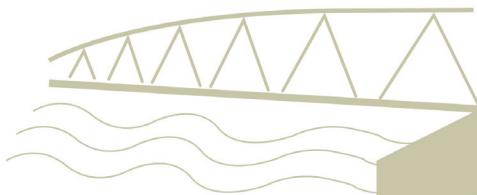




VILLAGE OF FAIRPORT DOWNTOWN PARKING STUDY

Fall 2024

Village of Fairport



CBC
Character-Based Code

FISHER 
ASSOCIATES



CONTENTS

1.0 Overview	... 4
1.1 Summary of Findings	... 6
1.2 Project Overview	... 7
1.3 Parking Requirements and Zoning	... 7
1.4 Previous Studies	... 8
1.5 Report Organization	... 9
2.0 The Importance of Right-Sized Parking	... 10
2.1 Introduction	... 11
2.2 The Problems with Excess Parking	... 11
2.3 Trends Influencing Parking Reform	... 17
3.0 Existing Conditions	... 22
3.1 Overview	... 24
3.1 Parking Facilities	... 26
4.0 Parking Supply Analysis	... 28
4.1 Summary of Findings	... 30
4.2 Discussion	... 33
5.0 Buildout and Parking Demand	... 34
5.1 Purpose	... 36
5.2 Development Buildout	... 36
5.3 Parking Demand Model	... 38
6.0 Recommendations	... 44
6.1 Recommendations Overview	... 46
6.2 Parking Facility Management	... 46
6.3 Policy Recommendations	... 50

[This page left intentionally blank.]

1.0 Overview



1.0 Overview

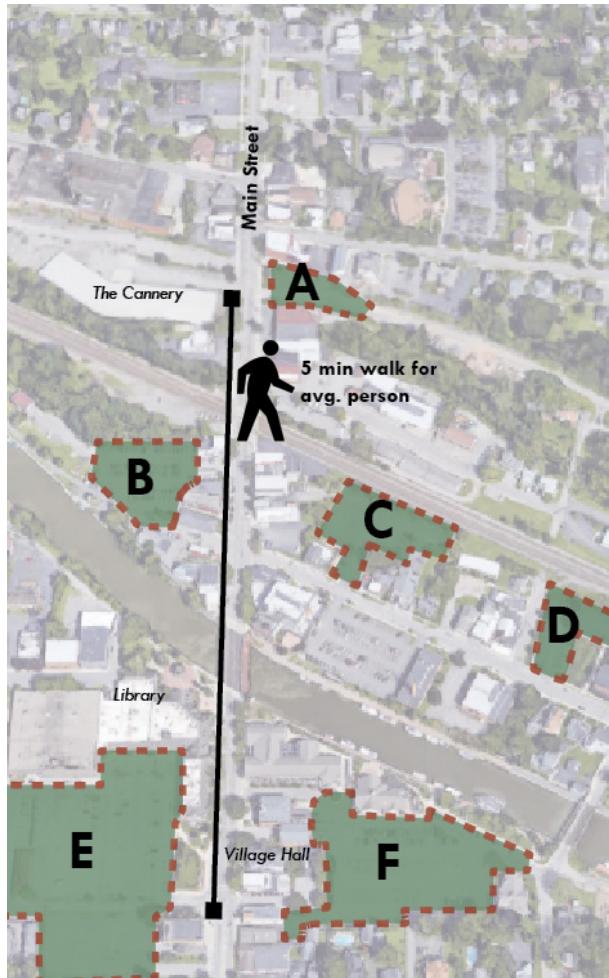
Overview

Summary of Findings

The Village of Fairport has a number of public parking lots in its downtown. There are approximately 900 spaces, including approximately 30 spaces along Main Street between Church Street and East Ave. Based upon an empirical analysis of actual lot utilization, there is ample supply of parking in the downtown as whole. Observations were taken during both lunch time and evening in spring and summer, the peak times outside of special events (e.g., Canal Days).

Certain lots, concentrated north of the Canal and train tracks, did reach capacity (and beyond due to informal parking.) Because there was ample supply for the downtown as a whole, it suggests a need for better parking management practices, such as wayfinding and information about location and availability of lots. From the farthest potential point of parking to downtown destinations at the north end of the downtown is approximately a quarter mile, which is roughly a five-minute walk for the average person.

A second portion of analysis tested a “build-out” scenario based upon hypothetical future development in the downtown, based upon scenarios of potential zoning changes. Based upon this analysis, there is the potential for 144 homes and a minor increase of 4,000 SF of additional commercial space beyond the present amount. Based upon parking demand projections, there is an estimated need for 170 parking spaces associated with the future development. Because of the ample supply of parking in the public lots, a portion of these parking needs could likely be accommodated in the public lots as part of a comprehensive transportation demand management policy.



Study area of the parking analysis of downtown Fairport.

Project Overview

The Village is currently in the process of updating its zoning code, called the Character Based Code (CBC). The updated zoning code is rooted in advancing the goals of the Village's recently adopted Comprehensive Plan. A robust community engagement process occurred to shape the regulations, including a public forum/open house event, several drop-in "office hours," attendance at the local farmers' market, two walking tours of the downtown, a virtual forum, an online survey, and additional opportunities for feedback via email and phone. This community engagement process was in large part an extension of the comprehensive plan's process, which also included numerous forums, a survey, and pop-up events.

Occurring concurrently with this community engagement process was a data-driven analysis of existing and future conditions relevant to the updated zoning code. This analysis helps us understand where there are misalignments between what is desired and what the regulations require. For example, based on the feedback to-date, many members of the community have a desire to maintain the built environment characteristics of their neighborhoods. But analysis comparing existing conditions to requirements under the regulations show numerous areas of misalignment. For example, minimum lot sizes and frontages for many homes are not in compliance with the regulations. This is fairly common in historic communities where the regulations reflect standards that are not appropriate for small, historic villages such as Fairport.

Understanding parking utilization and needs, especially in the Village's downtown, is another important component to ensure that the future zoning aligns with the community's vision and helps implement its goals.

Parking Requirements and Zoning

Parking is an integral part of updating a zoning code. Typically, a certain amount of off-street parking (i.e., private parking on-site) is required for redevelopment of a property. Zoning codes contain standards for how much parking is required, often based on use and the amount of development. For residential uses, it may be based on a certain number of spaces per bedroom or per unit. Commercial uses are often based on the amount of gross floor area, net leasable area, or through some other type of calculation (e.g., a restaurant may require parking spaces based upon the amount of seating).

There are two common issues with parking requirements in many zoning codes. First is that parking requirements are often set too high. Requiring too much parking for a certain use has a number of drawbacks. Parking, especially structured (i.e., garage parking) adds a major cost to developers, which are then passed along to residents and businesses. It has environmental issues, increasing the amount of impervious surface on site, which can increase stormwater runoff. And in a downtown area excess parking comes at the direct expense of "walkability." While downtowns in small communities need sufficient parking, excess parking leads to underutilized land and detracts from the walkable atmosphere that attracts people to downtowns in the first place. (See the following Chapter for additional discussion.)

The second, related issue with parking requirements in many zoning codes is that the requirements are set at arbitrary levels. Donald Shoup, the preeminent expert on parking has regularly documented arbitrary parking requirements found in zoning codes across the country. His research has found that parking requirements in zoning codes often do not reflect actual parking demand. And these

codes proliferate as many municipalities rely on neighboring communities' requirements as precedents.

Modern zoning codes seek to better match supply with demand. They err on the side of flexibility, as developers tend to understand market demand for parking for their investments and it is in their interest to provide sufficient but not excess parking. Modern codes also provide flexibility to account for locational conditions that could affect how much parking needs to be provided on site. There are a number of factors that could affect how much parking is needed in one location versus another, even for a similar development. For example, an area with a train station often requires less parking than a place without public transit (because more people will be able to commute to work via train rather than car, more people can visit the area via train, etc.). Similarly, an area with abundant public parking (on-street spaces, public lots, etc.) often implies fewer parking spaces are needed for private developments than an area lacking parking options.

In addition to accounting for locational differences, modern parking codes implement policies that reduce demand for parking and incentivize alternative ways of getting to and from a place. These techniques are collectively called Transportation Demand Management (TDM) and include a menu of options which can help reduce parking demand. TDM options often vary depending on the size of the development, location, use, etc. Options can include:

- Shared parking between developments (e.g., a church may allow parking on its lot for other developments when not being used for services)
- Shared parking for mixed-use developments (e.g., shops are generally open during the weekday, whereas many residents commute

A parking requirement sampler

Barber shop	2 spaces per barber
Beauty shop	3 spaces per beautician
Nunnery	1 space per 10 nuns
Rectory	3 spaces per 4 clergymen
Sex novelty shop	3 spaces per 1,000 square feet
Gas station	1.5 spaces per fuel nozzle
Swimming pool	1 space per 2,500 gallons
Mausoleum	10 spaces per maximum number of interments in a one-hour period

Examples from Donald Shoup's survey of parking requirements. He notes that these are often created arbitrarily and not reflect actual demand or take into consideration parking's effects on urban design, the environment, and other factors.

to work some days per week. Parking can be reduced slightly to accommodate this overlap.)

- Helping to fund multimodal transportation options (e.g., bike lanes) or amenities (e.g., bus shelter) to incentivize alternative ways of getting around.
- Offering bus or train passes, when applicable, or providing shuttles.
- Charging market rate fees for on-site parking.
- Providing bikeshare options.

The zoning code update for the Village seeks to incorporate best practices related to parking to encourage active transportation, reduce parking demand, retain Village character, and positively impact economic development. This study will inform the zoning requirements for the Village's downtown by providing real-world data on how its numerous parking lots are used today.

Previous Studies

In 2010 the Village commissioned a study¹ on Circulation, Accessibility, and Parking to develop feasible transportation planning

and design concepts to improve circulation, accessibility, and parking for pedestrians, bicyclists, and motorists, focused on the downtown. This was a comprehensive transportation plan covering both physical infrastructure recommendations, as well as policy recommendations.

The report included a number of recommendations related to both the public parking lots, as well as parking requirements in the zoning code. Given that the report is nearly 15 years old, this current study seeks to provide updated information related to the downtown's parking needs. It will build upon and incorporate the previous report's recommendations, as appropriate.

Report Organization

The following section provides an overview of issues related to parking, including why this is an important topic for a number of interrelated reasons. It also discusses some emerging trends and best practices.

The next two sections summarize the analysis. The first provides an overview of the utilization analysis that was completed with details for the downtown as a whole and each of the lots / street parking. The second summarizes the buildout analysis and methodology for determining the associated parking demand.

Finally, the report provides a number of recommendations to manage parking effectively in the downtown. As noted, much of the issue relates to the perception of parking availability rather than a lack of available supply.

2.0 The Importance of Right-Sized Parking

E
PARKING

VILLAGE OF FAIRPORT

FIND YOUR DESTINATION



Introduction

The effects of parking go far beyond simply having a place to put one's vehicle when visiting a place or returning home. There are both economic and environmental impacts, described in detail below.

The amount and location of parking also has a tremendous effect on the character of a neighborhood or district. In downtown locations, especially, it is critical not to have an over-supply of parking. Although having a lot of parking might seem like a positive thing for a commercial area to have -- and having sufficient parking is certainly critical -- too much parking comes at the direct expense of a pedestrian-oriented neighborhood. Safeguarding the traditional, historic, walkable characteristics of these neighborhoods retains what makes these places special in the first place.

As an example, one can consider a modern commercial corridor lined with strip malls and compare it to a traditional main street. Both places may have sidewalks. Both places have places to shop, eat, etc. Both places could potentially have homes, as well.

Despite these shared characteristics the two places are extremely different. The experience of walking along a large parking is very different from a place where the building meets the sidewalk or has patio seating. Walking along a high-speed, multi-lane arterial roadway is significantly different from a tree-lined main street. A stand-alone multifamily building surrounded by parking is different from one with homes above shops.

