthy walk in order to pay for parking.

While kiosks are a current technology that enable necessary advanced features, future parking technologies will continue to create opportunities for more convenience and better parking management. Amherst should continue to track the development of new parking technologies to ensure that parkers receive the best possible experience in the future.

Key Actions

- **5A.1:** Replace on-street coin-only meters with kiosks that accept coins, cash, and credit cards.
 - If completed in phases, prioritize areas with highest parking utilization, then areas with lower.
 - Ensure kiosks are compatible with other parking technology systems used in Amherst.
- **5A.2:** Regularly research latest parking technologies available.

KEY IMPACTS:

- Kiosks allow for more efficient on-street parking,
- Improved and customer-friendly payment options
- Graduated pricing schemes possible for on-street parking
- Data tracking improved versus coin meters

PRIORITY:

- High

PARTNERS:

- BID, DPWG

COST:

- Existing and future staff time, kiosk purchase and installation

CHALLENGES:

- Procuring, siting, and installing new kiosks is an intensive process

Strategy 5B: Adopt License Plate Reader (LPR) technology for enforcement

LPR technology allows parking enforcement to take place more efficiently. Permits can be enforced easily with license plates rather than stickers using a virtual permit system, allowing permit management to become streamlined. On-street spaces and lots using the pay-by-plate system can also be monitored using the technology.

LPR can also assist with data tracking, replacing the need for manual in-field utilization counts.

While the initial expense to implement LPR is a barrier, the long-term benefits of this technology support the investment cost. Procurement via the Metropolitan Area Planning Council's (MAPC) statewide joint procurement program may provide lower cost options and facilitate implementation.

Key Actions

- **5B.1:** Research LPR systems both handheld (for Parking Ambassador use) and vehicle mounted.
- **5B.2:** Allocate funding to purchase equipment.
 - MAPC joint procurement may provide lower cost options than going it alone.
 - Parking Benefit District (1C) funds can be allocated for technology procurement.
- **5B.3:** Use LPR for multiple purposes.
 - Use LPR to track and cite parking violations.
 - Use vehicle-mounted LPR to track utilization. (Replace manual counts once procured.)
 - Use for virtual permit program.

LPR Cost - The approximate cost to support the installation of LPR equipment on an existing vehicle is approximately \$50,000-\$65,000, inclusive of training and infrastructure needs, the installation of the cameras on the outside of the vehicle, wheel-imaging camera, the processing unit in the trunk, and the in-vehicle PC and navigator set-up in the front seat.

KEY IMPACTS:

- Enforcement becomes easier and more consistent
- Pay-by-plate is easy for users and requires no receipts or tickets
- Virtual permit systems are easy to track and manage
- In-field utilization counts may no longer be necessary
- Data tracking improved versus coin meters

PRIORITY:

- Medium

PARTNERS:

- LPR and app vendors

COST:

- Existing and future staff time, LPR handheld and vehicle-based cost

CHALLENGES:

- Startup costs are high
- Enforcement staff require retraining

Strategy 5C: Enhance communication efforts regarding available spaces in Downtown Amherst

Analysis conducted for this plan reveals that Town Center Permit spaces, which open to the public after 5 PM, are underutilized during the evening peak period. The public availability of these spaces should be directly communicated on all Town parking maps and web materials. These areas represent a critical opportunity for public parking.

Given the high utilization of many public lots, Amherst should also investigate the space counting capabilities of existing Parkeon infrastructure and consider adding space-counting signage in the future for larger facilities. These mechanisms make space identification easier for unfamiliar users.

Partnerships with apps such as Parkopedia or SpotHero also allow private spaces to be rented on a one-off basis. These apps add one more way to maximize the use of all available spaces in Amherst.

Key Actions

- **5C.1:** Ensure all parking available to the public is communicated on parking maps (e.g. Town Center Permit areas available after 5pm).
- **5C.2:** Maximize current parking system capabilities (or explore installation of space counting systems) to display number of spaces available.
 - Reach out to Parkeon to understand capabilities of existing system.
 - Consider installing parking counter signage (integrated into comprehensive wayfinding program) at key town parking facilities at highly visible locations. This should be coordinated with a broader signage and wayfinding plan (7A).
- **5C.3:** Explore partnerships with real-time on- and off-street parking availability app integration with current systems. (e.g. Parkopedia, SpotHero, ParkWhiz, Parker, Parknav, etc.)
 - Enter into agreements that meet Town of Amherst needs.
 - Integrate real time parking information into Park Amherst website.

