Downtown Orillia Parking Study – Phase 1: Final Report

Parking Study for the City of Orillia Ontario

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Contents

Recommendations

Please be mindful that Phase II of this project will provide more details with respect to implementation of the initiatives that you accept.

The following is a summary of recommendations as a result of the completion of Phase 1 of the Parking Study:

1. **Maintain the current level of parking supply in the downtown to meet existing parking demand.**
   A series of metrics used in the parking study were used to support the conclusion that currently, there is sufficient parking supply in the downtown.

2. **The City monitor changes in the downtown relating to changes in land use (new development and redevelopment) and impact on parking supply over the immediate term (0 to 2 years) and the near term (3 to 5 years), as referenced in Table 1 of this report.**
   The parking study outlined a number of plausible change scenarios and their potential impact on the balance of parking demand and supply. The latter is impacted by changes in the future level of occupancy of current stock of land uses in the downtown; future parking demand due to the oncoming re-developments or new developments in the core and the potential physical loss of existing public parking supply; and future magnitude, pattern and customer profile of parking demand due to potential changes in operations and potential implementation of different parking revenue control. The Public Works Department and the Planning and Development Department will be invited to participate in Phase II of the parking study.

3. **Secure longer term (6 to 10 years) parking assets to accommodate long term parking demand and supply.**
   Consider securing longer term leases or assemble more secure sites as municipal parking space supply will be potentially lost. Lot 10 is critical to the system and its replacement should it not be renewed will be significant. West of the core area is primed for reinvention and efforts should be made to jointly develop a parking component to any re-development sites that arise in the near term. For a detailed description and analysis, refer to the section in this report, entitled, “Estimate of Impact on Future Supply and Demand Balance.”

4. **Investigate new parking supply and financing opportunities.**
   Short term parking supply opportunities that need to be examined more fully in Phase II are: on street angled parking along Colborne between Andrew St. and West St. (subject to critical input from The Public Works Department); consider the sale of on street permit parking in areas that do not perform – Matchedash St. (23 spaces), Albert St.- from Colborne St. to Mississaga St. (5

spaces are candidates). Explore joint use developments, provision of parking within the zoning by-law, and different finance models for the longer term development and sustainment of the municipal parking system.

5. **Address the permit parking distribution.**
   When necessary, redistribute permit parking customers to our off street facilities to a maximum of 20 percent of capacity with the exception of Lot 5 which is crucial to the support of the shorter stay customer.

6. **Change time restrictions for on and off street municipal parking service.**
   Experiment with extending the time restriction from current one hour to two hours of on street space on Mississaga St. and other areas that are currently limited to one hour of parking, and reflect their **value** to the parking system with an **increase** in hourly charge from one dollar to **two** dollars per hour. Intended outcome of the above point is to match the duration profile that currently suggests that the average stay is over an hour, and also to begin to motivate customers away from the on street space to our off street by maintaining one dollar per hour on the off street space and time limits to five hours and retaining 8 hour existing lots.

7. **Continue to maintain the current level of accessible parking spaces, improve signage for on street accessible spaces and engage the Accessibility Advisory Committee as a full participant in Phase II of this project.**
   The Accessibility Advisory Committee should advise on forming a plan for the location and number of additional accessible parking stalls that meets accessibility requirements that are compatible with parking lot design standards and safety guidelines.

8. **Link to Active Transportation Initiatives.**
   Encourage bike parking on municipal parking facilities and reuse of metered posts as bike parking. Invite the Public Works Department and Active Transportation consultants to Phase II discussions of initiatives that impact them directly.

9. **Convert current revenue control system from Meter to Pay and Display unit for both on and off street facilities.**
   Upgrade the revenue control system from current parking meters to Pay and Display to provide tremendous flexibility in time restrictions, payment options, increased on-street capacity and acceptance of senior's card, and other promotional coupons.

10. **Increase enforcement fines for parked at expired meter.**
    Match the importance of turnover and allowing space to become more readily available by increasing the current fine level from $8 early fine (paid within 7 days) and $10 set fine (paid after 7 days) for overstaying beyond time limit to $15 early fine and $20 set fine.

11. **Expand and Explore Communication Themes.**

Continue to explore and expand the use of online e-commerce tools to serve customers – permit parking renewal; online complaint or comment store, training topics and explanation of the role of on and off street space, etc.

12. **Develop a bold way-finding / signage system.**
    A signage and way-finding system needs to be developed to help market our spaces. Connect this process with the study of gateways into and out of the downtown. Active Transportation study should also address this component.

13. **Improve pedestrian links to and from municipal off street sites.**
    We applaud the recent announcement of the improvement of pedestrian link to and from Lot 10. Design guidelines will form the details of Phase II, but should embrace safety (lighting), pedestrian surface treatment, and signage and operational issues vis a vis public access.

Overall Approach to the Downtown Parking Study

We defined the primary tasks as: Parking Demand Analysis, Parking Supply Response[1] [to the demand] and the Market Potential Identification. The results of these three tasks feed into a fourth task: Policy Development and Analysis and then into a fifth task: Parking Management Strategy which is Phase II of the Study.

Tasks 1 to 4 as we have defined will comprise the PHASE I portion of the project, while Task 5 completes PHASE II. Parking Demand Analysis was the subject of Technical Memorandum A, while the Parking Supply Response was discussed in Technical Memorandum B. The results of the Market Potential Identification was dicussed in Technical Memorandum C. In that report, analysis was presented into the adequacy of parking supply in meeting current and future demand; analysis of the strengths, weaknesses and more importantly the service opportunities that may be worth pursuing. It is critical to keep in mind that the results of the analysis presented therein poses possibilities and potential changes.

The actual implementation plan, the decision of which of the options are effective and financially feasible is the subject of Phase II of the study.

Scope of the Downtown Parking Study

Guided by your requirements in the Proposal Call, we provide you herein with a summary of the evidence, and direction that inform and support future initiatives related to your public parking system in downtown Orillia. Specifically, we were instructed to deliver our advice, observations and analysis of the following:

[1] The concept of *parking supply response* surveys is synonymous with the terms: parking utilization studies, Licence plate surveys, turnover and duration of stay surveys.

1. A comprehensive assessment of the current capacity and occupancy of both public and private downtown parking lots and on-street parking during summer, fall and winter with analysis on Mondays, Wednesdays, Fridays and Saturdays. The surveys were to cover the time period between 9:00 am and 5:30 pm.
2. Evaluation of various users and identification of their needs and required durations (which includes taking into account an appropriate distance individuals are required to walk to reach their destinations based on the expectations of a smaller municipality and the public transit available, as well as through consultation with the Downtown Orillia Management Board, businesses, etc).
3. To identify on a block by block basis areas of parking deficiency, if any.
4. To analyze accessible parking spaces (public and private).
5. To identify the City's role in providing long term employee parking. Identify if there is an adequate supply of permit parking spaces.
6. To project the future demand for core area public and private parking over the next 10 years.
7. To identify alternative methods of increasing future parking availability in the core, if required.

Schedule 1 attached to this report serves to define the geographic and business boundaries of the Parking Study Area.

Summary of Results

Parking Demand[2]

The key results that are important as indicated in our Technical Memorandum A are as follows:

Physical Environment

- Spoke of the land uses that attract customers and employees to the downtown and emphasized the interplay of trip destinations with one or more stores or offices in the area; we pointed out the impact that multiple destinations has on parking space demand, duration of stay and in choosing where people want to park.
- The urban design of the commercial area – so compact and solid (without driveways) face; serves the important notion of pedestrian interaction with the street and its parking space; the narrowness of Mississaga St. serves to enhance the commercial environment.
- The infusion of the Library and Farmer's Market back into the west end of the downtown core will serve to provide a source of pedestrian activity that will present an opportunity to engage; Opera House attendees provide an obvious source of commercial opportunity before and after the performance; aside from commercial advantages, this infusion serves to encourage the pedestrian traffic through the downtown.

[2] Complete details of the results are stored in Technical Memorandum A – Parking Demand Analysis.

Trip Characteristics

- Through the analysis of the input from respondents to postcard and online internet surveys, we developed ratios of peak trips to various land uses within the core. These ratios are applied to the land use floor area to begin to quantify long (employee) and short stay (customer) parking demand.
- Various land use types (office, medical and retail for example) attract parking demand at varying rates (per 1000 square feet), varying times of the day (restaurants attract evening peaks, offices during the day for example), varying days of the week (Opera House on weekends or matinees mid week), and varying seasons of the year (tourist season). Together these factors impact the pattern of the parking demand throughout the day. As well, together the different patterns of demand throughout the day, week and season serve to make the efficient use of parking space.
- Surveys of visitors helped to determine the number of multi-destination trips to the core. We also determined the sources of parking. We spoke of how this impacts parking demand and supply.

Attraction of Parking Supply

- Based on consultants' experiences and on the evidence extracted from postcard and online surveys, the study determined the level of service that currently is provided in the downtown. The measure for the level of service is the walking distance. We noted that the typical walking distance for short stay customer to destinations within the core blocks of the downtown[3] ranged from a very high level of service – 50 feet to about 350 feet between parking space and primary destination. We noted that this is reflective of strategically located off street facilities in the core and the ready availability of on street space in the core. **The range exhibited here in Orillia reflects a very high level of service**. It has been our experience in other such studies that typically the range for non-work trips is from 100 feet to 600 feet. The impact on customer expectations of course is the need to locate parking within basically a block of the destination.

[3] We defined the core blocks as those formed by Coldwater St. on the north, Matchedash St. on the east, Colborne St. on the south and West St. on the west.

- Important to this discussion of walking distance are these factors that influence where employers and their employees park their vehicle during the day:
    - Reasonable price and the acceptance that parking in the downtown has a monetary value;
    - Relationship of cost of parking and the distance to and from their destination (again the theory is this: I would balance cheaper parking rates against longer walking distance);
    - Availability of private space either on-site or in a shared private off-street lot;
    - Selection and my requirement for work-related parking space very close to my place of employment is directly related to the type of work that I do during the day (I may require my vehicle to load and unload consumer goods, for example).

Value of Permit Parking

Permits are sold to individuals at a substantial discount or subsidy. For example:

- Assume 30 dollars a permit.
- On average there are 22 business days a month which means that the daily cost to the permit holder is $1.36 per day
- Average duration of stay per day is say 8 hours
- Average cost of permit per hour parked then is $.17 per hour.

From a business point of view, the selling of this one parking space to a permit holder presents a lost revenue opportunity.

Consider the following:

- On average, a parking space made available to a short stay shopper or business visitor attracts between 4 and 6 different customers (vehicles) a day concept of **turnover** of parking space.
- On average, a parking space made available to a short stay shopper or business visitor occupies the parking space for about 90 minutes to two hours (assuming this is an off street parking space)
- Assume one (1) dollar per hour, this means that on average on short stay parking space generates between $6 and $12 compared to $1.36 per day for a permit space

- As expected, the current level of service for the employee parker is longer – ranging from 1300 to 1500 (about 3 to 4 blocks) feet of the primary destination. Based on other consultant surveys of typical walking distances for work trips in a downtown serve notice that **cost** impacts choice of parking location. Work trips in particular typically trade off parking locations with cheap rates with longer walking distance – resulting in a 1000 to 1200 foot range. We noted that the policy of distribution of parking permits was in a state of change and Lots 4/6 was under construction, so that we were likely viewing a somewhat fluid, changeable situation. This explains the slightly less than adequate level of service compared to other municipalities.
- With the analysis of walking distance, the study served to highlight the key link between the parking space and the primary destination – the pedestrian link. We spoke to the issue of clear path definition from our municipal carparks to and from the commercial area. Key municipal site – Lot 10 was highlighted as a facility that

looked like it would be performing better than evidenced in the study, and that the probable cause was the lack of a clear pedestrian link. We understand that specific measures are currently underway to rectify this link issue.[4]

- The other component of linking parking space to customer to destination is signage or way-finding. This component serves to advertise the parking space inventory in advance to the motorist's entry to the downtown. We noted the size and location of the current signs were in need of improvement and details of that will of course be part of Phase II of this project.

Parking Operations

- Drawn from consultants' experiences and based on customer comments one key element that serves to focus attention is the issue of **parking enforcement**. The measured current level of enforcement was between 9 and 11 percent of the actual number of violators were being captured. This was typical, that is, not overly aggressive for municipalities of this size.
- We spoke of the need to provide rationale for parking enforcement through the municipal internet site. Regular enforcement officer patrols are necessary for the following reasons:
  - To deter and discourage abuse by motorists that over-stay the time limits or refuse to pay the metered rate;
  - To improve pedestrian safety (i.e. vehicles parking on sidewalks or creating obstacles or blocking intersections);
  - To promote community safety by ticketing vehicles parking illegally near fire hydrants, fire routes or stalls reserved for motorists with disabilities; and,
  - To ensure the efficient delivery and exchange of goods and services to businesses by enforcing loading zones.
  - We demonstrated using Lot 2 as an example of the impact on availability of parking supply if everyone stayed 15, 30 or 45 minutes longer. The impact is obvious as parking space becomes less available over the course of the busy peak periods. Using Lot 2 as just an example of the impact yields an increase of 20 percent in the peak hour accumulation through the increase of duration alone.
  - As we discussed during our Study Team presentations there are only so many on street spaces available and overstaying will severely impair their capability of becoming available to serve the short stay customer. However we did point out that we needed to place a new value (cost) to these critical parking resources. The higher charges would be offset by increased time allowed on street by hopefully a push to the market acceptance of the off street space to service the two hour and more customers. It becomes crucial to the parking management strategy that the market distinction between the on street and off street space be made clear to our customers.

[4] The lane is just south of the Walking On The Cloud shoe store and will have lighting, re-surfacing, graffiti removed and the addition of way finding signage for pedestrians. Negotiations are underway to include benefiting property owners to contribute to the cost. In addition efforts should be made to have affected property owners consider re-surfacing and repairing the surfaces of their private parking areas, which may pose a safety issue.

- Enforcement of metered space on Mississaga St., Peter St., Matchedash St., and West St. provides the necessary mechanism to ensure that convenient and self-advertising on-street parking space presents opportunity for a number of different customers. Over-use of metered space on Mississaga St[5] impacts the volume of traffic on residential and side streets by those customers who are forced to circulate the downtown to find available parking space. As pointed out a number of times in our presentations to the Study Team, the role of the off-street parking resource as an attraction to longer stay customers needs to be advertised and properly priced in order to draw customers to it.
- In the course of our investigation and scan of other municipalities, we found that the current rate of fine for overstaying on a parking space is too low to be an effective deterrent. The analysis and demonstration of "rolling-the-dice" served to show that you either increase the frequency of enforcement or you increase the value of the fine. We are recommending the latter.

