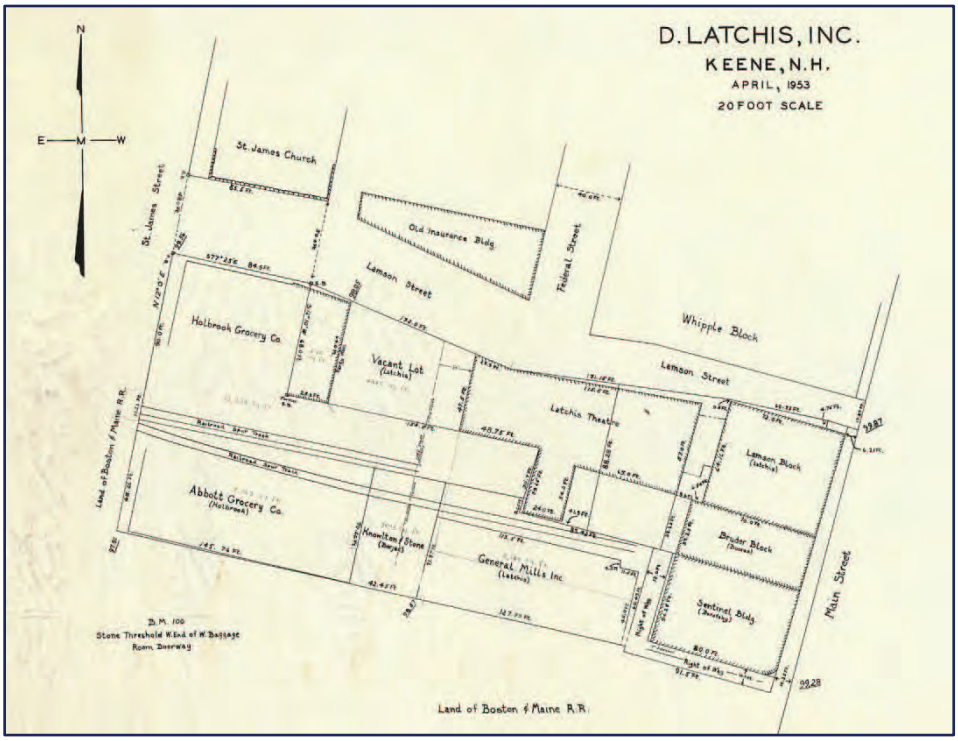
PARKING IMPACT ANALYSIS AND PROJECT FEASIBILITY STUDY

FOR THE

LATCHIS THEATER SITE

Submitted to:
The City of Keene, New Hampshire

December 2011



Submitted by:

Andrew W. Miller, AICP
Downtown Parking and Planning Associates, LLC

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Introduction/Background

The City of Keene, in cooperation with Cheshire County government requested the services of Downtown Parking & Planning Associates, LLC (DPPA) to perform a limited parking study and site analysis for the Latchis Theater site in downtown Keene, NH. The main purpose of this parking impact and project feasibility analysis was two-fold. Our first task was to analyze the proposed County Courthouse project and its potential parking impact on the existing Winter Street Parking Lot after final construction. Our second primary task was to review available site information on the Latchis Theater site and develop preliminary functional concepts for the creation of surface parking options on the site.

In reviewing the impact of proposed development on the existing Winter Street Parking Lot, we obtained information from Cheshire County that included: a grade level plan drawing of the proposed Courthouse project; information from a parking study completed in 1998; updated information from a county needs study completed in 2002, and information obtained from discussions with key staff at Cheshire County. For our analysis of parking functional options for the Latchis Theater site, we utilized information provided by the City of Keene Planning Department staff that included original street and plat drawings of the Latchis site and area; current GIS maps, and aerial images of the study area obtained from an earlier downtown parking study completed by DPPA.

It should be noted that our analysis of the Latchis site parking options is based upon older site drawings and that a recent, accurate site survey has not been completed at this time. It is also important to note that the functional parking concepts developed in this report are intended to be for concept planning purposes only and are extremely preliminary in nature. We have not analyzed city planning and development code requirements for surface parking as part of this study effort. Based upon final design and the local site plan approval process, the proposed parking concepts may require special use permits and/or waivers from existing screening and landscaping requirements. Our intent in this exercise was to develop parking concepts that would maximize the efficiencies of net new parking created on the Latchis site.

It is also worth noting that, because of its very small size, irregular shape and lack of access from public streets or rights-of-ways, we did not attempt to develop functional concepts for the Latchis Theater site as a stand-alone surface parking lot. This is because it would be extremely inefficient, cost prohibitive and almost physically impossible for a lot of this size to function as a stand-alone parking lot. Instead, our concepts utilize the existing Gilbo East Lot as primary access for the proposed Latchis site parking options.

END OF SECTION

Executive Summary/General Findings & Conditions

The following Executive Summary summarizes our primary findings more or less in order of significance or impact, with the understanding that there is some degree of overlap and inter-relatedness in all areas that relate to parking supply and parking management.

New Courthouse Parking Impact Analysis

Total parking capacity at the 83-space Winter Street Parking Lot will decrease by 46 parking spaces, representing a 55% reduction of existing parking capacity on-site. The breakdown of parking lost to development of the Winter Street Parking Lot is as follows (See **Exhibit 'C'**):

Off Street 10 Hour Meters =	11
Library Staff Reserved Monthly =	11
County Employee Reserved Monthly =	24
Total	46

One (1) on-street metered space also lost to construction

While the proposed new Courthouse will improve overall court facilities and consolidate the District Court and its 4 to 6 employees from City Hall to the new facility, overall Court activity and County employment has declined since the 1998 parking study and the 2002 space needs study. This is due to a combination of factors that include: budget cuts, staff furlough days, reduction in overall staffing levels; and a general reduction in activity over the past few years.

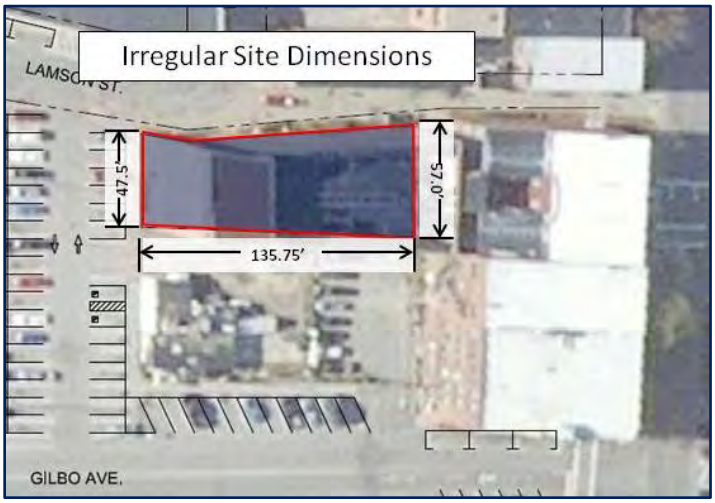
The 1998 parking study identified a parking deficit of 83 spaces to 191 parking spaces for all County functions. However, this study projected absolute worst-case scenarios for parking demand based upon full staffing levels, and it assumed all court sessions occurring simultaneously. For example, County staff indicate that instead of four (4) judges factored into the 1998 parking study, the County currently has only one (1) out of three (3) judge positions seated and the number of jury trials was down from previous years. The 1998 parking study demand estimates also included projections for the Keene City Library expansion project (45 total daytime parking spaces), which was still in the planning stage at the time.

The main challenge in mitigating the impact of constructing a new Courthouse on the Winter Street Parking Lot is to develop a plan to park library employees (11 spaces) and displaced County employee monthly parkers (24 spaces). The availability of convenient on-street, short-term customer and visitor parking during and after construction for both Courthouse constituents and Library visitors should also be a primary concern.

The proposed Courthouse floor plan does a good job of maintaining/replacing on-street short term meter parking that may be temporarily displaced during construction. The "Lower Level Floor Plan" provided for our review shows the loss of only one (1) on-street short-term parking space after construction. The new lower level plan also maintains the existing number of ADA Van accessible parking spaces (4), and improves their security, access and ease of use for persons with disabilities.

Latchis Theater Site Parking Feasibility Analysis

As mentioned above, the Latchis Theater Site is small and irregularly shaped, and it has poor access to existing streets and public rights-of-way for its development as a stand-alone surface parking lot. As the aerial image below demonstrates, the Latchis site is irregular in width at its east and west property lines, with a maximum width of 57 feet along the east property line. The fact that Lamson Street is pedestrian only from Federal Street to Main Street also impinges upon the ability to provide for proper vehicular egress to and from the site. Original street layouts, parcel & GIS maps and additional aerial image can be found in **Exhibit 'A'**.



The existing Gilbo East parking lot is a well utilized public parking lot serving the downtown area. The existing lot is in marginal to fair physical condition, it lacks perimeter sidewalks or curbing, and it provides little to no landscaping or screening of vehicles. There are what appear to be active telephone utility boxes located at the northwest corner of the Gilbo East Lot. Photos of the current Gilbo East parking lot and Latchis Theater site can be found in **Exhibit 'B'**.

Our basic assumptions in developing potential parking layouts for the Latchis site are:

- The site can only function as an extension of the Gilbo East parking lot
- We do not encourage "dead end" parking and do not show any options with dead end parking
- We attempted to maximize parking and access but do not factor in possible landscaping or screening code requirements
- We show both one-way and two-way traffic options in our proposed functional layouts
- Both one and two-way layouts will require a realignment and "squaring off" of the Latchis site property lines to achieve a more efficient rectilinear shape

Recommendations

Latchis Theater Site Parking Feasibility Analysis

Of the two basic configurations analyzed for one and two-way traffic on the Latchis Theater Site, Option „B" offers the best parking and traffic flow configuration and it maximizes total net parking gain. It offers two-way traffic flow with 90 degree angled parking and a 24ft traffic lane. To prevent a dead-end situation, this option would need to have vehicle exiting either onto Lamson Street (Option B) or by easement access to Gilbo Avenue (Option B-1). This option would also require the Latchis property to be widened to a 60ft width to accommodate a standard two-way parking bay module. Options B/B-1 both result in a ***net gain of 32 parking spaces***.

If Option „B" is not feasible due to lot size limitations, then Option A is possible utilizing a one-way configuration and 75 degree angled parking. Again to prevent a dead-end situation, this option could either use Lamson Street (Option A) or easement access to Gilbo Avenue (Option B-1) for vehicular exiting only. This option would require the Latchis site to be "squared off" at a 57ft minimum width to accommodate a one-way parking module. Options A/A-1 both result in a ***net gain of 26 parking spaces***.

Concept drawings and parking capacity tables of both options can be found in **Exhibit 'D'**.

New Courthouse Parking Impact Analysis

As mentioned earlier, the primary challenge for addressing the parking needs of the new Courthouse project will be the re-assignment of parking for Library and County employees who will be permanently displaced by construction on the Winter Street Parking lot. Based upon our understanding of current employment levels, a combined total of 35 monthly "reserved" parking spaces will need to be replaced (11 Library; 24 County employee). As shown in **Exhibit 'D'**, our parking options for the Latchis Site range from 26 to 32 net new parking spaces created. At 32 net new parking spaces, Options B/B-1 nearly meets the total number of lost monthly spaces from the Winter Street Parking Lot.

In addition to new parking created on the Latchis Site, we believe there may be viable opportunities to create additional on-street parking on St. James Street and possibly Lamson Street by converting existing parallel parking to angled parking on at least one side of the street(s). We understand the City"s engineering and traffic departments are exploring such options and will be developing options and recommendations.

Based upon the findings in our original downtown parking study completed in the summer/fall of 2010, we believe there may be opportunities to improve parking utilization by converting all or a portion of the twenty seven (27) existing three-hour parking meters in Library Annex Lot to employee permit parking. Our original study demonstrated these meters are underutilized and averaged only 30% occupancy during typical weekday mornings and 38% occupancy during typical weekday afternoon periods. In other words, our original study found that 18 to 19 parking spaces went unutilized in the Library Annex lot on a daily basis during our study observation period.

Jury Parking

We understand that New Hampshire State law requires that jurors be provided with free parking while appearing for and serving on jury duty. However, the law does not dictate ***where*** jurors can park for free. We understand the current system involves the County providing placards to prospective and seated jurors which allow the jurors to park at any street meter for free for as long as necessary. Because most jurors will park and store their cars for more than two hours, we believe it is bad policy to allow all day juror parking in prime on-street parking meters. We recommend that jurors be directed to more underutilized parking areas such as on Court Street north of Central Square, or at a designated area of the Commercial Lot. This will help to ensure that short-term parking remains available to County constituents and Library visitors.

Other Project Benefits

As proposed in option B-1, by opening up and expanding the Gilbo East Lot to the east behind Main Street commercial properties, we believe the overall area could benefit by better access and mobility created by re-establishing alley access behind Main Street properties. This new "alley" could benefit adjacent Main Street property owners by providing better access and exposure to the rear of their properties. This access could be used for pedestrians, service and delivery vehicles and to consolidate and service existing trash dumpsters.

Pedestrian Friendly Service Alley – Georgetown, Washington, DC

EXHIBIT 'A'

Figure 1 - Original Lamson Street Layout Showing Street Dimensions

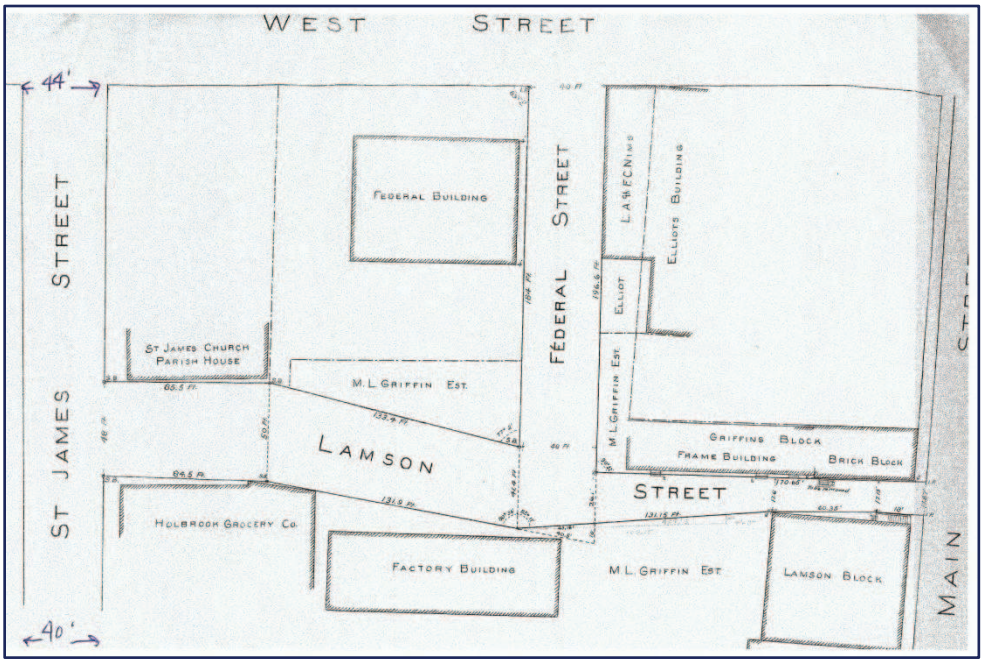


Figure 2 –Latchis Site and Gilbo Area Parcel Map (1953)