KEY IMPACTS:

- Maximize user awareness of all parking options
- Counter signage allows easy identification of open spaces for unfamiliar users
- App integration opens new opportunities for space identification

PRIORITY:

- High

PARTNERS:

- Parking apps, BID, DPWG

COST:

- Existing and future staff time, dynamic signage costs

CHALLENGES:

- Counter signage is not appropriate for smaller facilities

Issue: Parking Policies and Enforcement are Not Customer-Friendly

Amherst's public parking supply is regulated with varying time limits, rates, and enforcement hours. While users typically do not experience discomfort from varying rates, inconsistent enforcement hours can lead to confusion, as addressed in Strategy 4B. In addition to consistency, other management strategies and partnerships can make parking users feel more at home and more likely to have a positive experience.

GOAL 6 Implement programs that make parking in Downtown Amherst more inviting and convenient to customers

Strategies in this section address the need to provide a customer-friendly and business-supportive parking environment. The Town of Amherst can serve as a coordinator, partner, and proponent of these strategies. However, parking validation and valet systems should be spearheaded and operated primarily by the business community, with the Town of Amherst in a coordination and policy management role.

Strategy 6A: Create a parking validation system

Amherst’s existing ParkMobile platform is equipped to operate a validation system. Amherst business owners can fund parking validations that can be offered via ParkMobile codes distributed to business patrons. This can allow enforcement hours to be extended while avoiding additional expense for patrons.

The Town of Amherst should communicate this functionality to the business community, gauge interest, and coordinate between ParkMobile and business owners to offer a validation system. This validation system can alleviate concerns regarding customer-friendly parking and an 8 PM enforcement time for metered parking. Validation is simple to setup via ParkMobile and can be funded by all participating business owners.

Key Actions

- **6A.1:** Work with parking app vendor (currently ParkMobile) to allow parking validation app features to be available.
- **6A.2:** Distribute parking validation program information to Downtown businesses to notify them of the option.
 - Request information packets from ParkMobile to be distributed.
 - Optional: Customize/brand validation information packets to provide more "local" feel to encourage participation.
- **6.A.3:** Explore Town validation program.
 - Consider discounted parking validation to encourage increased visitor traffic during slower times of the year.
 - Consider "free parking" to encourage unofficial-holiday and other special event shopping in the downtown.
 - Free parking is provided by the Town at the request of the BID on Saturdays during the holiday season between Thanksgiving and Christmas. We would recommend limiting these days to “Black Friday” and Christmas Eve, days where downtown is most likely to attract visitors with free parking. Providing free parking every Saturday, may negatively affect business activity since time limits aren’t in effect and parking may become scarce with those who stay for longer periods.).

KEY IMPACTS:

- Mitigate concerns regarding 8 PM enforcement
- Create a customer-friendly parking environment
- Capitalize on available ParkMobile functionality

PRIORITY:

- Medium

PARTNERS:

- Parking apps, BID, DPWG

COST:

- Existing and future staff time

CHALLENGES:

- A critical mass of business participation is needed to make the most use of this system

Strategy 6B: Advocate for a shared valet program

Valet programs create an opportunity to use parking space as efficiently as possible. Local businesses can join together to pool their parking resources in a shared parking agreement that also offers valet service. In addition to the convenience offered to customers, valet drivers can stack cars and make use of all available space in a given lot.

The Town should serve as an advocate and organizer for this type of shared valet program. However, the Town does not need to operate and fund this service. The BID and private business groups are best positioned to fund and operate a valet program, with the Town serving as a policy advisor and manager of impacts to any public parking supplies.