Customer Experience

- The total responses for the entire study is shown in the table below:

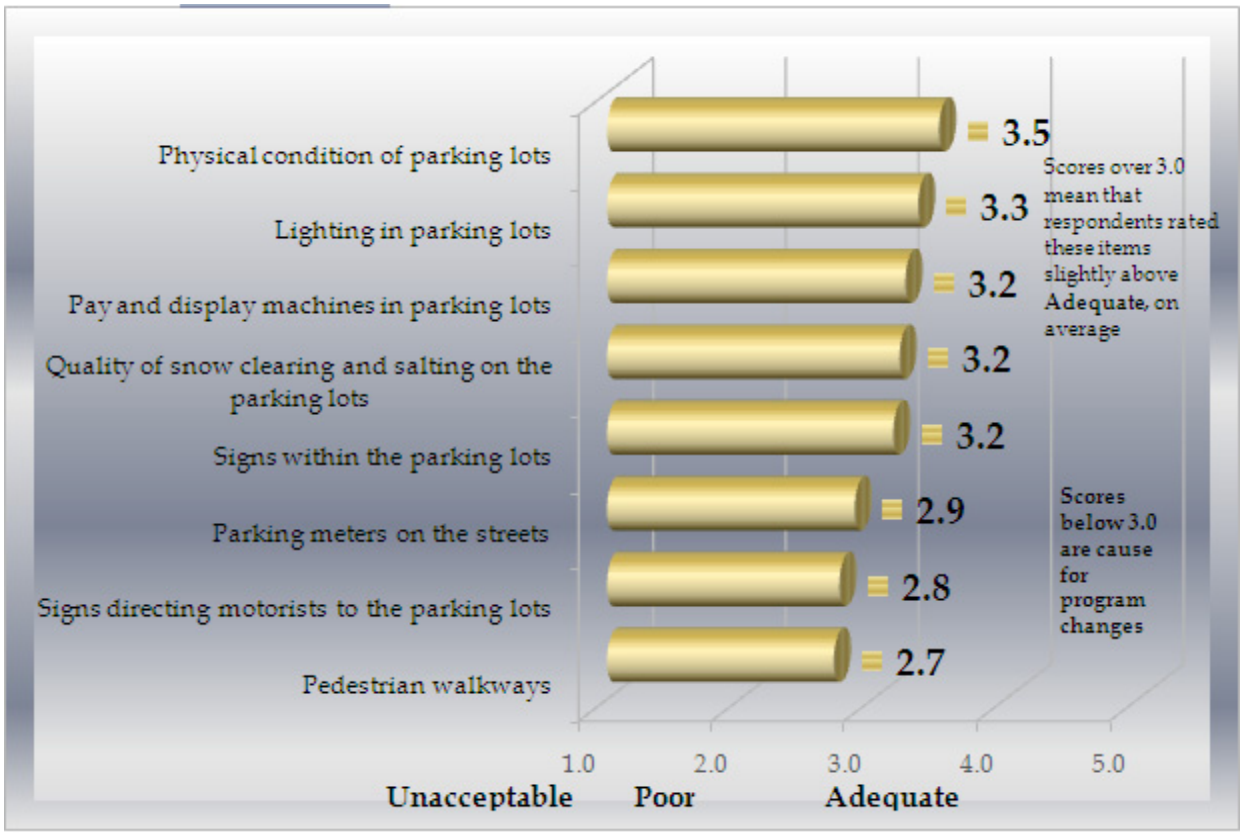
Survey Type	Dates	No. of Responses
Postcard - Visitors	Sept. '10 – Mar. '11	269 (61%)
Postcard - Employees	Sept. /Oct. 2010	99 (22%)
Online (Internet)	Sept. '10 – Feb. '11	73 (17%)
	Total	**441 (100%)**

- There were a total of 441 responses, of which 61% were from the visitor postcards and is considered a good response for this type of survey instrument.
- Drawn from customer/employee postcard and online survey responses, we spoke to another measure of level of service[6] – the time it takes to find a parking space in the downtown. We determined that 70 percent of short stay customers found parking space within five (5) minutes and 90 percent of the long stay employee customers (including those that park in private lots) found space within five minutes. **We indicated to the Study Team that this level of service is considered as high in the industry**. Scan of other consultant parking studies indicate that in situations where there is a critical parking supply location issue, that time to find a parking space especially during the peak hours of the day would tend to be closer to 10 and 15 minutes.
- The input of our customers to the definition of current weaknesses, strengths and potential improvement areas was invaluable. The primary areas of concern are related to parking

[5] On one survey day some 28 percent of the volume stayed over the one hour limit on Mississaga St.

[6] The first measure discussed earlier was walking distance to and from parking space and primary destination.

time restrictions, safety and way-finding. These areas of concern played a major role in our definition of areas of improvement, customer education and long term planning of the parking service. We duly noted that deficiency in terms of parking space supply was not an overwhelming or recurring theme. Drawn from Technical Memorandum A, the following graphic serves to highlight what our customers felt about various components of the current parking service.



- Positive comments focused on the “meter fairy” program whereby the business association tops up parking meters for customers; the great ambiance and pedestrian nature of the Farmer’s Market; and general comments related to the community feel that the downtown projects.
- It became clear to us that there is a very real opportunity to market the public parking service in Orillia. We spoke to areas where rationale for operations, service levels and the rationale behind user pay parking can be explained to customers. We floated the notion of online media to deliver the message to a wider audience. Critical message -among many- to deliver is the role of various parking space products – on street and off street – and the rationale for having time restrictions on some products.
- As is common in such customer experience surveys, the issue of the cost of parking is raised – specifically as a deterrent to shopping downtown. We provided research and our experience in the valuation of the cost of free parking. In summary:
    - Requires more control of time limits and cost.

- When free or inexpensive — as in many cities — demand exceeds supply, and people spend time and fuel cruising for scarce spaces.
- Cheap street parking thus increases congestion by encouraging people to drive rather than walk, pedal or take public transit.
- *"The cost of all parking spaces in the U.S. exceeds the value of all cars and may even exceed the value of all roads. Parking costs billions of dollars a year."- Donald Shoup, UCLA, Prof. of Planning & Economics*
- Free parking – even at suburban malls – is not free. That cost is incorporated in tenant's lease and reflected in the cost of goods and services sold to customers.

Parking Supply Response to the Demand

Twenty-one days between August 27th 2010 and January 22nd 2011 were chosen for parking supply response surveys. The task objective was to examine the parking activity in summer, fall and in the winter seasons, and we conducted license plate turnover/duration of stay surveys from 9:00 am to about 5:30 pm each sample survey day. As directed within the Proposal call, we selected a Monday, Wednesday, Friday and a Saturday within each season.

The primary data gathering instrument used in the collection of parking supply response data was a license plate survey. We chose the application of a LPR [License Plate Recognition] mobile solution. It is somewhat of a unique technological approach to the capture of the parking space utilization data. Digital cameras mounted on a vehicle and customized recording software captures, interprets, and stores the arrival time, departure time and location of each vehicle within the Study Area.

Each survey day provided data related to the use of parking supply within the downtown Study Area. License plate surveys require that plate numbers be recorded at a regular interval along specified routes throughout the downtown. In this way, estimates of parking accumulation and duration of stay of each parker within the downtown can be measured. **Schedule 2** serves to illustrate the coverage of these parking supply use surveys.

Three diagnostic measures were used in order to relate parking supply to parking demand generated in our Study Area. These diagnostic measures are:

- **Volume** of parkers (see **Schedule 3**);
- **Duration** of stay or the customer mix (see **Schedule 4**), and;
- **Occupancy** of space at critical times of the day (see **Schedule 5**).

Table 1A provides a summary of key performance statistics for key parking areas in the core. The last column of the table serves to rate the performance of the particular carpark by comparing the theoretical turnover (volume to capacity) ratio to the observed turnover of space.

Table 1A: Performance Statistics of Off street Municipal Lots and Core Area On street Space							
Carpark	Stay	Turnover	Spaces	Maximum Number of Cars	Pct Maximum Occupancy	Pct Average Occupancy	Rating
Lot 1	01:38	2.89	90	66	73%	51%	67
Lot 2	01:15	3.73	80	69	86%	70%	67
Lot 3	04:05	1.25	65	21	32%	27%	73
Lot 5	01:11	3.60	64	53	83%	56%	61
Lot 6	03:22	1.51	243	91	37%	24%	73
Lot 7	02:00	2.18	54	45	83%	68%	62
Lot 9	01:38	2.31	26	16	62%	38%	54
Lot 10	01:32	3.11	94	54	57%	46%	68
Lot 11	03:43	2.17	39	35	90%	60%	1.15*
Lot 14	03:51	1.39	64	37	58%	49%	76
Overall	**02:15**	**2.53**	**819**	**487**	**59%**	**44%**	**67**
On Street Core	**01:09**	**4.31**	**200**	**153**	**77%**	**61%**	**71**

Note 1 – Data is derived from the maximum observed over the course of the entire survey dates

Note 2 – "Rating" was derived from 7 hours of survey/average duration of stay = theoretical turnover; then the observed average turnover was divided by this theoretical turnover. The higher the rating value, the closer to maximum performance of the facility. Seven hours was used for smoothing of the data collected, such as, daylight savings time in the winter with an earlier nightfall, whereby vehicles were more difficult to capture by the LPR technology near the end of the day.

Note 3 *- Lot 11's rating exceeds expectation, but we suspect that overflow parking from Lot 5 is the reason for this. To avoid misconception of Lot 11's performance, we have dropped it from the overall rating computation.

Emerging from this survey evidence base was a set of metrics or indicators that helped to inform the answer to the question: ***How well is the parking space inventory responding to the parking space demand?***

Here is a point form summary[7] of the answer to these and other questions on the use of our parking supply:

- Over the course of 21 survey dates spanning the period from late August 2010 to mid-January 2011, the use of public parking space was observed in downtown Orillia. We observed 1,070 to 1,270[8] parking spaces including approximately 204 on street parking spaces[9], and 835 municipal spaces in off street facilities (comprised of 16 accessible spaces, 327 permit spaces & 492 metered spaces, as shown in Schedule 2). The entire Study Area contains some 4,250 total parking spaces - but not all of these are of course accessible to everyone – including to our field survey team. Thus our focus during the surveys was on the publicly accessible parking space inventory. The parking supply system provides a wide range of products - as it were - to service trips of varying duration of stay – from on street one hour time restricted spaces to three hours to eight hours at off street municipal lots. The field surveys captured a fair representation of these parking space product types.
- The downtown Study Area attracted typically between 1,500 and 1,750 vehicles on each survey day. Overall during the course of the summer, autumn and winter surveys, 25,340 vehicles were part of the study.
- The measures of performance that we used to help us determine how well the current parking supply services the current parking demand in the downtown indicated to us that **the number of parking spaces was not an issue here**. What was shown as a weakness of the system is the inability to "sell" available parking spaces that are operationally[10] designed to accommodate demands of varying durations of stay to customers. We found a number of customers who are staying for more than an hour parked on the metered space on Mississaga St. when parking spaces – of equal value in terms of cost (one dollar per hour) – were readily available in off street facilities. **The walking distance factor has a profound impact on choice of where to park, no doubt, but we also believe that customers do not avail themselves of the off street resource because they may not be aware of their specific role – their market niche**.

[7] Complete rich details of these results from Technical Memorandum B – Parking Supply Response.

[8] Be mindful that Lots 6 (243 spaces) and Lot 14 (64 spaces) were not established until later in the surveys, hence the range of off street space. In addition on some survey days we observed use on a number of public space locations that are non-municipal – Metro, Shoppers, and some of the hospital-related off street space.

[9] This includes 188 metered spaces, 5 free spaces at post office, 3 permit spaces on Peter St., and 8 spaces designated as Accessible parking. Please be aware that due to construction, this total number varied from survey day to survey day.

[10] Through the establishment of longer time restrictions on off street space (from three hours to eight hours) for example.

- Integrating our findings from the parking demand surveys[11] (Technical Memorandum A) with these parking supply response surveys (Technical Memorandum B), a set of market, operational opportunities arise from this observation. These were fully discussed in the Technical Memorandum C – Market Potential Opportunities.
- *How does the time restriction impact the turnover of the space?* We found that the **one-hour restricted** spaces turned[12] over 3.8 times on average; the **two-hour restricted** spaces turned over 2.5 times; and, the **three-hour restriction** turned over 1.7 times. The on street **unlimited** time parking supply[13] – although attracting the least number of vehicles (less than 1 percent of the total) – turned over 1.4 times. Therefore the theory holds true: *The setting of time restriction does encourage the turnover of on street space*.
- From a spatial perspective, the core area of the downtown (area bounded by West St., Coldwater St., Matchedash St. and Mississaga St.) defines the area where high volume and relatively shorter duration of stay yields higher than average turnover ratios[14]. The observed turnover values are considered by us to be in the comparitively moderate range of 3.2 to 3.8 vehicles per space.
- The relative turnover by block highlighted the possible role of parking supply **west of the core** – between West St. and Albert St. (again refer to **Schedule 4**). The parking supply is composed of on street parking space that provides **two** hour parking limits and Municipal Lot 7 (located on Block C019) offers 34 metered spaces with a time restriction of **three** hours. The area west of the core offers market opportunity for the municipal parking system – relatively convenient parking spaces located at the perimeter of the core four blocks. This strategic location encourages the dynamic flow and interaction between parking space and multiple destination points within and "on-the-way-to" the downtown core. Potential customers coming in from the west end of Orillia along Mississaga St., Colborne St. and Coldwater St. have an opportunity to park here and walk into that core of activity.[15] This strategic area also serves as a spill over parking area – that is, an area that is used when parking space cannot be found within the primary destination block – your second choice parking area as it were.
- This area – peripheral to the core – at the west end of the Study Area was found to be attractive to typically twelve (12) percent of the visitors to the Opera House as the majority found space

[11] Way-finding and signage from a pedestrian and vehicular point of view are examples of what we will discuss as potential opportunities, initiative and remedies.

[12] Turnover is computed by dividing the total number of different vehicles that parked (volume) by either the total number of spaces (capacity), or, divided by the maximum number of spaces occupied to arrive at what we have been calling the "effective" turnover rate.

[13] Please refer to Schedule 2 for the location of these.

[14] A spatial distribution of turnover of key blocks in the study area is illustrated on Schedule 4 of this report.

[15] Urban and transportation planners would probably refer to this strategic area on the periphery of the core as a potential transportation **gateway** to the downtown. Our parking service can respond to that "welcoming" opportunity through the presentation and marketing of municipal on and off street parking space that is structured to the two to three hour duration of stay.

within the core blocks. From our postcard surveys, we determined that 75 percent of Opera visitors who parked outside of the core area, parked on free non-metered space on the street.

- Overall, again on average, the on street parking space turns over 3.33 times – that is, 3.3 vehicles per space, while the off street was observed during our surveys as attracting on average some 2.49 vehicles per space. The ratio of **1.34** to 1 (on street turnover to off street turnover) is **not** consistent with that same metric we observed in other studies. Similar studies in Oakville and Peterborough, Ontario show that the relative attraction of the on street space to off street space – as represented by turnover – is closer to 1.8 and 3.2 times higher. This lower-than-expected turnover suggests the following:
    a. *Parking space on and off street is readily available to serve demand and/or ;*
    b. *Lack of price incentive to attract significantly longer duration customers to the off street space; and/or;*
    c. *As turnover is related to duration of stay, perhaps both on and off street space do not attract significantly different customer types.*

- Contrary to a widely-held theory that the duration of stay in the downtown is controlled by the time restriction posted on the parking space – **the reality is that people do not drive to the downtown to park their vehicles**, but rather to conduct business, re-create, shop, dine, visit a library or work. The activity drives the amount of time spent in the downtown not the time restriction. The focus of a parking management strategy is to market the different parking services to each customer type. As well, the critical factor that reflects user acceptance of the principle of parking longer in an off-street parking space is the required acceptance that one has to walk further to and from their primary destination point and that this longer walking distance is reflected in the value/cost of the parking service
- We do understand the anxiety that is created by the situation where a customer is faced with the prospect of running out of time on the parking meter or off street space for that matter as durations of stay get closer to the parking time limit. We have described this situation as **"meter-anxiety"** and have discussed technology that has been applied in larger municipalities and at least two Ontario colleges to help alleviate this anxiety. The simpler and less cost option that speaks to this, centers on marketing the on and off street space as serving different customer types. We discussed the use of social media to explain the strategy; we discussed a decal on the parking meter post that direct people to the off street space if anticipated trip duration is longer that one hour; and, we discussed the flexibility with the conversion from the parking meter to a Pay and Display unit that would allow us to experiment with variable time restrictions for different times of the day, or by season of the year.
- An option with respect to time management on the parking space is to capitulate to the current average stay on the parking meters and increase the time restriction and reflect that change with placing a higher value on this space though an increase in the hourly parking charge from the current one (1) dollar per hour to two (2) dollars. We are recommending this approach along with the conversion from metered control to Pay and Display units that will provide flexibility to experiment with different time restrictions over the course of the day or year. In

addition, the Pay and Display unit opens up cash-less payments along with value cards or promotional coupons. Furthermore, Pay and Display units provide an opportunity to increase on-street capacity by up to 15% as individual parking stall markings are no longer required (except at the end of each block face) allowing more vehicles of differing sizes to park in the same area.

