City of Birmingham
A Walkable Community

MEMORANDUM

Engineering Dept.

DATE: **June 13, 2014**

TO: **Joe Valentine, Interim City Manager**

FROM: **Paul T. O'Meara, City Engineer**

SUBJECT: **Monthly Parking Permit Rate Increases**

As has been discussed over the past several months, parking demand in the Central Business District increased unexpectedly during the summer of 2013. Since that time, it has remained high, and continues to increase today.

In January, this phenomenon was reviewed with the Commission. Also at that time, potential parking structure expansion options were reviewed, highlighting the addition of two floors at the Pierce St. Structure as the option with the most potential.

In February, the attached memo was presented to the Advisory Parking Committee (APC). Therein, the need to form an Ad Hoc Parking Study Committee was presented, as well as a request to consider a monthly parking permit rate increase. The APC endorsed the idea of the study committee, which was later endorsed (with modifications) by the City Commission. Since that time, we have been gathering data that will be used by the study committee once it starts meeting. The Committee's first meeting is tentatively scheduled for later this month.

With respect to rate increases, the APC requested that the Principal Shopping District (PSD) be brought into the discussion. The PSD asked the Maintenance Subcommittee to discuss the matter in greater detail, which it did. In early May, the PSD confirmed that it could not officially endorse a rate increase. However, it understood the reasoning for it, and indicated that the Board would not actively oppose it. With that response, the APC reviewed staff's proposal again, and passed the following recommendation at a special meeting held May 28, 2014:

SUGGESTED RECOMMENDATION:

With the understanding that the Auto Parking System needs to start making plans to build additional parking spaces, monthly permit rate increases at the following levels are recommended in an effort to increase the system account balance available for future construction:

Effective August 1, 2014:

Pierce St. Structure	*$60*
Park St. Structure	*$50*
Peabody St. Structure	*$55*
N. Old Woodward Ave. Structure	*$50*

Chester St. Structure	*$40*
Lot 6 Regular Permit	*$55*
Lot 6 Economy Permit	*$35*
South Side Permit	*$40*

Effective July 1, 2015:

Pierce St. Structure	*$65*
Peabody St. Structure	*$65*
Lot 6 Regular Permit	*$60*
Lot 6 Economy Permit	*$40*
South Side Permit	*$45*

Given the continued strong demand for parking in the downtown area, it appears ever more likely that additional parking capacity should be constructed by the City in the future. While additional detail can be found in the attached memos to the APC, the primary reason for this increase is to actively begin building the fund balance within the parking system, in an effort to reduce the bonding needed if and when a parking expansion project is undertaken. Having funds available from savings will reduce bonding and interest costs which would then have to be paid back for many years to come. As described in the attached memo, the estimated revenue increase (given current usage patterns) is estimated at $275,000 (+13%) in the first year, and $375,000 after 2015 rate increases (+18% from current level).

SUGGESTED RESOLUTION:

To accept the recommendation of the Advisory Parking Committee to increase monthly parking permit rates throughout the Auto Parking System, in accordance with the following schedule:

Effective August 1, 2014:

Pierce St. Structure	$60
Park St. Structure	$50
Peabody St. Structure	$55
N. Old Woodward Ave. Structure	$50
Chester St. Structure	$40
Lot 6 Regular Permit	$55
Lot 6 Economy Permit	$35
South Side Permit	$40

Effective July 1, 2015:

Pierce St. Structure	$65
Peabody St. Structure	$65
Lot 6 Regular Permit	$60
Lot 6 Economy Permit	$40
South Side Permit	$45

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A Walkable Community

MEMORANDUM

Engineering Dept.

DATE: **May 14, 2014**

TO: **Advisory Parking Committee**

FROM: **Paul T. O'Meara, City Engineer**

SUBJECT: **Monthly Parking Rate Increase Proposal**

At the February, 2014 APC meeting, the attached report regarding the high demand for monthly permits was identified. First, an update relative to the Ad Hoc Parking Study Committee will be provided below, followed by an update on the monthly parking rate increase proposal.

AD HOC PARKING STUDY COMMITTEE (AHPSC)

The formation of the above committee was approved by the City Commission in March. Since then, the various participating boards have nominated the following members:

Advisory Parking Committee – Susan Peabody
Corridor Improvement Authority – JC Cataldo
Multi-Modal Transportation Board – Unfilled
Planning Board – Gillian Lazar
Principal Shopping District – Richard Astrein

(The Multi-Modal Transportation Board is just now being formed. A total of six (out of seven) members were finally appointed at the Commission meeting of May 5. At their first meeting, the topic of appointing a member to the AHPSC will be discussed.)