Key Actions

- **6B.1:** Reach out to downtown business owners to gauge interest in a valet parking program.
 - Draft letter and distribute to all downtown businesses to identify those interested in participating in a Downtown Shared Valet program.
 - Create database of interested businesses.
- **6B.2:** Draft Shared Valet Program policy including pick-up area requirements (use of public on-street spaces), participant contributions, service fee (cost to users), parking storage location (e.g. garage) and liability responsibilities (typically the service provider).
 - Identify drop-off/pick-up locations (2-4 on-street spaces) with the potential to serve multiple businesses based on interest identified from 6.B.1.
- **6B.3:** Establish service fee framework for participating businesses (or BID, if sponsors/subsidizes service).
- **6B.4:** Contract with a valet service provider.
 - If sponsored in part by Town, develop and issue an RFP for a valet vendor. If run entirely by the BID, reach out to local valet vendors to submit service and cost proposals.
- **6B.5:** Develop communication/marketing program to announce program, including press release, valet signage, and more to promote program.
 - Draft press release to announce program including launch date, fees (for users), hours of operation, etc.

KEY IMPACTS:

- Maximize efficient usage of parking supplies through valet stacking
- Promote shared parking agreements between private businesses with collaborative valet program
- Leverage private funds for innovative parking management

PRIORITY:

- Low

PARTNERS:

- Parking apps, BID, DPWG, business owners

COST:

- Existing and future staff time

CHALLENGES:

- A critical mass of business participation is needed to make the most use of this system

- Design on-street signage (non-permanent) to inform downtown users of the service including wayfinding (at intersection of Pleasant and Main) and drop-off locations.
- **6B.6:** Launch shared valet pilot program.
 - Track usage over 3 month period.
 - Make valet permanent if demand/use is sufficient to cover (or nearly cover) cost to operate.
 - Suspend pilot if demand/use is low and does not cover cost to operate.

Strategy 6C: Shift to a Parking Ambassador model of enforcement

Parking Ambassadors are a way to reinvent enforcement in a more user-friendly role. Ambassadors direct users to parking areas, assist with wayfinding and information sharing, and promote a positive atmosphere.

A Parking Ambassador model should embrace the following characteristics:

- Officer uniforms and vehicles should be rebranded to point to a friendlier ambassador style.
- New job duties should be formalized to include helping visitors with wayfinding and answering questions regarding parking policies.
- Grace periods and first-time forgiveness should be implemented to improve the user experience.

Key Actions

- **6C.1:** Define Parking Ambassador roles and responsibilities (i.e. job description).
- **6C.2:** Revise parking enforcement practices to be more customer and business friendly.
 - Allow 8-minute grace periods. Grace periods begin after the purchased meter time expires. (Needs to be formalized - only possible with parking kiosk or smart-metered areas.)
 - Institute first time forgiveness program - instead of issuing ticket, provide pamphlet highlighting parking options. (Requires maintaining a database.)
- **6C.3:** Procure and provide new "Downtown Ambassador" uniforms to staff.
- **6C.4:** Hold training workshop with Parking Ambassadors. Reorient ambassadors toward helping visitors, providing information, and conducting wayfinding. Train Ambassadors on grace period and first-time forgiveness policies.
- **6C.5:** Implement program in concert with press release, on-street physical flyers and materials, online publication, and direct outreach to stakeholder groups.

KEY IMPACTS:

- Make enforcement customer-friendly
- Avoid visitor frustration over parking tickets
- Spread awareness of parking options

PRIORITY:

- Medium

PARTNERS:

- ParkMobile and Parkeon

COST:

- Existing and future staff time, enforcement uniform and equipment branding

CHALLENGES:

- Retraining staff not accustomed to a public facing, communication heavy role.

Issue: Wayfinding, Signage, and Safety Features are Inadequate

Town Center Permit spaces on side streets are currently underutilized despite being free and open to the public after 5 PM and on weekends. Wayfinding and signage is not consistent and is often inadequate for visitors and other users unfamiliar with the Town's parking options. Multiple opportunities exist to improve the downtown environment and make parking users more comfortable and willing to use all of their options.

GOAL 7 Improve wayfinding and signage to intuitively guide visitors to, from, and between parking and downtown attractions and amenities

Key investments into new signage and lighting can encourage visitors to make better use of all parking and mobility options. Town Center Permit blocks should be prioritized for improvements to encourage use, while major public parking facilities should be branded and indicated consistently with high visibility signage.