- Changing on street time restrictions and their rates impact the off street parking strategy. The critical factor that serves to "sell" the notion of choosing to park **off** street for longer durations of stay is **cost**. Our consulting experience has been this: if we want to encourage customers to the off street parking space for trips to the downtown that are longer than one hour in duration, we should make the fee attractive, that is, **offer a lower hourly charge to offset the longer – or perceived longer walking distance**[16]. This cost differential approach to **setting the market value** of parking space use is not applied in Orillia. We will likely re-visit this concept in a subsequent report that describes the potential market opportunities. However, we are recommending that the hourly charge of one (1) dollar remain on the off street space if and only if the on street rates increase to two (2) dollars per hour.
- Off street facilities attracted – on average – customers with duration of stay of 2 hours and 9 minutes, with a range of averages from 34 minutes to 4 hours. On the other hand, on street parking facilities – on average – attracted customers with duration of stay of 1 hour and 9 minutes, with a range of averages from 31 minutes to 2 hours and 40 minutes. As mentioned above, it is vital that off street space attracts longer durations of stay as it is necessary to free up very convenient on street space. The issue at hand is to further underscore the value of those high convenience spaces with a cost that reflects that higher value. **Schedule 5** provides a spatial distribution of key one and one to two hour customers as well as the overall customer mix in chart form.
- The overstay – people who park longer than the posted time restriction - is significantly **lower** on the **two-hour** time restricted parking spaces – only 4 percent of the total volume stays 2 to 3 hours on two-hour restricted space which is largely located in the periphery of the core area. These two hour spaces did not attract the volume or turnover that set them apart from other on street parking spaces in the core. This is likely more a reflection of the demand level, and that the on street space on Mississaga St. is turning over with enough frequency to attract customers at peak times of the day.
- ***What was the peak number of vehicles parked in the Study Area? And, was this peak number reflecting a serious shortage of parking supply?***
  The number of peak vehicles observed on 1,070 to 1,270 spaces (depending on the survey day) ranged from a low of **43** percent of space to a high of **79** percent of capacity[17] While this is an easy statistic to retain, the reality is that it is not that crucial to the study of a system that is so

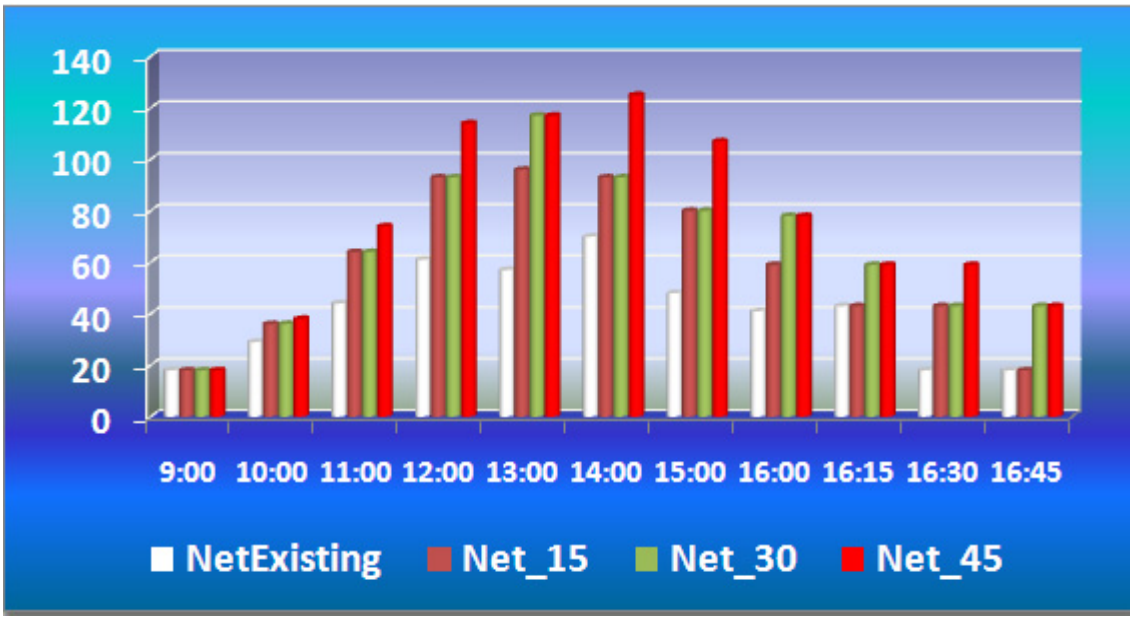
[16] Currently the hourly charge on our off street municipal lots is 1 dollar per hour with a time limit of three hours, with the exception of Lots 6 and 10 that have 8 hour time limits.

[17] This is the statistical range of occupancy based on our sampling of 21 days of parking use observations. A statistic confidence range provides a range within the occupancy would typically fall within 95 times out of a 100 such surveys. The statistics for each independent survey day are presented in Schedule 5 of this report.

tightly connected to a set of much focused areas in the downtown. The significant impact of walking distance to and from parking space to destination(s) on where people choose to park their vehicle renders the overall occupancy of parking spaces to that of a general indicator of performance, but not particularly useful in the determination of parking space deficiency.

- The analysis went on to further examine the **periods of intensity**, that is, to count the number of consecutive observations of use when the ratio of cars parked and the number of available spaces was consistently 85 percent or over. While we experienced such intense periods, in comparison to other studies of downtowns, they are not indicating prolonged periods of high occupancy that would in turn mean that customers would be turned away due to lack of available parking space. In other sections of the analysis here, we spoke to the shape of the accumulation curve and its reflection of a serious chronic parking space shortage and its impact on perception of a parking space shortage. **The situation observed in downtown Orillia is: while parking space use approaches 85 percent of capacity for perhaps an hour on a weekday and less than one hour on a weekend, *the area is not exhibiting the signs of chronic space shortage.***[18]

- ***Do customers who have duration of stay over 90 minutes for example choose to park on street or off street?*** We observed customers with duration of less than about 45 minutes largely chose the on street space as their primary choice. For durations of stay greater than 45 minutes to about 90 minutes, the off-street space starts to become more attractive. The notion was there



at least as the expected proportion between on versus off street parking space did not materialize. Again this clear-cut marketing of off and on street space, their roles in service, and

[18] This consultant conducted one of the many field surveys of use of the off street parking facilities in the core. Only once did I record a queue of vehicles to get into Lot 5 on Mississaga St. The length of the queue was about two vehicles in either direction – making lefts into the Lot and right-turns into the Lot. This queue was cleared up in less than 5 minutes on a Saturday in October.

perhaps in the future their value in terms of cost will be the subject of further exploration in the market opportunities report.

- ***Do customers deliberately choose either parking space to meet their anticipated length of stay?*** Not necessarily so as we observed that 26 percent of the over one hour customers who do park on metered spaces which currently restrict parking to that one hour. The study demonstrated the impact that an increase in duration has on the availability of parking space.
- Analysis performed by adjusting the duration of stay (adding 15, 30 or 45 minutes as noted in above chart) to current levels of volume, assuming no change in arrival times impacts the pattern of occupancy of parking space – that is, the availability of parking space. In this chart using Lot 2 as an example, if the volume remained the same, and the duration of stay increases from existing by 15 minutes, the net impact on the peak accumulation of vehicles is about a 20 percent increase! The impact of increasing the time restriction on current metered controlled parking space is rooted in the results of this kind of analysis. The third Technical Memorandum C – Market Opportunities – presented these analyses more fully.
- As in a theatrical performance, there are limited floor and front row seats**. Their location relative to the stage is given a monetary value – closer you are the higher the cost.** *This analogy is not dissimilar to the desire of customers to park front row centre on Mississaga Street.* The reality is that these spaces are limited in number. Consider that there are four (4) off street spaces for every on street metered stall currently and yet the cost of those much sought after on street space is equal to the more abundant off street space. This balance is tackled by the recommendation to increase the on street time restriction from one hour to two hours, increasing the value of an hour of parking on street from one dollar an hour to two dollars per hour, and marketing cheaper hourly rates for off street space for anticipated longer durations of stay.

Permit Parking

- One of the specific issues that we were asked to address was that of **permit parking**. The questions were:

  Is there a deficiency in the number of permit spaces?

  Is there a distribution issue in terms of where the permit spaces are allocated?

  What should the City's role be in the provision of permit parking spaces in the downtown?

  Here are our answers to this specific component of our emerging parking strategy:

- Certainly from the postcard and internet responses, and a participant in one of the two public information sessions, employees and employers have made it clear that permit parking space deficiency is an issue. However, the Lot 6 , 243 space municipal carpark just south of City Hall, is underutilized with average monthly permit sales of 67 permits sold per month from Oct. 2010 to May 2011 and maximum sales of 107, 122 and 121 in October 2010, January 2011 and

February 2011, respectively (due to demand from Lakehead University). The reason for under use is the long walking distance to the core of the downtown.

- In the earlier section of this report, "Attraction of Parking Supply," there is a blue side bar that makes a compelling point: the current value of the monthly parking permit is very cheap! Within contemporary parking industry management standards, such inexpensive parking service has to be offset by a peripheral- yes somewhat inconvenient parking location. Permit or long stay parking customers is a segment of the parking customer base that has the greatest flexibility in cost, and location that time sensitive, convenience driven shorter stay customer don't have.
- To put it more succinctly, the parking industry and the City's role in the provision of permit parking looks to *manipulate the permit parker to areas where space provision is not compromised for the* ***core of the City's service customer base – the shorter stay shopper, visitor to the downtown.*** *The strategic direction within a public parking management framework is to offset longer walking distances to and from places of employment with significant cost savings.* The private sector also plays an important role in the provision of parking for their employees on private properties.
- We are also aware that the spatial distribution of permit parking customers is skewed currently due to construction of Lots 4 and the original Lot 6. These two lots are of course part of the Library/Farmer's Market re-development site. As well, changes in policy with respect to Lot 10 now that Lot 14 (School site) has come into operation served to skew the distribution of permits. Lot 9 at the start of our parking study had 16 permit spaces, but now those spaces have reverted back to metered spaces to serve short stay customers (presumably to City Hall).
- Currently 330 permit parking spaces have been made available for sale – including 3 spaces on Peter St. Of these 330 spaces we understand that – although this is variable throughout the year – approximately 200 permits are typically sold. *Thus as far as the demand to supply ratio, we have adequate inventory.*

The goal of making use of what we have – sustainability – and preparing our parking system for change in downtown character and demand serve to focus our generation of initiatives, opportunities and possible remedies.

The Current Balance of Parking Demand and Supply

The block by block level of analysis is a useful approach to the study of parking activity as it implies and expresses the whole notion of walking distance - the integration of parking space to trip destination over distance.

Over the course of our presentations we have defined specific metrics of performance that give us pause to consider whether or not the current parking demand is being adequately serviced by the current amount and distribution of parking supply. Some of these metrics are as follows:

- **Accumulation Shape of Curve** – we spoke of a single peaked condition versus a double-peak and sustained period of high occupancy. We detailed in Technical Memorandum B that we found the former shape of accumulation, that is, there is only one peak point – generally between 13:00 to 14:00 hours – and that peak activity does not last for more that 15 to 30 minutes.

- **Periods of Intensity** – we spoke of the number of consecutive observations that we found parking space occupancy of over 85 percent of the inventory as an indicator of potentially turning customers away. We detailed in Technical Memorandum B that we found local cells of such a condition, but not consistent or chronic occurrences of intensity.

- **Turnover** – we spoke of the indication of a possible imbalance of parking supply and demand where areas exhibited very high turnover (6.0 and above) and queuing for parking space for on and off street space. We detailed in Technical Memorandum B that the order of magnitude of turnover in the downtown was more within the moderate range of 3.3 to 3.8 times turnover in some of the core blocks.

- **Customer Mix, Match to Demand** – We did find a significant amount of overstaying on metered space. We spoke of the impact that overstaying has on accumulation and thus availability of parking space (using Lot 2 as an example). This metric provided the evidence to promote a change in operations not in the level of supply. Several initiatives are specific to the time restriction current to our parking system.

- **Location seems good but performance not realized** – We pointed out the major concern of ours that while certain parking facilities were well within the high level of convenience (walking distance) and very attractive in terms of cost and value of parking and some key off street facilities were not well used. Lot 10, in particular served to demonstrate a site that is ideally located, but suffers from a lack of pedestrian connection to the commercial core and lack of clear signage that does not direct traffic to its service. In fact in large measure our initiatives support a proposed marketing campaign to address the role of the off street in its service of customers who have greater than one hour in duration. We spoke to the proposal of allowing **flexible** time limits on the **off street** that can position these spaces as key to longer stay visits to the downtown.

- **Existing patterns of use subject to change due to physical or market dynamics** – significant effort in determining the impacts due to leases not being renewed and impacts due to library and Farmer's Market activity re-introduction to the west end of the core. While change to customer duration of stay, volume will occur, we proposed that the west end of the core may be a center of focus for expansion of the municipal parking service. We spoke of the west end of the core as a "gateway" to the downtown and that parking space located there would serve to provide service to customers without having them travel through the core and add to the congestion. We proposed the development of a series of way-finding and space-finding systems that could be developed in the longer term that would help direct visitors (especially the key tourist category) to **off street** parking spaces.

- **Parking space distribution not matching implied level of service (walking distance) and value of parking** – in reference to permit parking, we are promoting the notion that we can re-introduce the sale of permits on each of our off street parking facilities (we suggested 20 percent of current inventory). We also underscored that the value of the permit is so

inexpensive that we should in theory reflect that cost by providing the permit space to the periphery of the core. Unfortunately, there are only short-term opportunities to do this (Lot 6). As a direct result of the input we received through the postcard survey, internet survey and the public information meeting on the 17th of May, **we recommend a wider distribution of permit spaces on each of the core facilities, but to a limit of 20 percent of capacity*. We also emphasized that level of permit space is part of a flexible process and can be evaluated each season*.** We discussed in our presentations that we could allow the number of permits to reflect the seasons – that is, in summer months when significant customer parking is more critical, we can reduce that number on Lots 2 and 1 for example. The key ingredient here is to market the space to match the rhythm of parking demand type. This kind of response is part of the approach to parking management that we encourage the City of Orillia to embrace.

Within this framework of investigation, there are tweaks to the current system that should be pursued**. The evidence does not support that there is currently a major parking space deficiency in the core.** We did however want to provide a picture of where the demand was being generated in the core and that picture would serve to provide areas of focus. Given that some of the municipal facilities are not secure (leased not owned), it was required that we provide these areas of focus wherein we might continue the ongoing process of looking for sites that may enhance the level of service to short stay transient and permit customers alike.

Distribution of Current Vehicle Trips

We developed a model that served us as a tool to generate the number of peak hour trips and their spatial distribution to each block given land use activity type and quantity. The computer model that was designed specifically to integrate the following factors:

- the quantity of land use by type and distributed over each **block** in the Study Area;
- the **employee** parking demand as computed by multiplying the employee parking ratios by land use type (Table 3 in the Technical Memorandum A) and the quantity of land use by type and by block;
- the **visitor** parking demand as computed by multiplying the visitor parking ratios by land use type (Table 4 in the Technical Memorandum A) and the quantity of land use by type and by block;
- the employee and visitor parking demand by block was distributed to parking supply that is found within the evidence walking distance market area;
- the distributed parking demand was then compared to current parking supply on each block and;
- the result was an aid to focus our attention in terms of market opportunities both now and in the future.