Parking isn't the only factor that causes these two commercial areas to be so different. (Roadway characteristics and urban design are also factors.) But parking is a major factor. Traditional commercial corridors typically require far too much parking, resulting in major underutilized portions of the land. Also, by placing parking in front it commands

high visibility, which comes at the expense of creating a walkable, pedestrian-scaled atmosphere. Fortunately, the Village of Fairport has the benefit of having substantial public parking while also maintaining the traditional look and feel of its historic downtown by having this parking located, generally speaking, to the rear or side of buildings.

The remainder of this chapter discusses in greater detail the negative consequences of having an over-supply of parking. This has become a nationally recognized topic, which has gained significant attention and sparked many discussions among planners, urbanists, developers, community development organizations, residents, and other stakeholders. While most people acknowledge that parking lots are necessities for modern living, their over-supply can cause major harm.

According to Strong Towns (an advocacy group), cities in the US combine to have somewhere between 800 million and 2 billion parking spaces, which translates to 3 to 8 stalls for every registered vehicle in the country. Surface parking lots alone cover more than 5% of all urban land in the country. This has many detrimental implications for cities, neighborhoods and communities. Every place is unique, and national issues do not necessarily correlate perfectly to issues facing Fairport. That being said, the following national trends do are each relevant to varying degrees in the Village's downtown.

The Issues with Excess Parking

The following highlight a number of issues associated with excessive parking lots.

1. Opportunity Cost

The most obvious issue of allocating too much space to parking is that the land can't be used for anything else. The construction of parking lots and garages comes with opportunity cost of what could have been built on that space.



The experience of walking along a contemporary commercial corridor with strip malls is different from a traditional main street. The amount and location of parking is one of the factors affecting how these two commercial areas look, feel, and function.

Parking lots and structures take up space that could be used for other development that could be used for more productive uses, such as additional homes, shops, restaurants, etc. It could also be used for open spaces, such as seating for restaurants or playgrounds for children. This affects not only the landowner but also the municipality in the form of reduced tax revenue. Findings from a study² in Hartford, CT, showed that the city forgoes \$1,200 in tax revenue each year for each parking spot.

2. Public Sector Cost

Compact land use patterns, such as those found in traditional neighborhoods require less municipal funds to service them than sprawling areas. Parking lots contribute significantly to suburban sprawl. And the infrastructure to serve this type of development is far higher than in a traditional downtown. Infrastructure such as roads, sidewalks, water pipes, sewer pipes, gas and electric lines, and internet connections are essential for supporting productive land uses.

However, allocating significant land for parking spaces extends the distances between these productive areas. This expansion incurs tangible infrastructure costs, borne by the public through local government and utility expenses.

3. Worsens housing affordability and inequities

Finding housing that is affordable is a challenge for many people looking for a home, including in Fairport. With inflation and interest rates pushing up rents and mortgage payments, housing affordability in the US is at its worst level in almost 40 years. Requiring excessive parking undermines efforts to provide new housing. Parking regulations lead to fewer units built (see #1 Opportunity Cost above) and raise development costs, which are passed on to residents, making housing more expensive. In many cases, parking requirements are so high that they can make development financially infeasible altogether, resulting in no new homes being built on the property.

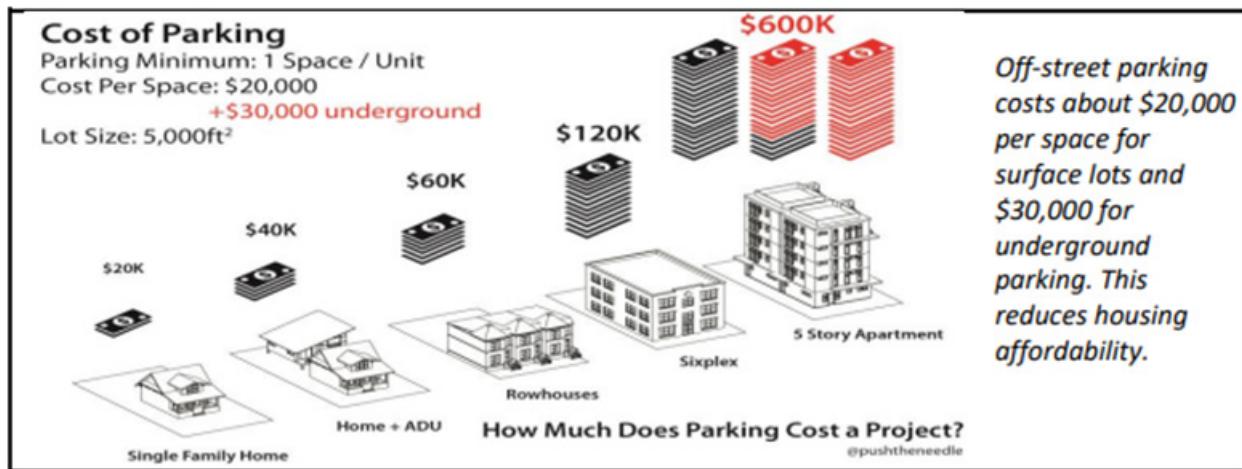
When developers build units in a place with parking minimums, they need to increase rents to cover the cost of parking construction and maintenance. Adding parking to an apartment can push up the rent by thousands of dollars over the year. The figure shows a breakdown of how the cost of constructing parking lots, whether surface or underground, affects the total house construction cost and subsequently the rent. A similar effect occurs when requiring businesses to provide parking higher than market demand.

The effect of high minimum parking requirements on housing affordability also has equity implications. It makes it even more difficult for lower income households to afford housing, since parking costs (which are passed on to residents) are roughly the same to build whether an apartment is luxury grade or modest. For example, constructing a parking lot that costs \$20,000 per space will be passed on

to the cost of the associated housing. This might only represent 5% of the cost to a high-end home and something that can be absorbed by a higher income household. But it could add 25% to the cost of an otherwise modestly-priced home, which could be too high a burden to bear for a lower income household. (This is particularly burdensome one-car or car-free households who are forced to pay for costly parking facilities they do not need.) Households with only one car are also burdened. They pay for extra unused parking spaces, raising their housing costs without added benefit. This limits affordability, especially for those who only need one space but face increased expenses due to mandated excess.

Analysis of 23 recent Seattle-area multifamily developments by the Victoria Transport Policy Institute found that parking costs increase rents approximately 15% or \$246 per month, although 20% of occupants own no motor vehicles and 37% of parking spaces were unoccupied during peak periods. Other studies draw similar conclusions. For example, one study³ estimated that parking mandates increase U.S. rents by 17%, \$1,700 annually per unit.

Providing parking is costly. It is a misconception that parking is ever “free.” The costs are born indirectly: either through higher taxes, increased rents, lower wages, etc. As also mentioned by the Victoria Transport Policy Institute these distortions are economically inefficient and unfair. They increase costs to consumers, governments, businesses and the environment. They force patrons and residents who don’t need the parking facilities to subsidize their cost. Studies show that households that own fewer than average vehicles and drive less than average cross-subsidize the parking costs of those that own higher than average vehicles and drive more than average. Since vehicles and trips tend to increase with income, this tends to be regressive – it results in lower-income people subsidizing



higher-income motorists.

The following illustration shows how parking affects total development cost.

the spaces. Developers and property owners pass on the costs through rent increases, or the business owners are responsible for the maintenance and upkeep of their parking lots.

4. High Parking Requirements Burden Small Businesses

Many communities, especially in traditional downtowns value small and local businesses, which contribute to the local economy, as well as providing a distinctive sense of place in these areas. In addition to forming and shaping the identity of the community, small businesses generate revenue that converts to local taxes and supports the local economy. Small businesses provide local jobs, spark innovation and diversity, stimulate urban development and revitalization, foster a sense of community and local pride and create thriving communities.

Parking requirements can be a major cost for small businesses, which often do not have the same resources as chain retailers to cover this expense easily. This puts smaller businesses at a competitive disadvantage to larger companies who can swallow the cost of providing mandated parking. The cost of building and maintaining parking spaces is passed on to small business owners, whether they rent or own

5. Excessive Parking Increases Car Dependency and Discourages Walkability

The emphasis on private car ridership through minimum parking requirement takes away opportunities to balance transportation investments across a spectrum of multimodal transportation options. As noted above, parking requires developers to dedicate lands to parking, making it harder to foster mixed-use, walkable communities with easier access to community amenities. As cities continue to influence parking mandate too much parking, residents become increasingly reliant on cars for their transportation needs, creating a cycle that reinforces reliance on cars, reducing the feasibility of providing public transit. Parking lots not only respond to a car-centric society, but further encourage driving, creating a feedback loop toward more driving, more parking lots, and more traffic. The lack of ability to walk conveniently and safely between destinations is an opportunity cost of parking.

6. Greenhouse Gas Emissions

Excessive parking worsens local climate risks and generates greenhouse gas (GHG) emissions. The transportation sector contributes 27% of U.S. GHG emissions, more than any other economic sector. Within transportation, motor vehicles account for more than half of the emissions. It is estimated that cars generate 30 million tons of carbon dioxide from idling alone. As established in the earlier paragraphs, having more parking lots would encourage more cars which would even make emissions worse. There is a clear correlation between parking and driving, where parking actually induces more people to drive, even if they would otherwise have been willing to travel by another means (e.g., biking). Reducing the amount of parking strategy is actually a strategy to reduce GHGs by incentivizing less vehicular trips.

7. Heat Island Effect

Another environmental harm from having excessive parking lots is the heat island effect. Large expanses of pavement increases temperatures. Communities with higher index scores of heat wave generally have the highest concentration of parking lots. While the heat island effect is a local impact, it leads to higher energy consumption as people attempt to stay cool through air conditioning and other cooling systems, creating more GHG emissions and further contributing to climate change.

These heat island effects also have some implications on environmental injustice, as neighborhoods plagued by heat islands are predominantly communities where most households are of low-income status or majority Black, Indigenous and other people of color (BIPOC). Along with historical divestment in trees and green space in these neighborhoods, the residents bear an even higher strain of excess summer heat.

8. Stormwater Flooding

A related environmental challenge caused by excessive parking is stormwater flooding. Most parking lots are constructed from impervious, non-porous materials. As communities grow and build more parking lots and roads, there is a less natural landscape to absorb excess water and store it as groundwater. Excessive runoff from parking lots can inundate stormwater systems, resulting in flooded streets and basements, sewage overflows, and pollution incidents.

An increase of 3.3 percent in annual floods is projected for every percentage point rise in impervious basin cover. Communities with excessive parking lots and roadways often face challenges in handling excessive stormwater runoff, often leading to direct discharge into water bodies and disrupting local ecosystems. Intensive development characterized by extensive asphalt surfaces and inadequate green infrastructure, or stormwater management measures exacerbates flooding risks and amplifies stormwater runoff.

9. Healthier Lifestyles

Walking and bicycling have been shown to improve mental and physical health through increased exercise, reduced stress levels, decreased anxiety, and improved mood. As noted above, excessive parking comes at the direct expense of a walkable environment. Walking among destinations can play a role in fostering human connections and enhancing social cohesion, thereby bolstering both individual and community mental well-being. By encouraging shared experiences and promoting a sense of belonging, walking throughout a downtown contribute positively to an area's vibrancy while also providing benefits at the individual level.

10. Space for Community Amenities

Minimum parking requirements assign lots of land to parking which in turn takes away prospects for amenities in the neighborhood that foster place attachment and bring joy. The excessive, often disproportionate presence of parking facilities results in a reduced allocation of space for various community amenities that enrich residents' lives. These include parks, public transportation, recreational areas, community gardens, nature reserves, eateries, housing, small businesses, and more. These amenities allow residents to engage with nature, have access to a home, travel around a neighborhood freely, promote business and exercise, all of which improve mental and physical health.

Trends Influencing Parking Reforms

There are a number of national trends that are pointing to a need for less parking in the future. As with the previous section, these are national trends and may not perfectly correlate to the Village of Fairport; however, they do provide context for the Village to consider as it plans for its future.