Strategy 7A: Implement high visibility and consistent signage in key locations

Amherst should ensure that parking and wayfinding signs should be branded consistently, include intuitive facility names, and help to direct pedestrians and vehicles alike. Key facilities like the Boltwood Garage should be labeled as such. Signs and maps should identify these key parking areas clearly, by name, and support wayfinding to and from these facilities to other activity hotspots. All parking signs should accurately reflect rates, time limits, permit requirements and other parking regulations. Whenever new parking policies are created, signs should be updated to reflect the new environment.

Key Actions

- **7A.1:** Identify trouble spots and prioritize them for implementation of improved signage. Ensure that new signage is consistent and matches the Town’s parking brand both on the street and in online materials.
- **7A.2:** Update all signs in Downtown Amherst to match new parking regulations and branding.
Communicate new enforcement policies, rate and time limit structures, and branding and labeling of facilities on all signs in the parking system.
- **7A.3:** Integrate facility names and branding into ParkMobile and all online parking materials. New parking system users may check online for information first. Ensure that branding, signage, and the ParkMobile interface align with the user’s online experience.
- **7A.4:** Work with private parking and shared parking operators to integrate signage and wayfinding. Private and shared parking facilities can benefit from directly integrating wayfinding and signage into the Town’s parking materials. From the user perspective, the ownership of a given facility is irrelevant. Ease of use should be prioritized across the whole parking system, regardless of operator.

KEY IMPACTS:

- Improve the visitor parking experience with improved wayfinding
- Avoid visitor frustration over parking tickets due to unclear regulations
- Spread awareness of parking options

PRIORITY:

- Medium

PARTNERS:

- None

COST:

- Existing and future staff time, sign production and installation cost

CHALLENGES:

- Signage must be clearly identifiable amid various street furnishings
- Signs must match online and other materials in terms of branding

Figure 8 Best Practices in Parking Signage



Strategy 7B: Improve lighting, pedestrian infrastructure, and other safety amenities on side streets

Side streets are currently underutilized during peak public parking hours. Improved lighting, sidewalks, and crosswalks will make these areas more comfortable to use and encourage better distribution of parking demand.

Streets such as Cowles Lane, North Prospect Street, Hallock Street, and others offer parking quite close to the Downtown core. However, since they are less well lit than main corridors like Pleasant Street, parkers are reluctant to utilize them during evening hours.

A short five- or ten-minute walk from a parking space to a destination can be a pleasant or even rewarding experience in a mixed-use downtown like Amherst's. Poor crosswalks and sidewalks can harm this experience and cause parkers to feel the need to park directly adjacent to their final destination. Pleasant Street, Amity Street, and Main Street in particular should have frequent and high-quality crossings, including mid-block crossings where appropriate. Crossings should also be situated at key accessways to parking facilities.

Key Actions

- **7B.1:** Identify where lighting is lacking on Town Center Permit blocks and other key parking side streets. Poor lighting is a deterrent to utilization of Town Center permit spaces.
- **7B.2:** Improve crosswalks on primary corridors and ensure that sidewalks are well maintained.

KEY IMPACTS:

- Make Town Center Permit spaces on side streets more viable for evening hours
- Improve user comfort and safety
- Make users feel more comfortable parking further away from their final destinations

PRIORITY:

- Medium

PARTNERS:

- None

COST:

- Existing and future staff time, lighting analysis costs, equipment purchase and installation

CHALLENGES:

- Lighting on side streets must respect the needs of nearby residences and avoid excessive light spillover

Issue: Public Parking is Overutilized

As outlined within Goal 2, public parking is overutilized in Downtown Amherst. While strategies in Goal 2 address this issue through management, technology, and policy changes, this section outlines the process for direct expansion of the municipal and shared parking supply.

GOAL 8 Add new parking facilities when utilization regularly surpasses 85%

All of the strategies contained in this plan are designed to cope with growing parking demand, add to the parking supply, streamline management and enforcement, and ultimately create a positive parking experience for all Amherst parking users. Low-cost management- and technology-based strategies should be implemented to manage parking utilization and user experience before major capital investments are made in new facilities. If municipal and shared parking utilization exceeds 85% regularly over time, new facilities may be warranted, particularly within a new development context. The Town must determine what frequency of this elevated utilization warrants the costly investment in new parking facilities. Currently, this condition likely only occurs during the peak months when colleges are in attendance. Furthermore, implementation of the other strategies in this document should be given time to mature before major investments in parking facilities are made. The strategies in the following section deal with the process, challenges, and supplemental policies necessary to add more parking facilities in Amherst's downtown.