Against this back-drop please refer to **Schedule 6–Areas of Focus – Where are Trips attracted to?** It illustrates the distribution of the theoretical number of trips attracted to each block for long stay (employee) and short stay (visitor) customers as computed by the application of various peak parking ratios to land uses on each block.

The spatial extent of the shorter stay trips attracted to these blocks is broader than that coverage exhibited by the longer stay trips. The implied functional requirement then is clearly that the shorter stay customer requires more localized parking supply to meet its demands of convenience (in terms of walking distance to and from destination). As is the norm with longer stay trips, because the duration of stay is significantly longer, and the relative cost of longer stay parking in the form of monthly parking permits is so inexpensive, the walking distances are and should be longer. The specific blocks that generate the most trips as shown on Schedule 6 provide no surprises. We have been speaking to the core blocks. In addition to those four core blocks, we note the demand generated by Opera House, Library and the future Farmer's Market blocks.

From a parking supply distribution point of view, **Schedule 6 identifies the critical blocks** – C014 and C015 – west of Peter St. and east of West St. Each block currently is home of municipal Lots 10 and 1 respectively. These facilities are obviously critical to the rendering of parking service to both long and short stay customers. This will become even more evident when we begin the process of testing "what-if" scenarios, such as: What if Lot 10 does not get renewed? What if Lot 14 on the north side of Coldwater St. gets redeveloped?

Thus while **Schedule 6** provides us with a spatial view of the type and magnitude of current trips to the core, it does not represent how well our current and future parking supply system responds to that demand. *Remember that people **walk** from their parking space to their destination(s) – so what is now required is an examination of what we will call the **fluid** parking demand and supply dynamic.* The discussion begins with the identification of scenarios that could develop on sites currently used as municipal parking sites.

The Future Balance of Parking Demand and Supply

The stage whereupon parking demand and supply interact may experience a number of changes that will impact the range, the type and the extent of parking demand and supply. Throughout the course of this study a number of known impacts and some that may or may not happen have been raised by the Study Team.[19] This key section of our report serves to present a number of plausible change scenarios and their potential impact on the balance of parking demand and supply.

The Agents of Change

Here are the factors that we know impact directly the balance of parking supply and demand:

- Changes in the future level of occupancy of current stock of land uses in the downtown;
- Changes in the future parking demand due to the oncoming re-developments or new developments in the core and the potential physical loss of existing public parking supply;
- Changes in the future magnitude, pattern and customer profile of parking demand due to potential changes in operations and potential implementation of different parking revenue control.

[19] In Phase II of this study it is critical to draw to the Study Team, the Planning and Public Works departments who will author the most plausible scenarios based on their more intimate knowledge of the situation here in the downtown.

Scenarios Derived from Occupancy of Current Stock of Land Use

An estimate of current level of commercial vacancy in the downtown was drawn from our own field survey, as well as input from local commercial realtors who better understand the commercial market in Orillia. The current commercial vacancy rate is 7 to 10 percent vacancy in the downtown. From our own experience and that of the realtors this range is typical for downtowns of this size. In fact given the recent (and continuing) downturn in the economic state, this level of vacancy is considered as remarkable. Given this level and the fact that we would normally expect at least 5 to 10 percent vacancy, we are not going to assume or generate a scenario that reflects full occupancy of existing commercial stock. [20]

Lakehead University and [new] Lot 6 Effect

Scenarios Derived from New or Redevelopments

The Study Team provided details on some new developments in the downtown core. The obvious one is currently under construction – Library/Farmer's Market around the Opera House for example. Library reconstruction and Farmer's Market bring a significant number of people to the downtown; research and evidence here in Orillia is that upwards of 90 to 150 peak parking spaces are required to serve the Farmer's Market itself; coupled with the Orillia Opera House on the same block points to significant influx of people before and after matinee events.

We spoke back in Technical Memorandum A – Parking Demand Analysis of the influence of recent developments such as the introduction of Lakehead University site on West St. and Colborne St. next to City Hall. The latter development has already had an impact on marketing of restaurants and student support services. The new campus outside of the downtown will of course serve to pull the University direct impact away from the downtown. As analysts of parking demand and supply, we felt that the University impact on the downtown parking situation would have already been measured by our surveys of parking supply use. In fact, the profile of the number of sales of permits on the new **Lot 6** located just south of the City Hall and immediately south of Lakehead University reached a peak of 122 in January 2011 to a low of 20 in May 2011 – when the school year is over. As Lot 6 is again not a site that is owned by the City and the lease arrangement is due to expire in a year, it becomes a near term (3 to 5 years) issue that needs to be dealt with.

Two current municipal parking sites – **Lots 10 and 5/11** – have been raised as potential re-developments. The latter site has progressed to a set of drawings showing integrated parking on Lots 5 and 11 yielding more space than currently provided, but more importantly, the discussion centered on commercial component on the Mississaga St. face of this site. In the longer term – 6 to 10 years hence, this site should be considered as a prime re-development site. The displacement of these critical spaces will impact the delivery of a high level of customer service in the core obviously. There were discussions

[20] In other downtown parking studies that this consultant has done, scenarios have been developed to generate the demand that comes from the filling up of vacant space. The 7 to 10 percent current level however, reflects optimal conditions and thus no additional demand.

centered on an interim solution should these two lots be so developed. The Patterson property located on the east and west sides of Matchedash St. south of Mississaga St. is in a reasonably good position[21] as a parking facility to serve core downtown demand if and when Lots 5/11 are displaced. However, because of the site's size and location, it is also a potential key commercial, residential mix potential. At best then this site is an interim solution to the possible displacement of Lots 5/11.

The municipal Lot 10 site is not owned by the City of Orillia, but has been used as a public parking lot since 1994. Given the size and the excellent access from a vehicular and pedestrian point of view, this site can someday be re-developed. We will push that potential re-development again to the longer term – 6 to 10 years hence.

The Study Team should appreciate that we are not the authors of the new development sites in the downtown. As we indicated a number of times in our presentation, longer term developments, the vision of the downtown in the longer term and insights to the sites that may begin to appear in the downtown is subject to the Planning and Development Department. In Phase II of this study we hope to invite the responsible departments to the table for such discussion.

The Liquidation store on Mississaga St., west of Andrew St. was a former department store; site configuration and location of course make it an ideal site to be re-developed into another anchor for the downtown; as you recall we spoke a number of times in the presentations that we can view this downtown like a suburban shopping centre in some respects in that anchor stores at either end of the downtown (Metro and Shoppers at the east end) serve to attract a recurring set of customers to the area every week and provides a pedestrian flow in between the anchors that provides support to those commercial spaces. Again while some discussion ensued regarding the great potential for re-invention of this site and a potential critical trigger for commercial attraction, at best this general area of the core (west end) and specifically this site has to be viewed as a near term potential. In addition to its own inertia, this area will see the re-birth of the pedestrian hub created by the Library, Farmer's Market and before and after activities at the Opera House. The trigger to its inclusion to the immediate planning horizon is dependent we think on the results of the leasing arrangements with both Lot 10 and [new] Lot 6. These two current parking facilities will impact when we promote the search for a joint development venture in and around the area east of West St. along Mississaga St.

Expansion of the Ontario Provincial Police (OPP) site in downtown Orillia will impact current municipal resource Lot 3. The expansion will also bring with it the need for reserved parking for the OPP staff. In this way, we viewed this possibility as a weakness in that the public-at-large will not likely have any priority on this lot. For all intents and purposes Lot 3 will likely become site specific in terms of its service. A recent site design meeting generated a plan that shows approximately 40 public spaces and 25 spaces for the exclusive use of the OPP. In that document it was stated that the site will not be attracting new staff until sometime in the distant future, and that it should be assumed then that no specific impact on current level of inventory should be anticipated in the near term or within the planning horizon of this parking strategy study.

[21] It would compete for the same customer base as Lot 2.

The site of Lot 14 – historic school site, on the north side of Coldwater St. just east of West St. N. may be re-developed. The historic integrity of the shell of the building will like be preserved, but the use will change of course. The Study Team discussion centered on the possibility that if and when this re-development occurs, any onsite parking will likely serve on site parking demands and not the community at-large. Currently this parking facility provides 64 spaces that are designated as permit parking space. The space demand does not represent the meeting of a specified increase in the demand for permit parking here, but rather is due to the re-distribution of existing permit holders from Lot 10 (across the street). We believe that any change on Lot 14 site is plausible within the near term, that is, 3 to 5 years hence. And when that does happen it is expected that at least that number of spaces be replaced in a similarly convenient location in the downtown or immediate periphery.[22]

Estimate of Impact on Future Supply and Demand Balance

Approach 1: Straight Numeric Changes to Parking Supply

Table 1 serves to sum up data that will measure the impact of events that might occur on specific municipal parking sites on immediate, near and long term planning horizons.

Table 1: Description of Potential Change Elements Related to Public Parking Facilities

Parking Lot ID	Number of Spaces	Impact	Trigger	Planning Horizon
Lot 3 - located immediately east of the Ontario Provincial Police office on block defined by Colborne St., Matchedash St., Elgin St. and Peter St. S.	65 spaces re-established -25 of which are for the OPP; public has 40 permit spaces	Inventory Loss – **Temporary**	Fluid at the time of writing: latest memo is that there be no change in the current inventory of public space; OPP office expansion has reached the design option stage	**Immediate Term** – 0 to 2 years hence
Lot 10 – located within the block defined by Coldwater St., Peter St. N., Mississaga St. E. and West St. N.	97 (including 3 accessible) – potential to lose all of these spaces	Inventory Loss - **Permanent**	Leased facility may not be available; current lease agreement ends March 2012 (has been a carpark since 1994); higher and best use likely a mixed commercial residential development; Could become a joint venture with	**Long Term** – 6 to 10 years hence

[22] Current number of permits sold on Lot 14 average 63 from January 2011 to May 2011.

Table 1: Description of Potential Change Elements Related to Public Parking Facilities				
Parking Lot ID	**Number of Spaces**	**Impact**	**Trigger**	**Planning Horizon**
			private owner and municipality	
Lot 5/11 – located within the block defined by Coldwater St., Matchedash St., Mississaga St. and Peter St.	131 spaces as part of re-development	Inventory Loss – **Temporary 105 spaces** **Permanent: After development a net gain of 26 spaces**	City owned property; re-development plans currently under discussion; plan involves joint venture; Lot 11 and Lot 5 will be consolidated and thus increased supply when project completed	**Immediate Term** – 0 to 2 years hence
Lot 14 – north side on Coldwater St. (former school site) across from Lot 10	Currently 64 permit spaces; the historic building may be re-developed	Inventory Loss – **Permanent** **Current number of permits sold match capacity (re-distribution from Lot 10 primarily); no short stay parking at this site**	City owned property; A potential re-development site; issue of mid block pedestrian crossing safety; the re-development of the site could mean a loss of public parking space	**Near Term** – 3 to 5 years hence
[New] Lot 6 – located just south of City Hall	243 spaces - 118 open public spaces; 125[23] – permit spaces	Inventory Loss - **Permanent** Serves as a largely permit parking area for those displaced by re-development of Lot 4 and 6 at the Library/Farmer's ; in addition major demand generated by staff and students of Lakehead University (on site)	This site is on a short term lease – to August 1st 2012 at which point there is an option to renew for another year; Attractive development site for the private owner of this site;	**Immediate Term** – 0 to 2 years hence
Lot 4/6 – Library	81 spaces added	Inventory (re)-gain of	New development	**Immediate**

[23] Currently a maximum of 122 permits are sold on Lot 6. The numbers of permits vary accordingly due to the student and staff demand for permits during the school year. Prior to this implementation of this carpark, apparently students and staff parked – in some cases illegally – in and around the school site on a number of municipal lots as well as on street. This carpark absorbed in a limited way the re-distribution of former permit holders on Lot 1 and Lot 9.

Table 1: Description of Potential Change Elements Related to Public Parking Facilities				
Parking Lot ID	**Number of Spaces**	**Impact**	**Trigger**	**Planning Horizon**
and Farmer's Market	on a new surface lot; includes six (6) accessible spaces 3 on street metered spaces added on Andrew St (east side) north of Mississaga St W	81 spaces – **Permanent** Inventory loss – 50 spaces from pre-construction period- **Permanent** By-law requirements for the development : 174 or 74 spaces as per section 16.2.1.7 of Zoning By-law 2005-72	includes re-introduction of this carpark, however the net after development is a loss of 50 spaces from the original capacity	**Term** – 0 to 2 years hence
Summary of Parking Supply Inventory *Numerical* Impacts	Today (NOW) Immediate Term after 2 years – Near Term after 5 years – Longer Term after 10 years – **Net Position after 10 years -**	Sufficient number of spaces Net loss of 330 (rounded) spaces Net gain of 130 (rounded) spaces Net loss of 95 (rounded) spaces **Net loss of 295 (rounded) spaces**		

In terms of parking supply, **in ten years** time, if all goes as shown on Table 1 we will see about **295 space deficits** in the Study Area. *The plausibility of these scenarios being realized is dependent on assumptions with respect to timing and subject to the success or failure of the municipality to secure renewals on existing sites.*

This discussion serves to underscore a primary direction of the future parking strategy that will serve us in Phase II of this study, namely**: secure longer term ownership of existing and all future parking facilities within the Study Area, and begin to build the framework for discussion and implementation of joint venture development on key sites in the downtown where the municipality does not own the property.** Approach 1 is **simplistic** as it does not take into account the level usage of these parking spaces that are being displaced. We have of course conducted a whole suite of parking supply response surveys (LPR – Licence Plate Recognition) as part of this project. A second approach discussed in the next section applies observed use of parking spaces on the municipal sites shown on Table 1.

Approach 2: Impact on Parking Supply and Demand Balance as per Current Use

In the previous section, we took a necessarily simplistic numeric approach to get a sense of magnitude, but now we shall explore the potential changes in the immediate, near and longer term planning horizons by taking account of the potential loss of parking spaces that are actually being used. The difference in the two approaches is that the former is a straight replacement of the current number of physical parking spaces displaced by failure to renewal leases, re-development, expansion of current

facilities, etc. The latter approach here takes into account the actual observed level of typical use of these spaces – why would we replace 100 spaces if on average only 50 are typically occupied?

Drawing from our license plate surveys detailed back in Technical Memoranda B and C, **Table 2** shows the number of parking spaces that typically are used to service parking demands at peak times of the day. We need to appreciate that we conducted twenty-one days of observation and thus to account for variation in the observed usage of the parking supply due to sampling, a statistical range was computed and is shown in the far-right column.

Table 2: Impact of Changes to Parking Inventory Using Observed Parking Space Use

Carpark	Spaces	Maximum Number of Cars	Percent Maximum Occupancy	Maximum Cars Parked at Peak Statistical Range [Rounded]
Lot 1	90	66	73%	55 to 75
Lot 2	80	69	86%	60 to 80
Lot 3	65[24]	21[25]	32%	18 to 25
Lot 5	66	53	83%	45 to 60
Lot 6	243	91	37%	80 to 125*
Lot 7	54	45	83%	40 to 50
Lot 9	26	16	62%	14 to 18
Lot 10	97	54	57%	45 to 60
Lot 11	39	35	90%	30 to 40
Lot 14	64	37	58%	32 to 42
Summary of Affected Sites	**574**	**291**	**51%**	**250 to 350**

[24] This includes 25 spaces for OPP staff on site.

[25] Occupancy reported is only for 40 public spaces on site.