While waiting for the membership of the Ad Hoc committee to develop, staff has been preparing for the study in two areas:

1. The database of the downtown parking district from 2000 is currently being updated by the Planning Dept. Due to some staff vacancies, this has been a slower process than had been expected, and it is not yet complete. It would be helpful for it to be complete prior to calling the committee to meet.
2. During the study in 2000, it was determined that the month of May was a good time of year to use for a parking demand model, in that it is near the peak time of year for demand. It was decided at that time that if the parking system can accommodate demand during a weekday afternoon in May, it should be able to meet the demand most days of the year. Since it is May, Central Parking is currently preparing to conduct a counting study of all the various areas of the downtown to better confirm what the level of demand is. Having actual numbers available will help speed the process of updating the demand model once the committee starts meeting.

MONTHLY PARKING RATES

At the February meeting, the APC generally accepted the premise that it may be time to raise monthly parking rates. However, it was felt that a vote on the matter was premature until input from the PSD was obtained. Chair Lex Kuhne and I appeared before the full PSD at their next regular meeting (March 5). After our appearance, the topic of parking was assigned to the Maintenance subcommittee of the PSD.

Brendan Cousino and I met with the subcommittee at their meeting of March 18, and discussed various parking topics with them in further detail. At that time, it was felt that they would not be ready to take the matter to the full board at their meeting of April 3, but to look for something at their meeting of May 1.

As the end of April approached, I asked for confirmation that the topic of parking rates was on the PSD agenda for May 1. I was told that the subcommittee had a list of concerns to pass on to the staff and the APC relative to parking, but the topic of monthly parking rates seemed to have been left out of the discussion. I expressed concern that the APC was in a holding pattern on this issue, with the expressed need to know if the PSD was going to raise objection to the topic of raising monthly parking rates. As a result, Brendan and I were invited to the next Maintenance subcommittee meeting on May 13. The meeting was productive, and touched upon other PSD concerns which are covered under a separate memo. With respect to rates, the members present indicated that the PSD cannot be in a position of encouraging a rate increase. However, they understand the current situation, and respect the fact that a rate increase may be coming. They indicated that the PSD as a board will not actively protest if one is proposed. They could not, of course, predict what the business community reaction would be.

A suggestion was made that if a rate increase is enacted, it would be more palatable to the business community if it the new funds were placed in a separate account reserved for funding future construction. Staff has concerns relative to this approach for two reasons:

1. The City Commission should not have to be bound by how it funds projects within the Parking System, provided that funds earned by the Parking System are expended on improvements to the system, whether they be new construction, maintenance, or general operational expenses.
2. If the City agreed to create a separate account that was earmarked for construction activities, it may set a precedent that each time a rate increase is enacted, the funds must be designated to a special purpose.

As a result, staff does not recommend that a rate increase have such limitations. The idea should be discussed by the APC. A possible compromise would be to ask Central Parking to keep account of the additional funds earned, but not to promise how the funds would be spent.

With the above introduction, I refer you back to the memo prepared in February, attached, starting on page 3. A suggested rate increase for all parking facilities is offered for your review and consideration. At this time, it would appear that the parking system is in need of new facilities to accommodate more cars. New construction will result in a need for assessments and/or bonding if the work is going to be accomplished in the relatively near future. It will

likely be several more months before a decision on how and when to expand the system is finalized. Given the current demand for parking within the system, it may be appropriate to begin collecting additional funds now that can be saved for future construction. The resolution as it appeared in February is presented again below (the rate increases have been pushed back one month to provide time for word to get out to the public):

SUGGESTED RECOMMENDATION:

With the understanding that the Auto Parking System needs to start making plans to build additional parking spaces, monthly permit rate increases at the following levels are recommended in an effort to increase the system account balance available for future construction:

Effective August 1, 2014:

Pierce St. Structure	**$60**
Park St. Structure	**$50**
Peabody St. Structure	**$55**
N. Old Woodward Ave. Structure	**$50**
Chester St. Structure	**$40**
Lot 6 Regular Permit	**$55**
Lot 6 Economy Permit	**$35**
South Side Permit	**$40**

Effective July 1, 2015:

Pierce St. Structure	**$65**
Peabody St. Structure	**$65**
Lot 6 Regular Permit	**$60**
Lot 6 Economy Permit	**$40**
South Side Permit	**$45**

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A Walkable Community

MEMORANDUM

Engineering Dept.