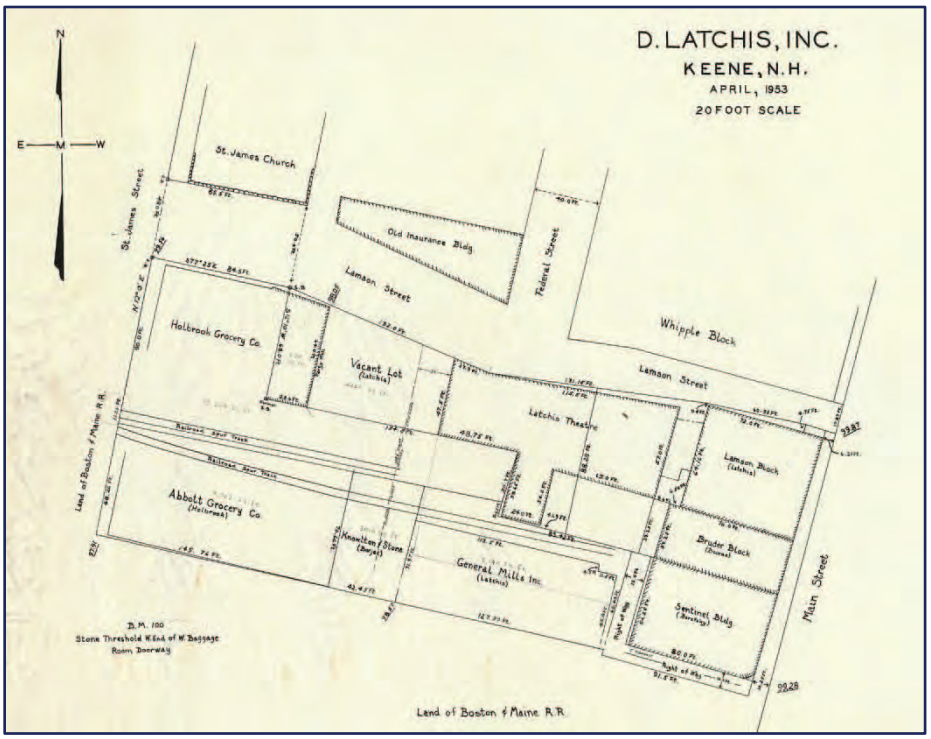


Figure 3 – Existing Latchis Site and Gilbo Area GIS Parcel Map

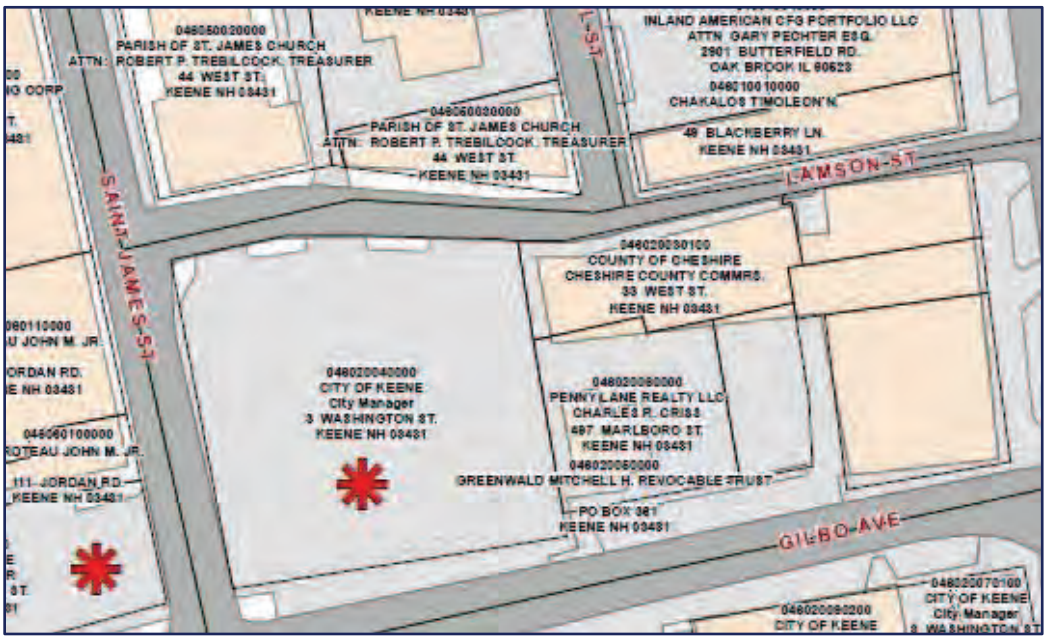


Figure 4 – Existing Latchis Site and Gilbo Lot Aerial Photo

EXHIBIT 'B'

Photo #1 - Existing Latchis Theater Site Facing Southeast From Lamson St.

Photo #2 - Lamson Street Facing West From Gilbo Lot

Photo #3 – St. James Street Facing North From Gilbo Avenue

Photo #4 – Lamson St. Facing West From Latchis Theater

Photo #5 – Lamson St. Pedestrian Access Facing East From Latchis Theater

Phot #6 – Lamson St. Pedestrian Access From Main Street Facing West

EXHIBIT 'C'

Figure 5 – Existing Winter Lot Parking Layout

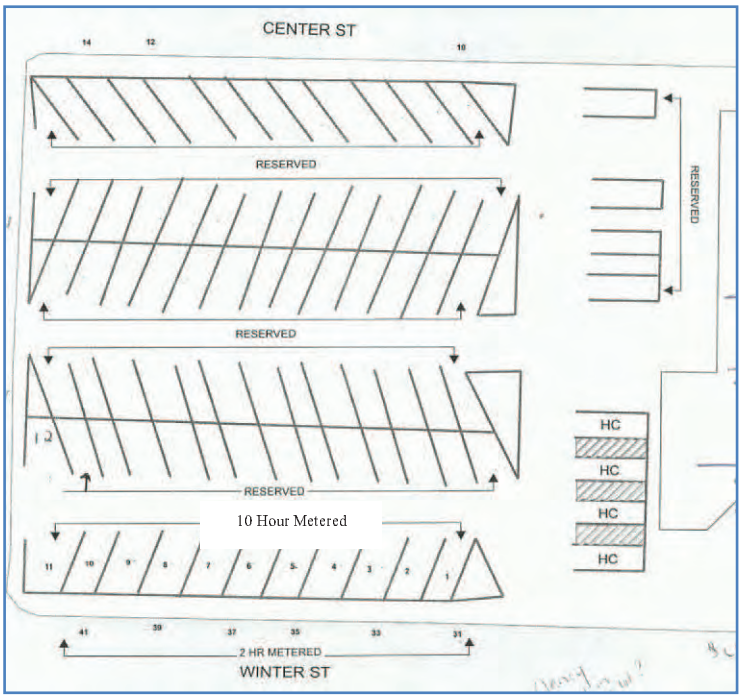


Figure 6 – Proposed New Courthouse Addition Ground Floor Plan

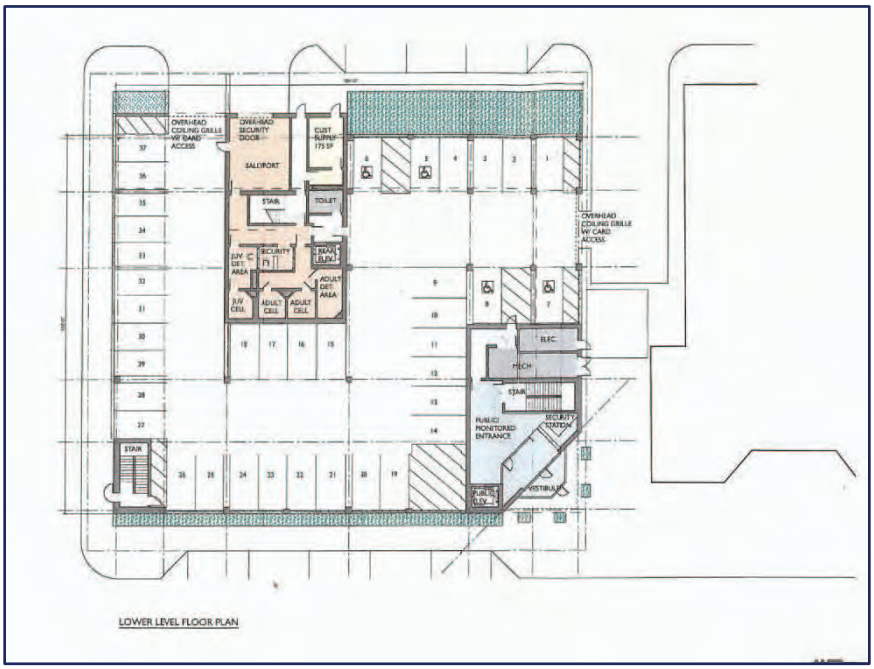
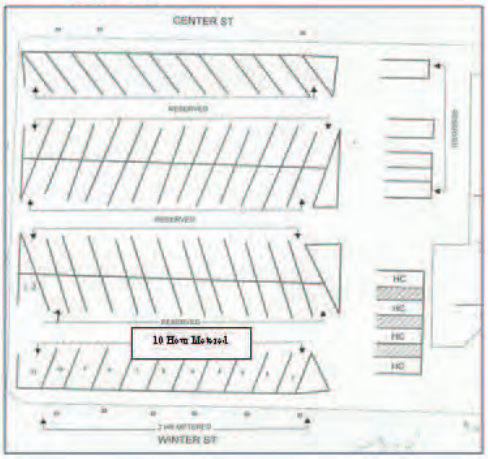


Figure 7 – Summary of Lost Parking Due to Construction

Winter Lot Development Impact

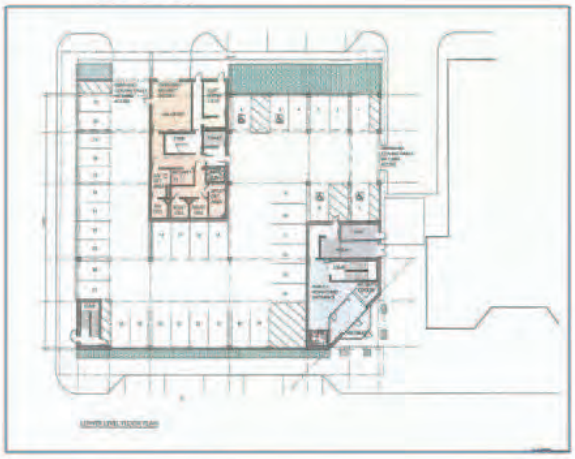
Existing:

68 - Reserved
4 - ADA Van
11 - Lot Meters (10 Hr)
9 – Street Meters (2Hr)
TOTAL - 92



After Construction:

33 - Reserved
4 - ADA Van
8 – Street Meters (2Hr)
TOTAL - 45



Net Loss of Parking After Construction:

Reserved Monthly	(35)
Lot Meters - 10 Hour	(11)
Street Meter - 2 Hour	(1)
Total	(47)

EXHIBIT 'D'

