MEMO

"...meeting community needs...enhancing quality of life."

TO: Municipal Services Committee

FROM: Paula Vandehey, Director of Public Works PAV

DATE: February 22, 2018

SUBJECT: **Recommendation to accept the Downtown Appleton Parking Study Update.**

The City of Appleton hired Walker Consultants to update the northern section of the 2015 Downtown Appleton Parking Study. The study updated the current and future conditions of the reduced study area surrounding the Blue Ramp with the most recent development projections. Using updated supply and demand counts, the latest development projection information, and the understanding that the Blue Ramp is scheduled for demolition in 2019, the consultant identified possible sites for a future parking ramp. All of this information is very valuable as we move forward with development in this area.

One way which I look at the data provided in the report is as follows:

Yellow Ramp 1180 stalls, 784 occupied = 66% = 396 available
Green Ramp 771 stalls, 383 occupied = 50% = 388 available
Blue Ramp 401 stalls, 282 occupied = 70%

784 total available
-282 from Blue Ramp
502 still available after Blue Ramp demo

However, some customers perceive a ramp to be "full" at 85% occupied.

So, Yellow Ramp 1180 x 85% = 1,003 – 784 occupied = 219 available
Green Ramp 771 x 85% = 655 – 383 occupied = 272 available

491 total available
-282 from Blue Ramp
209 still available after Blue Ramp demo

Attached is a memo from Walker Parking Consultants that they developed to help guide decision making on when the appropriate time is to build a new parking structure. On page 3 it states:

> *"Based on the quantitative analysis performed by Walker, we do not believe there to be significant localized or systemic shortfalls that would trigger the need for new parking supply in general. There were some projected shortfalls where some blocks do experience (current condition) or may experience (future conditions) parking occupancy above 85%. For both*

the current condition and future condition scenario 1, all of this can be accommodated within a reasonable walking distance. The much more aggressive (or further into the future) scenario 2 would require additional parking."

Therefore, based on this study update, I am confident we can demolish the Blue Ramp, displacing those customers to the Green and Yellow Ramps, and still have capacity for approximately 200 – 500 new customers to this area.

Attachment

WALKER CONSULTANTS

MEMORANDUM

PUBLIC MEETING – FOLLOW-UP

WALKER PROJECT #: 21-4014.10

DATE:	February 19, 2018
TO:	Ms. Paula Vandehey
COMPANY:	City of Appleton
ADDRESS:	100 North Appleton Street
CITY/STATE:	Appleton, WI 54911
COPY TO:	Karen Harkness
FROM:	Ezra Kramer, Ashley Hiniker
PROJECT NAME:	Future Parking Needs Assessment
PROJECT NUMBER:	21-4014.10

After participating in the public meeting last week, we thought it best to share some additional information to help guide decision making. The information within this memorandum was initially developed to help other communities which had questions about when it made sense to build a parking structure (ramp), and how to gauge an appropriate oversell factor for permit parkers in parking structures based on actual historical usage. The oversell will improve the understanding of current utilization, and aid in allocating the existing parking resources. Monitoring the utilization of City-owned parking facilities will also help to identify an appropriate time to consider construction of additional parking facilities.

COSTS AND CONSIDERATIONS FOR STRUCTURED PARKING

A common theme heard from community members was the belief that a parking structure would alleviate parking problems in the study area (real/perceived/current/future). The following information details what construction and operation of a parking structure entails, and when it is most appropriately utilized to meet parking needs.

This section provides a general overview of basic parking economics that an owner (i.e. municipality) must consider when planning for a new parking structure. A brief discussion is provided on capital costs, operating expenses, breakeven pricing, and structural repair budget.

CAPITAL COSTS

Parking structures may be constructed as stand-alone parking or incorporated in the design of a future building (various uses). A parking structure that is incorporated in another building requires short-span construction to meet load (weight support) requirements. The efficiencies of short-span construction are less than long-span because the column grid (30' on center) interferes with the parking layout. A typical short-span parking structure only has an efficiency range of 400-450 square feet per space. A typical long-span parking structure has an efficiency range of 315-350 square feet per space, meaning generally more parking spaces can fit within the same overall footprint since each space takes less area.