DATE: **February 14, 2014**

TO: **Advisory Parking Committee**

FROM: **Paul T. O'Meara, City Engineer**

SUBJECT: **Auto Parking System**
Monthly Permit Demand Increase

At the November, 2013 Advisory Parking Committee (APC) meeting, staff first discussed the large increase in monthly permit parking demand that the system is currently experiencing. After several months of investigating alternatives for new locations, staff is now recommending an expansion at the Pierce St. Parking Structure. The APC requested that a survey of the business community be prepared and issued to obtain feedback from the public. A draft survey was prepared and reviewed at the December meeting. In order to allow the survey to get the attention it needs to be successful, we issued it to the public on January 2, 2014.

The January APC meeting was scheduled for January 15. However, the deadline for preparing reports for that meeting was January 10. Less than 35 responses had been received as of that date (out of over 500 requests). Rather than hold a discussion and review on a small amount of responses, it was decided to postpone discussion until the February meeting.

In the meantime, the City Commission held its annual Long Range Planning Session on February 2. The Commission had already been apprised in the past about this topic, and about the lack of opportunities to site a new facility. With that in mind, the Long Range Planning Session represents an important opportunity to bring them up to date on this topic, and get their feedback. The survey results that had been obtained at that time (82 responses) were provided to the Commission, and a presentation formally suggesting that the Pierce St. Structure expansion appears to be the most logical direction, was prepared. The survey results and presentation slides are attached to this report for your review. The presentation given at that time will be reviewed for the APC at next week's meeting.

Here are the main themes that came from the discussion with the City Commission:

1. **It appears that the Parking System needs to do something to address the increased demand. Is the addition of 280 parking spaces at Pierce St. enough?**
2. **Funding for this project should come from increased monthly permit fees as the priority. Daily rates for customers should not be changed. The assessment formula will need to be looked at again before being implemented for such a project.**

THEME #1 – WHAT IS THE TRUE DEMAND?

The City Commission is giving the impression that a need for more spaces has been demonstrated, and that the City should work in that direction, with Pierce St. being the first priority. With the general downtown economy improving, some discussion has started recently about renewed interest in redeveloping the parking lot at the N. Old Woodward Ave. Parking Structure. To a lesser extent, interest has also been expressed about developing the green spaces at both the north and south ends of the Pierce St. Parking Structure property. (Both of these ideas were included in the Downtown Birmingham 2016 Master Plan.) In order to truly answer how many parking spaces the CBD needs, and to help guide the land development process, an updated, comprehensive parking demand study is needed.

In 2000, as an outcome of the 2016 Plan overlay zoning district changes that allowed increased density in the CBD, City staff performed a parking demand study. The study was partially updated in 2006 in the area of Shain Park to assist with the discussions of a parking structure at Parking Lot #7 held at that time. However, there has been no comprehensive study done since 2000. In 2000, the study was structured as such:

1. An Ad Hoc Parking Study Committee (AHPSC) was formed. Membership in the AHPSC included representatives of the following stakeholders:

    - Advisory Parking Committee
    - Historic District & Design Review Committee
    - Planning Board
    - Principal Shopping District
    - Engineering Dept. Representative
    - Planning Dept. Representative
    - Principal Shopping District Staff Representative

    The members of this committee were formed to help direct the methodology of the study, and to help make final recommendations from its results.

2. The study used the following steps to move its way to its conclusions:

    - A list of every property within the Parking Assessment District was prepared. The list included the amount of gross square feet of building space it contained, as well as the number of private parking spaces it had on site.
    - A review of the parking data that was available at that time was reviewed to determine what time of year the study should focus on. At that time, December represented a significant peak of demand, while the warmer months (April through October) represented a more “normal” level of demand, with May being the second busiest month. The AHPSC decided to use existing demand in May as its benchmark.
    - Actual demand was determined by counting all parking spaces in use on a typical weekday in May during the hours of noon to 2 PM (the peak of the daily demand). Both public and private parking spaces were counted.

- From the actual measured demand counted, and knowing the number of square feet that were available for use at that time, a demand ratio of one parking space per 424 gross sq.ft. was established.
- Private properties were analyzed individually, and those that appeared to be good redevelopment candidates were determined. Calculating the potential full increase in square feet that could be developed from the redevelopment candidates allowed a future number of needed parking spaces to be developed.
- The Parking Assessment District was split into 6 zones, to help determine which parking structure (or Lot #6) occupants from each building would prefer to park in.
- Recommendations for more spaces were established and forwarded to the City Commission, with the need being greatest in the areas around the Pierce St. and Peabody St. Parking Structures.