Figure 8 – Existing Gilbo East Lot Layout and Latchis Theater Site

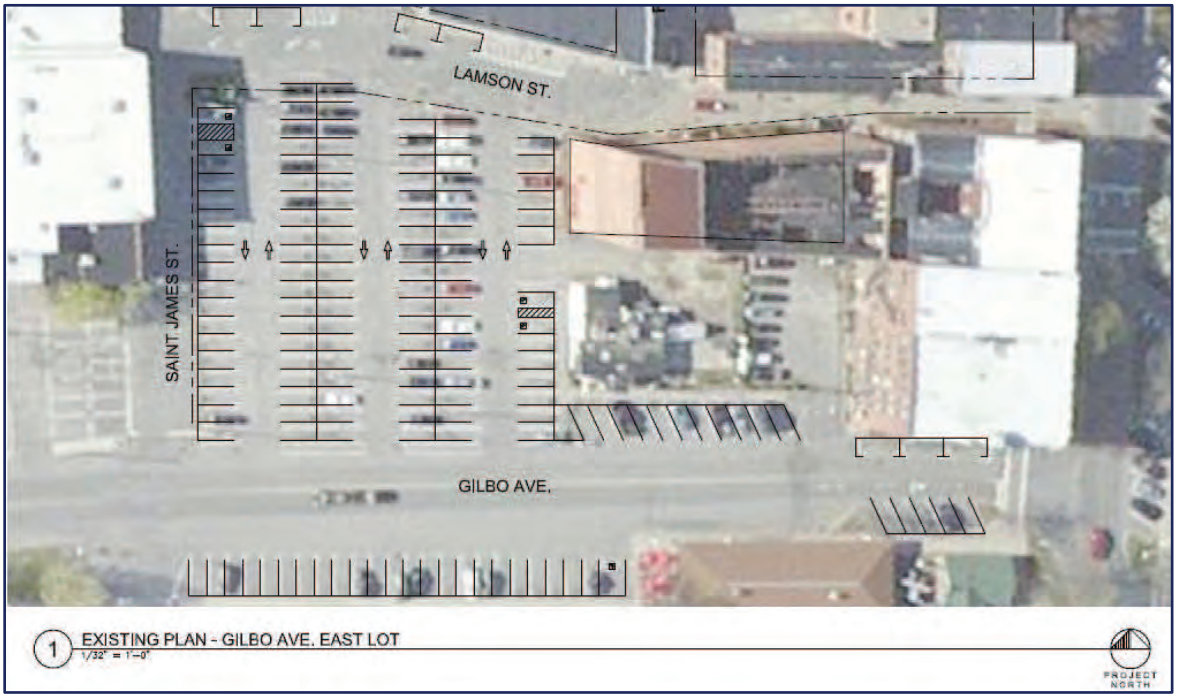


Figure 9 –Latchis Theater Site Dimensions

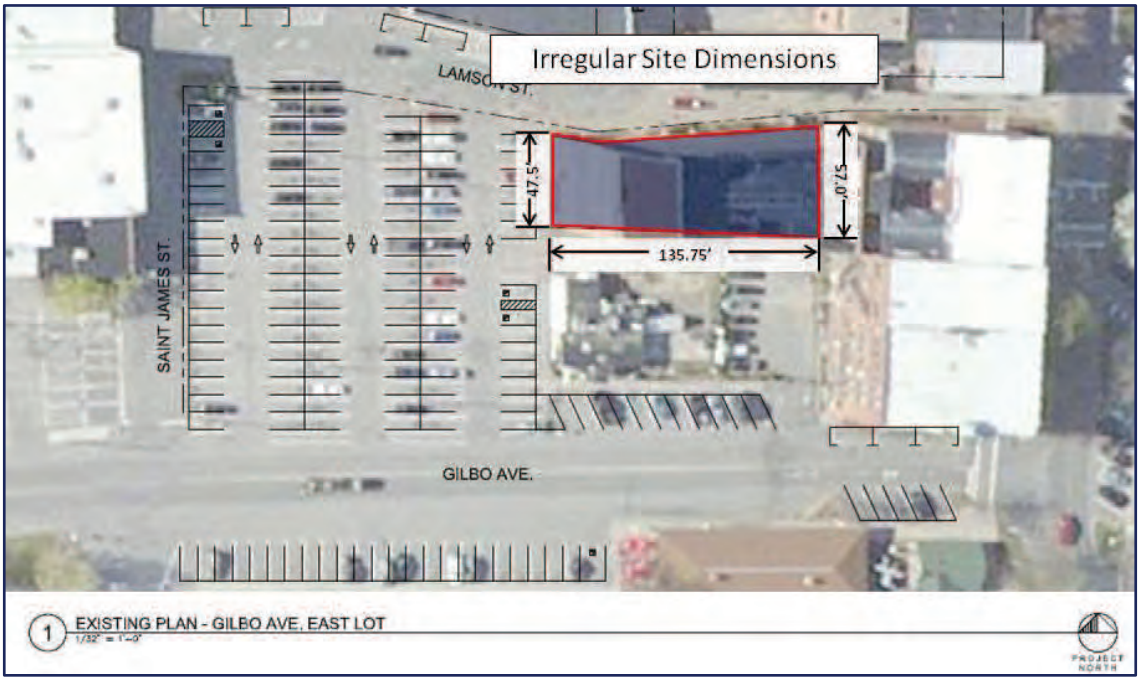


Figure 10 – Proposed Latchis Theater Parking Option A

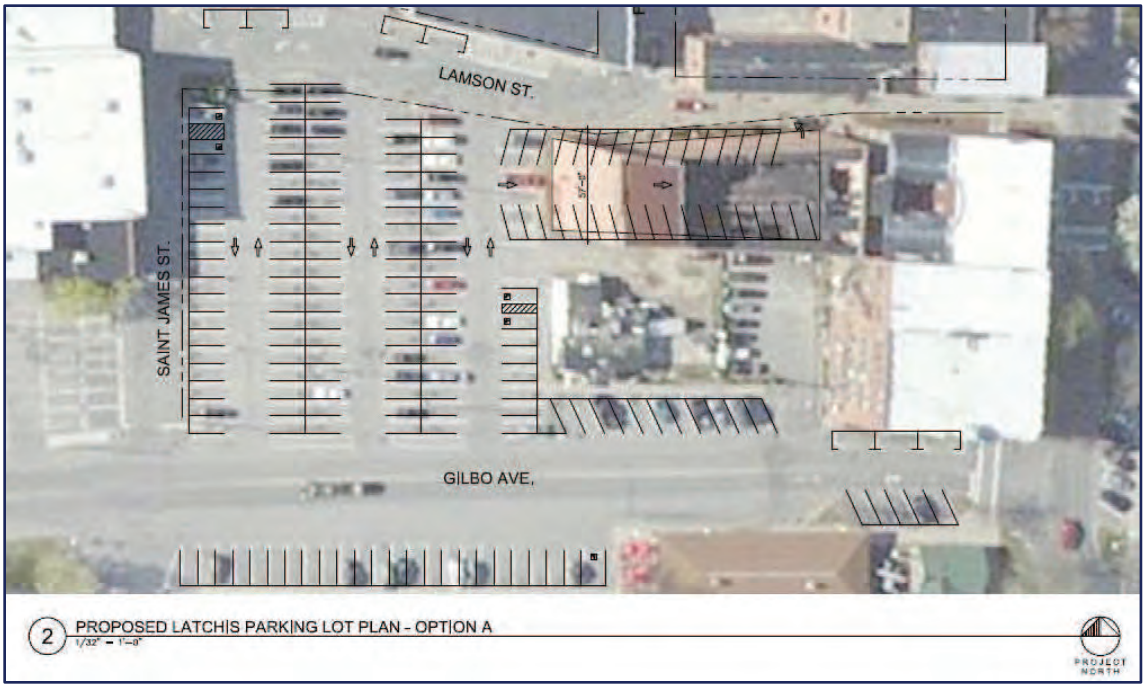


Figure 11 – Proposed Latchis Theater Parking Option A-1

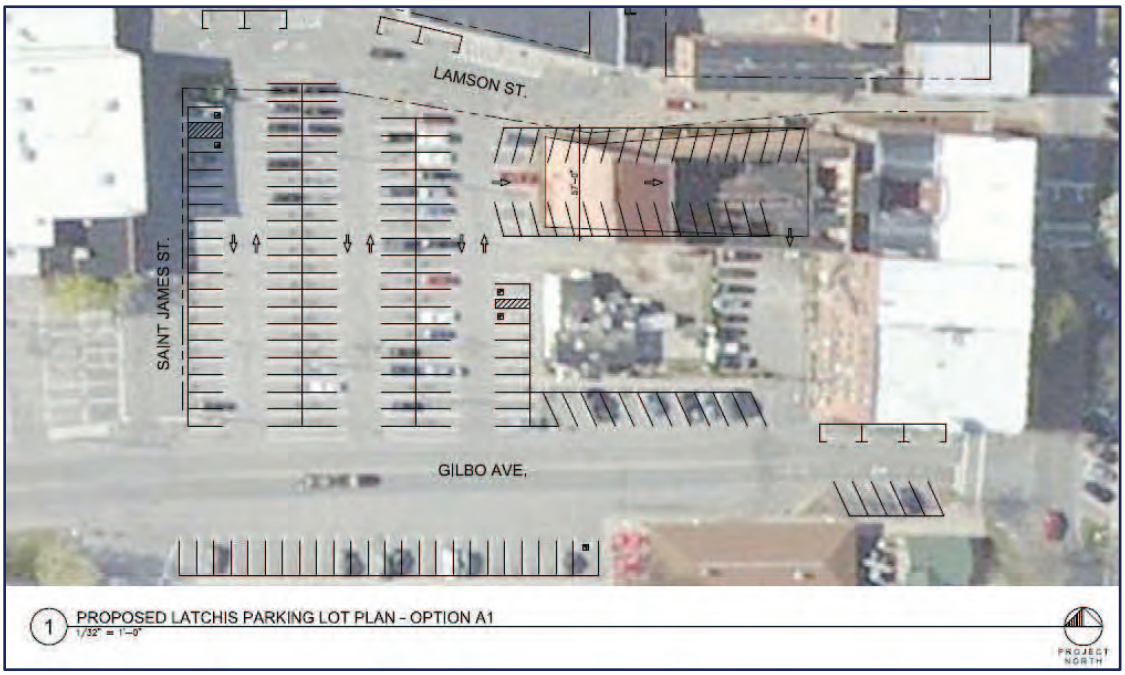


Figure 12 - Proposed Latchis Theater Parking Option B

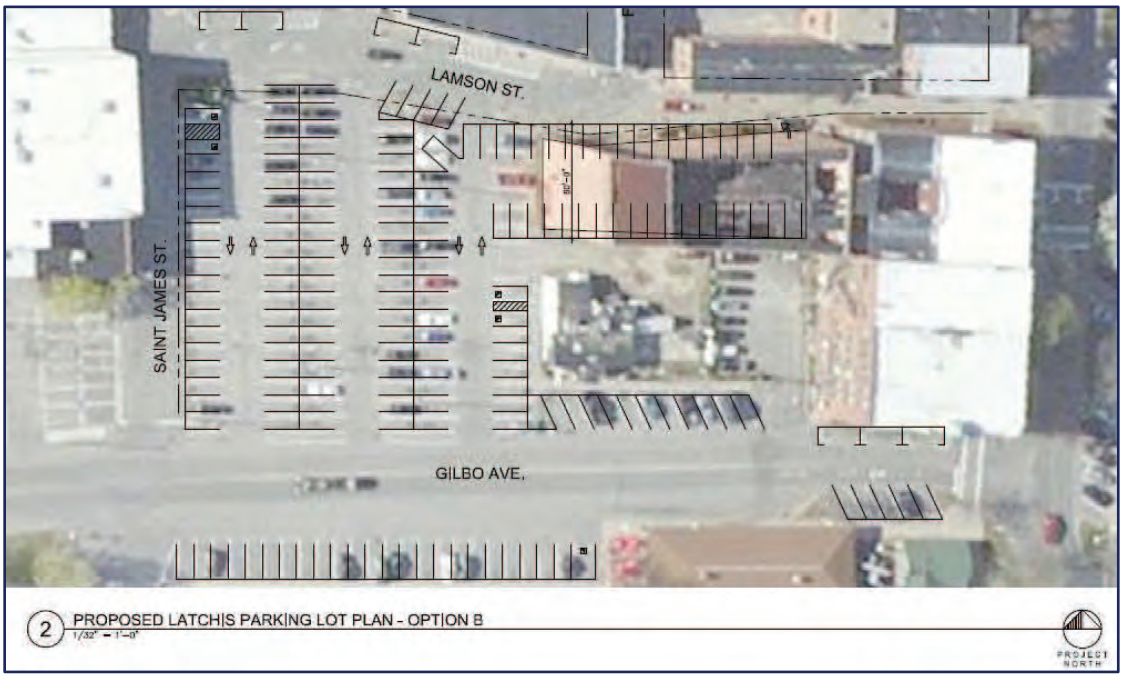


Figure 13 - Proposed Latchis Theater Parking Option B-1

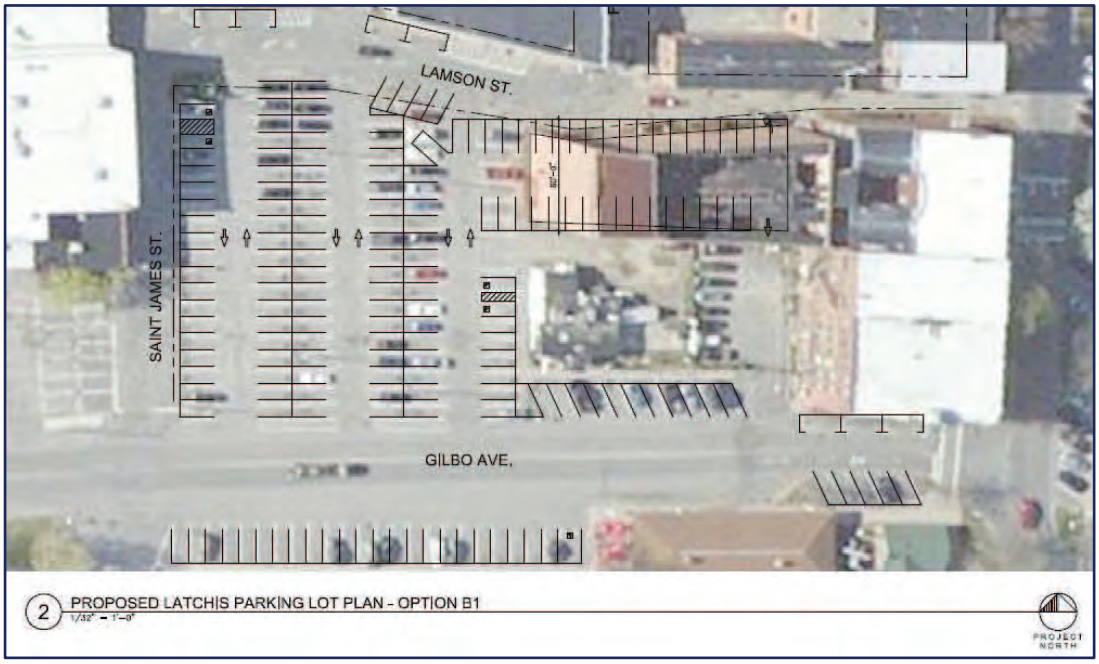


Figure 14 – Existing Gilbo East Lot Parking Summary

EXISTING PARKING SUMMARY				
DESCRIPTION	STANDARD	ADA	ADA VAN	TOTAL
LAMSON ST. - STREET	4	0	0	4
GILBO AVE. - STREET	42	1	0	43
GILBO AVE. - EAST LOT	104	2	2	108
TOTAL	150	3	2	155
STANDARD SPACE = 9'-0" x 18'-0" @ 65° & 90°				
ACCESSIBLE SPACE = 8'-0" x 18'-0" w/ 5'-0" AISLE @ 90°				
ACCESSIBLE VAN SPACE = 8'-0" x 18'-0" w/ 8'-0" AISLE @ 90°				

Figure 15 - Proposed Latchis Theater Parking Summary Options A; A-1

PROPOSED PARKING SUMMARY OPTION A				
DESCRIPTION	STANDARD	ADA	ADA VAN	TOTAL
LAMSON ST. - STREET	4	0	0	4
GILBO AVE. - STREET	42	1	0	43
GILBO AVE. - EAST LOT	98	2	2	102
LATCHIS PARKING LOT	32	0	0	32
TOTAL	176	3	2	181
STANDARD SPACE = 9'-0" x 18'-0" @ 75° & 90°				
ACCESSIBLE SPACE = 8'-0" x 18'-0" w/ 5'-0" AISLE @ 90°				
ACCESSIBLE VAN SPACE = 8'-0" x 18'-0" w/ 8'-0" AISLE @ 90°				

Figure 16 - Proposed Latchis Theater Parking Summary Options B; B-1

PROPOSED PARKING SUMMARY OPTION B				
DESCRIPTION	STANDARD	ADA	ADA VAN	TOTAL
LAMSON ST. - STREET	8	0	0	8
GILBO AVE. - STREET	42	1	0	43
GILBO AVE. - EAST LOT	98	2	2	102
LATCHIS PARKING LOT	34	0	0	34
TOTAL	182	3	2	187
STANDARD SPACE = 9'-0" x 18'-0" @ 75° & 90°				
ACCESSIBLE SPACE = 8'-0" x 18'-0" w/ 5'-0" AISLE @ 90°				
ACCESSIBLE VAN SPACE = 8'-0" x 18'-0" w/ 8'-0" AISLE @ 90°				

DOWNTOWN PARKING ANALYSIS FINAL REPORT

FOR

The City of Keene, New Hampshire
November, 2010

Submitted by:

Andrew W. Miller, AICP
Downtown Parking and Planning Associates, LLC

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Executive Summary

Primary Findings

Existing parking supply is adequate based upon current parking demand. While some high demand areas on-street "peak out" at over 90% occupancy during seasonal high demand periods, there remains sufficient parking supply available in nearby lots and side streets. Peak seasonal downtown parking activity periods are in April/May; and September/October.

The Downtown Keene parking system is well managed, with parking rates and time limits that encourage longer term parkers to park in off-street lots and facilities. This is demonstrated by the fact that off-street meters show higher average utilization levels than on-street meters.

Parking enforcement is dedicated and consistent; resulting in good turnover of prime short-term on-street metered parking spaces. Parking rates, monthly permit costs and fine amounts are very reasonable.

The City of Keene utilizes a sound business model for the downtown parking system, with a separate and dedicated Parking Enterprise Fund where all parking revenues are deposited and all parking expenses are accounted for.

The City maximizes the amount of available on-street parking supply through the use of angled parking wherever feasible. Angled parking increases parking supply, it helps to "calm" traffic, and it creates a small town feel that enhances the downtown experience.

The City relies almost exclusively on parking meters as its primary parking access and revenue control equipment (PARC) technology, both on-street and in off-street lots and facilities. City enforcement staff consistently monitors and documents actual parking utilization activity for metered parking areas throughout the downtown area.

While not necessarily increasing long term parking demand, the proposed new Central Fire Station and Courthouse Annex projects will have a short-term negative impact on parking availability in the areas north and west of Central Square.

The current Railroad Property development plan shows adequate parking on-site to accommodate planned/known development at this time. If additional development occurs, additional parking capacity in the form of structured parking may need to be created.

If the Gilbo Avenue development projects occur as planned, structured parking will be required to replace lost surface parking and to support additional parking demand. The ultimate size and location of structured parking will need to be further analyzed based upon the land uses contained in the final development plan.

Primary Recommendations

The City needs to develop a parking mitigation plan to deal with parkers displaced by the Central Fire Station and Courthouse Annex projects. Possible elements of the plan include: keeping Elm Street Lot and Elm Street metered parking open to the maximum extent feasible during construction; converting the Library Annex Lot to monthly parking; converting Court Street to permit parking for Courthouse employees.

The City should adopt a general policy that emphasizes the development of structured parking instead of surface lots in the downtown core area to promote sound economic development and urban planning goals. Parking needs to be viewed as infrastructure, and the City of Keene needs to take a pro-active and leading role in ensuring that proper infrastructure is in place to support future downtown development.

It is recommended that a set of general parking structure design and program goals be developed to act as guidelines for public development of, or participation in the design and construction of future parking structures. The guidelines would layout basic design goals, operational program elements, general financing plans and rate structures for the development of structured parking. These guidelines would apply to publicly financed and constructed facilities and/or parking structures developed under public/private partnerships or developer agreements.

City parking staff should to continue to collect parking utilization data on metered parking and permit lots and use the data to continually track, monitor and benchmark actual parking activity. This information can be valuable in helping the City to be more proactive in planning for future parking facilities and to provide a basis for possible parking policy or rate adjustments.

The City should consider the practice of "overbooking" in monthly permit lots and in the Wells Garage. A number of these facilities are leased out on paper, but in reality are operating below capacity on a daily basis. Overbooking is a common practice in the parking industry and most existing permit lots have the capacity to accommodate additional parking demand.

While existing parking meters are operating sufficiently and are well maintained, the existing fleet of parking meters in Downtown Keene is older generation technology and will need to be replaced in the not-too-distant future. In exploring new parking revenue and access control (PARC) technologies, the City should consider multi-space pay stations in surface lots to replace individual meters. More modern multi-space technologies should also be considered for prime on-street areas as well. Newer multi-space technology is growing in acceptance throughout the country and these systems offer greater efficiencies, more flexibility, better aesthetics, more payment options (such as credit card and bill acceptance), and they offer tighter revenue control and audit capabilities than older meter technology.

Primary Recommendations (Cont.)

Based on our shared demand modeling for the Railroad Property development area, we believe the existing development plan shows adequate parking supply on-site to accommodate planned developments. Projected on-site parking shortages are minimal, with ample parking available on-street or in public facilities to accommodate any overflow parking that may be needed to support this development. Structured parking may be needed if development activity includes a "future building" that has been discussed, but not articulated at this time.

If the proposed Gilbo Avenue development projects move forward as planned, structured parking of approximately **500 spaces** will be needed to replace lost surface parking and to accommodate increased parking demand. Ideally, the new parking facility will be sized and located to accommodate additional Gilbo Avenue parking demand, and also provide additional daytime capacity to serve Main Street businesses in general. However, due to the special event nature of the Keene State College Athletic Facility/Civic Center and the Arts Alive performing arts center, the ability to "right size" a parking structure will be difficult but extremely important. With the high cost of structured parking and the relatively low rates dictated by local market conditions, the City cannot afford to overbuild. Any final plan for structured parking along Gilbo Avenue will need to incorporate a parking and traffic management plan for major special events. The parking and traffic management plan would include the use of KSC parking facilities, other remote public lots and the use of buses or shuttles to accommodate the few events per year that generate very high parking demand. This plan needs to be developed in close cooperation with Keene State College and well in advance of the facility actually opening for events.

As mentioned in the report below, Keene's downtown parking system operates very well in general. However, there is no formalized parking management plan in place to strategically guide parking planning, management, and operations into the future. As with any successful organizational plan or business model, the downtown parking system needs to adopt a more formal and strategic parking management plan. Basic elements of a parking management plan would include a "Statement of Purpose" for the downtown parking system, a set of guiding principles and general management and organizational policies, the establishment of regular reporting and benchmarking activities, the creation of an organizational model/responsibility matrix, and a set of general parking structure design and program goals. The parking management plan should also include a marketing, communications and public relations component.

Introduction / Background

The City of Keene (population of 22,834) is located in southwest New Hampshire in Cheshire County. Downtown Keene is a vibrant and traditional New England community with a thriving Main Street offering a wide variety of dining, retail and entertainment opportunities in an historic town center setting. The downtown area serves as a major employment, governmental, educational and arts/cultural center for the region. Major downtown employers include the National Grange Mutual (NGM) insurance company, Cheshire County government, the City of Keene and a number of commercial businesses, professional offices and service organizations. Keene State College is located immediately south of the downtown area and the current campus of Antioch New England University is located on the western of edge of the Downtown area.

In June of 2010, the Keene Planning Department retained the services of Downtown Parking and Planning Associates to perform a parking analysis for the downtown area. The purpose of the study is to document existing parking supply, demand and utilization characteristics, and to project future parking demand for the downtown area based on anticipated development. The need for the parking analysis was realized due to a number of large pipeline projects and potential development projects that have been recently planned or announced. Major projects include a new Central Fire Station and a planned expansion of the Cheshire County Courthouse to the north and west of Central Square; and a proposed Keene State University Athletic Facility and Civic Center, Arts Alive expansion and new downtown campus for Antioch University all located along Gilbo Avenue immediately west of Main Street. Our analysis also includes a review of the Railroad Property mixed use development area along Railroad Street east of Main Street. This area is in the process of redevelopment with a new Marriott hotel, a senior living center, and an office/residential mixed use building recently completed. Additional hotel, retail and residential development is planned for the Railroad Property and our analysis is based upon total known or anticipated development activity planned at this time.