A general guideline for gauging the conceptual estimate of probable cost for a parking structure is to apply a cost per space figure to the target capacity. The cost for parking structures vary significantly based on location, architectural features, sustainability features, and whether the facility is above or below-grade. A reasonable range for an above-grade, 200-300 space parking facility is $15,000 to $18,000 per space, assuming long-span construction. This per-space amount does not include soft costs, contingencies, or façade upgrades. The cost per space can increase significantly when built below ground; the cost of each level increases by roughly 50% from the level above it (operating costs are also greater due to lighting and ventilation requirements).

OPERATING EXPENSES

Operating expenses can also vary widely based on numerous independent factors that make up an operating concept. Typically, operating expenses include labor (cashiering, custodial, light maintenance, and management/administration), utilities, daily maintenance, supplies, management and accounting, and insurance. Most expenses are variable and depend on either the size of the facility or hours of operation. More recently, labor from cashiering has been reduced or removed as owners are moving to automated cashiering options. Some facilities do not collect revenue, and therefore have no need for access and revenue control equipment or cashiers.

Operating expenses for a parking facility are typically presented on a cost per space basis for comparison to industry norms. Walker's recent research indicates a cost per space range from $150 to $1,000 annually. The lower end of that range is for facilities with limited hours of operation which do not collect revenue; the higher end is for facilities that operate 24/7 with staffed cashiering and access and revenue control equipment. All facilities need some sort of daily janitorial service that includes trash removal, sweeping, and minor repairs and maintenance such as lighting replacement. These responsibilities are often assigned to a city's public works department, if a parking department does not exist; these are sometimes allocated back onto the parking budget.

Walker developed a breakeven table which indexes monthly income required to break even for various combinations of cost per space and annual operating expense per space. Table 1 presents this information. The high required monthly income to break even demonstrates why most municipal parking structures are financed and operated as part of a larger system. The insolvent parking facilities are often subsidized by more profitable on-street parking within a system. This allows for a municipality to charge fees that are below breakeven if market rates indicate the breakeven amount would be too high in that specific market.

Table 1: Monthly Income Required to Break Even

Project Cost: Cost per Space	Annual Operating Expense Per Space $300	$350	$400	$450	$500	$550	$600	$650	$700	$750
$ 18,000	123	127	131	135	139	143	148	152	156	160
$ 19,000	128	132	136	140	145	149	153	157	161	165
$ 20,000	133	138	142	146	150	154	158	163	167	171
$ 21,000	139	143	147	151	156	160	**164**	**168**	**172**	176
$ 22,000	144	148	153	157	161	165	**169**	**173**	**178**	182
$ 23,000	150	154	158	162	166	171	**175**	**179**	**183**	187
$ 24,000	155	159	163	168	172	176	180	184	188	193
$ 25,000	161	165	169	173	177	181	186	190	194	198

Assume 100% Financed, 30-Year Term, 5.0%

Source: Walker Parking Consultants

SINKING FUND

In addition to operating expenses, Walker highly recommends that funds be set-aside on a regular basis to cover structural maintenance costs at a minimum of $75 per structured space annually, to be placed in a sinking fund. These funds accumulate over time and are then available when needed for structural maintenance and repair. Owners tend to grossly underestimate these costs and do not budget adequately for timely corrective actions that must be performed to cost effectively extend the service life of the structure. Even the best designed and constructed parking facility requires structural maintenance; expansion joints need replacing and concrete deteriorates with time and exposure to the elements. Periodic structural maintenance includes items such as patching concrete spalls and delamination in floor slabs, beams, columns, walls, etc. Many of these maintenance items deteriorate exponentially if not corrected early, increasing cost to cure in the same fashion. Deferred maintenance should be avoided, if possible.

WHEN STRUCTURED PARKING IS APPROPRIATE

Based on the quantitative analysis performed by Walker, we do not believe there to be significant localized or systemic shortfalls that would trigger the need for new parking supply in general. There were some projected shortfalls where some blocks do experience (current condition) or may experience (future conditions) parking occupancy above 85%. For both the current condition and future condition scenario 1, all of this can be accommodated within a reasonable walking distance. The much more aggressive (or further into the future) scenario 2 would require the additional parking.