At this time, it would appear that it is prudent to begin an update on the parking demand study. The study should cover the entire assessment district. A new AHPSC could be formed to oversee the process, which would include:

- Update the parcel list to reflect changes made since 2000, both in square footages and in private parking spaces.
- Update the map of potential redevelopment properties, and estimate potential square footages based on the current zoning ordinance.
- Prepare to count parking spaces in May of this year, as this should still be a reliable time of year on which to base demand.
- Calculate a revised number of gross square feet per parking space demand rate.
- Calculate the future ultimate demand for parking in the assessment district, and compare it to estimates made in 2000.
- Review the findings and make new recommendations for parking space needs in the parking system.

If this process is started soon, it is expected that this process would take until approximately July of this year to complete. Given the current advisory committee structure, we recommend modifying the membership of the AHPSC to make one change. The newly created Multi-Modal Transportation Board should be represented on this Committee, while the Historic District Committee/Design Review Board representation no longer seems necessary. A recommendation is provided below for your consideration. Having the firm numbers that a revised parking study could provide should give the final assurance of whether a project of this nature is needed or not. It will also provide badly needed data to help staff determine what the right level of potential private development should be on the “open” areas of both the N. Old Woodward Ave. Structure, and the Pierce St. Structure properties.

THEME #2 – RATES

Members of the Commission expressed the feeling that the monthly parking permit rates offered by the parking system are below market value, and that they have been for some time. Efforts to increase the rates in the past were based primarily on changes in demand at one structure compared to the others, with a desire to modify behaviors. These suggested rate increases have met with resistance by members of the public, and they have often not been

successful. However, those efforts were attempted in an environment where the parking system did not need the additional funds.

In our current environment, it would appear that the system is destined to head in the direction of more construction, which will obviously require funding. The cash flow balance prepared last fall (attached) suggests that the cash on hand for the system will be about $5.5 million at the end of the fiscal year (June 30, 2014). Since the system needs to keep about $2 million in the account at all times in the event of an unexpected emergency, that leaves $3.5 million available to be spent on a new construction project. If rates are left as is, the projection is that the savings account will grow to $6.4 million by the end of June, 2015. Assuming that the construction of a parking structure will require several steps, an assumption was made that $5 million would be available from savings by the time construction is actually underway.

The cost estimate for a building expansion at the Pierce St. Structure has been set at $9.5 million. Whatever is not available from the savings account will have to be bonded, which will then introduce interest costs on the outstanding debt. Given that the system has an underpriced asset (monthly parking permits), the special assessment that will eventually be charged to help make up the difference in cost could be lowered substantially if monthly parking rates are boosted. Below is a suggested level of increases that could be suggested to help get the conversation started.

PARKING FACILITY	CURRENT RATE	RECOMMENDED RATE (JULY, 2014)	RECOMMENDED RATE (JULY, 2015)
Pierce St.	$55	$60	$65
Park St.	$45	$50	$50
Peabody St.	$45	$55	$65
N. Old Woodward Ave.	$45	$50	$50
Chester St.	$35	$40	$40
Parking Lot #6 Permits	$30 & $50	$35 & $55	$40 & $60
South Side Permits	$40	$45	$50

The increases are suggested based on the following:

- Pierce St. & Peabody St. are the most severely short on spaces given current demand. Their current deficits are similar, therefore, the current value of a permit at Peabody St. is similar to Pierce St. An aggressive increase at Peabody St., while also increasing Pierce St., allows them to be at the same rate by 2015 without stepping either up too fast.
- Park St. & N. Old Woodward Ave. demand is greater than supply, but not as much. Only a $5 increase is suggested.
- Chester St. demand is greater than supply, but more so than any other, permit holders in this lot would rather be somewhere else if they could be. Only a $5 increase is suggested.
- Demand is equal to supply at Lot #6, and actually way under supply for the South Side area. However, for both, the people purchasing permits typically do not have to park that far from their destination, making them desirable permits to hold for those that purchase them. Both are being stepped up a total of $10 given the quality of parking they provide.

We encourage debate and discussion about how the rate increases were figured, and they can be tweaked if so desired.

Using the numbers above, and based on current sales, annual revenues would be as follows:

CURRENT=	$2,095,260	
2014 (AFTER INCREASE) =	$2,373,660	INCREASED REVENUE = $278,400
2015 (AFTER INCREASE) =	$2,470,380	INCREASED REVENUE = $375,120

If the goal is to make a significant increase in the savings account in a short time, just raising monthly parking permit rates alone will likely not do it. We are also in the early stages of talks with Central Parking to take advantage of a national call center office they now operate in Austin, TX. The call center would allow the elimination of the all night call center currently operated in our local office, resulting in a reduction in operating costs. The amount of savings could be over $100,000 per year, but those numbers still need to be verified. As this opportunity materializes, we will bring this idea to the Committee for further discussion.

No other substantial cost saving moves or revenue enhancers are being considered at this time.