Methodology / Project Approach

Parking Inventory

Our study was focused on the downtown commercial core area of Keene bordered more or less by Elm Street to the north, Roxbury Plaza to the east, Commercial Street to the south and School Street to the west. Our analysis included an inventory and field verification of all public parking lots and street meters in the study area, as well as the large private employee lots for NGM located along Gilbo Avenue. Posted time limits and parking regulations were documented as part of the inventory process.

Existing Parking Demand and Utilization

To document current parking demand and utilization the consultant performed car counts on random typical weekday morning and afternoon periods at key public lots and street meters. These counts were performed in June and August and compared against historic occupancy counts compiled by City parking staff for the previous year. We also compared empirical occupancy data for the months of July/August/September of 2009 with actual car counts for the same months in 2010 to see if parking demand trends have changed between 2009 and 2010. The results of our parking demand and occupancy analysis are summarized in the Executive Summary below and in graphic form in **EXHIBIT A**.

Field Observations

Our analysis included a total of three (3) site visits to Downtown Keene to perform car counts and to observe general parking conditions and patterns. This included a review of current parking access and revenue control equipment (PARC) both on and off street, a review of parking rates, policies and regulations, and a general observation of the City's parking enforcement program. Primary findings and recommendations based upon our field observations are included in the Executive Summary.

Estimating Future Demand

In estimating future parking demand generated by current and anticipated future development projects, we utilized the latest parking ratios published by the Urban Land Institute (ULI) in its publication "The Dimensions of Parking" 5th Edition, 2010. To more accurately project parking demand in an urban mixed use central business district, we utilized the ULI's shared parking demand modeling as the basis for our demand forecasting. Shared demand models are based on peak time-of-day parking accumulation patterns for different land uses as published by ULI in its publication "Shared Parking" 2nd Edition, 2005. A summary of our findings is included below. A detailed explanation of the concept of shared parking and the results of our shared demand modeling can be found in **EXHIBIT B**.

General Findings

Overall, the downtown Keene parking system is well managed considering the relatively small size of the City's operation. The City operates parking as a separate enterprise fund and allocates all revenues and expenses to the fund. This is a preferred business model over many cities we encounter who often "lose" parking revenues (and expenses) to the city's general fund. The City employs dedicated parking enforcement personnel on a consistent basis which helps to ensure parking turnover in the most valuable and high demand on-street parking areas such as Central Square and Main Street. Parking rates and fine amounts are reasonable, and the City's time limit and rate structures help to encourage all day parkers off the streets and into public lots and facilities. Overall, we found the public parking facilities to be generally well kept and parking meters to be in good working order in terms of maintenance and upkeep.

The City maximizes the supply and availability of valuable on-street parking by using angled parking throughout the downtown area wherever feasible. In addition to increasing the supply of parking, angled parking helps to calm vehicle traffic and it helps to provide a more "small town" feel for Main Street and Central Square. The City also has done a consistent job of collecting and maintaining historic parking occupancy and utilization data at public lots and meters which aided our analysis by documenting real life conditions and by providing empirical data on seasonal variations affecting downtown parking demand.

Existing Parking Supply

Public parking in downtown Keene consists primarily of public on-street metered parking, public lots, and two public parking structures. The City Hall and Wells Street parking structures are both relatively small, single level supported parking decks with exterior ramping systems. Total public parking in the study area was 1,390 parking spaces, which includes 477 on-street metered parking spaces and 913 parking spaces in public lots and structures. Public lots and structures include both metered and permit parking. In general, most on-street metered parking is limited to short term 2 Hour parking, with longer term 10 Hour meters and permit parking located in the lots and structures. Detailed breakdowns of public on-street and off-street parking is included in the tables below.

Public Parking Supply / On-Street Meters

Location	2 HR	3 HR	10 HR	Permit	HC	Total
Centrer Street	7					**7**
Central Square	41				2	**43**
Court Street	32					**32**
Cypress Street	2					**2**
Eagle Court	9					**9**
Federal Street	8					**8**
Gilbo Avenue	42				1	**43**
Lamson Street	4					**4**
Main Street	138	18			10	**166**
Mechanic Street	15			1	1	**17**
Railroad Street	8		13		2	**23**
Roxbury Plaza	14				1	**15**
Roxbury Street	10					**10**
St. James Street	9					**9**
Vernon Stret	3					**3**
Washington Street	36				1	**37**
Winter Street	36	11			2	**49**
Totals	**414**	**29**	**13**	**1**	**20**	**477**

Public Parking Supply / Off-Street Parking

Location	3 HR	4 HR	10 HR	Permit	HC	Total
Commercial Lot			106	30	5	141
Elm Lot	4		55	92	4	155
Gilbo Lot East			103		5	108
Gilbo Lot West				44	2	46
Wells Lot			14		4	18
Wells Lower			42	68	3	113
Wells Upper				115		115
Winter Lot	12			64	4	80
City Hall Upper		37		6		43
City Hall Lower				44	2	46
Cypress Lot				14		14
Library Annex	27			5	2	34
Totals	**43**	**37**	**320**	**482**	**31**	**913**

NOTE: No Two Hour Meters In Any Lots

TOTAL Public Parking = 1,390

Existing Parking Utilization

The demand for convenient parking close to businesses, retail shops and restaurants is high in any downtown, particularly a vibrant and active downtown like Keene. Cries of "there is never enough parking" are often voiced by those who compete for the most valuable on-street parking spaces close to their desired destinations. The results of our parking utilization analysis reveal that, while there are some areas of very high demand in the downtown area, overall parking supply is more than adequate to accommodate existing downtown demand.

As the charts on the following page demonstrate, areas of high demand on-street include Central Square meters, Main Street meters and Railroad Street meters. Low demand on-street areas include Court Street and Washington Street meters. The highest demand off-street facilities are the Gilbo East and Winter Street lots which show consistently high occupancy levels, and to a lesser extent the Wells Lot adjacent to the Wells Garage. Areas of low utilization include the Commercial Lot, the Library Annex Lot and to a lesser extent the Wells Garage.

Overall occupancy in 2009 - 2010 for on-street meters averaged 58% during the morning peak and 59% during the afternoon peak period. Overall occupancy for off-street parking averaged 74% for the morning peak and 68% for the afternoon peak over the same 2009 – 2010 period. This translates to an average of 195 parking spaces available on street and 237 parking spaces available off-street during typical peak parking demand periods. The fact that longer term off-street meters show consistently higher average utilization levels and higher levels of morning occupancy indicate that the City's pricing, time limits and enforcement policies are working to encourage employees and all day parkers to park off street in lots and garages while helping to maintain the availability of valuable on-street parking for shoppers and visitors.

The impact of Keene State University on overall downtown parking activity appears evident based on the monthly occupancy counts conducted in 2009 and 2010. As part of our analysis we charted parking occupancy activity by month from June 2009 through June 2010. We also compared parking counts for July/August/September 2009 against parking counts conducted for the same months in 2010. The results of this graphic analysis show that overall parking activity spikes seasonally in April, with a secondary spike in October. September and November follow in terms of busiest seasonal parking months. These seasonal spikes indicate that downtown activity does seem to increase when the Keene State University is in full session. Other than the monthly/seasonal variations just noted we did not identify any significant changes in overall parking activity in comparing July/August/September 2009 activity against the same time period for 2010. Detailed charts and graphs of annual occupancy counts by month for on-street and off-street facilities and comparisons for 2009 vs. 2010 parking utilization levels can be found in **EXHIBIT A**.

Existing Parking Utilization

Off-Street Meter Occupancies

Facility	Average Morning Occupancy													Average Occupancy
	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	
Wells Structure Lower	52%	58%	x	x	48%	49%	63%	72%	83%	84%	94%	96%	69%	73%
Wells Lot	77%	77%	x	x	98%	88%	90%	93%	88%	93%	96%	89%	85%	89%
Elm Lot	60%	62%	60%	70%	76%	78%	43%	50%	76%	60%	74%	74%	67%	65%
Winter Lot	94%	88%	90%	92%	96%	92%	87%	94%	77%	95%	98%	83%	98%	91%
Gilbo East Lot	45%	82%	82%	91%	96%	92%	81%	95%	84%	91%	91%	89%	68%	84%
Commercial Lot	29%	39%	35%	46%	44%	41%	38%	44%	39%	53%	54%	38%	42%	42%
	60%	**68%**	**67%**	**75%**	**76%**	**73%**	**67%**	**75%**	**75%**	**79%**	**85%**	**78%**	**72%**	**74%**

Facility	Average Afternoon Occupancy													Average Occupancy
	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	
Wells Structure Lower	62%	67%	x	x	43%	47%	71%	84%	68%	78%	80%	73%	64%	67%
Wells Lot	80%	60%	x	x	77%	93%	81%	82%	79%	80%	68%	82%	83%	79%
Elm Lot	67%	64%	60%	68%	69%	69%	52%	64%	46%	55%	72%	68%	63%	63%
Winter Lot	83%	97%	90%	83%	88%	88%	90%	90%	75%	88%	88%	94%	94%	88%
Gilbo East Lot	74%	79%	79%	73%	75%	76%	66%	76%	65%	76%	69%	76%	78%	74%
Commercial Lot	35%	37%	37%	49%	31%	28%	30%	31%	31%	43%	34%	37%	33%	35%
	67%	**67%**	**67%**	**68%**	**64%**	**67%**	**65%**	**71%**	**61%**	**70%**	**69%**	**72%**	**69%**	**68%**

Over 90% Occupied

On-Street Meter Occupancies

Street / Area	Average Morning Occupancy													Average Occupancy
	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	
Railroad Street	79%	74%	72%	85%	79%	70%	78%	78%	79%	77%	100%	97%	68%	80%
Main Street EF Lane	44%	36%	33%	42%	39%	42%	43%	47%	26%	44%	63%	61%	50%	44%
Main Street College	25%	52%	30%	98%	98%	77%	40%	60%	89%	82%	100%	40%	25%	63%
Central Square City Hall	87%	80%	58%	54%	90%	71%	85%	88%	65%	80%	94%	87%	79%	78%
Central Square Church	52%	52%	56%	59%	80%	68%	67%	60%	58%	75%	95%	90%	68%	68%
Central Square Chamber	92%	78%	69%	78%	94%	85%	85%	87%	67%	80%	90%	83%	98%	84%
Court Street	26%	10%	20%	22%	35%	37%	31%	16%	32%	34%	34%	65%	28%	30%
Library Annex	43%	45%	27%	56%	54%	34%	30%	66%	40%	31%	16%	33%	30%	39%
	56%	**53%**	**46%**	**62%**	**71%**	**61%**	**57%**	**63%**	**57%**	**63%**	**74%**	**70%**	**56%**	**61%**

Street / Area	Average Afternoon Occupancy													Average Occupancy
	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	
Railroad Street	83%	81%	84%	88%	78%	78%	86%	83%	74%	88%	97%	104%	87%	85%
Main Street EF Lane	49%	52%	68%	47%	57%	46%	44%	50%	53%	49%	68%	33%	55%	52%
Main Street College	46%	47%	43%	95%	96%	73%	42%	55%	82%	82%	88%	38%	20%	62%
Central Square City Hall	79%	75%	88%	58%	69%	73%	65%	65%	63%	77%	83%	69%	100%	74%
Central Square Church	78%	69%	78%	68%	80%	52%	76%	45%	45%	65%	72%	65%	75%	67%
Central Square Chamber	69%	83%	75%	72%	79%	73%	68%	52%	56%	77%	79%	85%	80%	73%
Court Street	32%	29%	35%	29%	53%	46%	43%	33%	29%	39%	50%	54%	28%	38%
Library Annex	44%	41%	27%	28%	32%	22%	16%	22%	21%	30%	24%	22%	21%	27%
	60%	**60%**	**62%**	**61%**	**68%**	**58%**	**55%**	**51%**	**53%**	**63%**	**70%**	**59%**	**58%**	**60%**

Over 90% Occupied

Parking Enforcement

The City of Keene has a dedicated staff of two full time parking enforcement personnel. In addition to actual enforcement and ticket writing activities, the parking enforcement personnel are also responsible for meter maintenance and meter collections. The City uses modern, electronic hand held computerized ticket writing hardware and ticket tracking software. Fine amounts are reasonable at $5.00 for expired meter violations and $15.00 for most other parking violations. Fine amounts escalate for non-payment after 15 days ($15, $35) and again after 28 days ($35, $75) of non-payment.

We found the City's enforcement personnel to be very visible, professional and polite in the discharge of their duties. While no one enjoys getting a parking ticket, dedicated parking enforcement is critical in maintaining turnover at prime on-street metered spaces in the core downtown area. Overall we believe the City is doing a good job of employing a proper level of parking enforcement. The fact that off-street meters consistently show higher occupancy levels and greater utilization during the morning peak periods than on-street meters is at least in part due to consistent levels of parking enforcement.

Parking Access and Revenue Control Equipment (PARC)

Parking meters are the primary type of PARC equipment utilized by the City of Keene. Existing parking meters are second generation electronic meters that accept nickels, dimes and quarters. Parking meters are used for all on-street short term 2 Hour parking and for longer term 10 Hour parking areas in surface lots and in the Wells Garage. The upper level visitor parking area of City Hall Garage uses an older model pay-and-display multi-space machine where visitor can pay in advance for up to four hours of parking and display a payment receipt on their vehicle's dashboard. The existing fleet of electronic meters is older technology and will be in need of replacement in the not-too-distant future. The heavy use of parking meters in surface lots creates visual clutter and is not the most efficient way to manage off-street facilities.

While the existing fleet of parking meters will function properly into the near future, we believe the City should begin planning soon for the next generation of on-street PARC equipment. Other forms of multi-space revenue control technology should be considered for surface lots and structured parking facilities to eliminate individual meters from these locations. Additional discussion on PARC equipment is included in our recommendations below, with examples of possible new on-street revenue control technologies included in **EXHIBIT C**.

Future Parking Demand Estimates

Central Fire Station and Courthouse Annex – North Central Square Area

The Courthouse and Fire Station projects will impact parking availability during construction, particularly if both projects are under construction at the same time. However, parking demand after construction is not expected to increase by any significant factor because in both cases the projects are replacing cramped or obsolete facilities and not necessarily expanding in terms of increased employment or consolidation of services. Both projects will also include on-site employee parking once completed. The impact of the YMCA leaving its current location and the potential redevelopment of that building and the former Middle School property is not known at this time. Depending on the type and intensity of redevelopment of these properties, additional public parking capacity may be needed. The City should be prepared to conduct parking impact analyses for any proposed redevelopment projects at these locations.

Railroad Property Development Area

Based upon land use and parking supply information provided to the City Planning staff by the Railroad Property developer, we performed shared parking demand modeling for this development area. Our demand modeling included all planned or known development at this time and it assumes 100% occupancy of all land uses. As the detailed models in **EXHIBIT B** demonstrate, on-site parking supply as proposed for the development area is adequate to meet projected parking demand. Any spillover parking demand under "worst case" scenarios can be accommodated by existing capacity in nearby streets and public facilities.

It must be noted that our analysis did not include the addition of a possible "future building" on the Railroad Property. If this future building is constructed, it is highly likely that structured parking of some sort may be needed to support the additional development. A parking impact analysis should be completed once the size and proposed land uses of any future building(s) are known.

Gilbo Avenue Development Area

Proposed developments along Gilbo Avenue west of Main Street could include a possible new 100,000sf Keene State College multi-function athletic facility and civic center; a new 40,000sf downtown campus for Antioch New England University; and a new 10,000sf "Arts Alive" multi-arts center. The Arts Alive project would include an expansion of the existing Colonial Theater stage, improved dressing rooms and public reception areas, and a new 200 to 300 seat performing arts center. The KSC project would include daytime/evening indoor athletic practice space for college and high school athletics and serve as a civic center, with multi-function space that could be configured to accommodate trade shows, graduations, concerts, banquettes, sporting tournaments, etc. Information provided by Keene State indicates that the proposed facility could accommodate large graduations and special events with a maximum capacity of 6,200 seats.

Based upon the information provided, we developed parking demand estimates for both weekday daytime and evening special event "typical" periods. Our parking demand estimates are based upon ULI parking ratios and time-of-day peak accumulation patterns for the proposed new Gilbo Avenue developments. The demand models assume all three projects being completed, and it assumes simultaneous evening special events at the Arts Alive and KSC facilities.