If parking supply is segregated by user group, we typically recommend varying levels of occupancy would be appropriate to serve needs. Employees who parking in the same facility day after day feel that parking is adequate even when occupancy is above 95%, due to familiarity. Visitors, on the other hand, tend to perceive parking to be inadequate when occupancy is above 85%. Visitors under an event scenario are typically also fine with a higher occupancy percentage based on expectations, and potentially being directed to their space.

For studies where we identify that additional parking supply is needed, we typically proceed through a series of considerations in an alternatives analysis to determine the need for structured parking. Parking structures are an appropriate solution when density of the built environment is high and when significant localized or systemic parking shortfalls are observed or projected. The density of the built environment is needed because a structured facility must be within a reasonable walking distance to their parking demand generators. The number of spaces needed within a 600-foot radius for visitors and a 1,200-foot radius for employees should be a starting point for sizing a parking facility (more proximate, competing supply would reduce this number).

There is also the question of who should be responsible for providing the parking supply and whether it should be constructed using public funds, private funds, or some mix. If minimum parking requirements are not being met on-site and are creating a shortfall in the community, at least partial payment for the parking facility should be borne by the owner of that site. Otherwise, the costs related to the structure are borne by the taxes collected by the municipality, and are going to serve a specific owner. Some cities allow for a reduction in the on-site parking requirement if owners provide a payment based on either a "payment in lieu" or a "parking credit" system. In this way the financial burdens of a public parking facility are offset somewhat by private funds based on their anticipated impact on the public parking system.

Another consideration is the number of spaces between the parking structure and the destination that exist on-street or within private, but publicly available, parking supply. Because many of these spaces would be more attractive to users, the restrictions and utilization of those spaces should be considered. Policy and enforcement

to ensure availability of on-street parking for short-term users is required to shift long-term parkers into off-street supply and gauge public parking need.

Structured parking would be appropriate after these considerations have been made, and it is deemed that a shortfall would hinder business viability. Planning for the structure should take place to match development within the area, possibly under a phased approach that maximizes use of other existing parking options first.

OVERSELL IN PUBLIC PARKING

In many cases, more monthly parking permits can be sold than there are space to accommodate those permit holders. The term used in the parking industry for this potential condition is "oversell", and is typically presented as a percentage above the number of spaces in the parking supply (i.e. "20% oversell factor" means 120 permits for 100 spaces).

The ability to oversell spaces varies based on user group characteristics and parking supply characteristics. Some user groups generate parking very regularly (e.g. residents need a space nearly every night; therefore 1 permit :1 space is needed); other user groups generate parking somewhat sporadically (e.g. lawyers and outside sales staff need parking very infrequently; therefore >1 permit: 1 space is possible). The number of spaces within the "pool" of parking used to accommodate permit parkers is also a factor. The larger the pool of permit holders, the more likely that not all would regularly be present.

When overselling parking spaces, you are playing an odds game – betting that not all permit holders will be there at the same time. The odds game should be educated by historical information to the extent possible. This is not always possible in a parking facility that does not have access control equipment. For those facilities that do, the information can be mined from the system and put to good use. Typically the parking equipment vendor, or third-party operator can provide these reports, or at least outline steps to retrieve the information.

Data points required to develop a reasonable oversell factor include:

- The number of permits issued by individual facility in a given month; and,
- The monthly activity report by permit number (or sum of permits used).

In addition, it would be helpful to pull hourly accumulation reports for both permit and hourly/daily parking. This information can be added and compared to the number of spaces within the parking facility to identify typical availability, overall peak period, and peak period for both user groups. With this breakdown, and the calculated oversell factor, you could safely estimate the number of additional permits that could be issued without impacting hourly/daily parkers. To best maximize this, permit parkers should be encouraged (possibly economically) to park from the top level down. The number of permits may need to be adjusted over time as the character and mix of land uses would impact parking needs for various user groups.

Monitoring utilization and potential oversell opportunities allows for an efficient use of available resources while keeping an eye on factors that would indicated that it's time to consider building a new facaility.