- **Historically high construction costs.** As noted in the previous section, parking provides a major cost which is passed on to residents and patrons. The issue is even more pronounced today, with inflationary pressures and high interest rates pushing costs even higher than in the past.
- **Changing shopping preferences.** With e-commerce ubiquitous, the way people shop has changed. Many retailers, especially "big box retailers," have overbuilt their parking, resulting in acres of underutilized parking lots. Small businesses providing unique goods and services, as well as "experiences" that

can't be ordered online, such as visiting a bar or restaurant, are better positioned to thrive in this new economy. These uses tend to have lower parking needs and often draw visitors from a more local area, where some of these people can walk or bike to visit (or, increasingly, live within the downtown neighborhood itself).

- **Changing commute patterns.** The COVID pandemic altered the way many people work. During the height of the pandemic many companies that were able to create the infrastructure to allow their employees to work remotely. Although the long-term effects of this phenomenon are still playing out, it seems that today many employers are using a hybrid approach to work, where employees are allowed to work remotely some of the time. (Of course, this is typically for jobs that take place in an office, rather than services or manufacturing.) Because of this, the demand for office parking has been diminished.
- **Increased interest in multimodal transportation.** Walking and biking has become increasingly popular over the years. Biking can allow people to travel from farther distances to visit a location and studies have shown that many people will bike if there is safe biking infrastructure to do so. In addition, the ubiquity of mobility services—such as Lyft, Uber, and car-sharing services—is reducing the need for individuals to drive and park for all trips. (This also can greatly reduce issues of driving under the influence of alcohol.)
- **Better parking management.** Often, rather than more parking what is needed is better use of existing spaces. Advances in technology are promoting more efficient management of the existing parking supply

by using information technology that shares the location of available spaces, supports real-time dynamic pricing, and helps make shared parking options easier.

- **An increased focus by municipalities on sustainability, livability, and social equity.** Many communities are becoming more cognizant of the issues related to parking, such as those outlined in this chapter. With this knowledge in hand, more communities are moving in a direction that seeks to address the harmful effects of an over-supply of parking.

Types of parking policy reforms

There are a number of strategies aimed at better matching the amount of parking that is required to what is needed. The following are examples of innovative strategies. These are often paired as part of a comprehensive transportation demand management (TDM) strategy. TDM strategies, such as the one used in Buffalo, NY incorporate strategies that both match parking supply with demand, as well as aim to reduce demand itself. The latter can be accomplished through incentive programs (e.g., bus passes), helping to fund multimodal infrastructure (e.g., bike lanes), and other means that make alternative transportation means an attractive option for some people (e.g., bike parking).

1. Reduction/Elimination of Parking Minimums

Reducing or eliminating minimum parking requirements allows the landowner to determine how much parking to include in projects, rather than a set ratio. As noted earlier, a set ratio based on a building's square footage, planned uses, and/or the number of residential units (or number of bedrooms per unit) is often set at an arbitrary level. Landowners are inherently incentivized

to provide the "right" amount of parking -- providing too much leads to an unnecessary cost. But not providing enough would negatively affect their ability to attract quality tenants.

A city in Oklahoma recently abolished most parking requirements by changing one word in the existing ordinance. "Spaces required" were changed to "spaces recommended" for all uses except single-family and duplexes. The change has the biggest impact downtown and in areas with substantial mixed-use, multifamily, and commercial zoning. This type of change is easy to provide guidance while also allowing for flexibility.

2. Maximum On-Site Parking Requirements (aka Parking Caps)

The flip side of parking minimums are parking maximums. Maximum on-site parking requirements restrict the total number of parking spaces that can be constructed as part of a development project. Similar to parking minimums, the maximum number of spaces is often based on the square footage of a specific land use or number of residential units. Maximum parking requirements can be in addition to or instead of minimum parking requirements. Some retailers build parking to a level that anticipates a "worst case scenario" of parking need that might only occur one day per year, meaning the lot is underutilized the vast majority of the time. This approach can help counteract this issue.

3. Shared Parking

Shared parking can mean two things, both of which can allow for reduced parking requirements.

The first relates to parking as part of a mixed-use development. In this case parking spaces are shared by more than one use, which allows parking facilities to be used more efficiently. Shared parking policies recognize that many

parking spaces are used only part time, with usage patterns that follow predictable daily and weekly cycles. Parking shared between different uses can reduce parking provision by 40 to 60 percent, compared with the standard off-street parking requirements for each destination.

For example, offices require maximum parking during working hours during weekdays, whereas restaurants and theaters require maximum parking during evenings and weekends. Rather than the total parking required be the sum of each use's requirement, some portion can be considered to overlap, thus reducing the overall parking requirement. If the parking required for the office space would be 50 spaces based on the amount of office space, and the amount of restaurant parking on site is also 50 spaces, rather than provide 100 spaces, the development could provide, e.g., 80 spaces. (The actual amount could be based on a formula or modeling the effects.)

The second manner of shared parking could be through an agreement set up among different property owners. If one landowner has a lot larger than they need for their uses, the two landowners could come to an agreement to allow the other landowner to use its parking lot to accommodate its needs.

For example, a church may have a large lot that only sees significant utilization on Sundays. If a nearby proposed development is for an office, its needs are likely primarily Monday through Friday. The two landowners could come to an agreement where some (or all) of the office developer's parking needs are accommodated at the church's lot.

4. Unbundled Parking

Unbundled parking means that parking spaces for each unit in a development are rented or sold separately from the unit itself. This allows for a more nuanced way to accommodate parking needs. Not every household will need

the same amount of parking. A two-bedroom apartment with two roommates may need two spaces. But if one of those roommates works remotely and can bike for most trips, they may only need one parking space. Unbundling parking allows residents and tenants who do not own a car generally to pay less for housing. When combined with other parking reforms, unbundled parking can support development goals and promote affordability.

Examples of Reduced/Eliminated Parking Minimums

The following are examples of communities that have reduced or eliminated parking requirements for some situations. This is not intended to be exhaustive but rather to demonstrate that this concept is occurring throughout the state (and one example outside New York) in communities of various sizes. (They are also occurring in larger, urban cities such as Buffalo and Rochester.)

Canandaigua, NY

There are no provisions that establish a minimum number of off-street parking spaces for development. However, certain development proposals are required to complete a parking demand analysis, which will assist in determining off-street parking spaces required.

- Population: 10,156
- Type of Reform: Eliminate Parking Minimums
- Reform Status: Implemented
- Scope of Reform: City-wide
- Land Uses: All Uses
- Resources: <https://parkingreform.org/resources/mandates-map/>
- https://parkingreform.org/mandates-map/city_detail/Canandaigua_NY.html

Saranac Lake, NY

There are no minimum parking requirements anywhere in the Village, including business districts. There are design standards for parking areas that are proposed for all new non-single family dwelling developments.

- Population: 5,700
- Type of Reform: Eliminate Parking Minimums
- Reform Status: Implemented
- Scope of Reform: Village-wide
- Land Uses: All Uses
- <https://ecode360.com/31626764#31626764>

Hudson, NY

No required off-street parking spaces, voted on by City's Common Council in 2019.

- Population: 6,072
- Type of Reform: Eliminate Parking Minimums
- Scope of Reform: City-wide
- Land Uses: All Uses
- <https://ecode360.com/5082518#5082518>

Bibliography

<https://knowledge.uli.org/en/reports/research-reports/innovations-in-parking-policy?q&sortBy=relevance&sortOrder=asc&page=1>

<https://www.planning.org/planning/2022/spring/a-business-case-for-dropping-parking-minimums/>

<https://knowledge.uli.org/-/media/files/research-reports/2021/parking-policy-resources/types-of-off-street-parking-policy-updates.>

<https://parkingreform.org/resources/mandates-map>

<https://www.scientificamerican.com/article/parking-lots-cause-more-heat-and-flooding-heres-how-100-u-s-cities-rank/>

<https://www.strongtowns.org/journal/2019/11/27/parking-dominates-our-cities-but-do-we-really-see-it>

https://alts.co/parking-lot-economics-the-costs-of-convenience/#Opportunity_cost

<http://shoup.bol.ucla.edu/HighCost.pdf>

<https://www.reinventingparking.org/2015/06/how-much-does-one-parking-spot-add-to.html>

<https://www.strongtowns.org/journal/2018/11/20/the-many-costs-of-too-much-parking>

https://www.metrans.org/assets/research/ucla-18-32_manville_final-report.pdf

https://www.nlc.org/wp-content/uploads/2022/08/FINAL-CS-Parking-Lots_-Spots-and-Garages-Report

Relevant text from the Town of Canandaigua's parking requirements.

§ 220-73 Off-street parking regulations.

[Amended 3-16-2015 by L.L. No. 3-2015; 11-16-2020 by L.L. No. 3-2020]

Purpose: There are no provisions that establish a minimum number of off-street parking spaces for development. However, certain development proposals are required to complete a parking demand analysis, which will assist in determining off-street parking spaces required. In all districts there shall be provided, at the time any building or structure is erected, enlarged, increased in capacity or changed in use, improved and usable off-street parking spaces for motor vehicles in accordance with the requirements of this article, the New York State Uniform Fire Prevention and Building Code, and Federal Americans with Disabilities Act.

A. Authority. Parking requirements shall be determined by the Planning Board in the course of their respective reviews of any site plan, subdivision, special use permit, or other necessary review.

H. Required off-street parking spaces. Off-street parking shall be provided to meet the realistic demand for the proposed land use. The applicant shall calculate this demand based on standards such as the Institute of Transportation Engineer's Parking Generation Reports, Urban Land Institute, observed local demand analysis, or any other standard acceptable to the Planning Board.

(1) Applicability. Projects exceeding the following thresholds shall provide a parking demand analysis:

- (a)** New construction of principle building/s in excess of 5,000 square feet of gross floor area; or
- (b)** The substantial renovation of a principal building with a gross floor area of at least 50,000 square feet and involving a change of use;
- (c)** Or upon request of the Planning Board during the course of their review.

(2) Exemptions:

- (a)** All single-family dwellings and two-family dwellings; or
- (b)** Generally accepted agricultural operation or practice occurring within an established Ontario County Agricultural District, and temporary farm stands; or
- (c)** As otherwise stated within Chapter 220.

(3) Waiver for current construction:

- (a)** Applicant may request the Planning Board waive the requirement to construct off-street parking spaces during initial construction.
- (b)** Applicant shall specify on a site plan which off-street parking spaces are to be delayed, including the total number of spaces, and to provide justification for the waiver request.
- (c)** Such off-street parking spaces shall be included as if to be constructed in any SEQR consideration and planning approvals.
- (d)** The future construction of the subject spaces shall require a site development permit and be exempt from site plan review if in substantial conformance with the approved plans.
- (e)** If granted, the Planning Board may also impose additional conditions as needed to achieve the objectives of this chapter.

3.0 Existing Conditions



Overview

The Village of Fairport is a historic community with a population of around 5,000, situated along the Erie Canal in southeastern Monroe County, New York. Located within the Town of Perinton, Fairport is approximately 8 miles from Rochester, the region's central city. Covering over 900 acres, the village boasts peaceful residential neighborhoods with tree-lined streets and a charming downtown area featuring a variety of shops and restaurants.

The Erie Canal

The Erie Canal remains a key focal point for Fairport, with ongoing projects including the Northwest and Southwest Bicentennial Bank areas, the Liftbridge Lane West pedestrian and biking path, and festival venue. Although the Canal is no longer a major commercial route, it continues to serve as a popular recreational asset, drawing thousands of visitors annually. The Canal Days Festival, taking place on the first weekend in June, attracts visitors to Main Street in Fairport for celebrations of arts, crafts, cuisine, and the Canal itself. During the canal season (May through October), pedestrians on Main Street might see the lift bridge rise to let large vessels pass underneath. The local economy is predominantly service-based, and many former industrial buildings have been or will be repurposed into a mix of residential, retail, and office spaces.