Table 2: Impact of Changes to Parking Inventory Using Observed Parking Space Use				
Carpark	**Spaces**	**Maximum Number of Cars**	**Percent Maximum Occupancy**	**Maximum Cars Parked at Peak Statistical Range [Rounded]**
Today (NOW)	**Sufficient number of spaces**			
Immediate Planning Horizon (0 to 2 yrs)-Loss of Space based on use	**Loss of 170 [temporary] spaces based on the upper end of the usage range**			
Near Term Planning Horizon (3 to 5 yrs) – Loss of Space based on use	**Net Gain of 165 (rounded) spaces based on the upper end of the usage range**			
Long Term Planning Horizon (6 to 10 yrs) – Loss of Space based on use	**Loss of 95 (rounded) spaces based on the upper end of the usage range**			
Overall	**819**	**487**	**59%**	**425 to 550**
Rows highlighted represent parking sites that are those cited on Table 1. These sites represent immediate, near and long term potential change.				
**** More recently staff and students of Lakehead University have begun to purchase monthly parking permits on this lot. Previously, enforcement officers reported to us that these students and staff were parked on the City Hall visitor section of the lot, parked illegally on primarily residential streets and on private lots in the area.***				

Thus Approach 1 – straight numeric – indicates that a 295 space deficit may occur after ten years, while this approach – based on current levels of actual space use – indicates that after ten years if the

scenarios described back on Table 1 do come to fruition, the deficit would be closer to approximately 95 spaces.

There is a third approach to the determination of the future parking demand and supply balance after ten years. The third approach applies the currently observed **walking distances** between destinations of trips to location of parking supply.

Approach 3: Impact on Parking Supply and Demand as per Market Attraction of Customers

We built a framework that mimics the fluid nature of parking demand and supply. The analytic framework described in greater detail back in Technical Memorandum C incorporates walking distance and the relative attractiveness of each block and facility on that block to the service of demand.

Schedule 7 illustrates the areas that we want to focus our attention on in the worst case situation, that is, if sites do not get renewed and current parking inventory is impacted. The spatial distribution of opportunity underscores the importance of the block that now is home to Lot 10 (marked block C014), and the critical contribution of Lot 1 (marked block C015). If physical opportunities do not arise from either of these two blocks, we are suggesting that consideration of supply enhancement in the west end of the core.

The order of magnitude is shown by the colour of the block, but let's be clear that the number of spaces and their exact location is subject to conditions that are out of our control and they will be subject of validation as part of Phase II of this project.

The west end of the core has been previously identified as a potential gateway to the downtown and its role in the area cannot be underestimated. We spoke to the reinvention of the west end when the library, Farmer's Market and Opera House begin to interplay. We feel that in the longer term something needs to be done there. As we said in the presentations to the Study Team and to the public, in some ways we want to be prepared to **react** to conditions. The west end of the core is such an opportunity.

The other area of focus that emerges from the analysis is the block B016 south of Lot 2 at least in the immediate and near term planning horizons. Its potential role can grow to provide support if Lot 10 for example does not get renewed. And as the downtown may begin to re-invent itself along Colborne St., this block may take on a higher profile in time. At this time however, we are not aware of market site opportunities on this block, but again this is the subject of Phase II of this study.

The third approach here provides these conclusions:

- The spatial focus of immediate term is narrow and confined largely to current blocks that have municipal public parking. What does this imply? We think it means that given the very high level of service as measured by walking distance and time spent looking for parking, that opportunities to provide parking beyond that implied level of service are few. The direction then is clear to us:
    - we need to make better use of existing facilities in our marketplace;

  - we need to develop a strategy that makes it evident that parking beyond the observed walking distances will be rewarded with a cost savings to the consumer;
  - we need to secure current locations of municipal parking.
- Using market conditions as a base, by the end of the immediate planning term (after 2 years), there will be a need to remediate the parking supply inventory by 255 spaces. This quantity implies short term use of any available vacant or under-used (in a commercial sense) properties as interim parking facilities. We spoke of the Patterson site on Matchedash St. as an example of a site that can provide interim support if and when Lots 5/11 are re-developed.
- High level of service will act as a barrier to any strategy of consolidation of parking sites to a broader downtown serving multi-tiered parking structure in the longer term. Short walking distances do not provide the market evidence and behaviour that is supportive of provision of decked parking facilities whose intent is to consolidate existing parking spaces from individual parking sites to a collective site.
- Finally, we have indicated in our presentations that within the next year or so, our downtown Study Area will present off street parking opportunities on each core block that makes up the downtown. This is evidence that from a strategic point of view your downtown provides equitable parking service to most if not all of the major driving commercial centers in the downtown. While there will no doubt be short term disruption to this complete market coverage while say Lots 5/11 are re-developed, the future looks very positive. As mentioned many times, it is the critical block that now contains Lot 10 (Coldwater St. on the north, Peter St. N. on the east, Mississaga St. E. on the south and West St. N. on the west side) will continue to exert itself as a critical must-have site.

Conclusions Drawn from the Three Approaches

To summarize the results of these three (3) approaches to the determination of the impact on the balance of parking demand and supply, we present Table 3. In our opinion, while we will add costs and benefit type of analyses to each result in Phase II, **the use-based Approach 2 appears the most cost effective route at this point.**

That approach relies on making the best use of the existing inventory. We have been saying that if we want to deliver to the City of Orillia a sustainable municipal parking strategy then making the best use of existing resources is critical. We have also been stressing that a new initiative that the municipality needs to embrace is to secure its parking assets through joint ownership of key sites – sites that are in themselves key commercial opportunities. This partnership between private owner and the municipality serves the purpose of securing longer term assets while enriching the commercial/mixed use fabric of the downtown.

Table 3: Summary of Results of Impacts on Balance of Parking Demand and Supply			
Approaches	**Immediate Term (0 to 2 yrs)**	**Near Term (3 to 5 yrs)**	**Long Term (6 to 10 yrs)**
Approach 1: Numeric	Net loss of 330 (rounded) spaces	Net gain of 130 (rounded) spaces	Net loss of 95 (rounded) spaces
	TIME LINE: We start off with a drop of 330 spaces and after ten years we end up with a numerical deficit of approximately 295 spaces. ***INTERPRETATION: From a numeric point of view, a significant deficit occurs in the immediate planning term. This deficit is driven by the loss of the Lot 6 (south of the City Hall). In the near term we input replaced inventory (Lots 5/11, Lot 3 – the OPP site). The longer planning horizon shows a net loss of 95 spaces that specifically tied to the possibility that Lot 10 does not get renewed. The question becomes: How many of the deficit spaces are actually servicing the parking demand in the downtown? (See Approach 2)***		
Approach 2: Space Use (Replace only the spaces that are currently serving the parking demand; based on our extensive parking supply surveys)	Loss of 170 [temporary] spaces based on the upper end of the usage range	Net Gain of 165 (rounded) spaces based on the upper end of the usage range	Loss of 95 (rounded) spaces based on the upper end of the usage range
	TIME LINE: We start off with a deficit of 170 spaces and after ten years we end up with a deficit of approximately 100 spaces using observed use of parking space. ***INTERPRETATION: From a current use of space point of view, while there will be immediate displacement of 170 parking spaces, the system balances that by the end of the near term with the redevelopments of Lots 5/11 and Lot 3). The long term deficit of 97 spaces is due specifically to the possibility that Lot 10 does not get renewed in that long term.***		
Approach 3: Market (Provide very high level of service to customers in terms of short walking distances and search times for a parking space within 5 minutes)	Opportunities to service demand at current level of parking service are: **100** spaces for shorter stay demand and **155** spaces for longer stay demand for a total of **255** spaces (rounded)	Opportunities to service near term changes to supply and demand at current high level of service **remains at 100** spaces for short stay demand; while long stay opportunity decreases to **135** spaces (rounded) for a total of **240** (rounded) spaces or a net gain of 15 spaces over the immediate term	Opportunities to service longer term changes to supply and demand again at current high level of service grows to a total of **145** (rounded) spaces for shorter stay customer demand; and grows to **190** (rounded) spaces for longer stay employee demand for a total of **335** (rounded) space target.

Table 3: Summary of Results of Impacts on Balance of Parking Demand and Supply			
Approaches	**Immediate Term (0 to 2 yrs)**	**Near Term (3 to 5 yrs)**	**Long Term (6 to 10 yrs)**
	TIME LINE: We start off with a measured opportunity to service a 255 space deficit and after ten years we see an opportunity to add another 80 spaces [335 – 255]. ***INTERPRETATION: If the municipality had unlimited funds, and it was deemed essential that current high levels of customer service be maintained then a significant investment of land acquisition and capital development would be necessary. Phase II of this project will place costs to this initiative.***		

Based on the data contained in Table 3, we now have a *long term planning target that ranges from 95 to 335 spaces depending on the approach taken.* We stress that a remarkably high level of customer parking service is provided in the downtown in terms of walking distance and parking space search times of less than 5 minutes. **Schedule 7** serves to provide a spatial context for the discussion in this section. The resulting spatial terrain shows the spreading effect of pushing in the "bubble" that appears on wallpaper – it serves to spread the trips to blocks that are equally competitive in servicing the displaced parking demands.

We believe that a prudent strategy would be to make the best use of existing parking supply assets; to more firmly secure those assets; and to continue to provide information to our customer base that explains the marketing strategy behind on and off street parking space.

Summary of Market Opportunities, Initiatives and Remedies

The discussion will now center on generating **options** and evaluating these options to form a base for the process of informing a meaningful parking management strategy for the downtown. The development of the Parking Management Strategy is the expected result of Phase II of this project.

The primary result herein is the presentation of potential policy options that address current and future parking demand within the downtown. The sources of our input are:

- Consultants' knowledge and experience in the parking technology;
- Staff and Parking Advisory Committee input to definition of problems, historical approaches and insight to market acceptance to some of the ideas presented by the consultants;
- Public input through the postcard and internet surveys of employees and visitors to the downtown;
- Input from attendees to our two Public Information meetings on May 17th,2011 (attended by a total of 18 people – not including staff and consultants);
- Analysis derived from Parking Demand surveys (customer postcard/online) and Parking Supply Response surveys (LPR – Licence Plate Recognition);

- Flexible block by block model that distributes parking demand to surrounding blocks according to current profile of walking distance and industry standards of acceptable walking distance as per customer duration of stay.

We have to keep in mind that in dealing with some of these opportunities**, change** may be required in how we view parking space within the broader context of traffic, *movement of not just vehicles, but people.*

Options and opportunities that reflect our values on safety, cost of implementation, levels of service, active transportation goals and environmental concerns influence where we go from here. We spoke of not just parking the vehicle in a parking space, but the requirement to provide safe and easy to understand way-finding from that space to the downtown activity center. We spoke of the vital visual connection that parking space needs to have to the motorist and to the commercial ambiance of the street.

We also have in our presentations throughout this project emphasized the integration of parking space to the fabric of the experience in the downtown, and within the larger context of providing service to a wide number of different people whose trip characteristics must be understood and accommodated for in a downtown.

Physical Parking Supply - Recommendations

Based on the foregoing, and on evidence and discussion contained in the three (3) Technical Memoranda, the following recommendations related to the supply of parking are presented for discussion.

1. **Maintain the current level of parking supply in the downtown to meet existing parking demand.**

Discussion:

- A series of metrics used in the parking study were used to support the conclusion that currently, there is sufficient parking supply in the downtown. Refer to section on “Parking Supply Response to Demand” in this report.

2. **The City monitor changes in the downtown relating to changes in land use (new development and redevelopment) and impact on parking supply over the immediate term (0 to 2 years) and the near term (3 to 5 years), as referenced in Table 1 of this report.**

Discussion:

- The parking study outlined a number of plausible change scenarios and their potential impact on the balance of parking demand and supply. The latter is impacted by changes in the future level of occupancy of current stock of land uses in the downtown; future parking demand due to the oncoming re-developments or new developments in the

core and the potential physical loss of existing public parking supply; and future magnitude, pattern and customer profile of parking demand due to potential changes in operations and potential implementation of different parking revenue control.

- The Public Works Department and the Planning and Development Department will be invited to participate in Phase II of the parking study.

3. Secure longer term (6 to 10 years) parking assets to accommodate long term parking demand and supply.

Discussion:

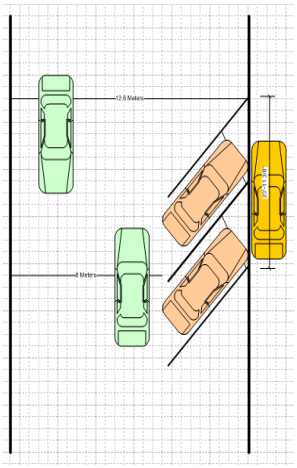
- The lack of secured parking sites is at the heart of the near and longer term parking demand and supply imbalance. Lot 10 in particular drives the longer term parking supply requirement. This site in theory should be much more attractive to customers today, but does not live up to that potential. We suggested that way-finding and pedestrian links to the core may be two elements of the system that will help this site attract what it should be attracting in theory.
- We noted that the typical walking distance for short stay customer to destinations within the core blocks of the downtown[26] ranged from a very high level of service – 50 feet to about 350 feet between parking space and primary destination.
- We noted that this is reflective of strategically located off street facilities in the core and the ready availability of on street space in the core. The range exhibited here in Orillia reflects a very high level of service. It has been our experience in other such studies that typically the range for non-work trips is from 100 feet to 600 feet. The impact on customer expectations of course is the need to locate parking within basically a block of the destination.
- Further evidence of an existing high level of service is that based on the surveys conducted 74% of Opera House visitors took less than 5 minutes to find a parking space and a significant portion of them ended up parking on street.
- Note that there is a municipal parking facility on each core block in the downtown. This reflects unprecedented high level of customer service. As will be developed further, our pursuit is to make the best use of what we have (sustainable); and to secure over the long term what we already have.

4. <u>Investigate new parking supply and financing opportunities</u>.

[26] We defined the core blocks as those formed by Coldwater St. on the north, Matchedash St. on the east, Colborne St. on the south and West St on the west.

Discussion:

- In response to the possibility that current parking assets in the core cannot be maintained in the near and longer terms, we need to continue to investigate sites in the west end of the downtown core.
- Promote the framework of joint private and public sector development to secure a public parking component in larger scale re-developments in the core.
- With Lot 10 potentially not being part of our inventory in the longer term, it is vital to begin to investigate properties that will adequately service parking demand in the west end.
- The infusion of the Library and Farmer's Market back into the west end of the downtown core serves to provide a source of pedestrian activity that will present an opportunity to engage; Opera House attendees provide an obvious source of commercial opportunity before and after the performance; aside from commercial advantages, this infusion serves to encourage the pedestrian traffic through the downtown. It is prudent to expand the municipality's investigation into the West end of the core.
- Interim sites suitable for parking need to be found in the immediate term to offset the loss of current municipal parking supply on Lots 5/11 in the core due to their potential re-development. We indicated to you an existing commercial/residential site (Patterson property) that is within walking distance of the core that would serve demand.



- Expand on street parking to include Colborne St. (13 spaces) in front of City Hall between Andrew St. and West St. S. Very preliminary design and subject to Public Works Department's input, 13 angled parking stalls could be implemented. Further as we mentioned in our presentations we hope to invite input from the Active Transportation team in the evaluation of parking along Colborne or any other street in terms of potential conflicts with any future bicycle lanes.
- In concert with a recommendation to convert from metered space parking control to Pay and Display units on the streets of the downtown, the parking industry promotes that such a conversion may result in a 10 to 15 percent increase in the number of available parking spaces on the street; this is due to the fact that such a Pay and Display revenue control system does not require marked spaces on the street except for accessible spaces at the extreme ends of the block face.
- Land acquisition is of course an expensive method of providing public parking space; potential range of 40 to 55 dollars per square foot in the downtown translates to roughly 16,000 to 20,000 dollars per parking stall. This will be furthered developed in Phase II of the project.
- We studied the Parking reserve fund and its role in the provision of parking for the future. We offered a different way to interpret the size of the fund: in terms of the number of parking spaces that it can buy – land cost at 16 to 20 thousand dollars plus parking space development cost of 2,500 dollars per stall, plus about 300 dollars per stall per annual maintenance. This will be furthered developed in Phase II of the project.