Suggested recommendations to the City Commission regarding both of the above topics are provided below. If the APC feels that additional discussion, such as with the PSD, is warranted, it would be reasonable to postpone the second recommendation.

SUGGESTED RECOMMENDATION A:

To recommend that the City Commission authorize the formation of an Ad Hoc Parking Study Committee that will be formed for a limited time to update the parking demand study done in 2000 for the Parking Assessment District, with the goal of determining the long term demand levels for parking throughout the Central Business District, and recommendations of how to best use the Auto Parking System's properties at this time. Suggested recommendation of the Ad Hoc Committee shall include the following members, with each of the suggested boards nominating their representative accordingly:

- **Advisory Parking Committee**
- **Multi-Modal Transportation Board**
- **Planning Board**
- **Principal Shopping District**
- **Engineering Dept. Representative**
- **Planning Dept. Representative**
- **Principal Shopping District Staff Representative**

The Ad Hoc Committee shall be formed as soon as practical, with the goal of finalizing a report of findings and recommendations by July, 2014.

SUGGESTED RECOMMENDATION B:

With the understanding that the Auto Parking System needs to start making plans to build additional parking spaces, monthly permit rate increases at the following levels are recommended in an effort to increase the system account balance available for future construction:

Effective July 1, 2014:

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MEMORANDUM

Engineering Dept.

DATE: **January 21, 2014**

TO: **Robert J. Bruner, Jr., City Manager**

FROM: **Paul T. O'Meara, City Engineer**

SUBJECT: **Auto Parking System Update**

After completion of the 2016 plan in 1997, discussions were held between the City Commission and the Advisory Parking Committee relative to how the new overlay zoning in the Central Business District could have an impact on parking demand. A comprehensive study of the entire district was undertaken in 2000 to attempt to predict future needs. Recommendations of the study suggested that additional spaces would be needed, particularly in the areas close to the Pierce St. and Peabody St. Structures.

As new buildings were built in the early 2000's, the parking system did not experience a significant increase in daytime demand. Evening demand increased significantly. Since the system had more than enough capacity to accommodate evening increases, there was no apparent need to begin expanding the capacity of the system. With the economic downturn starting in 2008, several more years elapsed with the system able to accommodate demand.

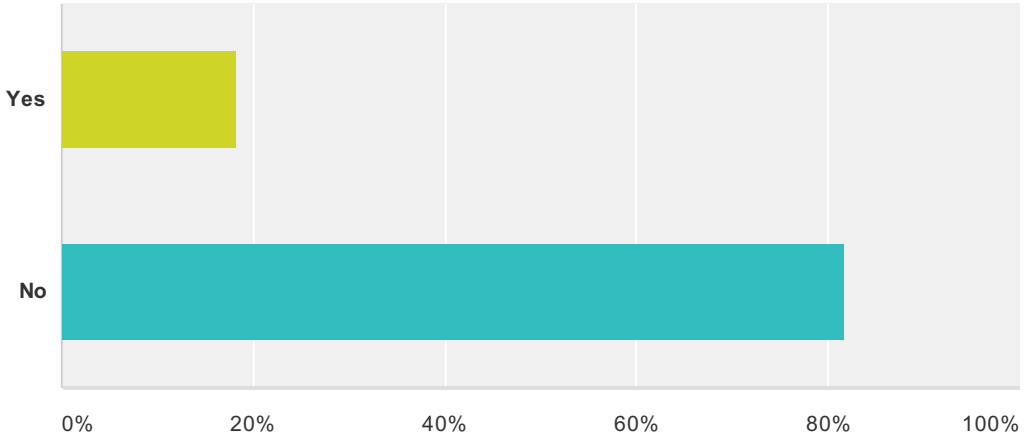
Since early 2010, the parking system has seen a steady, growing demand for monthly parking permits in the downtown area. Daytime demand is now higher than ever experienced in the past, and since last summer, all five parking structures are sold out. We do not see this demand lessening in the near future.

The long term needs of the parking system were reviewed by the Advisory Parking Committee beginning at their meeting in November. A survey of property owners and business owners was put together to better measure what the public is feeling about our current level of service. The results have just been received, and are attached. The Advisory Parking Committee will not have a chance to review the results until their regular meeting of February 19. In the interim, though, it is appropriate for the issue to be reviewed by the City Commission at the Long Range Planning meeting. The attached presentation will be reviewed, better defining the current status of the system, and offering the possible solutions that the Advisory Parking Committee will review in greater detail. Also attached is the background information prepared by staff for the APC at their November meeting.

Obtaining input from the City Commission as to the urgency and possible solutions of this issue will be helpful as the Advisory Parking Committee explores it in more detail.