Strategy 8A: Expand the public parking supply through design interventions

While large-scale parking facility construction is highly expensive, smaller design interventions can add parking spaces without a massive capital investment. Restriping on-street and other parallel spaces to 20 feet versus the 22 feet that was once common can add up to 9% more parking spaces on a given street. Moving from meters to kiosks also opens up more flexibility to arrange spaces in innovative ways and even allows for all stall markings to be removed, if desired, to maximize potential for efficient parking.

Key Actions

- **8A.1:** Restripe Amherst’s on-street parking stalls from 22 to 20 feet. Amherst’s on-street parking stalls are 22 feet in length. Modern vehicles only require 20 feet to safely and easily park.
- **8A.2:** Shift from on-street meters to kiosks (see Strategy 5A).
 - Individual meters limit the Town’s ability to more efficiently use on-street space. Each serves one parking stall. Should on-street stalls be reduced in size, kiosks eliminate the need to reset the meters (and the cost). Kiosks also eliminate the need for painted stalls and allow vehicles to park as efficiently as possible in the available curb space.

KEY IMPACTS:

- Ensure that all available street and lot space is used efficiently for parking
- Add to the public parking supply

PRIORITY:

- Low

PARTNERS:

- None

COST:

- Existing and future staff time, restriping costs, kiosks costs

CHALLENGES:

- The locations of curb cuts, driveways, and other street features may limit how many spaces can be gained through restriping

Strategy 8B: Add new parking facilities via public-private partnerships, dedicated private investment, or municipal investment

As development continues, new parking facilities will likely be required. After gains from shared parking and management strategies are exhausted, the Town should seek partnerships with developers and other stakeholders interested in adding to the parking supply via new facilities. While no formal parking requirement exists for new development in Amherst’s Downtown district, the Town can encourage developers to provide additional parking in order to accommodate their own customers and tenants with the understanding that the existing public parking supply is currently overutilized.

Key considerations in pursuit of new parking facilities include:

- **Maintain communication with developers** who are interested in adding high-intensity land uses to Downtown Amherst.
 - Notify developers that, despite the lack of a formal parking requirement, existing public parking conditions may hamper the success of mixed-use developments which fail to provide adequate parking for their own customers and tenants. Also, see strategy 8C for an example of progressive mobility requirements that could be implemented to require transportation investment from developers.
- **Investigate the expansion of Town-owned parking in key areas.** Expansion could include more efficient lot design, or structured facilities. However, we would recommend cost-efficient strategies be implemented and assessed before higher cost projects move forward.
 - **Boltwood:** The small size and configuration of the existing Boltwood facility poses challenges to redevelopment as a larger parking deck. Several businesses and residences are oriented facing the Boltwood facility. However, few similar Town-owned parcels are available in the core of Amherst for parking facility construction. Boltwood may be a candidate for parking expansion in the future when other options are exhausted due to its central location.

KEY IMPACTS:

- Add a large number of spaces to the public / shared parking supply
- Leverage public-private partnerships to create new shared parking areas

PRIORITY:

- Medium

PARTNERS:

- Developers

COST:

- Existing and future staff time, capital investment for new facilities, long-term operational costs of new facilities

CHALLENGES:

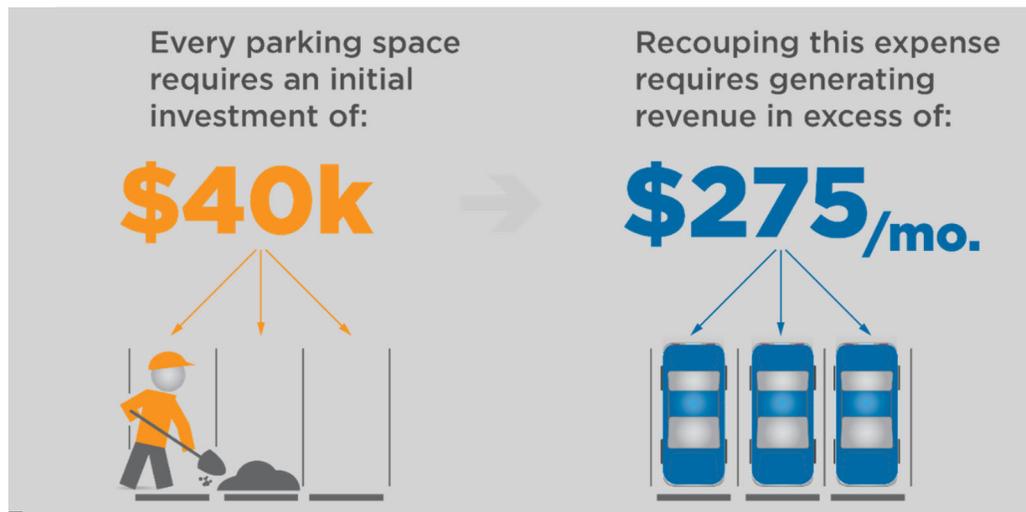
- The positioning and size of Town-owned parcels limits potential for new municipal facilities
- New parking facilities are highly expensive
- No parking requirement exists to force developers to supply parking