- Other funding sources come out of cash-in-lieu and revenue increase as part of rate increases and adjustments in the core. These will be furthered developed as options in Phase II of the project.

5. **Address permit parking distribution**.

Discussion:

- **Parking space distribution not matching implied level of service (walking distance) and value of parking** – in reference to permit parking, we are promoting the notion that we can re-introduce the sale of permits on each of our off street parking facilities (we suggested 20 percent of current inventory). The exception to the above re-distribution strategy is Lot 5 which needs to be dedicated to the service of shorter stay transient parking customer.

    a. We also underscored that the value of the permit is so inexpensive that we should in theory reflect that cost by providing the permit space to the periphery of the core. Unfortunately, there are only short-term opportunities to do this (Lot 6). As a direct result of the input we received through the postcard survey, internet survey and the public information meeting on the 17th of May, we propose a wider distribution of permit spaces on each of the core facilities, but to a limit of 20 percent of capacity**.**
    b. **We emphasized that level of permit space is part of a flexible process and can be evaluated each season**. We discussed in our presentations that we could allow the number of permits to reflect the **seasons** – that is, in summer months when significant customer parking is more critical, we can reduce that number on Lots 2 and 1 for example.
    c. The key ingredient here is to market the space to match the rhythm of parking demand type. This kind of response is part of the approach to parking management that we encourage the City of Orillia to embrace.
    d. We suggest that some of the very under-utilized on street parking space can be converted to permit parking spaces. We discussed Matchedash St. for example; however, although this is a good idea in theory, it was felt by the Parking Advisory Committee and others that the selection process may prove to be contentious. This suggestion was therefore discarded.

- Improvement to the very procedure of purchasing permits through the internet should be investigated for customer convenience.

6. **Change time restrictions for on and off street municipal parking service.**

Discussion:

- The control of how much time one can park on a parking space would seem to be counter-productive to commercial business owners. Intuitively, one would want customers to stay in the downtown for a significant amount of time that is, the greater duration of stay the higher the probability of spending more money in the downtown's commercial area.
- From a parking planning point of view, we strive to generate traffic to the downtown's commercial area as well. The difference is that we want to present to the prospective customer a range of parking products that meet their duration of stay needs. We are saying through the use of different time restrictions, and in some municipal parking systems, different parking charges is this*: if your trip purpose is under one hour please make use of the parking space along Mississaga St. and areas of the street face that provide you with one hour parking spaces. If your trip duration is greater than one hour but less than three hours, please make use of specific parking products that are so signed. And further, if your trip duration of stay is greater than two hours, please make use of our off-street parking spaces*.

- It is the explicit role of the municipal parking organization to **market** the parking product – to invest in the **education** of our customers as to the location of our facilities, and role of our parking service system in the overall scheme of things (how parking is integrated with urban design framework of the downtown, and how parking is linked to commercial destinations for example). As well, our role is to provide a **way-finding mechanism** to get our customers to all of our parking space products. Thusly, the recommendation that follows is not an isolated initiative – it requires a number of supportive initiatives and actions.
- We did find a significant amount of overstaying on **metered space**. We spoke of the impact that overstaying has on accumulation and thus availability of parking space (using Lot 2 as an example). This metric provided the evidence to promote a change in operations not in the level of supply. Several initiatives are specific to the time restriction current to our parking system.
- **We recommend increasing the on street parking meter time restriction from the current one hour to two hours.** We provided evidence from our parking supply response surveys that 28 percent of the observed customers did in fact stay longer than the one hour time limit. Notwithstanding the impact that increasing the time restriction has on turnover and availability of parking, we concur with the PAC Study Team that we can increase the time to two hours **while at the same time increase the value of that premium parking.** The increase in the on-street metered price from $1 per hour to $2 per hour will shift longer stay parkers to the lower priced ($1 per hour) off street parking lots resulting in a balancing of demand and supply. We recommend that concomitant action is required with respect to the increase of time restrictions on the on street parking space. **That action is to value one hour of parking from current one dollar to two dollars.**
    - As in a theatrical performance, there are limited floor and front row seats**. Their location relative to the stage is given a monetary value – the closer you are, the higher the cost.** This analogy is not dissimilar to the desire of customers to park front row centre on

Mississaga Street. The reality is that these spaces are limited in number. Consider that there are four (4) off street spaces for every on street metered stall currently and yet the cost of those much sought after on street space is equal to the more abundant off street space. This balance is tackled by the recommendation to increase the on street time restriction from one hour to two hours, increasing the value of an hour of parking on street from one dollar an hour to two dollars per hour, and marketing cheaper hourly rates for off street space for anticipated longer durations of stay.

  - As presented in Technical Memorandum A, a scan of neighbouring similar municipal parking operations, supported the increase from one hour to two hours.
  - Tied to this action is a suggestion that we market through stickers, newspaper ads, and on the City's internet site, reminders of what the intended purpose of on versus off street parking, namely: shorter stay parking for the on street at a higher cost premium, and longer stays off street at a lower cost.

- **The extended 2 hour parking limit for on-street metered spaces also addresses the existing public complaints that customers only receive 1 hour amount of parking whenever a $2 coin (toonie) is inserted in the meter (due to the 1 hour time limit).**
- With respect to off street time restrictions, we recommend increasing the time restriction from three hours to five hours and retain the existing 8 hour lots.
  - The permit parking distribution was described earlier in this section.
  - The time restriction change from three hours to five is a required operational reaction to the increase of time at the on street space. Our off street space needs to be marketed to customers as providing service for customers who want to stay longer in the downtown.
  - As well, we appreciate that permit parking opportunities are at a premium, and we hope that five hours allows those who need to stay longer as part of their employment can do so.
  - Results from Opera House visitors and employees (47 percent) indicated a requirement for duration of stay of over three (3) hours to twelve (12) hours. This proposed change in the time restriction is also meant to be supportive of those customers. We appreciate how vital to the downtown this particular segment of the market is and we recommend that the time restriction be increased accordingly to better serve.

7. **Continue to maintain the current level of accessible parking spaces, improve signage for on street accessible spaces and engage the Accessibility Advisory Committee as a full participant in Phase II of this project.**

Discussion:

- Concerns about location and geometry.
- AODA (Accessibility for Ontarians with Disabilities Act) and requirement for municipalities to meet the Built Environment Standard (under review by Province).
- On-street numbers of spaces to be provided – no provincial standards (ad hoc).
- Off-street numbers of spaces to be provided – many municipalities have established ratios.

- No consistent standard for free vs. paid on-street or off-street public parking for motorists with MTO issued Accessible Parking Permit (APP).
- Awaiting the release of the provincial Built Environment Standard (which should address parking) for location and geometry.
- Municipalities (Barrie, Toronto) have developed geometrics for on-street (parallel and diagonal) and off-street (90 degree) parking (Orillia, Barrie, Toronto).
- ADA (Americans with Disabilities Act in USA) has established geometry guidelines and number of space requirements.
- Municipalities currently examining on-street number of space requirements.
- For off-street number of spaces, municipalities (Orillia, Collingwood, Barrie, Toronto) have addressed ratios in zoning bylaws and/or urban design policies/guidelines.
- Current ratio of accessible spaces in Orillia: 1 to 25 on-street and 1 to 52 for off-street is very high. We noted that there are municipalities that only situate accessible parking space on their off street facilities unlike Orillia which provides accessible parking space on and off street.
- The Accessibility Advisory Committee should advise on forming a plan for the location and number of additional accessible parking stalls that meets accessibility requirements that are compatible with parking lot design standards and safety guidelines.

8. **Link to Active Transportation Initiatives**

Discussion:

- Bicycles, Motorcycles and MoPeds are part of the overall transportation family of modes; our municipal parking facilities can and should provide storage for them.
- Demand and location to be determined in Phase II.
- In concert with replacement of metered parking control to pay and display on the streets, we can make use of the post of the current meter heads as bicycle parking posts (with ring attachment).

Parking Operations - Recommendations

The following recommendations are drawn from customer input and parking industry standards. Together these form proposed changes to the operations of the municipal parking system.

9. **Convert current revenue control system from Meter to Pay and Display unit for both on and off street facilities.**

Discussion:

Where the parking system's revenue is controlled by on-street parking meters, the following challenges emerge:

- No coin return (the nature of the technology);
- Cash only;
- Frequent breakdowns;
- Old technology;
- Not flexible in terms of changing rates, time restrictions or their operation hours.

Where the off street parking system's revenue is now controlled by Pay and Display units the following initiatives emerge for both on and off street applications:

- Flexible payment (introduce credit card);
- Present the option of using a discount or value card distributed and supported by the downtown business group;
- Reliability and frequency of breakdown;
- Increased street capacity of 10% to 15% as no on-street individual stall markings required (except at end of each block face) allowing for more vehicles of differing sizes to park in the same area.
- Use control unit as an information kiosk promoting business and events in the downtown.

10. Increase enforcement fines for parked at expired meter.

Discussion:

- Current fine is $8 early payment (paid within 7 days) and $10 set fine (paid after 7 days).
- The value of the fine for overstaying has to increase to make it less desirable to overstay on especially critical on street space; we have recommended increasing the time restriction on the on street metered spaces from one hour to two hours and this should provide some comfort to those customers who found the one hour too short; in our presentations we provided evidence related to the notion of “rolling the dice” to avoid paying for parking versus getting caught with a fine that is far too low to impact behaviour.

- Promote compliance through public awareness programs to better understand the rationale of restrictions and enforcement practices.

- Public education through website and social media (short YouTube type video).

- Enforcement level, measured by the “capture rate,” is 9% to 11% and comparable to other similar municipalities at 12%.

- Violators consume limited parking resources (that could be used by others willing to pay and not overstay) by taking a chance in getting a parking ticket due to low fine rate.

- Increase the fine rate to $15 early payment (paid within 7 days) to $20 set fine (paid after 7 days).

Marketing and Communications Strategy - Recommendations

Input from our customers is important to the development of a municipal parking strategy. That input forms a consensus on the necessary elements of the parking system that need improvement, and that need additional customer training in terms of explaining the rationale for how we are delivering our parking service. We dutifully examined each comment that was submitted through postcard surveys, the internet based questionnaire and to our two public meetings. Emerging from that repository of opinions, suggestions and questions a set of customer service strategy initiatives are presented in the following section of this report.

11. **Expand and Explore Communication Themes.**

Discussion:

- Cost of parking is one of these items that should become part of a marketing presentation on the rationale for user pay facilities; value of the service needs to be understood by everyone.
- Role of enforcement as a tool that encourages compliance not punishment.
- Role of on street space and off street space.
- How to pay for parking or obtain a monthly parking permit or pay a parking fine.
- Where to find parking space in the downtown. Location of accessible spaces.
- Connecting parking service to the downtown; becoming part of the experience.
- Who to call or communicate with regarding municipal parking service.

12. **Develop a bold way-finding / signage system.**

Discussion:

Scenarios derived from the marketing of existing parking facilities to customers stem from largely the Consultants experience with integrating parking supply with the customer's vehicular approach and with the commercial area that the parking supply is intended to serve. In the course of our presentations we spoke to the whole issue of way-finding.

Emerging from a weakness of the current signage and pedestrian connection from the off street parking facility to the commercial activity, the following options or initiatives emerged:

- Using the concept of a gateway corridor system that escorts vehicles and pedestrians into the downtown, erect universal green P signs at the major intersections; size of signs and color were discussed in our presentations and the number and specific locations of such welcome signs will be subject of Phase II.

- The potential for a networked set of pay and display units, can provide the feature of electronic monitoring of the number of spaces available in real time; we would use these data to inform the motorist travelling into the downtown of their availability and location of available space through digital message board at the various gateways.
- Erect large "P" way finding signs at eye level throughout the downtown for customers to quickly find parking lots located off back streets.
- Use reflective 3M material (for night and winter periods); or, consider sign illumination i.e. LED; or Green solar powered signs available.
- Important for "definition of place" - Large simple bright "P" identifier signs near entrances and visible from approaching traffic in two directions.

13. Improve pedestrian links to and from municipal off street sites.

Discussion:

- Pedestrian connections from the off street space to the commercial area needs to be somewhat formal, well lighted and surface treatment needs to respect the wide range of age and mobility capabilities.
- We spoke on a number of occasions that Lot 10 is in theory in a great position to service far more of the demand than it currently does, and that we suspect that vehicular access to the facility and connection back to commercial core are in need of significant improvement. We are very supportive and appreciative on the most recent decision to improve one of the primary lanes from this lot to West St. N.
- In Phase II of this project we will be inviting representatives of Orillia's Accessibility Advisory Committee to join us in pedestrian link design guidelines for current and future municipal parking facilities.
- Improve signage to be quickly and easily identified, especially for tourists (details in Phase II).
- Develop a program to improve surface condition and lighting (details in Phase II).
- Lighting standards are available in GTA (safety, green initiative).
- Link to emergency telephone, intercom for assistance, bill boards/information kiosks, auto assistance.
- Surface treatment needs to respect customer profile, weather conditions, and types of travel modes (cycle, pedestrian, roller blades).

Attachments: Schedules 1 to 7

Schedule 1: The Study Area (from the Proposal Call document)

Schedule 2: Parking Response Surveys (extents, time restrictions, etc)

Schedule 3: Parking Supply Response to Demand – Diagnostic Measure 1 – Volume

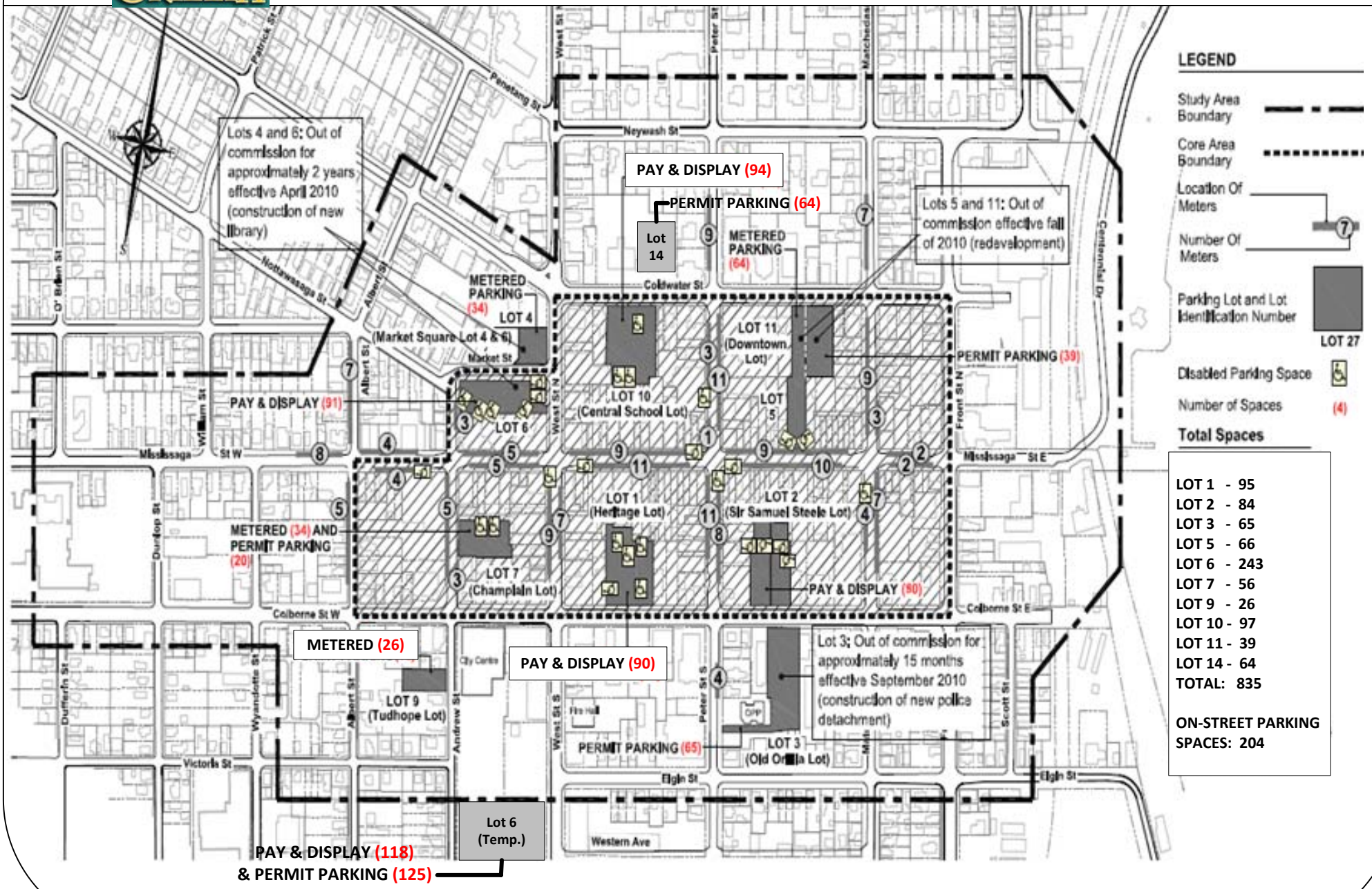
Schedule 4: Parking Supply Response to Demand – Diagnostic Measure 2 – Customer Mix

Schedule 5: Parking Supply Response to Demand – Diagnostic Measure 3 – Accumulation of Vehicles

Schedule 6: Areas of Focus – Where are current trips attracted to?