Q1 Do you own real estate in the parking assessment district?

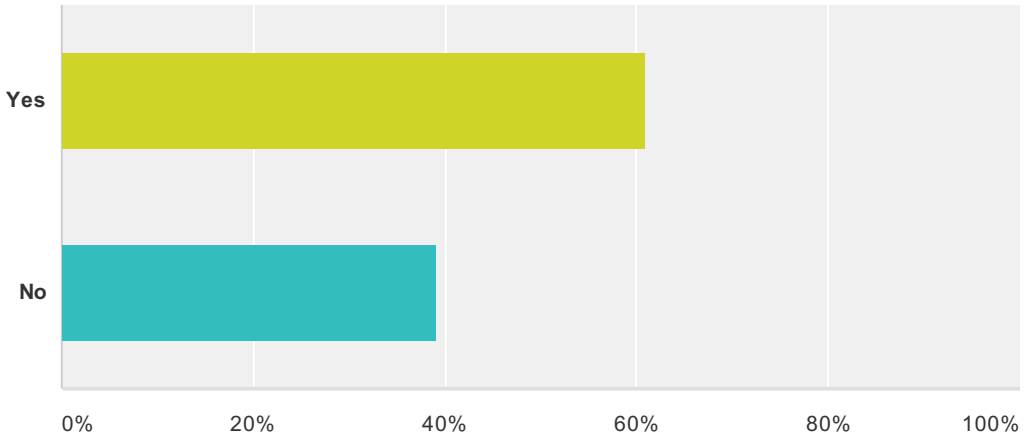
Answered: 82 Skipped: 0



Answer Choices	Responses	
Yes	**18.29%**	15
No	**81.71%**	67
Total		**82**

Q2 Do you operate a retail business or restaurant that brings customers to the area who need to park?

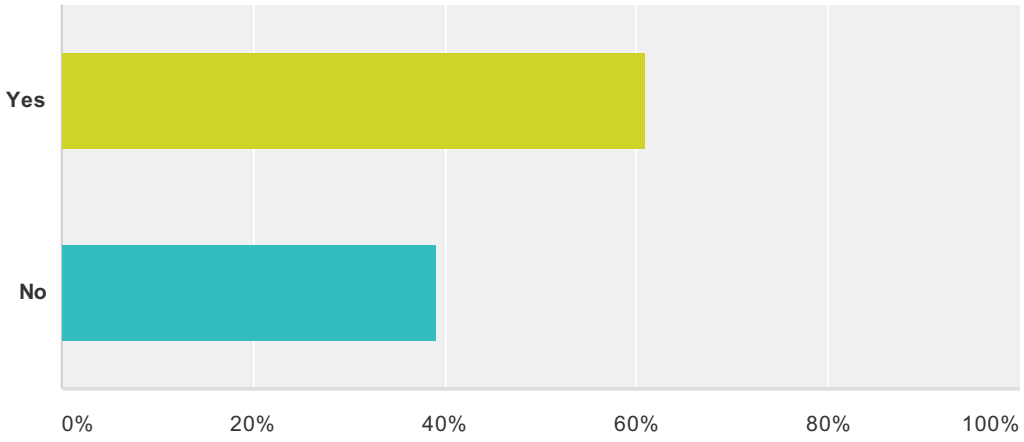
Answered: 82 Skipped: 0



Answer Choices	Responses	
Yes	**60.98%**	50
No	**39.02%**	32
Total		**82**

Q3 Do you operate an office that brings additional people (other than yourself) to the area who need to park?