- **North and South Common Lots:** These lots are centrally located and, despite their small size, represent opportunities to expand parking in the future. Constructing below-grade parking at the site of these two lots would limit impact to the Town Common and expand the parking supply in a critical area.
- **North Pleasant Street Lot.** This centrally located, but poorly connected lot, holds the greatest potential for a parking deck or larger structure. However, as mentioned, access in and out of the lot is constrained by poor right-of-way from North Pleasant Street. Negotiating with the property owner to provide improved access is needed.
- **Amity Street Lot and Adjacent Private Lots:** The Amity Street Lot is centrally located next to some of the most popular business in Town, including the Amherst Cinema. The Town should investigate consolidation of the Amity Lot and adjacent Bank of America lot (which already has a shared agreement with Amherst Cinema) and People’s Bank lot. Together, these lots represent an opportunity to formalize a larger, more easily managed shared parking facility and would potentially allow the Town to engage in restriping efficiencies or even new facility construction.

Key Actions

- **8B.1:** See shared parking recommendations (3A – 3C).
- **8B.2:** Although not required under current zoning, work with developers to provide on-site parking at new developments.
- **8B.3:** Identify parcels in the downtown parking district most able to provide additional public parking.
 - Assess potential of each publicly owned parcel to provide additional parking including North Pleasant lot, Amity lot, upper and lower Boltwood garage, and Town Common lots.
- **8B.4:** Explore opportunities to purchase undervalued parcels for future parking supply.

Figure 9 Investment Costs for New Parking Facilities



Strategy 8C: Implement progressive mobility requirements to leverage private dollars for mobility improvements

Amherst currently requires no parking for Downtown-area developments. While eliminating parking requirements is considered a best practice for ensuring that Downtowns remain mixed-use, walkable, and bikeable, the lack of parking requirements can also lead to a lack of private investment in mobility.

Amherst should consider implementation of Access Management Requirements (AMR), a set of transportation requirements that give developers a menu of options for fulfillment. These options include payment directly into a Parking Benefit District / Mobility Management District, provision of new shared parking spaces, funding of bike and pedestrian improvements within the AMR area, and other transportation demand management (TDM) measures such as provision of shared cars within the development, subsidized transit passes for tenants, and more. Please see Appendix D for a detailed explanation of AMRs and multiple case studies illustrating potential applications.

Key Actions

- **8C.1:** Establish Access Management Requirements based on national best practices.
 - Allow developers to satisfy the requirement through a variety of mobility improvements, including shared parking, bike and pedestrian enhancements, and TDM incentives programs for tenants (see Appendix for examples).
 - Allow developers to pay directly into the Parking Benefit District to satisfy the requirement and support Downtown Mobility (see 1C).
- **8C.2:** Align funds and new improvements gained via AMRs with long-term transportation planning efforts for Amherst’s downtown.

KEY IMPACTS:

- Leverage private dollars for critical Downtown mobility improvements while avoiding over-construction of parking
- Incentivize development with flexible requirements that do not limit the viability of mixed-use developments

PRIORITY:

- Medium

PARTNERS:

- Developers

COST:

- Existing and future staff time, capital investment for new facilities, long-term operational costs of new facilities

CHALLENGES:

- Implementation of new bylaw requires a lengthy and thorough process
- The impact of AMRs may take several years to observe after implementation depending on development patterns