Schedule 7: Areas of Focus in the Longer Term if Existing sites not secured over the Long Term

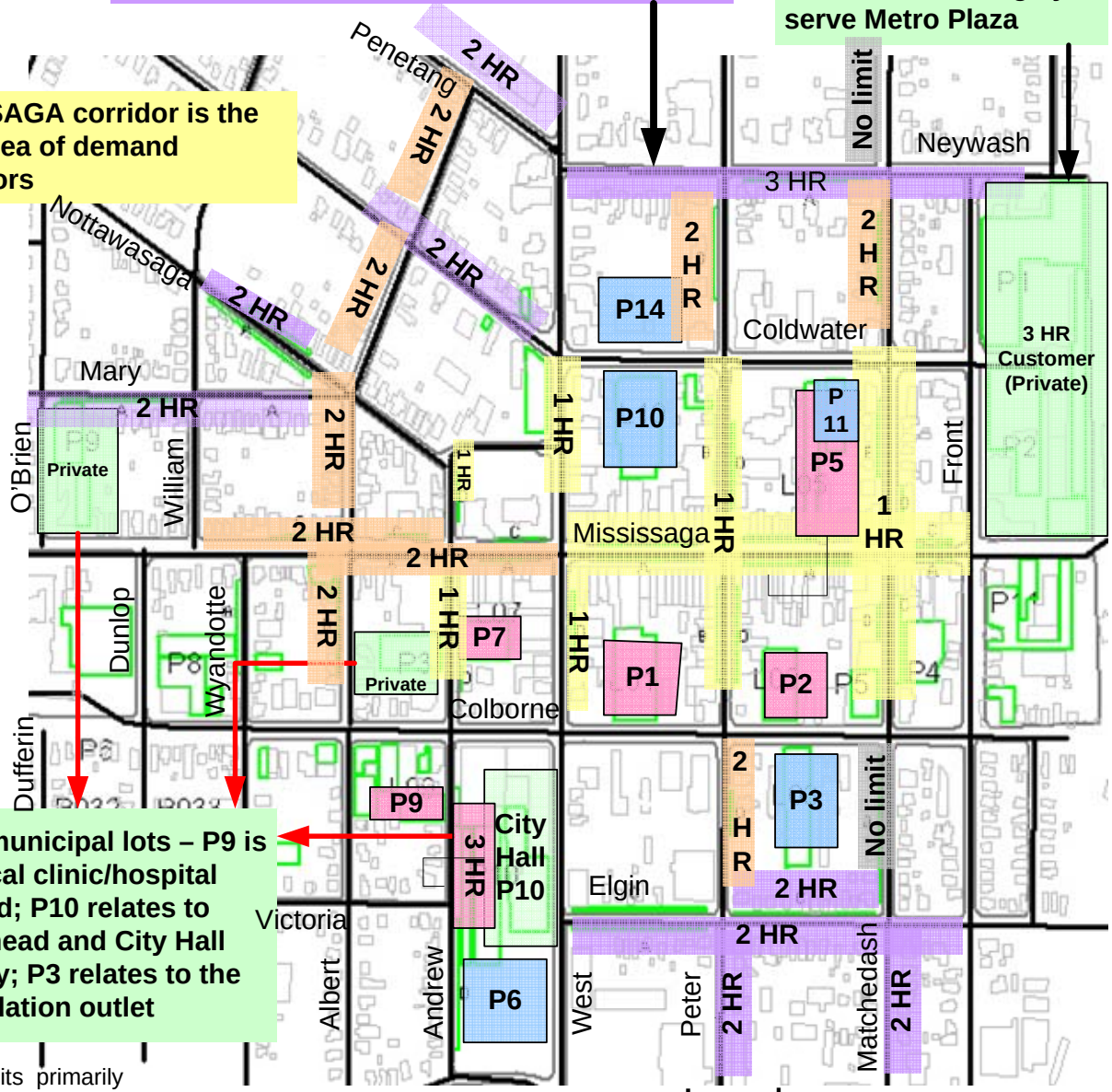
Schedule 1: Downtown Orillia Parking Study Area



NEYWASH corridor provided some insight to potential overflow parking

Customer lots largely serve Metro Plaza

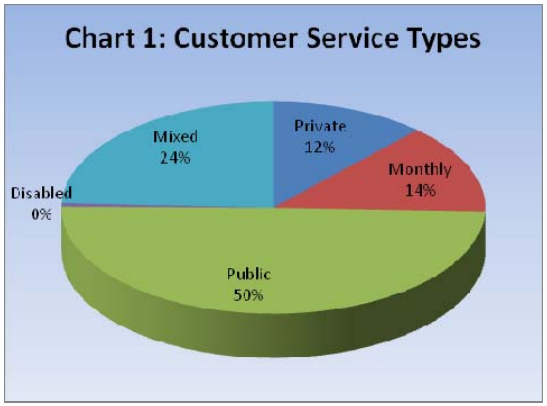
MISSISSAGA corridor is the prime area of demand generators



Non-municipal lots – P9 is medical clinic/hospital related; P10 relates to Lakehead and City Hall facility; P3 relates to the Liquidation outlet

2 hr. limits primarily 7 a.m. to 6 p.m.

	Accessible	General	Permit	Total
On Street Meters	8	193	3	204
Off Street Lots	16	492	327	835
Lot 1	5	76	14	95
Lot 2	4	80	0	84
Lot 3	0	0	65	65
Lot 5	2	64	0	66
Lot 6	0	118	125	243
Lot 7	2	34	20	56
Lot 9	0	26	0	26
Lot 10	3	94	0	97
Lot 11	0	0	39	39
Lot 14	0	0	64	64



We inventoried some 4250 parking spaces, and as **Chart 1** here displays, some 50 to 75 percent can be considered as open to the public at-large.

Over 21 survey days representing use of supply in late Summer, Autumn and Winter seasons, we observed over 25000 vehicles on over 14000 spaces

Legend

- On-Street 2 HR Pay
- On-Street 1 HR Pay
- Municipal Lots – 3 HR
- Municipal Lots – 8 HR
- Free On-Street (with Time Limits)
- Free On-Street (No limit)

CORE DOWNTOWN – these four blocks attract between 3.2 to 3.8 vehicles per occupied parking stall ; clearly very intense ; block C11 face is shown in picture form ; compact retail urban design that generates synergy among the uses ; well served by off street facilities – both behind the block face and along the face of neighbouring blocks (Lot 5 is on C010)

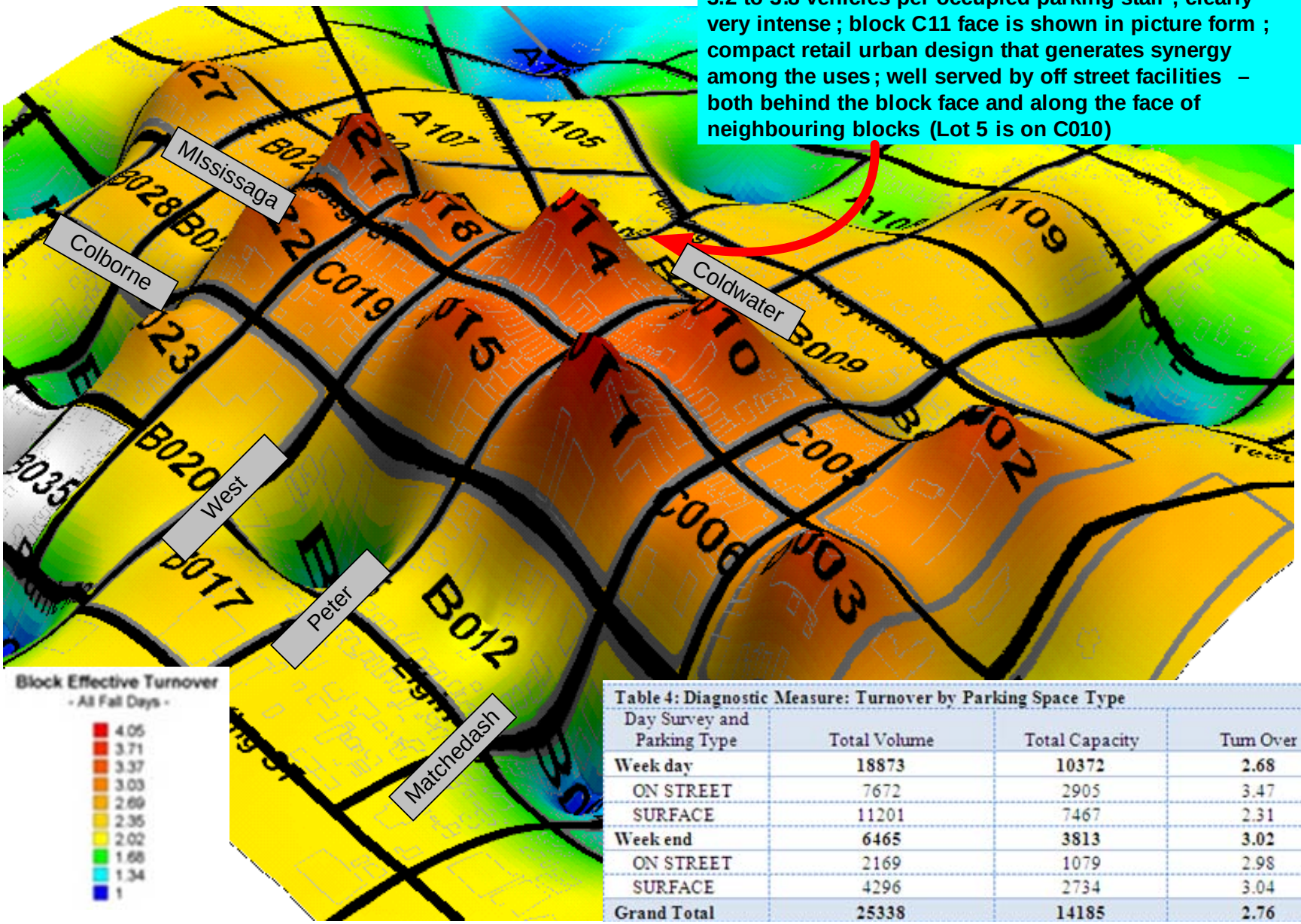
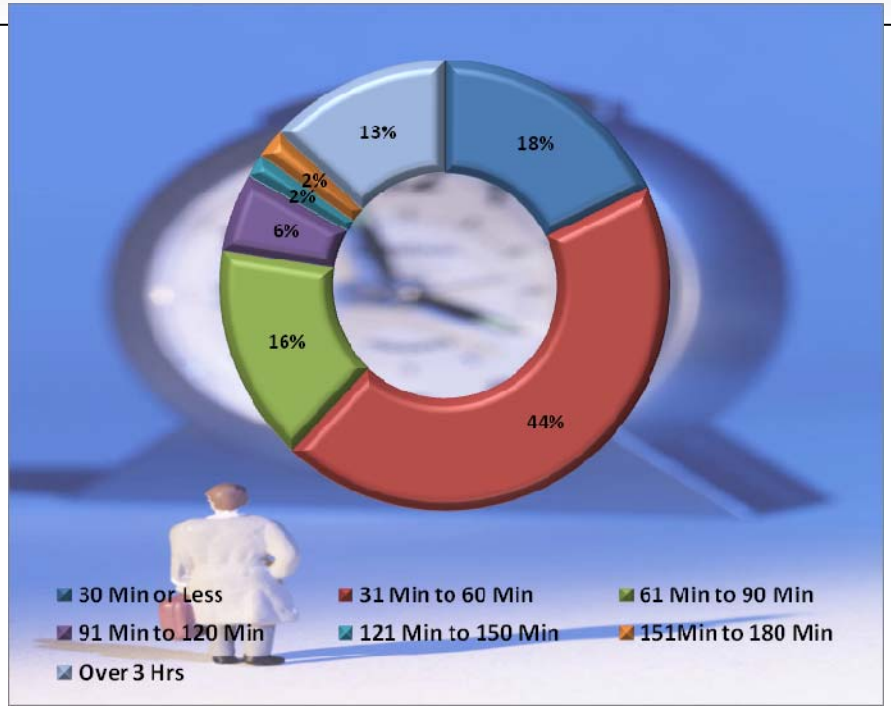


Table 4: Diagnostic Measure: Turnover by Parking Space Type

Day Survey and Parking Type	Total Volume	Total Capacity	Turn Over
Week day	**18873**	**10372**	**2.68**
ON STREET	7672	2905	3.47
SURFACE	11201	7467	2.31
Week end	**6465**	**3813**	**3.02**
ON STREET	2169	1079	2.98
SURFACE	4296	2734	3.04
Grand Total	**25338**	**14185**	**2.76**

The hotter the color the higher the turnover. Turnover is volume of vehicles divided by capacity.

Schedule 4: The Parking Supply Response to Demand – Diagnostic Measure 2: Duration of Stay (Customer Mix)



Sixty-two percent of the observed customers had durations of under one hour. This represents a snapshot of the entire survey sample.

Off street facilities attracted – on average – customers with duration of stay of 2 hours and 9 minutes, with a range of averages from 34 minutes to 4 hours. On the other hand, on street parking facilities – on average – attracted customers with duration of stay of 1 hour and 9 minutes, with a range of averages from 31 minutes to 2 hours and 40 minutes

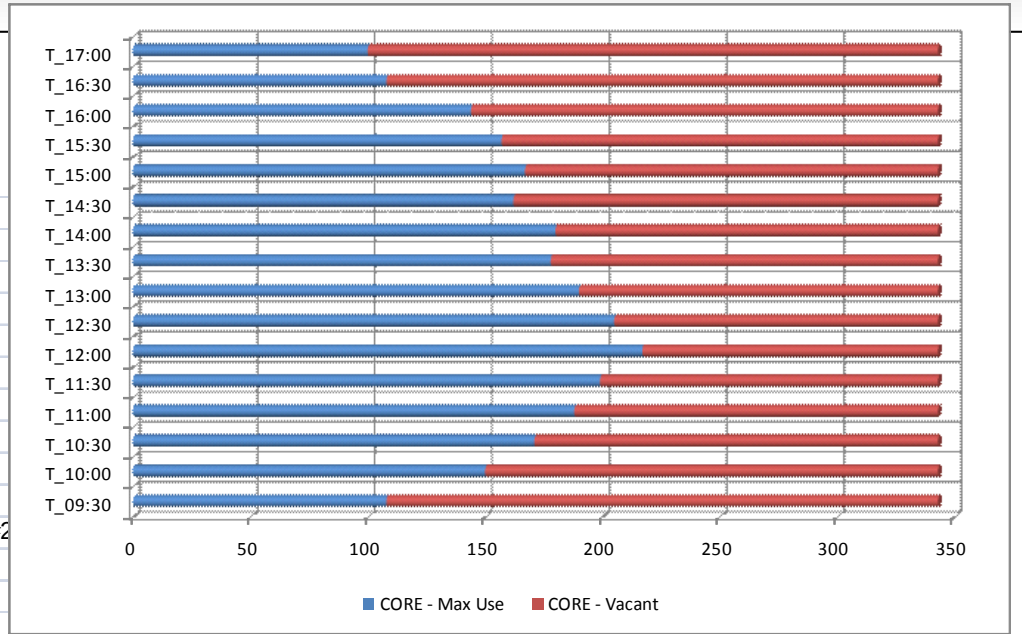
The two maps illustrate the distribution of key customer categories – one and two hour durations. Keep in mind that on street space in the core area has a one hour time restriction.