The Erie Canal

The Trains

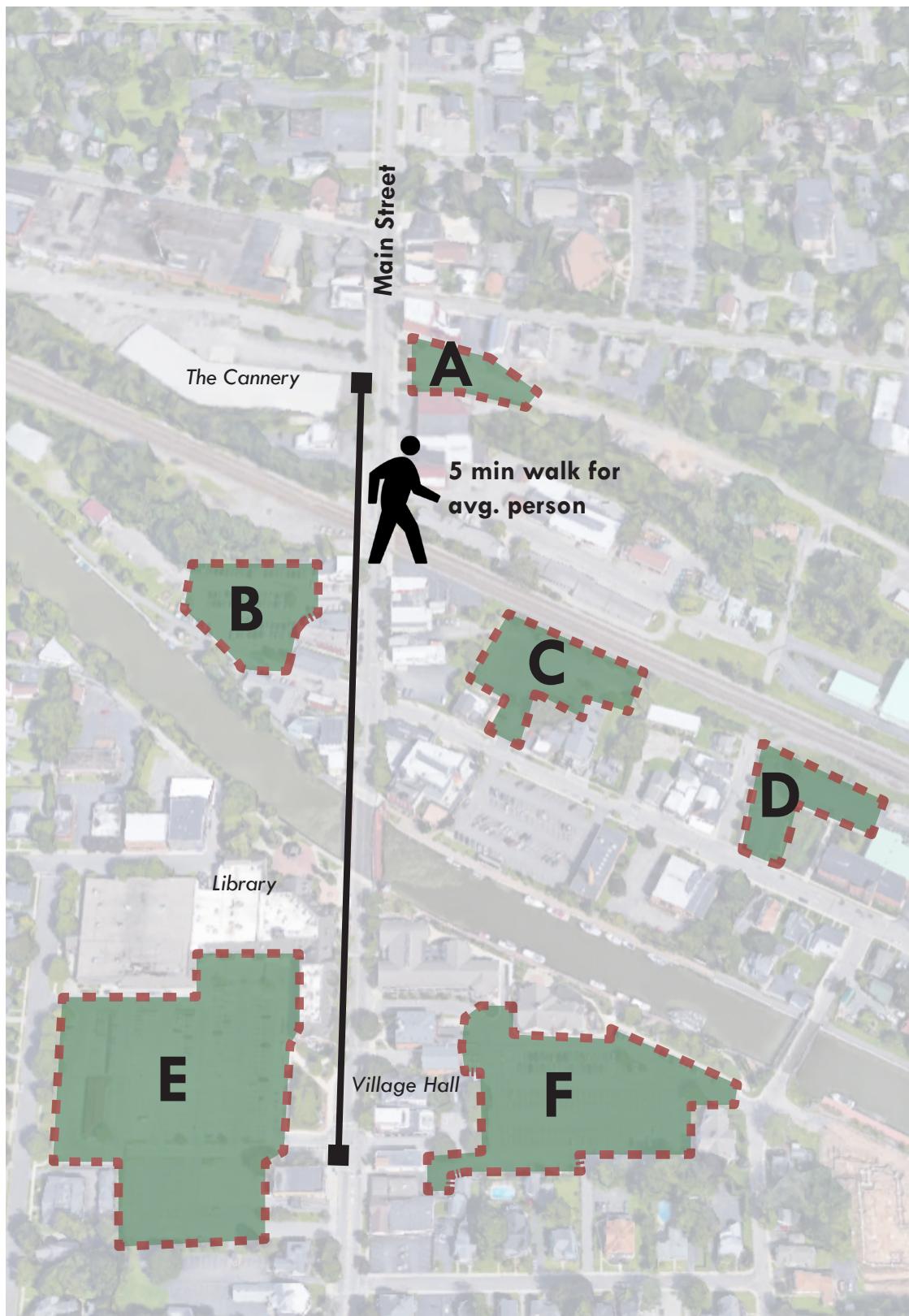
Although trains no longer serve Fairport for commuting purposes, they still frequently interrupt traffic on North Main Street each day. The train line is located just north of the canal, running parallel to the canal through the downtown. The canal and train tracks can create a distinction between the southern and northern parts of the Village's downtown, although in reality the entire downtown is walkable and compact.

Downtown Fairport

The parking analysis is focused on the downtown area. Fairport's downtown area is situated along Main Street. The downtown features a mix of commercial, civic, eating, and drinking establishments, with traditional buildings meeting the sidewalk to create a traditional downtown environment. The northern end of downtown exhibits a more suburban layout with plazas and surface-parking in front of the buildings.



Downtown Fairport with the public lots. There are also several private lots in the vicinity, as well as public on-street parking. Most of the downtown can be covered in an approximately five minute walk for the average person (i.e., quarter mile distance).



Parking Facilities

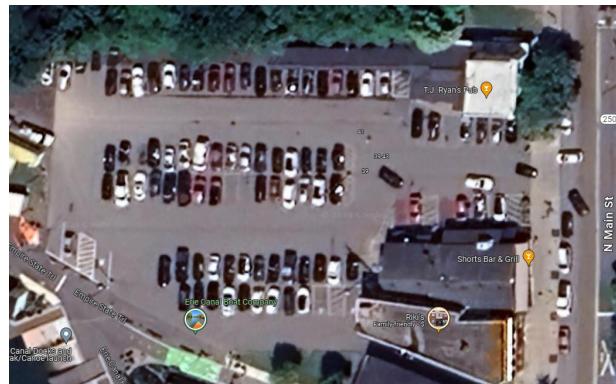
The Village of Fairport owns six parking lots with approximately 855 free parking spaces, in addition to numerous private business lots. Most businesses in the downtown area are within short walk from these lots. On-street parking is also available along the Main Street and some side streets.

Lot A: Located at the north end of the downtown across from the Cannery on the east side of Main Street. This lot is approximately 800 feet from the Erie Canal. It includes 6 EV spots and has a total of 58 spaces. The paved lot gives way to an unpaved area and informal roadway on the eastern end. During peak times, i.e., weekend evenings, vehicles parking were observed parking in this area.



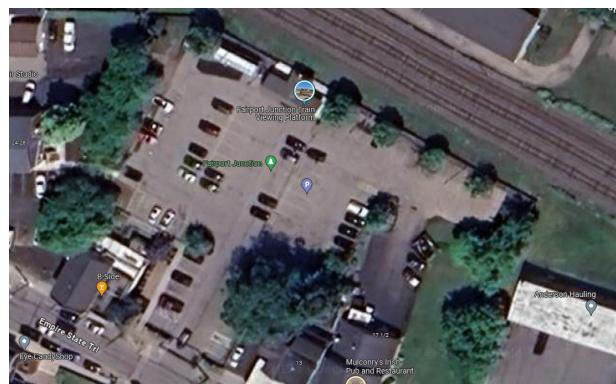
Lot A

Lot B: Located at 43 N Main Street, this lot is on the northwest side of the Erie Canal, adjacent to the Erie Canal Boat Company and a family restaurant. It has approximately 91 spaces.



Lot B

Lot C: Located at 9 Liftbridge Lane, this lot is on the northeast side of the Erie Canal, near the Fairport Junction Train Viewing Platform. It features 6 EV spots and has a total of 74 estimated spots.



Lot C

Lot D: Found at 43 Liftbridge Ln, Fairport, NY 14450, next to Fairport Electric Operations. This lot includes 1 EV spot, and has 25 estimated spots.



Lot D

Lot F: Situated at 29 Main Street, this lot is on the southeast side of the Erie Canal, behind Fairport Village Hall. It includes 6 EV spots and has a total of 218 estimated spots.



Lot F

Lot E: Located at Fairport Village Landing, this mixed-use complex includes stores, offices, a gym, and a market. This is the largest of the public parking lots in the downtown district, with 279 parking spaces, including 6 EV spots, on the main level and 81 spaces below grade.



Lot E

On-Street Parking

There are also a number of parking spaces along Main Street, which were included in the counts. Only 9 of the spaces, south of the bridge were marked. In total there was an estimated 29 spaces, which were observed as part of the downtown study area.

4.0 Parking Supply Analysis



Summary of Findings

The purpose of this parking analysis is to assess the current utilization rates of parking lots in the Downtown District of Fairport. This study will provide valuable insights to the village administration and other relevant stakeholders about the capacity and demand for public parking. It provides actual data to answer the basic question of “is there enough parking?”

Parking Supply

Downtown Fairport has a total of 855 parking spaces, of which 29 are on-street, comprising 3% of the total parking supply. The remaining 826 spaces studied are off-street, accounting for 97% of the total. Additionally, there are 25 designated spots for electric vehicles, which represents 3% of the overall parking capacity.

Methodology

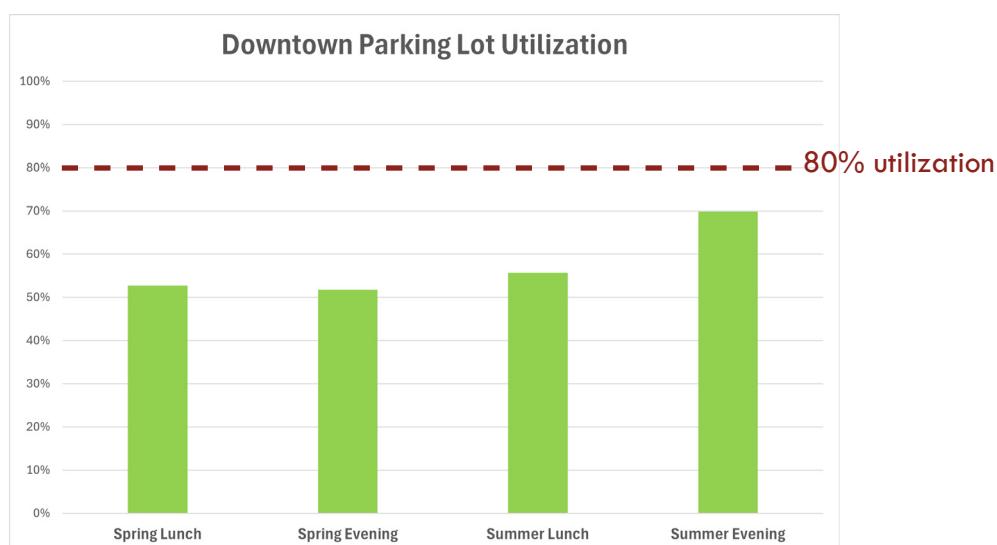
The analysis was conducted through empirical observations on two specific dates: Spring Parking Counts on March 15, 2024, and Summer Parking Counts on June 14, 2024. Each day involved four parking counts: at 11:30 AM, 12:30 PM, 6:00 PM, and 7:15 PM. The two daytime counts were then averaged, as were the two evening counts. Taking observations in both the spring and summer and during different “high-demand” times of day (i.e., lunch and dinner) provide a robust data set to assess.

Downtown Fairport consists of seven parking lots and additional on-street parking on Main Street. Each count recorded the total number of occupied spaces in each location, and the utilization rates were calculated by averaging the total utilization rate for each parking lot across the two counts for each time period.

Findings

Transportation planners typically consider the ideal parking utilization to be 80% at any one time. Having 80% of the spaces used implies that there are sufficient spaces for drivers to find a space and provides sufficient buffer for certain times that may experience a temporary spike. Conversely, as discussed in the previous chapter, having too many empty spaces has its own issues related to underutilized space.

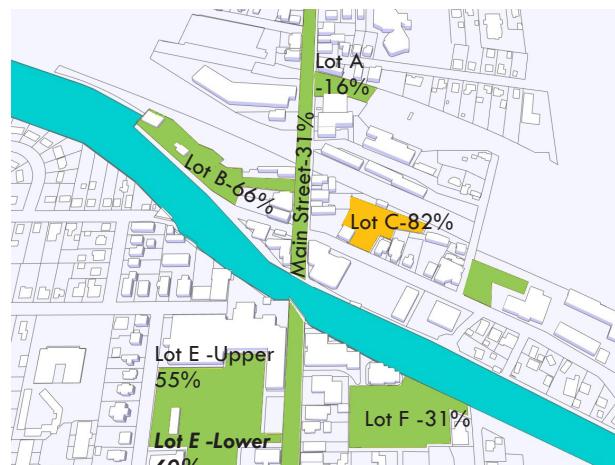
As a whole, there is an abundance of available parking in the downtown during typical times. (Certain events, such as Canal Days, will have much higher parking demand, but parking should be based on typical needs, not discrete events.) As shown in the chart below, all times observed in the downtown as a whole were well-below the 80% rule-of-thumb threshold.