Other assumptions on which we based our demand modeling include:

- NGM employee lots are ***not*** included in factoring daytime parking supply & demand, but ***are*** included in factoring evening/special event parking supply & demand
- Modeling assumes "typical" evening special event at the KSC facility drawing 2,500 attendees
- Daytime demand modeling includes replacing existing actual parking demand at the Gilbo East and Commercial lots, plus new daytime demand of Antioch University and KSC daytime parking demand
- All demand estimates assume loss of existing Gilbo East and Commercial lots, but include Gilbo on-street meters and Gilbo West Lot
- The "Worst Case" model assumes a major evening graduation or special event at the KSC facility at total 6,200 seat capacity

As the demand modeling in **EXHIBIT B** demonstrates, new daytime demand generated by the proposed development projects is projected at 335 spaces. Combined with existing parking demand and utilization at the Gilbo East and Commercial lots (158 spaces), the amount of new parking needed to replace lost surface parking and accommodate new daytime demand is **493 spaces**. For special event parking we assumed a "typical" KSC evening event drawing 2,500 attendees. Based upon the assumptions above, our demand modeling indicates that typical special event evenings will require **447 spaces** over and above the Gilbo Avenue West Lot, Gilbo Avenue meters and the NGM surface lots.

Gilbo Avenue Development Area (Cont.)

While it is important to plan for special event parking to the maximum extent feasible, it is not practical to build structured parking to accommodate large special events that may only occur two or four times per calendar year. Many factors will impact large special event parking demand including the type of event, the time of day, day of week and season of year that the event takes place. The use of remote parking provided by KSC or other public and private parking facilities as part of a parking and traffic management plan must be included in planning for major events. In pre-planning for sufficient structured parking to support planned developments, the primary goal should be to accommodate anticipated total daytime demand first and foremost. The secondary goal for structured parking should be to support typical special events by providing enough prime parking near the event to fill the garage on a consistent basis.

Based upon the information we know at this time and the parking demand modeling performed, we believe a parking structure of approximately **500 spaces** would be needed to support the proposed Gilbo Avenue development projects. A parking structure of this size would accommodate existing daytime peak demand based upon existing utilization, plus anticipated new daytime demand as its primary function. A 500-space structure located close to the new KSC and Arts Alive facilities should also be able to provide sufficient primary parking for the majority of "typical" special events, and for additional evening overflow parking to support Main Street restaurants and shops.

Final parking rates for daytime, monthly and evening/special event parking and the type of PARC system utilized in the new facility will need to be carefully considered. However, nominal special event and evening rates should be considered in the new parking structure and in other public parking facilities to help pay for the cost of building and maintaining downtown parking infrastructure.

Primary Findings and Recommendations

- Existing parking supply in the downtown core area is sufficient to accommodate existing demand. While some areas of on-street parking operate at 90% utilization or greater during peak parking demand periods, consistent parking enforcement encourages high turnover in these prime parking areas. The creation of a downtown parking map and the development of a communication and public relations plan can help to educate shoppers and visitors on available parking options.

- Parking utilization is quite low at the Commercial Lot, the West Gilbo permit lot and to a lesser extent in the Wells Garage and Elm Lot. While the Wells Garage and Elm Lot may be full "on paper" with permit parkers, actual daytime parking activity is average and capacity exists in both facilities to accommodate more parkers through overbooking permit parkers, or by freeing up more spaces for daytime transient parking.

- The impact of the new Central Fire Station and Courthouse Annex are the most immediate short-term concerns. A mitigation plan needs to be developed to deal with parkers displaced from the Winter Lot and Elm Lot. Possible temporary parking for displaced parkers could be developed on the Library Annex Lot, and possibly on Court Street. Existing metered parking on Elm Street should be maintained during construction of the Fire Station if at all possible.

- Based on our shared demand modeling for the Railroad Property development area, we believe the existing development plan shows adequate parking supply on-site to accommodate planned developments. Projected on-site parking shortages are minimal, with ample parking available on-street or in public facilities to accommodate any overflow parking that may be needed to support this development. Structured parking may be needed if development activity includes a "future building" that has been discussed, but not articulated at this time.

- The proposed developments along Gilbo Avenue will require additional parking supply to be created to accommodate the increased parking demand and loss of surface parking that will occur as a result of development activity. With the heavy concentration of development activity and the uses proposed, multi-level structured parking will be required. The use existing NGM surface lots, KSC lots and other remote public and private parking facilities for evening/special event parking will have a significant impact on the proposed Gilbo Avenue development projects and the size of any new parking structure needed to support the planned land uses. Based upon the preliminary development information known at this time, a parking structure of approximately 500 spaces would be required to accommodate planned Gilbo Avenue Developments.

Additional Recommendations

- In planning for future development, the City and Parking Commission should adopt a general plan that encourages structured parking over surface lots to support new development. The primary rationale for structured parking is to encourage higher density development downtown from both a planning and economic development perspective.

- The use of TIF funds to help finance structured parking bonded debt is a valid use of public funds and should be pursued. We recommend that a set of very general "design goals" be developed to articulate basic program and design parameters of future structured parking facilities. These "design goals" should be applicable to any projects the City may undertake itself, or through any potential public/private development agreements.

- As mentioned earlier, the existing fleet of electronic parking meters is functioning properly for the time being, but will need to be replaced in the not-too-distant future. We believe the City should consider newer multi-space technology for future meter replacements, particularly in high density angled parking areas on Central Square and Main Street. Similarly, we strongly believe that single meters should be eliminated from surface lots and parking structures and be replaced with multi-space technology. Newer multi-space technology is more efficient, more secure, and more flexible. Newer equipment is also more customer friendly by offering various payment options to include coin, bills, credit cards and even payment by wireless telephone. (See **Exhibit 'C'**)

- Once new PARC equipment is in place in surface lots and structures, the City should consider charging a nominal flat rate for evening parking and special events to help generate revenues to pay for debt service and for future parking capital improvements. Line striping, lighting, signage, paving and repair costs could be augmented by additional parking revenues.

EXHIBIT 'A'

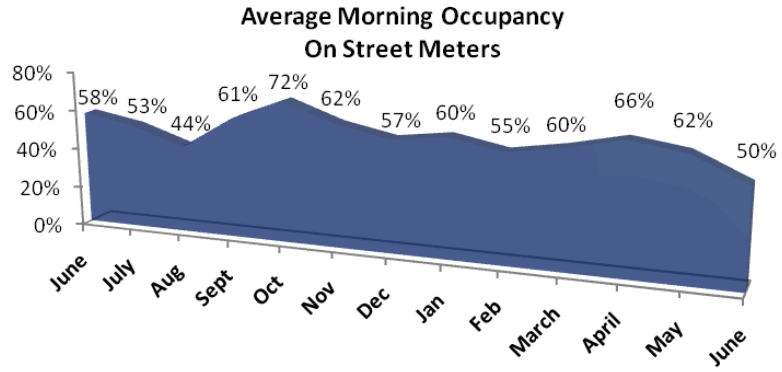
Average Monthly Occupancy Graphs On-Street / Off Street

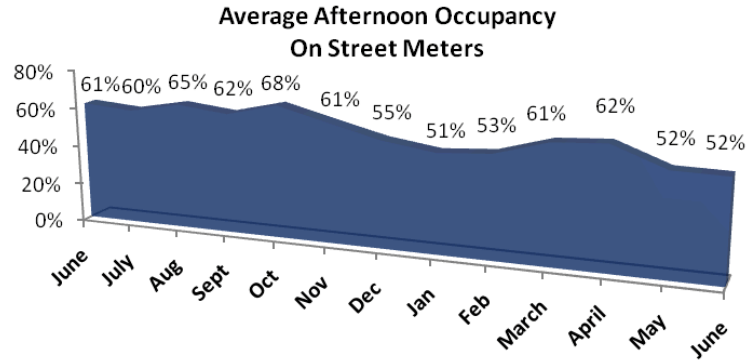
Detailed On-Street Occupancy Graphs by Area

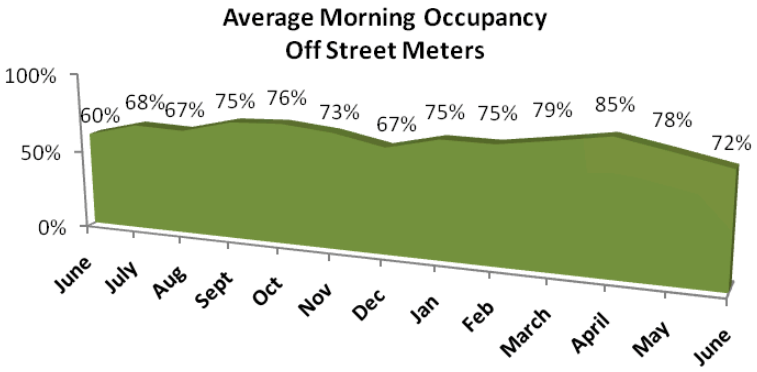
Detailed Off-Street Occupancy Graphs by Facility

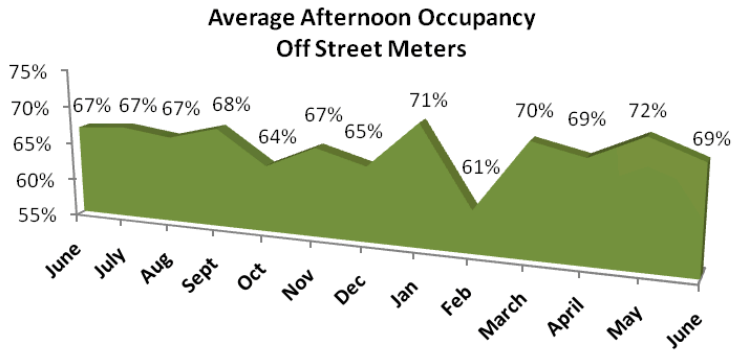
Occupancy Comparison July/August/September 2009 - 2010

Average Monthly Occupancy Graphs On-Street / Off Street









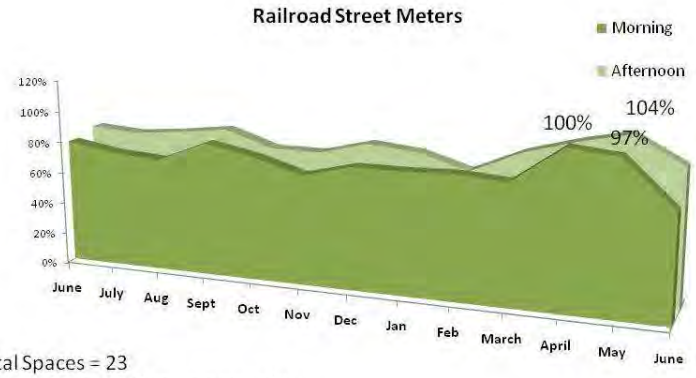
Detailed On-Street Occupancy Graphs by Area

Total Spaces = 13
Average Morning Occupancy = 84%
Average Afternoon Occupancy = 73%
Peak Occupancy 98% - June, 2010

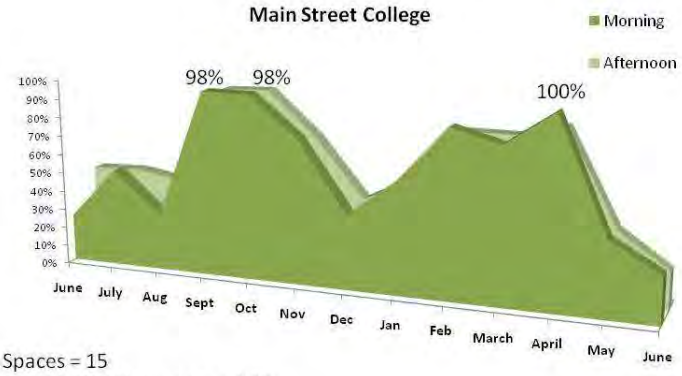
Total Spaces = 15
Average Occupancy = 68%
Average Afternoon Occupancy = 67%
Peak Occupancy 95% - April, 2010

Total Spaces = 13
Average Morning Occupancy = 78%
Average Afternoon Occupancy = 74%
Peak Occupancy 100% - June 2010

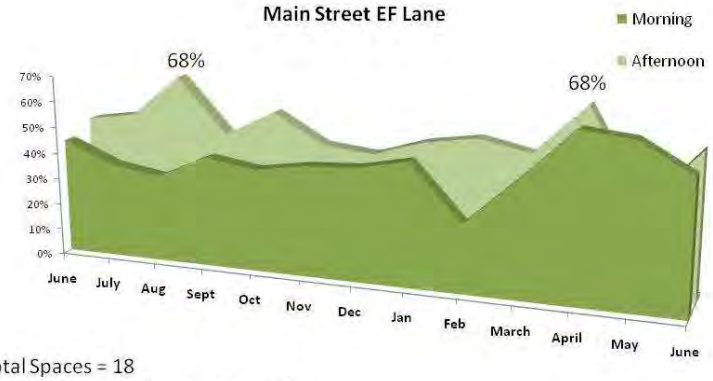
Detailed On-Street Occupancy Graphs by Area



Total Spaces = 23
Average Morning Occupancy = 80%
Average Afternoon Occupancy = 85%
Peak Occupancy 104% - May, 2010



Total Spaces = 15
Average Morning Occupancy = 63%
Average Afternoon Occupancy = 62%
Peak Occupancy 100% - April, 2010

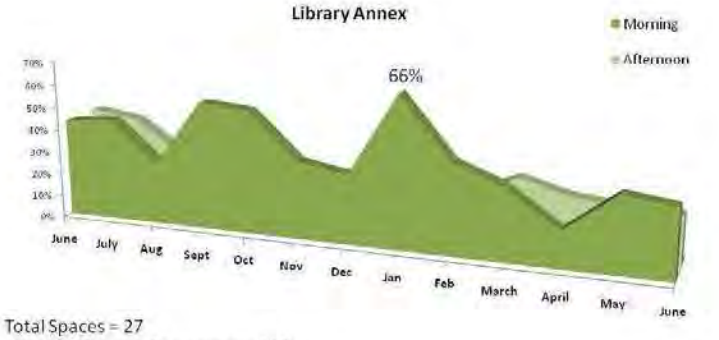


Total Spaces = 18
Average Morning Occupancy = 44%
Average Afternoon Occupancy = 52%
Peak Occupancy 68% - April, 2010

Detailed On-Street Occupancy Graphs by Area

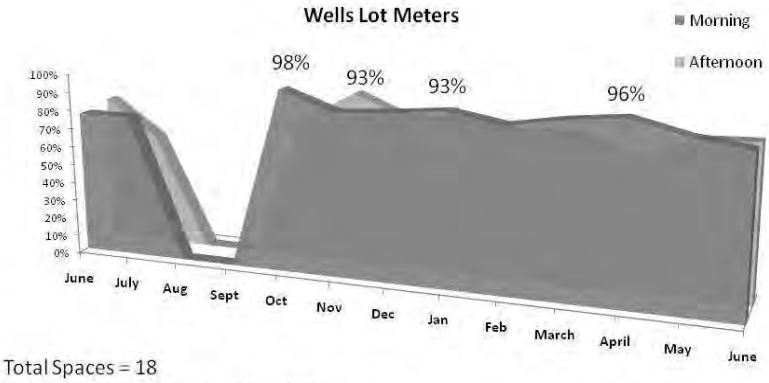
Total Spaces = 13
Average Morning Occupancy = 30%
Average Afternoon Occupancy = 38%
Peak Occupancy 65% - May, 2010

Total Spaces = 19
Average Morning Occupancy = 52%
Average Afternoon Occupancy = 64%
Peak Occupancy 89% - November, 2009

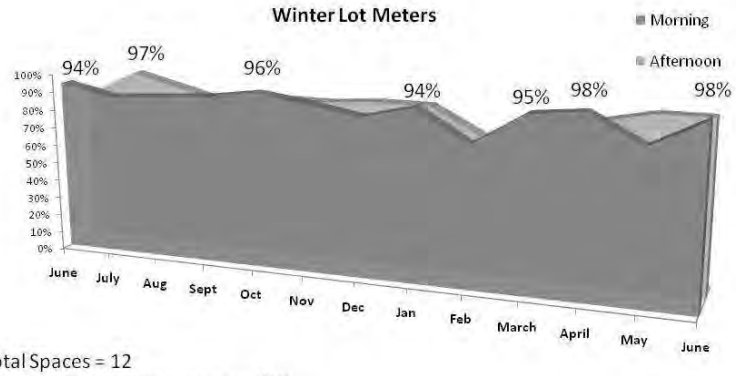


Total Spaces = 27
Average Morning Occupancy = 39%
Average Afternoon Occupancy = 27%
Peak Occupancy 66% - January, 2010

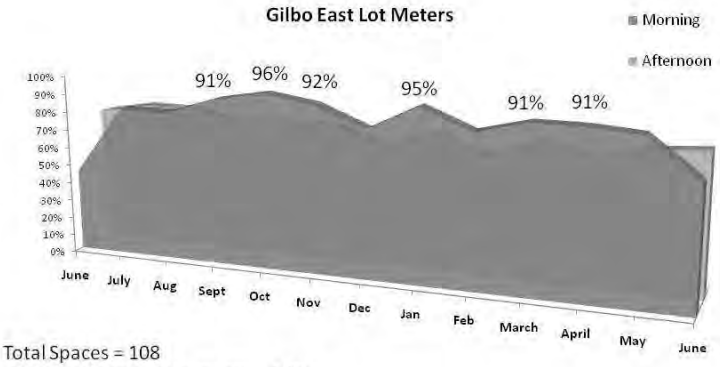
Detailed Off-Street Occupancy Graphs by Facility