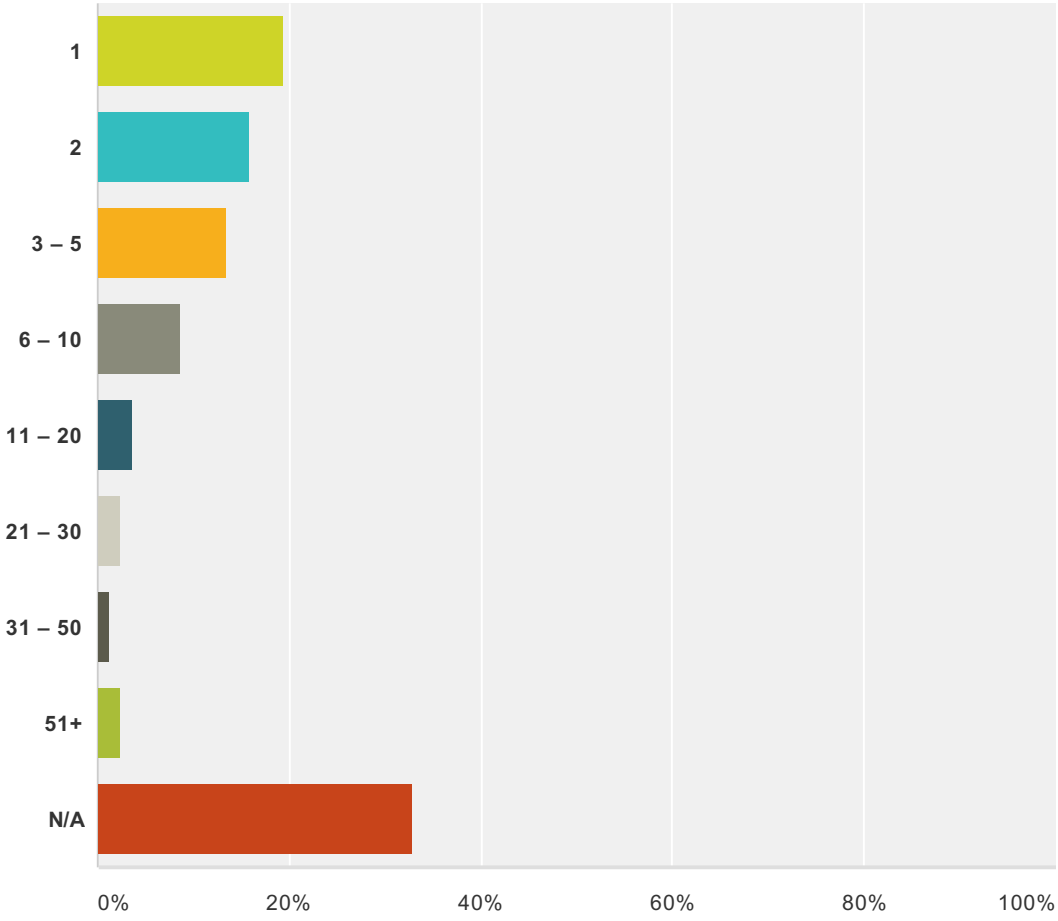
Answered: 82 Skipped: 0



Answer Choices	Responses	
Yes	**60.98%**	50
No	**39.02%**	32
Total		**82**

Q4 How many monthly parking permits do you or your company pay for (if answering for the company, only one company representative should answer for the company).