Although there is sufficient parking as a whole in the downtown, there was considerable variation among individual lots. The following summarizes the counts by time and lot.

Afternoon Utilization (Spring):

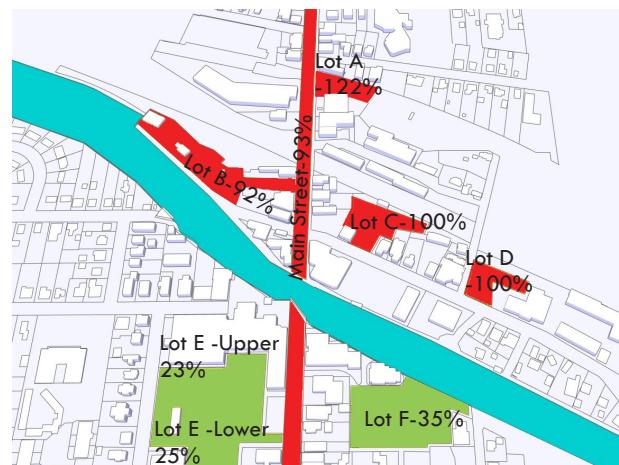
Lot A exhibits the lowest utilization rate at only 16%. Lot C has the highest utilization rate at 82%, followed by Lot D at 72%, with other areas ranging from 31% to 66%.



Afternoon Utilization Rate Map (Spring)

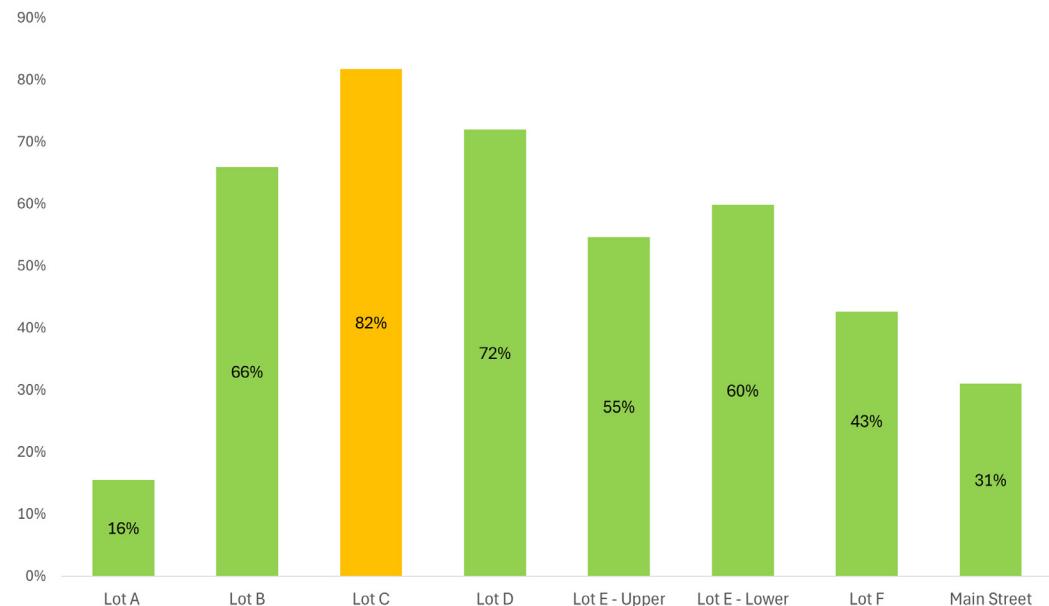
Evening Utilization (Spring):

Lot A exceeded capacity with a 122% utilization rate. Lots C and D achieved full capacity at 100% utilization. Lot B and Main Street also remained highly utilized, each with rates exceeding 90%. Conversely, Lot F and both the upper and lower levels of Lot E were underutilized, with utilization rates below 40%.



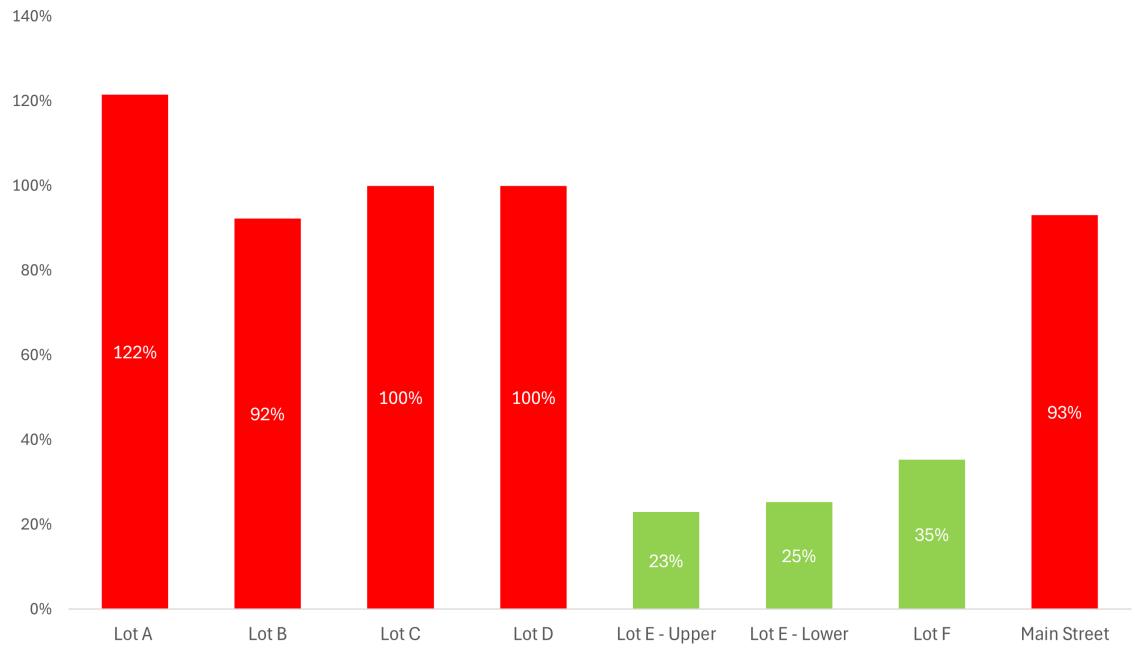
Evening Utilization Rate Map (Spring)

Spring Counts Total Utilization Rate By Area - Daytime (lunch)



Afternoon Utilization Rate Chart (Spring)

Spring Counts Total Utilization Rate By Area - Evening



Evening Utilization Rate Chart (Spring)

Afternoon Utilization (Summer):

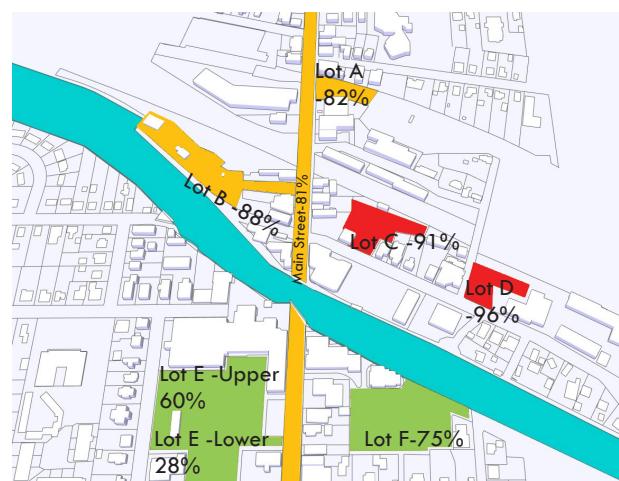
Main Street continued to show high utilization at 78%, closely followed by Lot D with a 76% rate. In contrast, Lot A was the least utilized, with only a 19% utilization rate. Other areas ranging from 49% to 66%.



Afternoon Utilization Rate Map (Summer)

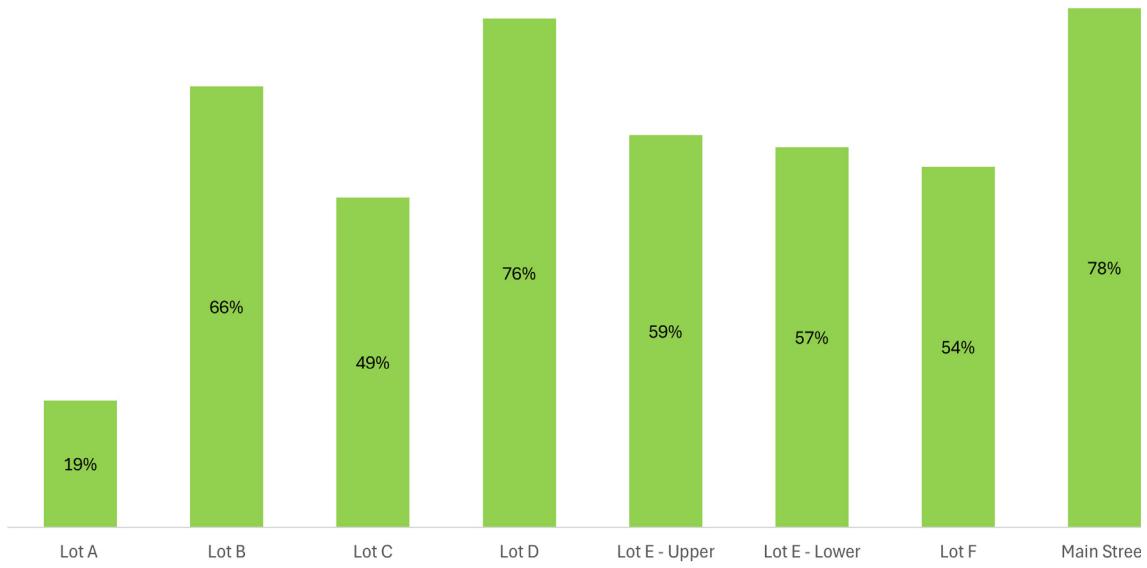
Evening Utilization (Summer):

Lots C and D maintained high utilization rates of over 90%. Similarly, Main Street, Lot A, and Lot B showed strong demand, with utilization rates exceeding 80%. However, the lower level of Lot E continued to show low appeal with a significantly lower utilization rate of only 28%.

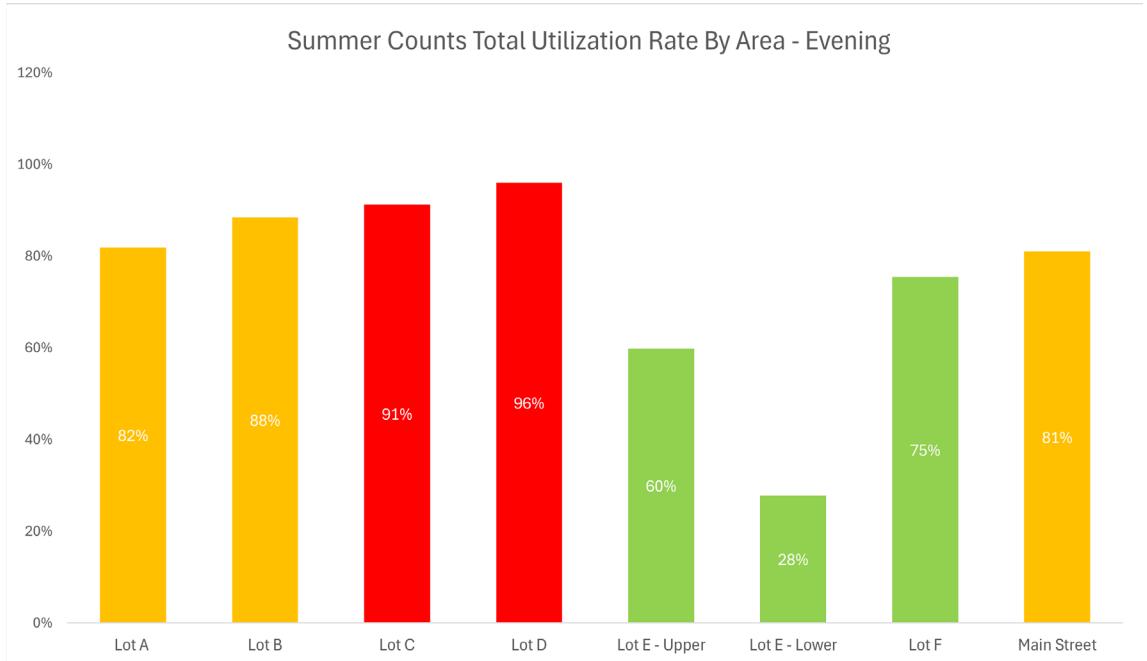


Evening Utilization Rate Map (Summer)

Summer Counts Total Utilization Rate By Area - Daytime (lunch)



Afternoon Utilization Rate Chart (Summer)



Evening Utilization Rate Chart (Summer)

Discussion

Observations indicate that most parking lots in downtown Fairport are not fully utilized, with utilization rates typically under 90%. Higher utilization rates were observed in the weekend evenings at the lots north of the canal. Lot E is the largest parking lot in the study area, and capacity remained well-below target utilization rates at all times of observation. These findings, along with those in the buildout analysis described in the following section, form the basis for recommendations.