Total Spaces = 18
Average Morning Occupancy = 91%
Average Afternoon Occupancy = 81%
Peak Occupancy 98% - October, 2009

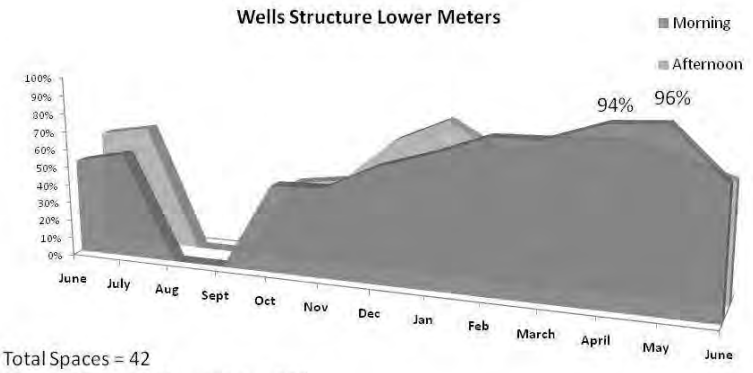


Total Spaces = 12
Average Morning Occupancy = 91%
Average Afternoon Occupancy = 88%
Peak Occupancy 98% - April/June, 2010

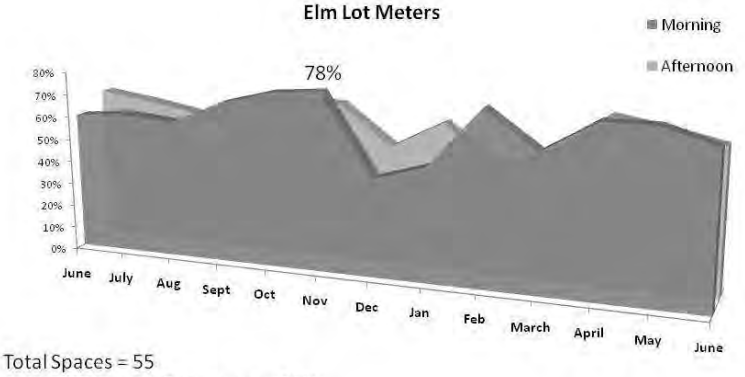


Total Spaces = 108
Average Morning Occupancy = 87%
Average Afternoon Occupancy = 73%
Peak Occupancy 96% - October, 2009

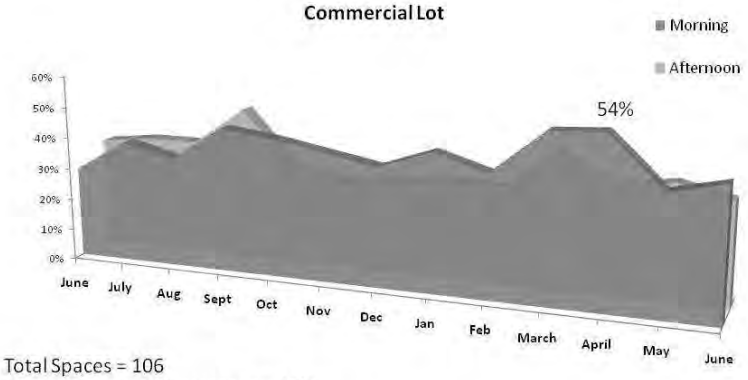
Detailed Off-Street Occupancy Graphs by Facility



Total Spaces = 42
Average Morning Occupancy = 73%
Average Afternoon Occupancy = 68%
Peak Occupancy 96% - May, 2010

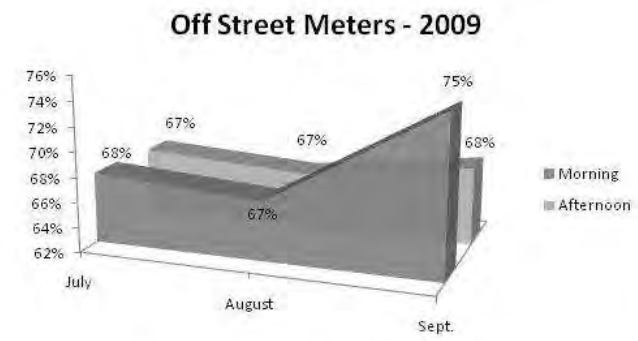


Total Spaces = 55
Average Morning Occupancy = 66%
Average Afternoon Occupancy = 62%
Peak Occupancy 78% - November, 2010



Total Spaces = 106
Average Morning Occupancy = 44%
Average Afternoon Occupancy = 33%
Peak Occupancy 54% - April, 2010

Occupancy Comparison July/August/September 2009 - 2010



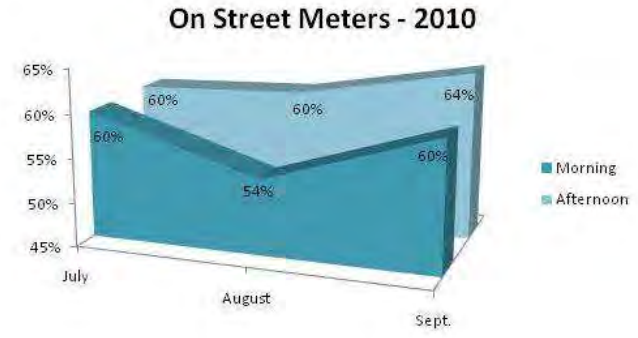


EXHIBIT ‘B’

Explanation of Shared Parking Demand and Captive Market Reductions

Shared Parking Demand Models for Railroad Property Development Area

Shared Parking Demand Models for Gilbo Avenue Development Area

The Concept of Shared Parking Demand and the Effect of Captive Market Reductions

Parking demand is defined as the peak accumulation of parked vehicles generated by each building or land use within the area being studied. Historical experience with peak parking accumulations for land uses has been utilized to develop indicators for calculating parking demand. For most land uses, the size of the building (total floor area) is used to compute the peak parking accumulation ratio. For hotels and residential uses, the number of rooms or living units is used, and for cinemas, performing arts centers or special event facilities the parking ratios are based on the number of seats. Parking ratios, determined by dividing the peak parking accumulation by the floor area/units/seats, have been assembled and reported by the Urban Land Institute (ULI), the Institute for Transportation Engineers (ITE) and the National Parking Institute. These sources are often used by local zoning and planning officials to establish parking ratios for various land uses in local ordinances. When separate parking ratios are combined into an aggregate number for a mixed-use development, the resulting number is referred to as ***Aggregate Demand.*** Many factors influence the demand for parking at a particular location, including type, density and proximity of land uses, the availability and location of parking, the cost of parking, the availability and convenience of alternate modes of transportation, commuting drive times and other local factors.

Shared Parking Demand / Captive Market Reductions

Parking demand in Central Business Districts and urban mixed use developments can be significantly overstated if each land use must provide parking in accordance with local ordinances or industry standards. This occurs for three primary reasons:

1. Different activity patterns of adjacent or nearby land uses result in variations of peak accumulation by time of day, day of week, or season of year. For example, an office building with a peak parking demand during weekday daytime periods can "share" the same parking facility with a hotel that has a peak demand weekday evenings/overnight. This concept is known in the parking industry as ***Shared Parking***.

2. People often patronize two or more land uses in close proximity to each other in a single trip. This concept refers to office workers who shop or dine within the development area, hotel guests, or retail patrons who support restaurant entertainment venues while remaining parked at their original locations. These activities help to reduce total parking demand in mixed use developments and are referred to in the parking industry as ***Captive Market Reductions***.

3. The density of development and the availability of mass transit and alternate modes of transportation such as carpooling, biking and walking reduce the reliance on the automobile. These activity patterns also help to reduce total parking demand based upon ***Modal Splits / Modal Reductions***.

Estimating Future Parking Demand

To accurately define parking requirements in a mixed-use development, the parking demand ratios for a component land use should be factored downward in proportion to the amount of market support received from adjacent land uses. Although the effects of the captive market at a particular development depend upon local factors and specific market conditions, the Urban Land Institute has determined that reductions of 60% or greater in parking demand can occur at CBD locations and urban mixed-use developments due to the combined effects of ***Shared Parking***, ***Captive Market Reductions and Modal Split Reductions.*** According to the Urban Land Institute, the average reduction for mixed-use projects in Central Business Districts is 40%. For mixed use developments that include hotel uses, the potential for market synergy is significant. Hotel guests demonstrate a greater propensity for being captive patrons of a mixed-use development than do employees, who are more likely to be captive patrons to the entire downtown area. ***Net Parking Demand*** refers to the adjusted parking demand for a mixed use development based upon ***Shared Parking Demand, Captive Market*** *and* ***Modal Split Reductions.***

Our parking demand estimates are conservative in that they assume full occupancy of all land uses modeled and are based on Shared Parking reductions only. While Captive Market and Modal Split reductions are typical of most CBD and mixed use urban development projects, they are difficult to accurately quantify without detailed local analysis. The adoption of a Parking Management Plan and the implementation of Transportation Demand Management (TDM) strategies and practices can also help to reduce parking demand in downtown central business districts and urban mixed use development projects over and above any benefits of Shared Parking alone.

Railroad Property Shared Parking Demand Analysis

In performing our analysis for the Railroad Property Development, we utilized the latest parking ratios published by the Urban Land Institute (ULI) in its publication "The Dimensions of Parking", Fifth Edition, 2010. Our shared demand modeling is based upon the peak accumulations by time of day for each land use as researched and published by the ULI in its publication "Shared Parking", Second Edition, 2005. Our modeling includes the analysis of existing and proposed development for the Railroad Property development area. Our shared demand modeling includes three separate scenarios, based upon "Worst Case", "Realistic" and "Best Case" estimates. The "Worst Case" model is based upon maximum ULI parking ratios for each land use. The "Realistic" model is based upon mid-range ULI parking ratios for each land use, and the "Best Case" scenario is based upon minimum ULI parking ratios.

Our shared demand modeling takes a conservative approach in that our parking demand estimates are based on shared demand reductions only, and do not factor any additional Captive Market or Modal Split reductions. All shared demand models apply the same employee ratios for each land use under each scenario. For residential parking, we included a "Visitor" factor of .15 spaces per residential unit for all units. All shared demand models assume full occupancy of all land uses.

Railroad Property Parking Supply

Our analysis is ***based on information provided from the developer to the City*** and includes primarily off street parking within the Railroad Property development area. The street meters on Railroad Street are the only public parking included in our analysis. The development area includes a total of 387 parking spaces comprised mostly of surface parking as listed the table below.

Existing	**Number of Spaces**
Railroad Street Meters	12
SE Lot – Community Way	33
West Lot – Community Way	79
Community Way Angled	55
Senior Housing Lot	44
SCS Offices Dunbar St.	16
Proposed	
Covered Parking	16
Lot Next to Covered Parking	6
Food Co-Op	32
New Cypress Lot	94
Total	**387**

Note: Parking Supply Inventory Does Not Include Existing Temporary Gravel Lot

Railroad Property Shared Parking Demand Analysis

ULI Parking Ratios Utilized

Land Use	Maximum ULI	Mid-Range ULI	Minimum ULI	Employee
Hotel	1 Space/Room	.88 Space/Room	.52 Space/Room	.25 Space/Room
Retail	3.2 Space/1,000sf	2.9 Space/1,000sf	2.9 Space/1,000sf	.7 Space/1,000sf
Residential	1.65/Unit	1.5 Space/Unit	1.4 Space/Unit	.15 Space/Unit
Restaurant	15.25 Space/1,000sf	13 Space/1,000sf	10 Space/1,000sf	2.75 Space/1,000sf
Office	3.5 Space/1,000sf	3.15 Space/1,000sf	2.6 Space/1,000sf	.25 Space/1,000sf

Source: Dimensions of Parking, 5th Edition, 2010 – Urban Land Institute

Railroad Property Land Use Breakdown

Existing	Hotel	Restaurant	Office	Residential	Retail
Marriott	160 Rooms				
51 RR Street		3,250sf	10,251sf	8 Units	
Senior Housing				24 Units	
SCS Building			42,475sf		
Proposed					
Hotel	60 Rooms				
Food Co Op					12,000sf
Retail Space					3,600sf
Townhouses				12 Units	
Future Building	N/A	N/A	N/A	N/A	N/A
Totals	**160 Rooms**	**3,250sf**	**52,726sf**	**44 Units**	**15,600**

NOTE: "First Course" Culinary Arts School Classified As Office

Summary of Shared Demand Modeling – Railroad Property

Total Parking Supply =	387
Aggregate Demand Based on Maximum ULI Parking Ratios =	605
Theoretical Shortage	(218)
Shared Demand "Worst Case" - Based on Maximum ULI Ratios =	464
Shortage	(77)
Shared Demand "Realistic" – Based on Mid-Range ULI Ratios =	435
Shortage	(48)
Shared Demand "Best Case" – Based on Minimum ULI Ratios =	379
Surplus	**8**

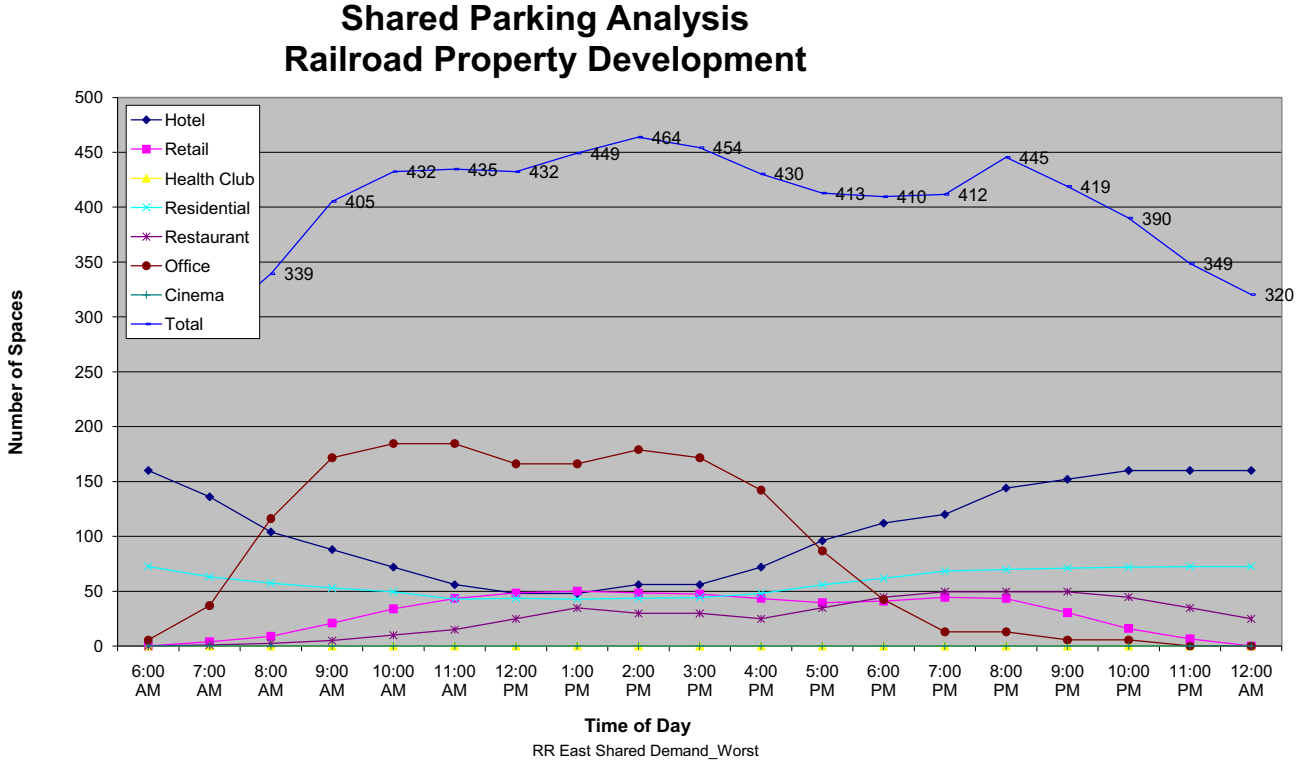
KEENE RAILROAD PROPERTY DEVELOPMENT SHARED PARKING MODEL - "Worst Case"
PROJECTED PARKING DEMAND BY HOUR
(BASED ON URBAN LAND INSTITUTE SHARED PARKING MODEL)