Notwithstanding the impact that duration of stay has on occupancy of space (and therefore availability of space), should we increase the time restriction from one to two hours? And if we do, should we also raise the hourly charge from one to two dollars?

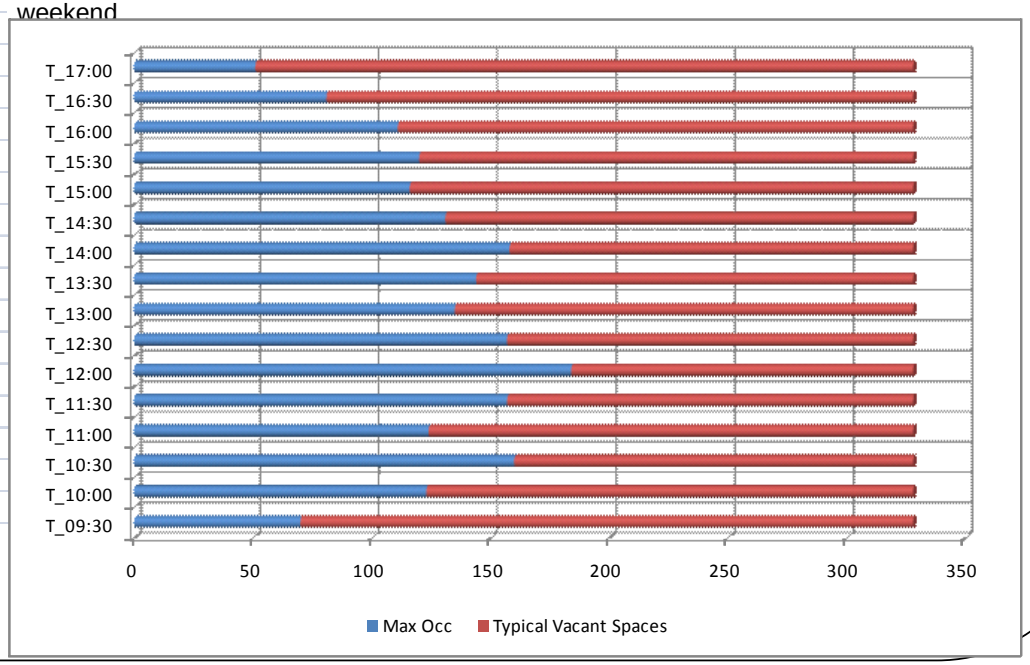
Schedule 5: The Parking Supply Response to Demand
– Diagnostic Measure 3: Accumulation of Vehicles

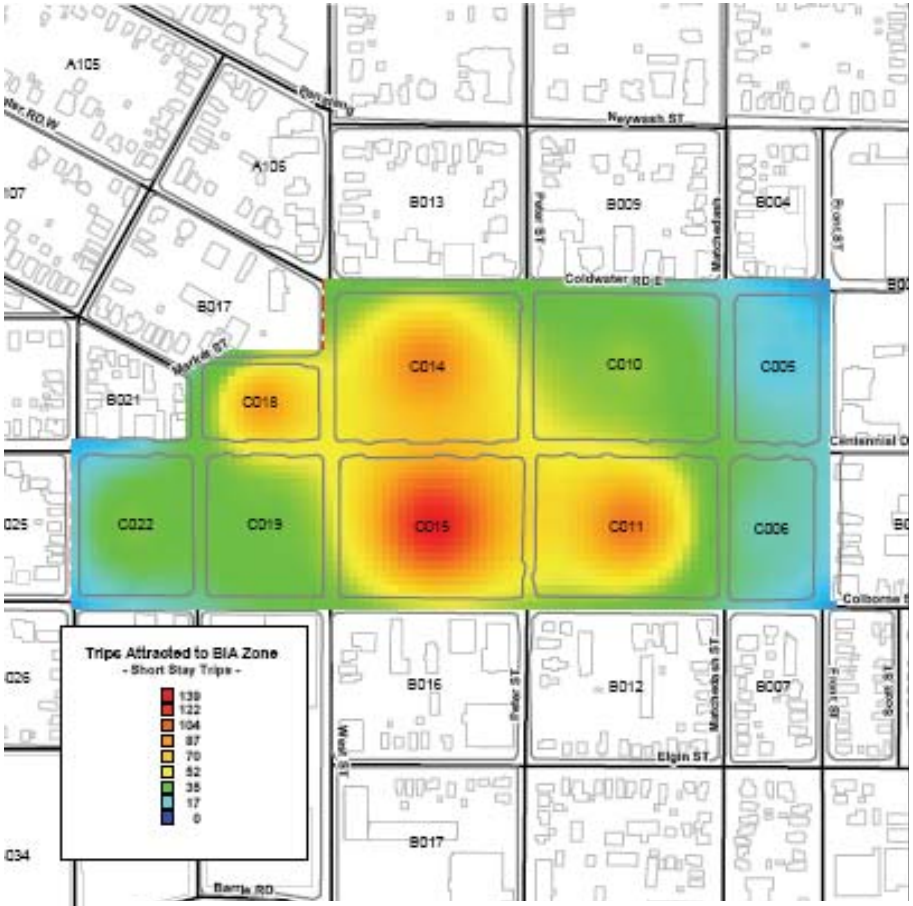
Table Extracted from Technical Memo B (Table 2)

Fall	**73.4%**	
Weekday	**76.4%**	
Nov03Wed	74.3%	On street only
Nov05Fri	79.4%	On street only
Nov08Mon	93.6%	Off street only
Nov10Wed	70.6%	Off street only
Nov15Mon	74.5%	On street only
OCT22Fri	74.5%	Off street only
Weekend	**68.0%**	
Nov06Sat	54.4%	Off street only
OCT16Sat	67.9%	Off street #5, #1,& #2
OCT23Sat	85.7%	On street only
Summer	**54.6%**	
Weekday	**57.6%**	
Aug27Fri	60.8%	All facilities
Aug30Mon	53.1%	All facilities
Sep01Wed	59.0%	All facilities
Weekend	**44.4%**	
Aug28Sat	44.4%	All facilities
Winter	**66.9%**	
Weekday	**72.7%**	
DEC14TUE	72.3%	On street only
DEC15WED	70.7%	Off street only
DEC16THU	74.2%	On street only
DEC17FRI	73.5%	Off street only
JAN20THU	59.4%	On street only
JAN21FRI	79.2%	Off street only
Weekend	**47.4%**	
JAN15SAT	43.3%	Off street only
JAN22SAT	55.7%	On street only
Grand Total	**64.7%**	



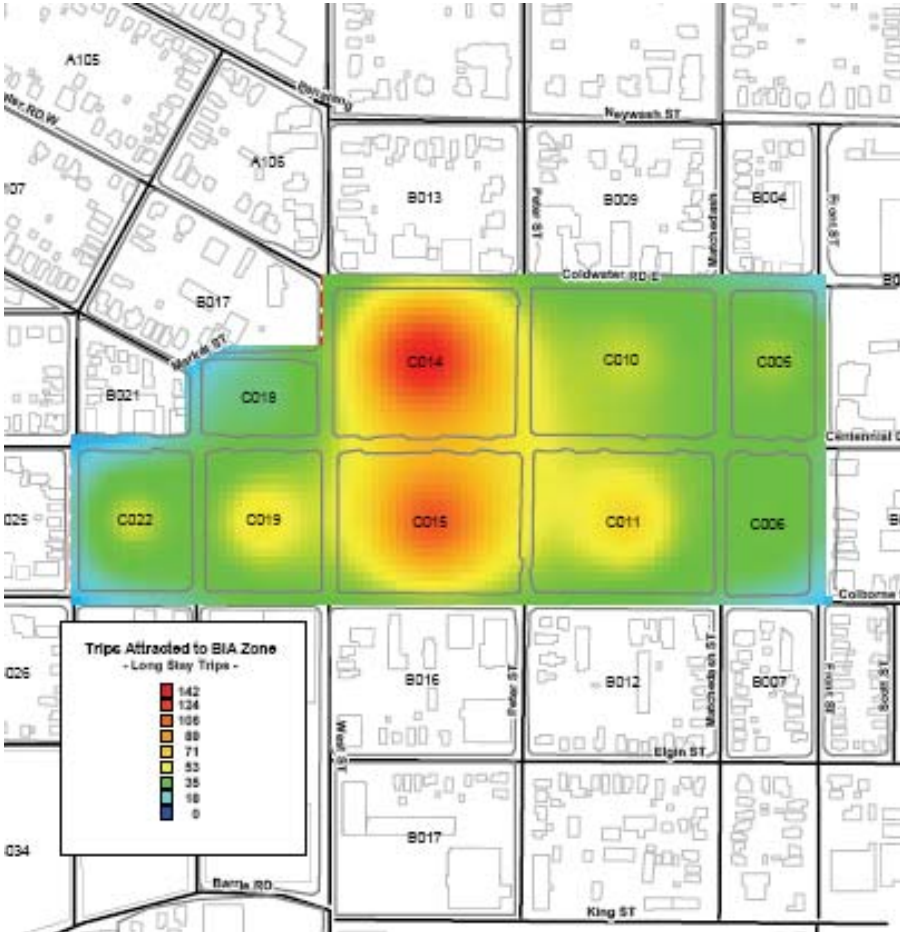
Here are composite views of the number of occupied versus vacant parking spaces in our study area. The above chart represents the weekday and the one below represents the weekend



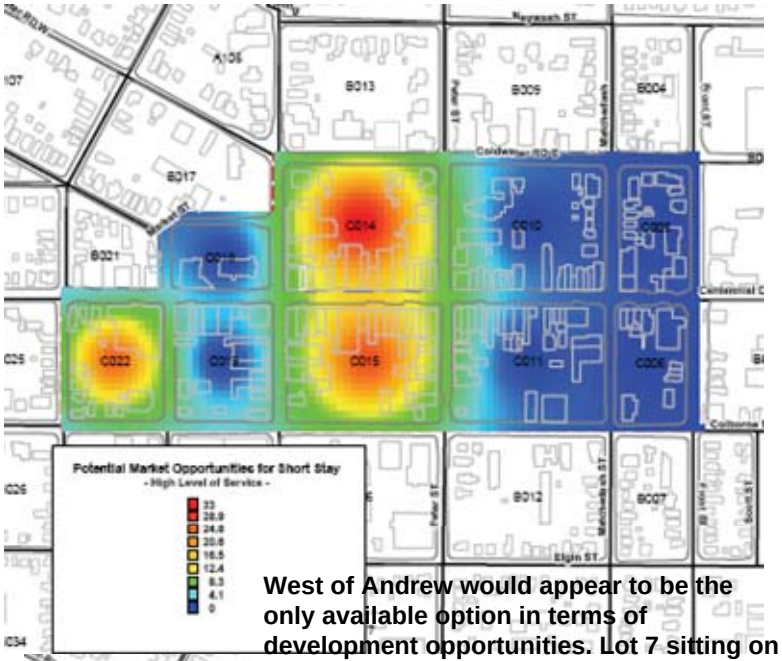


Above, the graphic illustrates the estimated number of **short stay** customer trips to each block in the BIA zone. The graphic to the right represents the estimated longer stay / employee type of trips.

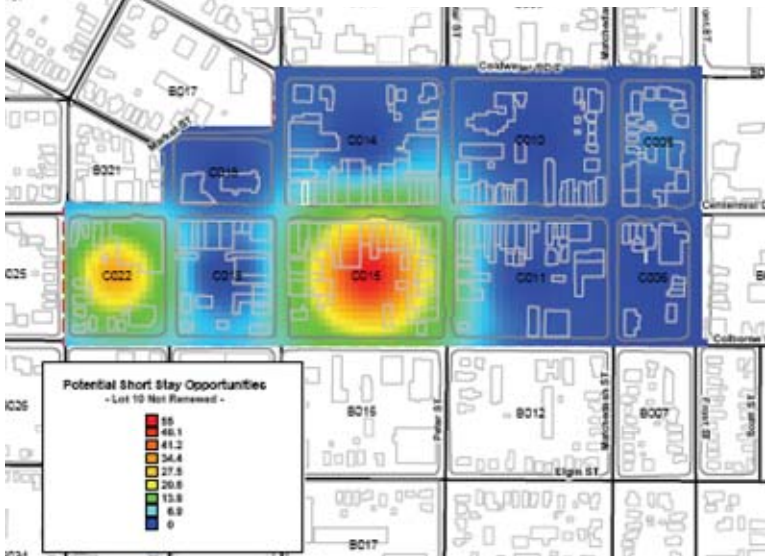
The hotter the color the higher the volume. Note that the trips shown here do not represent the number of parking spaces one needs to provide on each block. The relationship between where the demand is generated and where customers actually park is a fluid and dynamic one – walking distance then becomes a critical measure of balance between parking demand and supply.



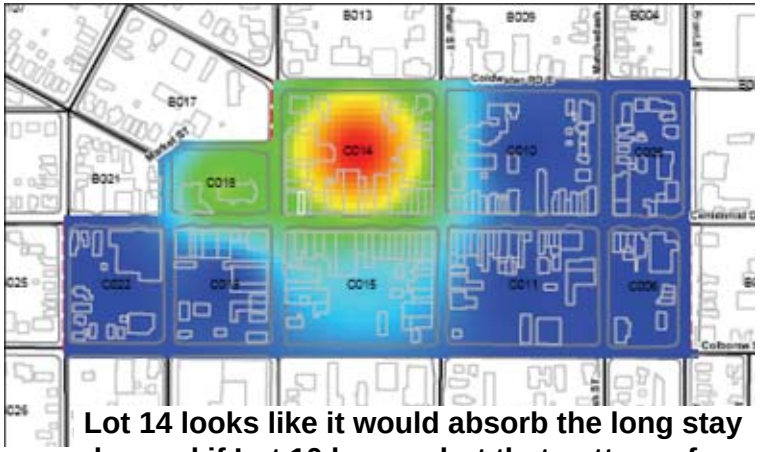
Schedule 7: Areas of Focus in the Longer Term if Existing Sites not Secured over the Longer Term



West of Andrew would appear to be the only available option in terms of development opportunities. Lot 7 sitting on C019 block needs to grow in profile to service the short stay demand in particular.



Potential short stay parking opportunities (for enhancement of service) will develop largely centered on block C014 – currently the location of Lot 10. The top two maps illustrate the extent of the short stay (left) and the longer stay (right) opportunities. These opportunities are based on the condition that we provide the same or slightly higher level of service to customers. The bottom half represents the impact on that potential market opportunity should Lot 10 not continue to be part of the inventory



Lot 14 looks like it would absorb the long stay demand if Lot 10 leaves, but that pattern of interaction between these two blocks is not apparent today. Marketing, price difference, mid-block crosswalk might help.