5.0 Buildout and Parking Demand

VILLAGE OF
FAIRPORT
on the Erie Canal



Photo by: Jennifer L. Staub

Purpose

The purpose of the buildout analysis complements that of the utilization analysis described in the previous section. Whereas the utilization analysis assesses the existing situation, the buildout analysis considers the effects of potential future development on parking needs. This analysis can help inform policy decisions to address needs in a proactive manner.

The overall process is first to develop a hypothetical buildout of future development over the coming decades. Based upon a number of assumptions described below, this will yield a total amount of new commercial and residential space within the Village's downtown. Based upon this development estimate, the second part of the analysis is using this amount of development to estimate the demand for parking associated with this development.

Development Buildout

This portion of the analysis relies on a number of assumptions and considerations to create a potential of future development in the downtown over the coming decades. It is important to note that this analysis hinges on hypothetical developments -- there are not any current plans for redevelopment, but it is assumed that given the demand for mixed-use development and future zoning changes to allow this type of development, there will be future applications. At the same time, it is not likely that every parcel would be redeveloped due to a variety of factors. Thus, the buildout model assumed some properties have a higher likelihood for change. Factors influencing these decisions include:

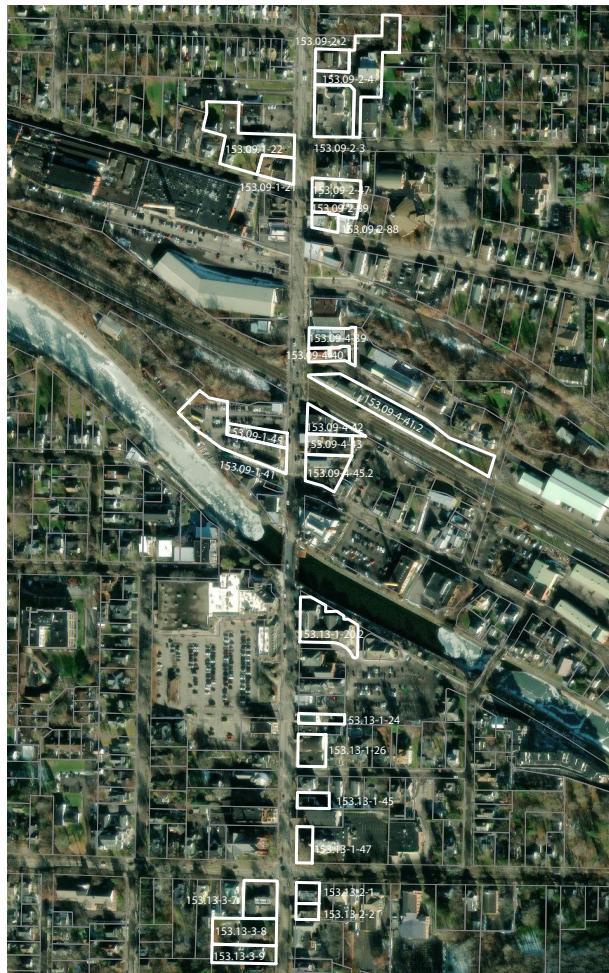
- Age of building (e.g., a building that was recently redeveloped is unlikely to be redeveloped again in the near future)
- Current land use (e.g., a government

building such as Village Hall is unlikely to be redeveloped)

- Number of stories (i.e., a single story building is more likely to be redeveloped than one that is already multiple stories)
- Property utilization (e.g., properties with low building lot coverage are more likely to be redeveloped)
- Specific property attributes (e.g., the Cannery was considered built out and unable to support additional development)

The analysis also assumed that the existing municipal lots would continue to function as public parking and would not be redeveloped.

Based upon these considerations, 25 parcels were identified as being most likely candidates for redevelopment.



Properties identified for the buildout analysis.

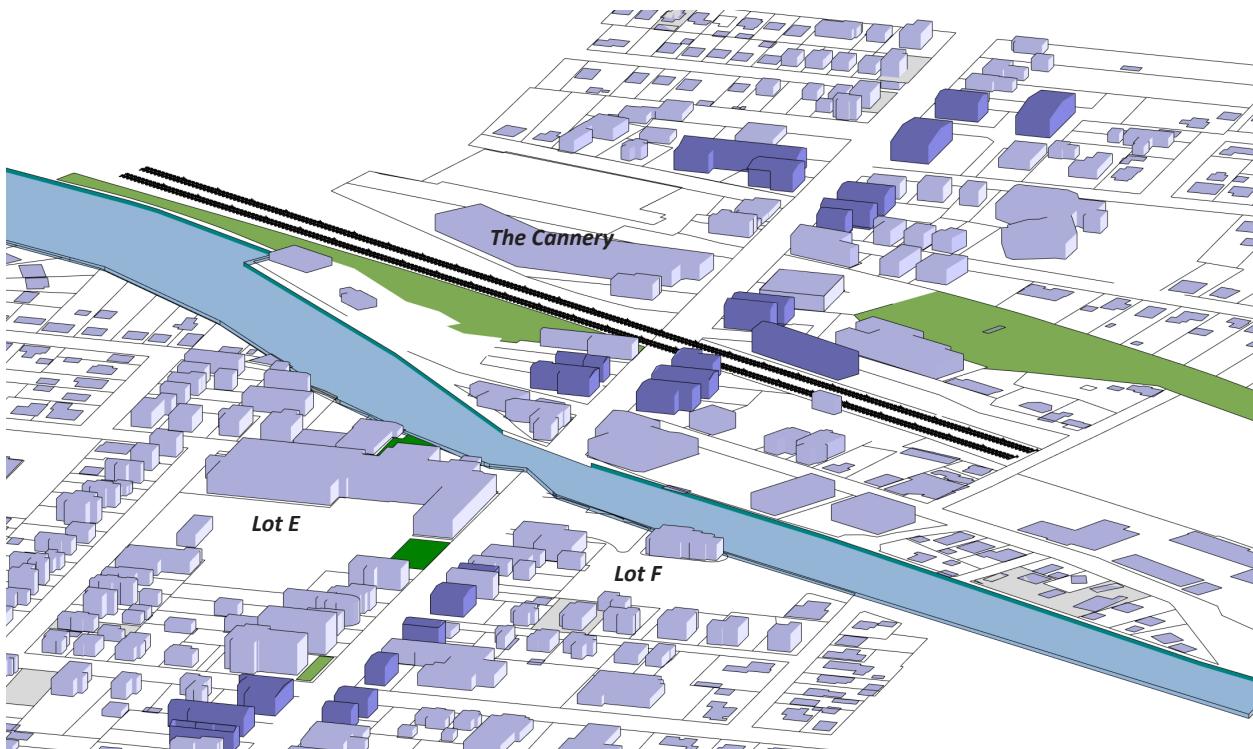
Using 3D modeling software, the identified properties were redrawn as potential hypothetical mixed-use developments. In each case, it was assumed that the ground floor would be occupied by commercial space, which is important in ensuring that Fairport's downtown remain a hub for small businesses and a place that continues to attract visitors.

Currently, most of the sites already have ground-floor commercial space (with the exception of buildings containing storage/warehouse space and one containing manufacturing space). It was assumed that all new commercial space would be on the groundfloor, although technically it's possible that upper stories could also have commercial space. But given market demand, it is most likely that for redeveloped properties upper floors would be used as homes. **Therefore, total new commercial space, was modest. Existing commercial space is approximately 100,000 SF and would rise to 104,000 SF.**

Different types of commercial uses generate varying amounts of parking demand. Restaurants generate the highest amount of demand due to concentrating a high number of people in the space (along with associated turnover) during meal times. The breakdown of commercial uses was:

- Restaurants and eateries: 40%
- Retail: 25%
- Personal Services: 25%
- Office: 10%

As noted, it was assumed that upper floors would be occupied by homes. Another assumption is the size of each home, as that drives the total number of units, which in turn effects the amount of parking demanded. The analysis assumed a gross floor area (i.e., including common areas, hallways, stairs, etc.) of 1,800 SF per unit. **Based upon these assumptions, the model resulted in 144 dwelling units in the downtown.** (It is important again to note that these developments would occur over decades.)



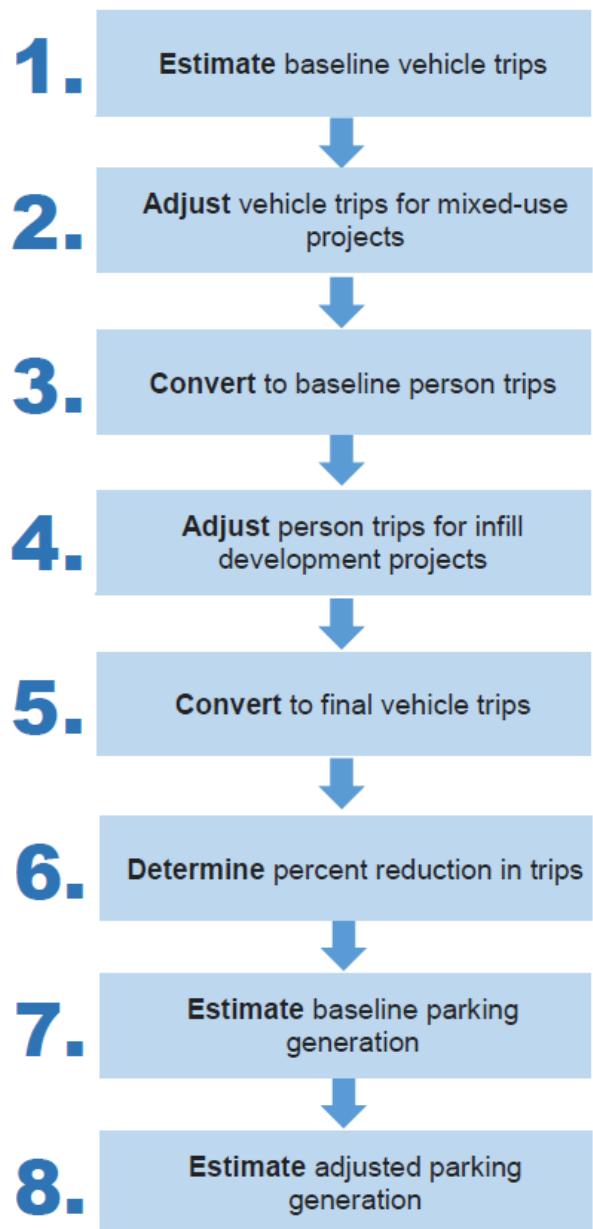
The dark purple buildings were the ones "redeveloped" for the analysis.

Parking Demand Model

The second part of the analysis was to take the buildout potential and run it through a travel demand model. The model was developed as part of Buffalo, NY's Transportation Demand Management Policy, which is used to determine the amount of parking that must be provided on-site and ways to mitigate that demand. This model is used for site-specific developments, however, the concept has been applied to the Fairport's downtown.