Hourly Accumulation of Parked Vehicles by Land Use as a Percentage of Peak Hour Demand												
Hour of Day	**Hotel**		**Retail**		**Health Club**		**Residential**		**Restaurant**		**Office**		**Cinema**
6:00 AM	100%		0%		70%		100%		0%		3%		0%
7:00 AM	85%		8%		40%		87%		2%		20%		0%
8:00 AM	65%		18%		40%		79%		5%		63%		0%
9:00 AM	55%		42%		70%		73%		10%		93%		0%
10:00 AM	45%		68%		68%		68%		20%		100%		0%
11:00 AM	35%		87%		80%		59%		30%		100%		0%
12:00 PM	30%		97%		60%		60%		50%		90%		30%
1:00 PM	30%		100%		70%		59%		70%		90%		70%
2:00 PM	35%		97%		70%		60%		60%		97%		70%
3:00 PM	35%		95%		70%		61%		60%		93%		70%
4:00 PM	45%		87%		80%		66%		50%		77%		70%
5:00 PM	60%		79%		90%		77%		70%		47%		70%
6:00 PM	70%		82%		100%		85%		90%		23%		80%
7:00 PM	75%		89%		90%		94%		100%		7%		90%
8:00 PM	90%		87%		80%		96%		100%		7%		100%
9:00 PM	95%		61%		70%		98%		100%		3%		100%
10:00 PM	100%		32%		40%		99%		90%		3%		100%
11:00 PM	100%		13%		10%		100%		70%		0%		80%
12:00 AM	100%		0%		0%		100%		50%		0%		70%

Parking Demand Ratios

1.0/Room	**3.2/1,000 SF**	**6.6/1,000 SF**	**1.65/Unit**	**15.25/1,000 SF**	**3.5/1000 SF**	**0.2/Seat**
Emp .25/Room	Emp .7/1,000 SF	Emp .4/Space	*Visitor .15/Space	Emp 2.75/1,000 SF	Visitor .25/1,000 SF	Emp .01/Seat

	Hotel		**Retail**		**Health Club**		**Residential**		**Restaurant**		**Office**		**Cinema**		
Hour of Day	160	Emp	15,600	Emp	0	Emp	44	*Vis	3,250	Emp	52,726	Vst	0	Emp	**Total**
6:00 AM	160	40	0	0	0	0	73	14	0	0	6	0	0	0	293
7:00 AM	136	29	4	1	0	0	63	13	1	0	37	3	0	0	291
8:00 AM	104	17	9	2	0	0	57	11	2	0	116	8	0	0	339
9:00 AM	88	12	21	5	0	0	53	11	5	1	172	12	0	0	405
10:00 AM	72	8	34	7	0	0	49	10	10	2	185	13	0	0	432
11:00 AM	56	5	43	10	0	0	43	8	15	3	185	13	0	0	435
12:00 PM	48	4	48	11	0	0	44	9	25	4	166	12	0	2	432
1:00 PM	48	4	50	11	0	0	43	8	35	6	166	12	0	4	449
2:00 PM	56	5	48	11	0	0	44	9	30	5	179	13	0	4	**464**
3:00 PM	56	5	47	10	0	0	44	9	30	5	172	12	0	4	454
4:00 PM	72	8	43	10	0	0	48	10	25	4	142	10	0	4	430
5:00 PM	96	14	39	9	0	0	56	11	35	6	87	6	0	4	413
6:00 PM	112	20	41	9	0	0	62	12	45	8	42	3	0	5	410
7:00 PM	120	23	44	10	0	0	68	14	50	9	13	1	0	5	412
8:00 PM	144	32	43	10	0	0	70	14	50	9	13	1	0	6	445
9:00 PM	152	36	30	7	0	0	71	14	50	9	6	0	0	6	419
10:00 PM	160	40	16	3	0	0	72	14	45	8	6	0	0	6	390
11:00 PM	160	40	6	1	0	0	73	14	35	6	0	0	0	5	349
12:00 AM	160	40	0	0	0	0	73	14	25	4	0	0	0	4	320



RR East Shared Demand_Worst

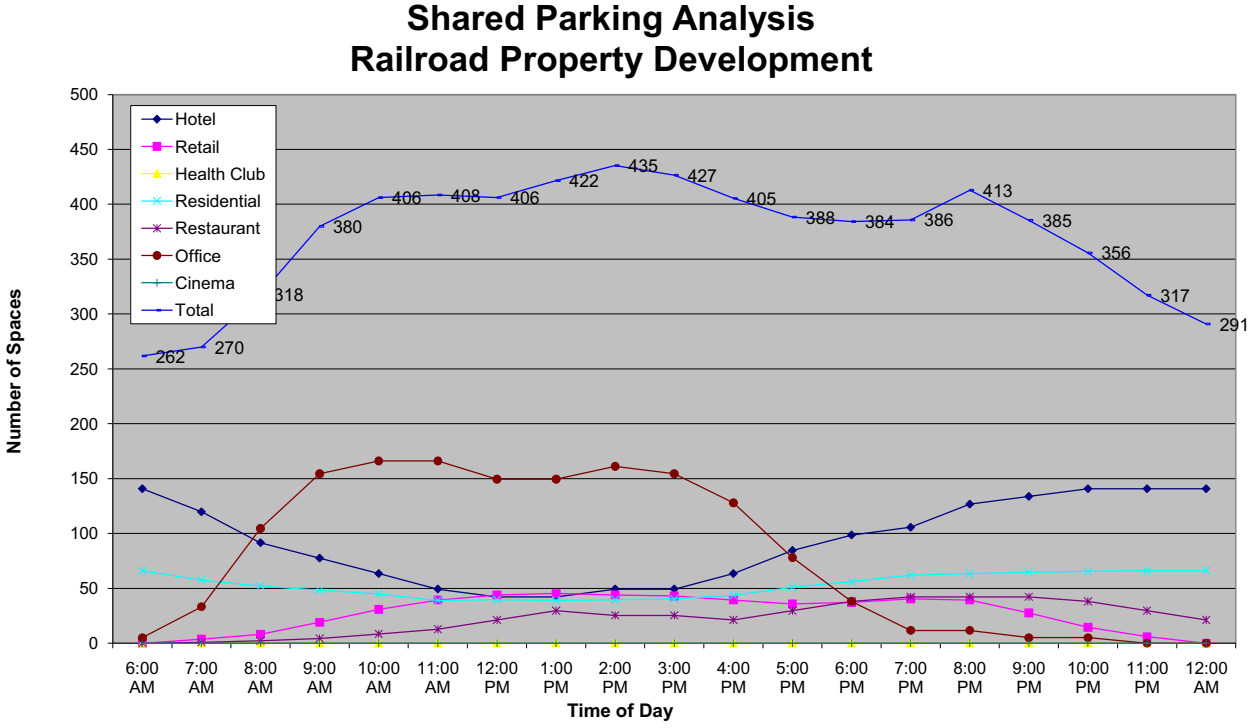
RAILROAD PROPERTY DEVELOPMENT SHARED PARKING MODEL - "Realistic Assumption"
PROJECTED PARKING DEMAND BY HOUR
(BASED ON URBAN LAND INSTITUTE SHARED PARKING MODEL)

Hourly Accumulation of Parked Vehicles by Land Use as a Percentage of Peak Hour Demand												
Hour of Day	Hotel		Retail		Health Club		Residential		Restaurant		Office		Cinema
6:00 AM	100%		0%		70%		100%		0%		3%		0%
7:00 AM	85%		8%		40%		87%		2%		20%		0%
8:00 AM	65%		18%		40%		79%		5%		63%		0%
9:00 AM	55%		42%		70%		73%		10%		93%		0%
10:00 AM	45%		68%		68%		68%		20%		100%		0%
11:00 AM	35%		87%		80%		59%		30%		100%		0%
12:00 PM	30%		97%		60%		60%		50%		90%		30%
1:00 PM	30%		100%		70%		59%		70%		90%		70%
2:00 PM	35%		97%		70%		60%		60%		97%		70%
3:00 PM	35%		95%		70%		61%		60%		93%		70%
4:00 PM	45%		87%		80%		66%		50%		77%		70%
5:00 PM	60%		79%		90%		77%		70%		47%		70%
6:00 PM	70%		82%		100%		85%		90%		23%		80%
7:00 PM	75%		89%		90%		94%		100%		7%		90%
8:00 PM	90%		87%		80%		96%		100%		7%		100%
9:00 PM	95%		61%		70%		98%		100%		3%		100%
10:00 PM	100%		32%		40%		99%		90%		3%		100%
11:00 PM	100%		13%		10%		100%		70%		0%		80%
12:00 AM	100%		0%		0%		100%		50%		0%		70%

Parking Demand Ratios

.88/Room	2.9/1,000 SF	5.5/1,000 SF	1.5/Unit	13/1,000 SF	3.15/1000 SF	0.2/Seat
Emp .25/Room	Emp .7/1,000 SF	Emp .4/Space	*Visitor .15/Space	Emp 2.75/1,000 SF	Visitor .25/1,000 SF	Emp .01/Seat

	Hotel		Retail		Health Club		Residential		Restaurant		Office		Cinema		
Hour of Day	160	Emp	15,600	Emp	0	Emp	44	*Vis	3,250	Emp	52,726	Vis	0	Emp	**Total**
6:00 AM	141	35	0	0	0	0	66	14	0	0	5	0	0	0	262
7:00 AM	120	34	4	1	0	0	57	13	1	0	33	3	0	0	270
8:00 AM	92	26	8	2	0	0	52	11	2	0	105	8	0	0	318
9:00 AM	77	22	19	5	0	0	48	11	4	1	154	12	0	0	380
10:00 AM	63	18	31	7	0	0	45	10	8	2	166	13	0	0	406
11:00 AM	49	14	39	10	0	0	39	8	13	3	166	13	0	0	408
12:00 PM	42	12	44	11	0	0	40	9	21	4	149	12	0	2	406
1:00 PM	42	12	45	11	0	0	39	8	30	6	149	12	0	4	422
2:00 PM	49	14	44	11	0	0	40	9	25	5	161	13	0	4	**435**
3:00 PM	49	14	43	10	0	0	40	9	25	5	154	12	0	4	427
4:00 PM	63	18	39	10	0	0	44	10	21	4	128	10	0	4	405
5:00 PM	84	24	36	9	0	0	51	11	30	6	78	6	0	4	388
6:00 PM	99	28	37	9	0	0	56	12	38	8	38	3	0	5	384
7:00 PM	106	30	40	10	0	0	62	14	42	9	12	1	0	5	386
8:00 PM	127	36	39	10	0	0	63	14	42	9	12	1	0	6	413
9:00 PM	134	38	28	7	0	0	65	14	42	9	5	0	0	6	385
10:00 PM	141	40	14	3	0	0	65	14	38	8	5	0	0	6	356
11:00 PM	141	40	6	1	0	0	66	14	30	6	0	0	0	5	317
12:00 AM	141	40	0	0	0	0	66	14	21	4	0	0	0	4	291



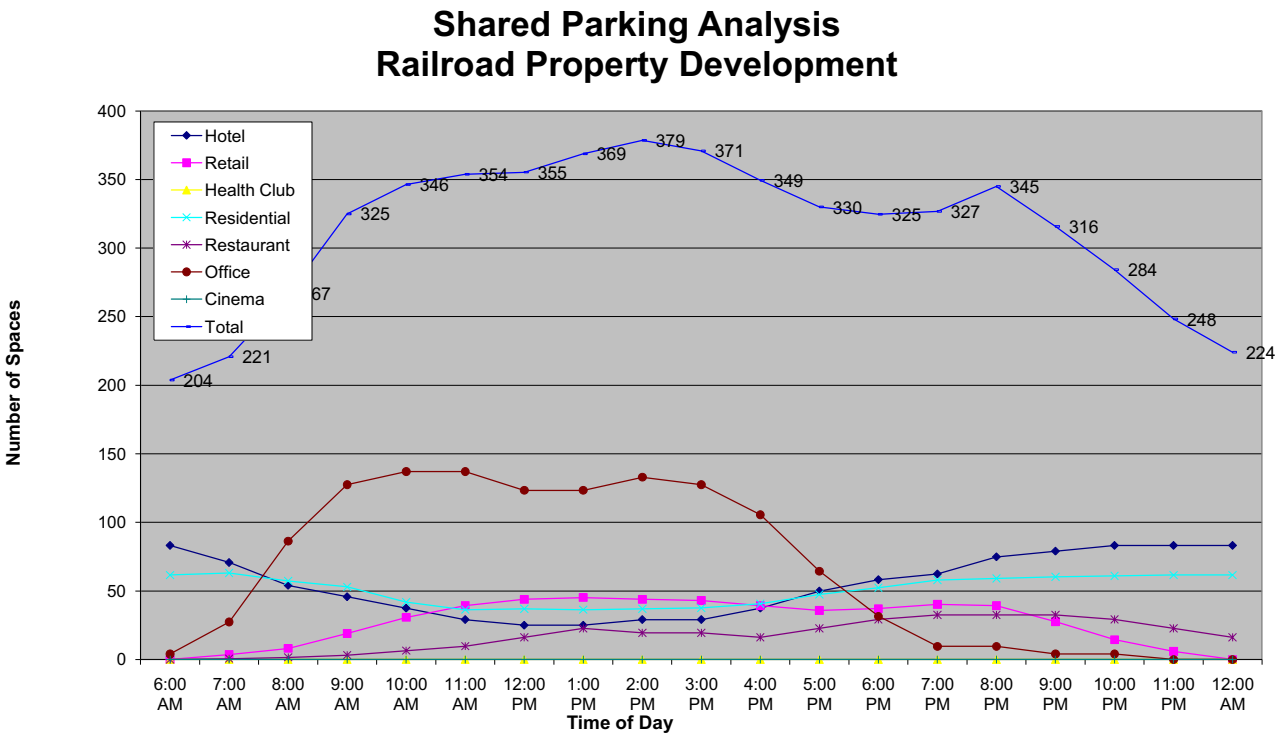
RAILROAD PROPERTY DEVELOPMENT SHARED PARKING MODEL - "Best Case"
PROJECTED PARKING DEMAND BY HOUR
(BASED ON URBAN LAND INSTITUTE SHARED PARKING MODEL)

Hourly Accumulation of Parked Vehicles by Land Use as a Percentage of Peak Hour Demand												
Hour of Day	**Hotel**		**Retail**		**Health Club**		**Residential**		**Restaurant**		**Office**		**Cinema**
6:00 AM	100%		0%		70%		100%		0%		3%		0%
7:00 AM	85%		8%		40%		87%		2%		20%		0%
8:00 AM	65%		18%		40%		79%		5%		63%		0%
9:00 AM	55%		42%		70%		73%		10%		93%		0%
10:00 AM	45%		68%		68%		68%		20%		100%		0%
11:00 AM	35%		87%		80%		59%		30%		100%		0%
12:00 PM	30%		97%		60%		60%		50%		90%		30%
1:00 PM	30%		100%		70%		59%		70%		90%		70%
2:00 PM	35%		97%		70%		60%		60%		97%		70%
3:00 PM	35%		95%		70%		61%		60%		93%		70%
4:00 PM	45%		87%		80%		66%		50%		77%		70%
5:00 PM	60%		79%		90%		77%		70%		47%		70%
6:00 PM	70%		82%		100%		85%		90%		23%		80%
7:00 PM	75%		89%		90%		94%		100%		7%		90%
8:00 PM	90%		87%		80%		96%		100%		7%		100%
9:00 PM	95%		61%		70%		98%		100%		3%		100%
10:00 PM	100%		32%		40%		99%		90%		3%		100%
11:00 PM	100%		13%		10%		100%		70%		0%		80%
12:00 AM	100%		0%		0%		100%		50%		0%		70%

Parking Demand Ratios

.52/Room	**2.9/1,000s.f.**	**4/1,000s.f.**	**1.4/Unit**	**10/1,000s.f**	**2.6/1000s.f.**	**0.2/Seat**
Emp .25/Room	Emp .7/1,000 SF	Emp .4/Space	*Visitor .15/Space	Emp 2.75/1,000 SF	Visitor .25/1,000 SF	Emp .01/Seat

	Hotel		**Retail**		**Health Club**		**Residential**		**Restaurant**		**Office**		**Cinema**		
Hour of Day	160	Emp	15,600	Emp	0	Emp	44	*Vis	3,250	Emp	52,726	Emp	0	Emp	**Total**
6:00 AM	83	40	0	0	0	0	62	14	0	0	4	0	0	0	204
7:00 AM	71	34	4	1	0	0	63	13	1	0	27	3	0	0	221
8:00 AM	54	26	8	2	0	0	57	11	2	0	86	8	0	0	267
9:00 AM	46	22	19	5	0	0	53	11	3	1	127	12	0	0	325
10:00 AM	37	18	31	7	0	0	42	10	7	2	137	13	0	0	346
11:00 AM	29	14	39	10	0	0	36	8	10	3	137	13	0	0	354
12:00 PM	25	12	44	11	0	0	37	9	16	4	123	12	0	2	355
1:00 PM	25	12	45	11	0	0	36	8	23	6	123	12	0	4	369
2:00 PM	29	14	44	11	0	0	37	9	20	5	133	13	0	4	**379**
3:00 PM	29	14	43	10	0	0	38	9	20	5	127	12	0	4	371
4:00 PM	37	18	39	10	0	0	41	10	16	4	106	10	0	4	349
5:00 PM	50	24	36	9	0	0	47	11	23	6	64	6	0	4	330
6:00 PM	58	28	37	9	0	0	52	12	29	8	32	3	0	5	325
7:00 PM	62	30	40	10	0	0	58	14	33	9	10	1	0	5	327
8:00 PM	75	36	39	10	0	0	59	14	33	9	10	1	0	6	345
9:00 PM	79	38	28	7	0	0	60	14	33	9	4	0	0	6	316
10:00 PM	83	40	14	3	0	0	61	14	29	8	4	0	0	6	284
11:00 PM	83	40	6	1	0	0	62	14	23	6	0	0	0	5	248
12:00 AM	83	40	0	0	0	0	62	14	16	4	0	0	0	4	224