This model employs a multistep process, summarized to the right and described in detail below.

The method was chosen based on a review of trip generation (travel demand) and parking generation (parking demand) methods from publications issued by the Institute of Transportation Engineers (ITE) and from research conducted by the National Cooperative Highway Research Program.



Step 1: Estimate Baseline Vehicle Trips

The comprehensive datasets available in ITE Trip Generation Manual (latest edition) offer a breadth of data to estimate travel demand. These datasets, however, are often based on vehicle trips from primarily suburban locations. While the subsequent steps in this Policy Guide adjust this number to account for the multi-modal options available in compact walkable areas, this first step is necessary to create a baseline for these future adjustments. Using the latest edition of ITE Trip Generation Manual, we estimate the baseline number of vehicle-trips associated with the proposed project. The estimated number of vehicle-trips for the proposed project is determined by summing the peak hour vehicle trip generation associated with each land use as reported by ITE (Equation 1). ITE Trip Generation Manual and the ITE Trip Generation Handbook contain guidance for estimating the number of baseline vehicle-trips.

Equation 1: Baseline Vehicle-Trips

$$VehicleTrips_{BASELINE} = (VehicleTrips_{LANDUSE1} + VehicleTrips_{LANDUSE2} + \dots)$$

Where:

$VehicleTrips_{BASELINE}$ = Sum of the peak vehicle trip generation for each land use of the proposed project.

$VehicleTrips_{LANDUSE1}$ = Peak vehicle trip generation for the first land use associated with the project.

$VehicleTrips_{LANDUSE2}$ = Peak vehicle trip generation for the second land use associated with the project (if applicable).

Step 2: If the Proposed Project is Mixed-use, Adjust Baseline Vehicle Trips

Otherwise, mixed-use projects have a proportion of trips that originate from one internal use to another internal use (e.g., from on-site residential to on-site commercial). To adjust for these internal trips, baseline vehicle trips from Step 1 must be reduced. Using Equation 2, baseline vehicle trips are adjusted by subtracting the estimated number of internal trips. The steps and procedures required to make this adjustment for mixed-use projects is provided in Chapter 6 of the ITE Trip Generation Handbook (3rd Edition).

Equation 2: Adjusted Baseline Vehicle Trips (Mixed-use projects only)

$$VehicleTrips_{ADJUSTED} = VehicleTrips_{BASELINE} - Trips_{INTERNAL}$$

Where:

$VehicleTrips_{ADJUSTED}$ = Number of vehicle trips after internal trips have been discounted.

$VehicleTrips_{BASELINE}$ = Number of baseline vehicle trips from step 1.

$Trips_{INTERNAL}$ = Number of person trips that occur internal to the site. See ITE Trip Generation Handbook for guidance.

Step 3: Convert Vehicle Trips to Baseline Person Trips

To estimate the total number of trips associated with the proposed project, including those associated with transit, walking, and biking, vehicle-trips must be converted to person-trips. Using Equation 3, vehicle-trips are converted to person trips by using baseline mode share and a vehicle occupancy factor plus transit trips and non-vehicle trips. The steps and procedures required to make this conversion are provided in Chapter 5 of the ITE Trip Generation Handbook (3rd Edition).

Equation 3: Baseline Person-Trips

$$\text{PersonTrips}_{\text{BASELINE}} = [\text{VehicleTrips} \times \text{VehicleOccupancy}] + \\ \text{TransitTrips} + \text{NonVehicleTrips}$$

Where:

$\text{PersonTrips}_{\text{BASELINE}}$ = Baseline vehicle-trip generation from Step 1, converted to baseline person-trips by all modes of travel.

VehicleTrips = Either baseline vehicle trips from step 1 or adjusted vehicle trips from step 2.

VehicleOccupancy = 1.4 (2009 National Household Travel Survey)

TransitTrips = See ITE *Trip Generation Handbook* for guidance.

NonVehicleTrips = See ITE *Trip Generation Handbook* for guidance.

Step 4: If the proposed project is “Infill Development,” Adjust Person Trips

Some proposed projects may require an adjustment if they are located in compact urban areas with a greater number of pedestrians, transit riders, bicyclists, or a high rate of vehicle occupancy. These projects are often called urban infill development sites. ITE defines thresholds for a typical infill development site in Chapter 7 of the ITE Trip Generation Handbook (3rd Edition). If the project does not meet at least one of those thresholds, skip to step 5. Using Equation 4, baseline person trips are adjusted. The steps and procedures required to make this adjustment for infill development sites is provided in Chapter 7 of the ITE Trip Generation Handbook (3rd Edition).

Equation 4: Adjusted Person Trips (Infill Development projects only)

$$\text{PersonTrips}_{\text{ADJUSTED}} = \text{PersonTrips}_{\text{BASELINE}} + / - \text{PersonTrips}_{\text{INFILL}}$$

Where:

$\text{PersonTrips}_{\text{ADJUSTED}}$ = Number of adjusted person trips.

$\text{PersonTrips}_{\text{BASELINE}}$ = Either baseline person trips from step 2 or adjusted person trips from step 3.

$\text{PersonTrips}_{\text{INFILL}}$ = See Chapter 7 of the ITE *Trip Generation Handbook* for guidance.

Step 5: Convert Person Trips to Final Vehicle Trips

To estimate the final number of vehicle trips associated with the proposed project, use Equation 5 to convert person-trips to final vehicle-trips by using the mode share estimate for person trips and the vehicle occupancy factor. The steps and procedures required to make this conversion to final vehicle trips is provided in Chapter 5 of the ITE Trip Generation Handbook (3rd Edition).

Equation 5: Final Vehicle Trips

$$VehicleTrips_{FINAL} = \frac{[PersonTrips \times (Percent\ Person\ Trips\ in\ Vehicles)]}{VehicleOccupancy}$$

Where:

$VehicleTrips_{FINAL}$ = Number of person trips taken by vehicle. Vehicle person trips takes into account auto occupancy.

$PersonTrips$ = Either baseline person trips from step 3 or adjusted person trips from step 4.

$Percent\ Person\ Trips\ in\ Vehicles$ = The percent of person trips associated with vehicles from step 3 or step 4.

$VehicleOccupancy$ = 1.4 (2009 National Household Travel Survey)

Step 6: Determine Percent Reduction in Vehicle Trips

The percent difference between the baseline vehicles trips from step 1 and final vehicle trips from step 5 represents the difference between typical suburban and compact development travel demand. Using Equation 6, estimate the percent reduction in vehicle trips. This percent reduction will be used to adjust the estimated baseline parking generation in step 7 to a parking generation that takes into account the walkable nature in a village setting.

Equation 6: Percent Reduction in Vehicle Trips

$$\%ReductionTrips = \frac{VehicleTrips_{BASELINE} - VehicleTrips_{FINAL}}{VehicleTrips_{BASELINE}}$$

Where:

$\%ReductionTrips$ = The estimated percent reduction that can be expected based upon the use of alternative modes of transportation.

$VehicleTrips_{BASELINE}$ = Number of baseline vehicle trips from step 1.

$VehicleTrips_{FINAL}$ = Number of final vehicle trips from step 5.

Step 7: Estimate Baseline Parking Generation

Each TDM plan must detail the travel demand accommodations for the proposed project. As vehicular travel demand results in parking demand, steps 7 and 8 detail the methods for estimating parking demand in order to determine the appropriate amount of accommodations needed for the proposed project. The methods within step 7 estimate the baseline parking generation which is adjusted in step 8.

For proposed projects with more than one proposed land use, a shared parking analysis is required. Shared parking is the use of a parking facility to serve two or more individual land uses without conflict. The model uses the ULI Shared Parking guide, which takes into account the hourly variation of parking required for each land use, to estimate the number of parking spaces required for each proposed land use by hour of day. Using Equation 8, sum the parking demand for each land use for the hour which has the highest total parking demand. (Note, Equation 7 was omitted from this analysis as it relates to single use projects.)

Equation 8: Baseline Parking for Mixed-use Projects

$$Park_{MixedUse}_{BASELINE} = (Park_{LANDUSE1} + Park_{LANDUSE2} + \dots)$$

Where:

$Park_{MixedUse}_{BASELINE}$ = Sum of the "Average Peak Parking Demand" for each land use of the proposed project.

$Park_{LANDUSE1}$ = "Average Peak Period Parking Demand" for the first land use multiplied by the independent variable as reported in ITE Parking Generation.

$Park_{LANDUSE2}$ = "Average Peak Period Parking Demand" for the second land use multiplied by the independent variable as reported in ITE Parking Generation.

Step 8: Estimate Adjusted Parking Generation

As previously mentioned in Step 1, most of the data collected within ITE Trip Generation Manual was from auto-centric, suburban locations. The same is true for most of the data within ITE Parking Generation. To adjust this data to a more walkable environment, the percent reduction in vehicle trips from Step 6 is used as the factor for adjusting the ITE Parking Generation data to a more village-like environment.

Using Equation 10, the model estimates the adjusted parking generation for a mixed-use project by using the baseline parking estimate from step 6 and the estimated percent reduction in vehicle trips from step 6. (Note, Equation 9 was omitted from this analysis as it relates to single use projects.)

Equation 10: Adjusted Parking for Mixed-use Projects

$$\text{ParkMixedUse}_{\text{ADJUSTED}} = \text{ParkMixedUse}_{\text{BASELINE}} - (\text{ParkMixedUse}_{\text{BASELINE}} \times \% \text{ReductionTrips})$$

Where:

$\text{ParkMixedUse}_{\text{ADJUSTED}}$ = Adjusted parking generation for a mixed-use projects.

$\text{ParkMixedUse}_{\text{BASELINE}}$ = From Equation 8, baseline parking for mixed-use projects.

$\% \text{ReductionTrips}$ = From Equation 6, the percent reduction in vehicle trips.

Results of the Parking Demand Analysis

Based upon the buildout analysis and associated parking demand analysis, **the potential development could generate demand for 170 parking spaces**. As noted previously, this analysis relies on a hypothetical situation that would occur over coming decades. It does not take into account future changing preferences -- as more people walk, bike, and live in mixed-use environments, demand may actually be lower in the future than this analysis suggests.

6.0 Recommendations



Recommendations Overview

Often, a knee-jerk reaction to parking problems is to increase supply. When parking studies are conducted, however, municipalities often find parking congestion is localized and limited to a few areas where popular retail, social, and cultural destinations are located. Attempts to increase supply is often coupled with adverse effects on the character and function of a place. Balancing the needs of parking and mobility, while maintaining and enhancing the desirable walkable character of downtown Fairport is key when evaluating solutions.

Furthermore, often, at least a part of the issue relates more to the perception of a parking problem rather than an actual issue. This further underscores the importance of parking management as part of the solutions.

Parking problems are often viewed as one singular issue (lack of supply or too much demand) with one solution (increasing supply). In reality, parking problems are a combination of multiple factors.

A Note on Peak Demand Times

As the Utilization Analysis shows, overall there is sufficient supply of parking in the downtown, although some lots do, in fact, get full at peak times. There are also certain times of year that will have far higher demand, such as the Village's Canal Days held in the summer. Parking studies and research from around the United States have concluded that municipalities should not plan and design parking to accommodate annual peak demand. Rather, they urge promotion of contingency-based efforts to aid in mitigating problems while providing alternative modes.

Planning and designing parking facilities to meet annual peak demand typically results in the characteristic 'sea of parking' around shopping areas. Given the importance of maintaining the character of the Village, this is not

a viable solution (among other reasons). In fact, where these types of environments do exist, many are now being "retrofitted," reducing the amount of parking while providing a more sustainable mixed use environment that promotes pedestrian activity and transit use. Balancing the potential need for new parking with transit, bicycle, and pedestrian options ensures parking facilities are not over-built.

The following parking recommendations have been grouped into two categories: Parking Facility Management and Policy Recommendations. A number of these recommendations build off of recommendations from a previous Village report, the Circulation, Accessibility & Parking study from February 2010.

Parking Facility Management

The entire downtown is walkable and most points of interest are within a 5 minute walk from parking areas for most people. A key part of the recommendations, therefore, is managing parking so that motorists are encouraged to park in less congested lots, even if the walk is slightly longer. As a comparison, walking across Eastview Mall in Victor takes approximately 6-7 minutes!

Parking Wayfinding

Each of Fairport's parking lots has a sign alerting drivers to the lot. In addition, the Village's website lists the various parking lots (although the quality of the image is difficult to read).

Some of the existing signs could be improved so that motorists realize there are multiple options, especially from the often crowded lots north of the canal to the large ones to the south. As shown in the following image, currently a driver would see the sign for the closest lot but may not realize that there are additional options.



The older signs in the downtown could be improved to offer better wayfinding of available lots.

Village Parking Lots



-  Public Parking
-  Electric Vehicle Charging
-  Walking Distance in Minutes from Chosen Parking Lot

The website could be improved to provide clearer information of parking lot locations.



Entrance to the lower level of parking in Lot E.

Signs could point the way to additional lots with approximate walking times and/or have a map indicating their locations.

Separate from signage to additional lots, Lot E could have improved signage to its lower level. There are approximately 81 spaces on its below-grade level, which is larger than Lots A, C, and D. Although the entrance does have a sign, it is small and difficult to see unless one already knows to drive to this far section of the parking lot. A larger, more prominent

sign alerting people to this additional parking option would further improve the perception of parking availability in the downtown.

The Village may also wish to update its website with clearer visuals of parking locations. If the Village incorporates real-time parking alerts (see following recommendation, this information could potentially be integrated to the Village's website).



Dynamic parking options can provide real-time information of parking space availability in the Village's lots. Another option shows spaces that are free / occupied by means of red or green lights, helping to take away the uncertainty of finding a space.

Dynamic Parking Alerts

The initial recommendation relates to updated signage so that motorists know there are additional parking options in the downtown. A more robust solution not only provides that information but also realtime information on the availability of parking in the various lots. This type of innovative parking helps take the guesswork out of whether there are available spaces in a lot, which avoids the need to circle around lots, which contributes to the perception of a parking problem.

These systems can provide real-time information as to whether there are free spaces in a lot, where spaces are free, and/or whether additional lots have available parking. Options include:

- Variable message signs and indicators
- Full matrix signs of available parking and locations

- Outdoor monitors
- Smart-phone apps providing real-time information

Although these systems have been used more commonly in indoor parking locations (i.e., garages), there are increasing options for systems for surface lots.

If the Village is interested in potentially pursuing this option, it would need to explore multiple vendors, consider pricing, and how the system would be funded and maintained into the future.

Price High-Demand Spaces

Even if a motorist doesn't need to pay for parking, the parking lot itself is not actually free. There are costs associated with maintenance (as well as opportunity cost for what could be done on the space). Village

residents and business owners, therefore, fund the public parking indirectly through its payment of taxes.

The Village may wish, therefore, to consider charging for some of its public parking spaces. Charging for parking has several benefits:

- **Incentivize other means of travel.** For those who are able to travel by other means, it can incentivize them to do so, thus keeping spaces available for those who have no choice but to drive. For example, someone may decide that they could walk rather than drive and pay for a space.
- **Incentivize use of other spaces.** Public spaces can be priced according to their location. Lots with lower utilization, such as Lot E and Lot F, could remain free of charge, while high demand spaces (north of the canal or Main Street) could have a cost associated with their use.
- **Increased turnover.** Small businesses thrive on multiple customers. When customers are paying for parking they are more aware of time and more likely to make space for additional customers to use the parking spaces and patronize the businesses.
- **Increased revenue.** As noted above, the increased revenue can go towards maintenance and beautification efforts.

Pricing parking tends to be controversial for communities where this is new. There are a number of considerations, from determining the price, collection mechanisms, enforcement, and other administrative matters that would need to be carefully considered.

Employee Parking Locations

Finally, part of the issue with the perception of lack of parking is when the “best” spaces are already occupied. This can occur in part when employees at businesses adjacent to the lot occupy these spaces for their shifts, thus removing the most sought-after spaces for

substantial portions of the day. Encouraging or requiring employees to park in spaces further away in the lots would reserve the closer spaces for visitors and patrons.

Pricing technology available today includes:

- Sensors that can alert drivers to open parking spaces,
- Online payment options to both initiate and extend parking,
- Text (sms) alerts to users of expired parking, and
- The ability to alert parking enforcement of expired spaces.

If the Village does decide to consider pricing downtown parking, it could then consider creating a neighborhood “parking benefit district” to reinvest meter and enforcement funds directly back into the neighborhood. All or portions of revenues generated from meters and fines, less expenses for maintenance and enforcement, could be reserved for reinvestment in improving pedestrian, bicycle, transit, and parking facilities. A parking benefit district would provide the legal mechanism to set-aside the meter and fine revenue received from meters for specific reinvestment within the neighborhood. Local businesses and residents would be able to provide input on how these funds would be used to improve the public facilities within the district.

Policy Recommendations

Transportation Demand Management

Transportation Demand Management (TDM) are a set of policies that aim to reduce the number of vehicular trips and associated parking demanded by those trips. TDM can be part of an official policy for setting individual property requirements for parking or a general set of principles engaged by the Village. In either case, TDM refers to a menu of choices rather than a one-size fits all solution.

Walkability and Bikeability

TDM strategies often seek to make other modes of travel more attractive. Fairport is small and compact, and thus inherently walkable. Ensuring well-maintained sidewalks, high visibility crosswalks or pedestrian signals (where appropriate), and reducing vehicular speeds on local streets can contribute to improving the walkable nature of the community. Fairport currently has plans to redo its sidewalks along Main Street, which will further enhance the area's walkability.

Another TDM opportunity is to increase the "bikeability" of the Village. People are typically willing to bike far greater distances than walk, thus making the downtown accessible to the entire Village.

The Erie Canal provides the backbone of a bike-friendly system through the downtown. The relatively flat topography of much of the Village also makes it easy to bike. There are not, however, significant on-road bicycle facilities. In many cases, this is due to constrained rights-of-way; however, there are often opportunities by slightly reducing travel lane widths or through a "road diet" where excess lanes are reallocated for other means of travel. Biking is one of the fastest growing modes of travel and many people would opt to bike if it feels safe to do so. Bike infrastructure is a critical component in ensuring this safety. A bicycle plan that creates an interconnected network should be the long-term goal. Resources such as the design guides developed by NACTO can provide a strong starting point. Related to the above include providing adequate bicycle parking and parking shelters to accommodate parking during inclement weather. Bike parking should be located at regular locations and at high-demand locations. Installing bicycle parking at bus stops could promote cross-mobility use.

Improved Transit

Encouraging greater use of public transportation is another potential element of Transportation Demand Management. Transit is not as prevalent a mode of transportation in Fairport (and, indeed the Rochester area) as it is in some other, larger urban areas; however, the Route 21 bus line runs along Main Street and has 8 stops between Church Street and East Street. While the Village does not have control over bus frequency, it can have a role in making bus usage more comfortable. The Village can advance plans to install a covered bus shelter. This increases comfort while waiting for the bus, especially in inclement weather. It also highlights attention of the bus as a viable mode of transportation, especially when the bus shelter incorporates creative and compelling designs (which further contributes to the public realm).

Trolley/Shuttle/Valet

The Village's previous mobility report recommended exploring the solution of a shuttle for peak times as one of the means for dealing with parking issues in the downtown. These types of solutions are not always economically viable, but could be explored either on its own or included as part of a TDM strategy, where a developer could contribute funding to the shuttle's operational costs.

Shared Parking

A strategy that the Village currently uses and should be expanded upon is for shared parking among properties. Often, one property has more parking than is needed for its own use, whereas another property may not have enough. These shared parking arrangements allow the landowners to come to an agreement where a portion of one's parking needs can be accommodated by the other property's parking spaces.

Another type of shared parking arrangement

is for situations where there is a mix of uses on a single property. Different uses not only have different parking needs in terms of the amount, but also when they are needed. For example, an office typically has most of its parking needs during the work day, whereas a bar would be most likely in the afternoon and evening times. For mixed-use properties it is appropriate that some percentage of this “overlap” can be combined. For example, if a property with an office would normally require 10 spaces and a bar would require 20, rather than require 30 total spaces a shared parking mechanism would find a requirement that takes into account the different peak demand times. Some communities have set schedules that dictate this shared percentage and others do it on a case-by-case basis.

Other TDM strategies

Other TDM strategies include bike-share programs, carshare programs (e.g., Zipcar), providing or contributing to shuttle bus programs, providing bus or transit passes, etc. Not all strategies are feasible in all situations, and thus the Village should explore and determine what strategies are most appropriate to the context of a downtown Village.

Adjust Parking Requirements the Village Code

A theme of this report is that there is a tension where sufficient parking is necessary but excess parking is a detriment for the numerous reasons discussed. Furthermore, the analysis suggests that there is an abundant supply of public parking throughout the downtown. Although certain lots do, in fact, fill up at peak times, better parking management can greatly help the issue. The abundant supply of the downtown as a whole helps create a strong opportunity for the downtown to grow in a manner consistent with its historic built environment fabric.

Reduce or Eliminate Parking Minimums

Parking requirements should be assessed for both residential and commercial activities. In many cases, at least a portion of the parking needs associated with these uses can be accommodated on the public lots, potentially in concert with other TDM strategies. Parking minimums should be updated to reflect the unique, walkable and historic nature of the downtown.

Zoning codes have traditionally instituted minimum parking requirements based on use and the amount of development. As noted previously these requirements are often not based on actual demand but are rather arbitrary requirements, typically set higher than needed. At the least, these requirements for the Village should be simplified and provide additional flexibility so that they do not detract from the historic nature of the downtown.

An additional consideration is to remove the arbitrary requirements altogether and adopt a TDM policy, sometimes known as a Transportation Access Plan. With this type of mechanism, a developer first assesses parking demand associated with a future development based upon an objective process that takes into account empirical studies, such as those done by the Institute of Transportation Engineers (ITE). The Developer would then be required to reduce that demand based upon a TDM strategy (which could include allowances for parking on the public lots), and then provide on-site parking for any balance.

Institute Parking Maximums

A central premise of reducing or eliminating minimum parking requirements is that they are often set higher than what is needed. It is a mechanism that relies on landowners to provide what is best for their properties. Complementing this approach is establishing maximum parking requirements. Some retailers, especially chain establishments, plan for parking on a rare peak day, such as

during the winter holiday rush, leaving excess parking spaces for the vast majority of the year. Establishing maximum parking is a way to handle this issue, which, as noted throughout this report, is critical for a vibrant, walkable downtown.

Bike Parking

Along with parking requirements for vehicles should be requirements for bicycle parking. Providing bike parking as part of the zoning code's parking requirements is an emerging trend and helps incentivize using other modes of travel. Bike parking could be part of a TDM strategy or it could be a requirement applicable to all developments in the downtown.

Create a Parking Assessment District

The “Price High Demand Spaces” recommendation discusses the creation of a parking benefit district. Another type of district that could be used either alternatively or in conjunction is creating a Parking Assessment District, whereby property owners adjacent to public lots would contribute to funding the continued maintenance and operations of the public lots. Currently, the public lots are funded solely by the Village, and thus all community tax payers subsidize the maintenance of the lots, even if they rarely use them.

Monitor Parking Needs

Parking demand is not static, nor is it linear. A number of factors affect the demand for parking. Incorporating effective parking management techniques can alter demand. New technologies may impact the future of parking needs. Changing cultural preferences can also affect demand. For example, Copenhagen is now considered one of the most walkable and bike-friendly cities on earth. But back in the 1970s it was as car-centric as any place found in the United States today

(see photo below). This is not to suggest that Fairport will become like Copenhagen at some point, but rather that drastic change can occur in a relatively short amount of time.

It is therefore, important for the Village to continue to regularly monitor parking utilization of its lots, making adjustments as needed.



Copenhagen then and now.