RR East Shared Demand_Best

Gilbo Avenue Development Parking Demand Analysis

ULI Parking Ratios Utilized

Land Use	ULI Parking Ratio	Employee
Performing Arts Theater	.30 Space/Seat	.07 Space/Seat
Community College	*5.5 Space/1,000sf	.7 Space/1,000sf
Arena	.27 Space/Seat	.03 Space/Seat

Source: Dimensions of Parking, 5th Edition, 2010 – Urban Land Institute
Community College Ratios Estimated Based on Observed Local Conditions

Gilbo Avenue Land Use Breakdown

Proposed	Performing Arts	Community College	Arena	Retail
Arts Alive	250 Seats			
Antioch University		40,000sf		
KSU Athletic Facility			*2,500 Seats	10,700sf

Assumes typical evening event drawing 2,500 attendees

Summary of Parking Demand Modeling – Gilbo Avenue Daytime

New Development Daytime Peak Demand	335
Existing Demand (Gilbo East + Commercial Lot Actual)	158
Total New Daytime Demand	**493**

Summary of Parking Demand Modeling – Civic Center Special Events

Evening Civic Center Event Drawing 2,500 Attendees	938
Less NGM/Gilbo Ave Parking	(491)
Net Evening Special Event Demand	**447**

Evening Major Event to Maximum 6,200 Seat Capacity	1,974
Less NGM/Gilbo Ave Parking	(491)
Net Evening Major Event Demand	**1,483**
Potential Parking Structure	(500)
Major Event Off-Site Parking Needed	**983**

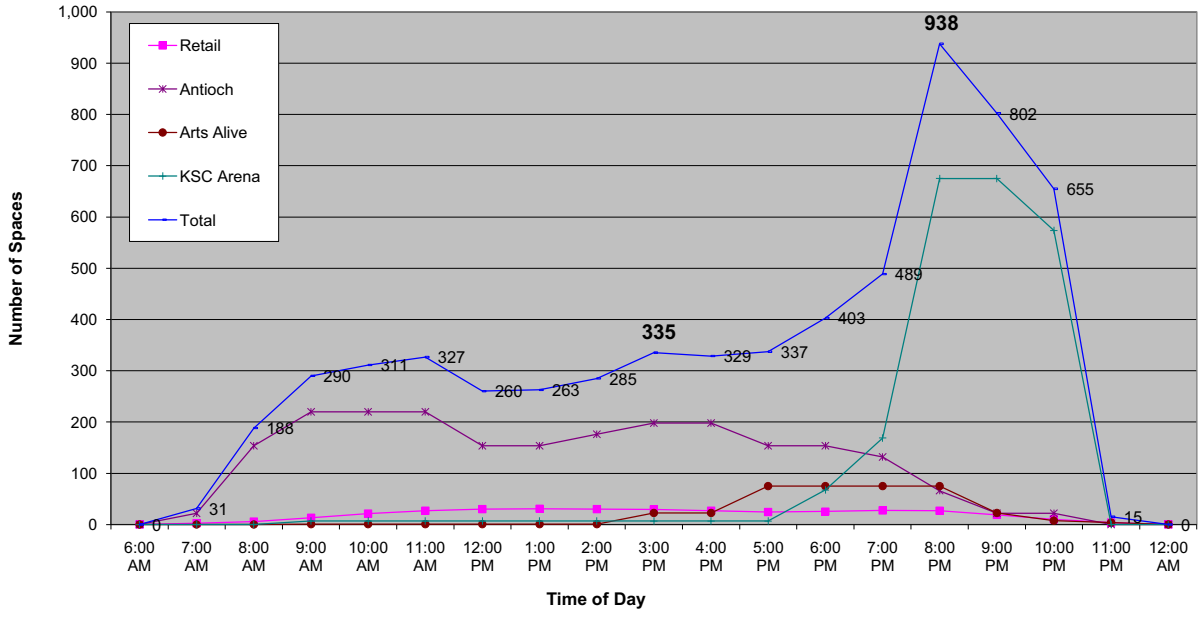
GILBO AVANUE DEVELOPMENT SHARED PARKING MODEL - "Typical Event"
PROJECTED PARKING DEMAND BY HOUR
(BASED ON URBAN LAND INSTITUTE SHARED PARKING MODEL)

Hourly Accumulation of Parked Vehicles by Land Use as a Percentage of Peak Hour Demand												
Hour of Day	**Hotel**		**Retail**		**Health Club**		**Residential**		**Antioch**		**Art Alive**		**Arena**
6:00 AM	100%		0%		70%		100%		0%		0%		0%
7:00 AM	85%		8%		40%		87%		10%		0%		0%
8:00 AM	65%		18%		40%		79%		70%		0%		0%
9:00 AM	55%		42%		70%		73%		100%		1%		1%
10:00 AM	45%		68%		68%		68%		100%		1%		1%
11:00 AM	35%		87%		80%		59%		100%		1%		1%
12:00 PM	30%		97%		60%		60%		70%		1%		1%
1:00 PM	30%		100%		70%		59%		70%		1%		1%
2:00 PM	35%		97%		70%		60%		80%		1%		1%
3:00 PM	35%		95%		70%		61%		90%		30%		1%
4:00 PM	45%		87%		80%		66%		90%		30%		1%
5:00 PM	60%		79%		90%		77%		70%		100%		1%
6:00 PM	70%		82%		100%		85%		70%		100%		10%
7:00 PM	75%		89%		90%		94%		60%		100%		25%
8:00 PM	90%		87%		80%		96%		30%		100%		100%
9:00 PM	95%		61%		70%		98%		10%		30%		100%
10:00 PM	100%		32%		40%		99%		10%		10%		85%
11:00 PM	100%		13%		10%		100%		0%		5%		0%
12:00 AM	100%		0%		0%		100%		0%		0%		0%

Parking Demand Ratios

1.0/Room	**2.9/1,000 SF**	**6.6/1,000 SF**	**1.65/Unit**	**5.5/1,000sf**	**.30/Seat**	**0.27/Seat**
Emp .25/Room	Emp .7/1,000	Emp .4/Space	*Visitor .15/Space	Emp .7/1,000 SF	Emp.07/Seat	Emp .01/Seat

	Hotel		**Retail**		**Health Club**		**Residential**		**Antioch**		**Arts Alive**		**KSC Arena**		
Hour of Day	0	Emp	10,700	Emp	0	Emp	0	*Vis	40,000	Emp	250	Vst	2,500	Emp	**Total**
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	2	1	0	0	0	0	22	3	0	0	0	0	31
8:00 AM	0	0	6	1	0	0	0	0	154	20	0	0	0	0	188
9:00 AM	0	0	13	3	0	0	0	0	220	28	1	0	7	0	290
10:00 AM	0	0	21	5	0	0	0	0	220	28	1	0	7	0	311
11:00 AM	0	0	27	7	0	0	0	0	220	28	1	0	7	0	327
12:00 PM	0	0	30	7	0	0	0	0	154	20	1	0	7	0	260
1:00 PM	0	0	31	7	0	0	0	0	154	20	1	0	7	0	263
2:00 PM	0	0	30	7	0	0	0	0	176	22	1	0	7	0	285
3:00 PM	0	0	29	7	0	0	0	0	198	25	23	5	7	0	335
4:00 PM	0	0	27	7	0	0	0	0	198	25	23	5	7	0	329
5:00 PM	0	0	25	6	0	0	0	0	154	20	75	18	7	0	337
6:00 PM	0	0	25	6	0	0	0	0	154	20	75	18	68	3	403
7:00 PM	0	0	28	7	0	0	0	0	132	17	75	18	169	6	489
8:00 PM	0	0	27	7	0	0	0	0	66	8	75	18	675	25	**938**
9:00 PM	0	0	19	5	0	0	0	0	22	3	23	5	675	25	802
10:00 PM	0	0	10	2	0	0	0	0	22	3	8	2	574	21	655
11:00 PM	0	0	4	1	0	0	0	0	0	0	4	1	0	0	15
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Gilbo Civic_Typical

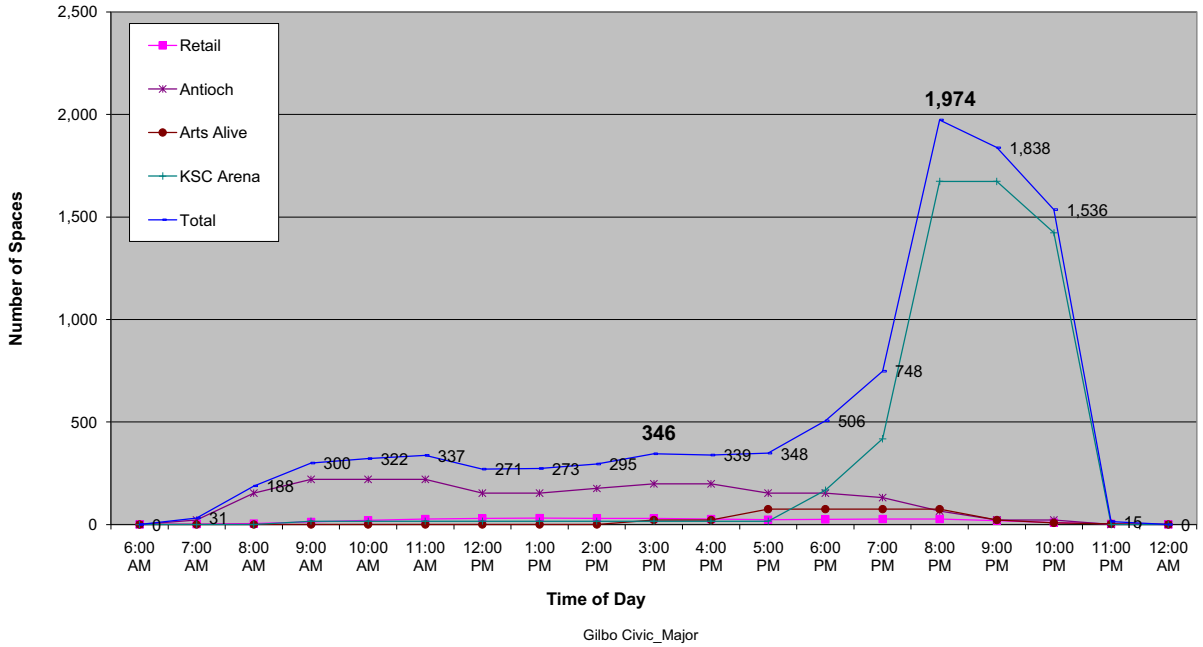
GILBO AVANUE DEVELOPMENT SHARED PARKING MODEL - "Major Event"
PROJECTED PARKING DEMAND BY HOUR
(BASED ON URBAN LAND INSTITUTE SHARED PARKING MODEL)

Hourly Accumulation of Parked Vehicles by Land Use as a Percentage of Peak Hour Demand												
Hour of Day	**Hotel**		**Retail**		**Health Club**		**Residential**		**Antioch**		**Art Alive**		**Arena**
6:00 AM	100%		0%		70%		100%		0%		0%		0%
7:00 AM	85%		8%		40%		87%		10%		0%		0%
8:00 AM	65%		18%		40%		79%		70%		0%		0%
9:00 AM	55%		42%		70%		73%		100%		1%		1%
10:00 AM	45%		68%		68%		68%		100%		1%		1%
11:00 AM	35%		87%		80%		59%		100%		1%		1%
12:00 PM	30%		97%		60%		60%		70%		1%		1%
1:00 PM	30%		100%		70%		59%		70%		1%		1%
2:00 PM	35%		97%		70%		60%		80%		1%		1%
3:00 PM	35%		95%		70%		61%		90%		30%		1%
4:00 PM	45%		87%		80%		66%		90%		30%		1%
5:00 PM	60%		79%		90%		77%		70%		100%		1%
6:00 PM	70%		82%		100%		85%		70%		100%		10%
7:00 PM	75%		89%		90%		94%		60%		100%		25%
8:00 PM	90%		87%		80%		96%		30%		100%		100%
9:00 PM	95%		61%		70%		98%		10%		30%		100%
10:00 PM	100%		32%		40%		99%		10%		10%		85%
11:00 PM	100%		13%		10%		100%		0%		5%		0%
12:00 AM	100%		0%		0%		100%		0%		0%		0%

Parking Demand Ratios

1.0/Room	**2.9/1,000 SF**	**6.6/1,000 SF**	**1.65/Unit**	**5.5/1,000sf**	**.30/Seat**	**0.27/Seat**
Emp .25/Room	Emp .7/1,000	Emp .4/Space	*Visitor .15/Space	Emp .7/1,000 SF	Emp.07/Seat	Emp .01/Seat

	Hotel		**Retail**		**Health Club**		**Residential**		**Antioch**		**Arts Alive**		**KSC Arena**		
Hour of Day	0	Emp	10,700	Emp	0	Emp	0	*Vis	40,000	Emp	250	Vst	6,200	Emp	**Total**
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	2	1	0	0	0	0	22	3	0	0	0	0	31
8:00 AM	0	0	6	1	0	0	0	0	154	20	0	0	0	0	188
9:00 AM	0	0	13	3	0	0	0	0	220	28	1	0	17	1	300
10:00 AM	0	0	21	5	0	0	0	0	220	28	1	0	17	1	322
11:00 AM	0	0	27	7	0	0	0	0	220	28	1	0	17	1	337
12:00 PM	0	0	30	7	0	0	0	0	154	20	1	0	17	1	271
1:00 PM	0	0	31	7	0	0	0	0	154	20	1	0	17	1	273
2:00 PM	0	0	30	7	0	0	0	0	176	22	1	0	17	1	295
3:00 PM	0	0	29	7	0	0	0	0	198	25	23	5	17	1	346
4:00 PM	0	0	27	7	0	0	0	0	198	25	23	5	17	1	339
5:00 PM	0	0	25	6	0	0	0	0	154	20	75	18	17	1	348
6:00 PM	0	0	25	6	0	0	0	0	154	20	75	18	167	6	506
7:00 PM	0	0	28	7	0	0	0	0	132	17	75	18	419	16	748
8:00 PM	0	0	27	7	0	0	0	0	66	8	75	18	1,674	62	**1,974**
9:00 PM	0	0	19	5	0	0	0	0	22	3	23	5	1,674	62	1,838
10:00 PM	0	0	10	2	0	0	0	0	22	3	8	2	1,423	53	1,536
11:00 PM	0	0	4	1	0	0	0	0	0	0	4	1	0	0	15
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Gilbo Civic_Major

EXHIBIT 'C'

On-Street Pay-by-Space Technology

As stated in our main report, the City of Keene will need to consider new technology over the next few years to replace its existing fleet of parking meters. The City of Ann Arbor, Michigan recently installed new on-street pay-by-space parking and revenue control equipment called "e-park". We believe Keene should consider this type of multi-space technology for both surface lots and for on-street parking meters as it moves forward with replacement technology. Photos of the recently installed e-park equipment are included below. Basically, the customer pays in advance for the time desired by remembering the posted parking space number and paying at the pay station. If set up in advance, a customer will receive a text message notification that time is expiring and can either pay-by-phone, or can add more time by paying at any pay station in the downtown area.

Electronic multi-space technology offers a number of benefits over conventional parking meters that include:

- Offers customers more payment options to include coins, bills, credit cards, pay-by-phone or pre-paid cards
- More efficient than meters due to reduced labor needed for collections and maintenance
- Easy to use and customer friendly, multi-space technology gaining greater acceptance in US
- Solid state technology is reliable and easy to replace if equipment malfunctions
- Offers greater flexibility in setting and changing rates, time limits, special event rates, etc.
- Better financial reporting, internal auditing and revenue control
- Greater efficiencies in parking enforcement
- Less visual clutter, better aesthetics than parking meters

Pay Station, Space Marker, Pre-paid E-Park Card

Downtown Ann Arbor, MI


INSTRUCTIONS
1
PRESS KEYPAD TO START
2
FOLLOW PROMPTS
3
MAKE PAYMENT
4
TAKE RECEIPT
$1.20 per hour: 8 am - 6 pm, Mon. - Sat.
Please note time limit on space marker.


epark
www.annarborepark.com
pay by phone:
to set up an account you will need:
• mobile phone number
• credit card (we accept VISA, MasterCard).
$0.35 Service fee other fees may apply
1 Call 1-888-450-park (7275)
2 Enter Location #4855
3 Enter Space #____