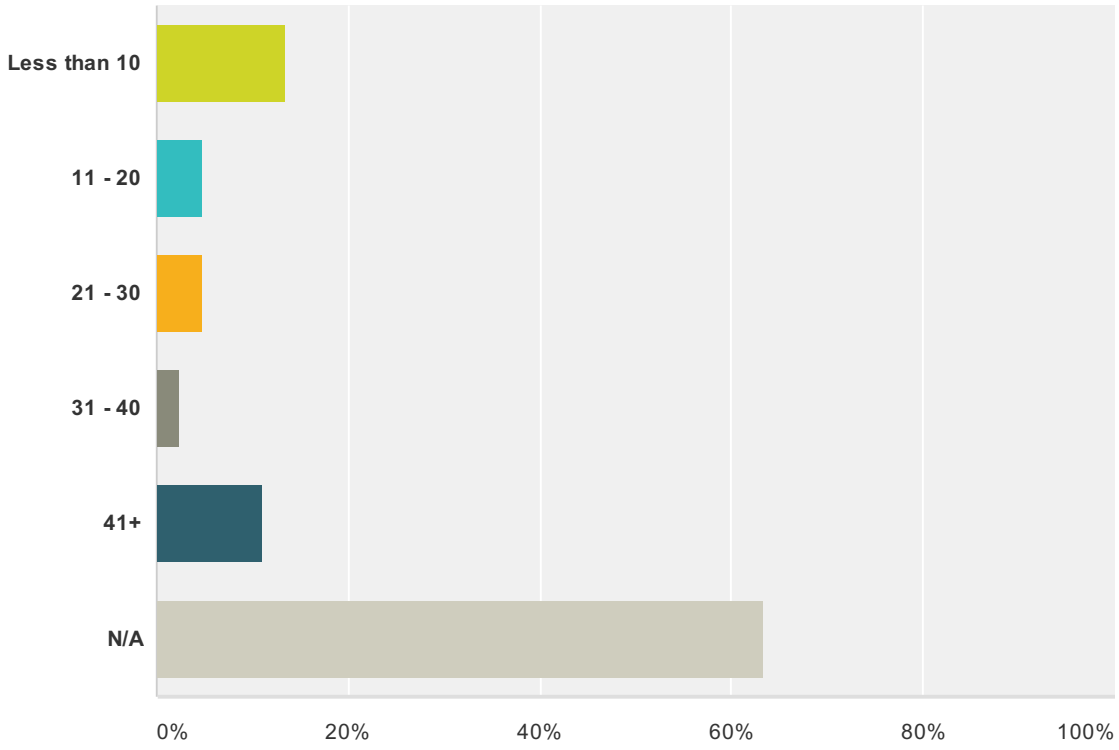
Answered: 82 Skipped: 0



Answer Choices	Responses	
1	**19.51%**	16
2	**15.85%**	13
3 – 5	**13.41%**	11
6 – 10	**8.54%**	7
11 – 20	**3.66%**	3
21 – 30	**2.44%**	2
31 – 50	**1.22%**	1
51+	**2.44%**	2
N/A	**32.93%**	27
Total		**82**

Q5 If you do not have a monthly permit, approximately how many hours per week do you pay for parking at a public parking space in downtown Birmingham?

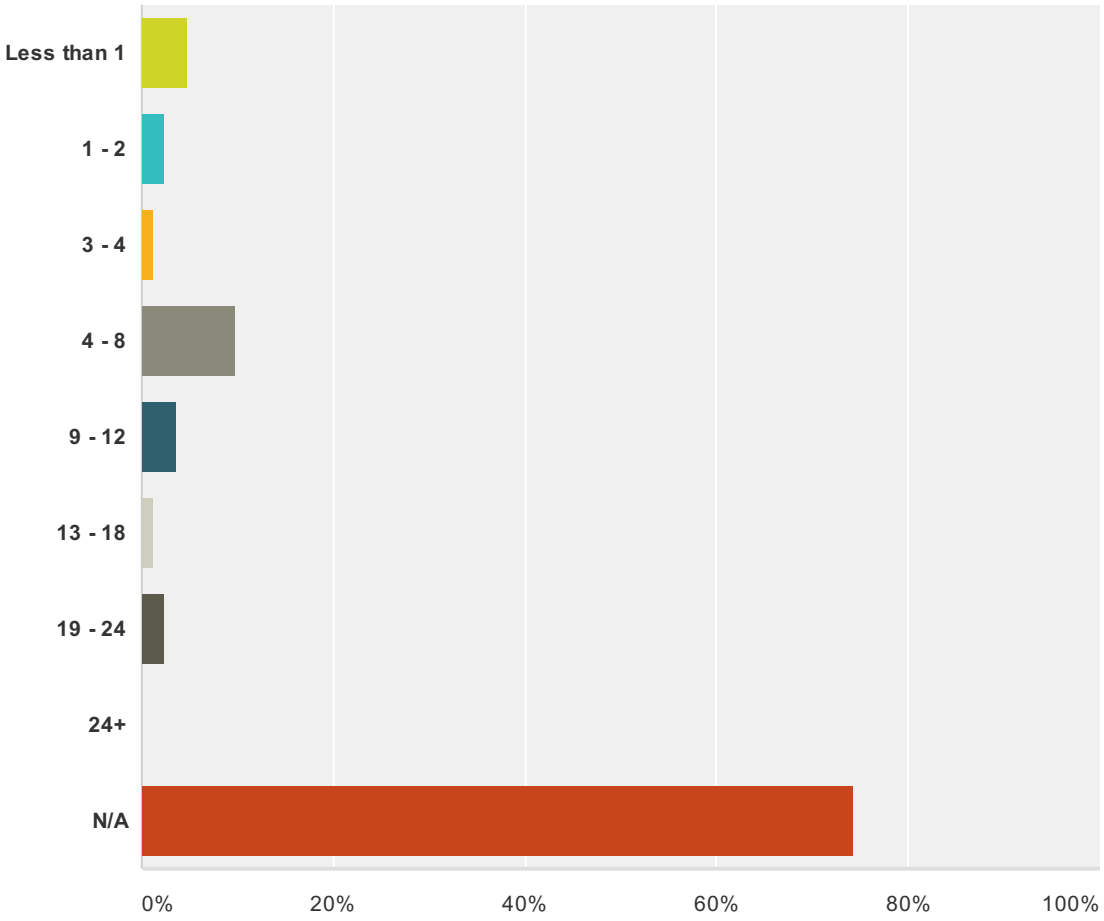
Answered: 82 Skipped: 0



Answer Choices	Responses	
Less than 10	**13.41%**	11
11 - 20	**4.88%**	4
21 - 30	**4.88%**	4
31 - 40	**2.44%**	2
41+	**10.98%**	9
N/A	**63.41%**	52
Total		**82**

Q6 If you are on a waiting list to obtain a monthly parking permit, how many months have you been waiting?

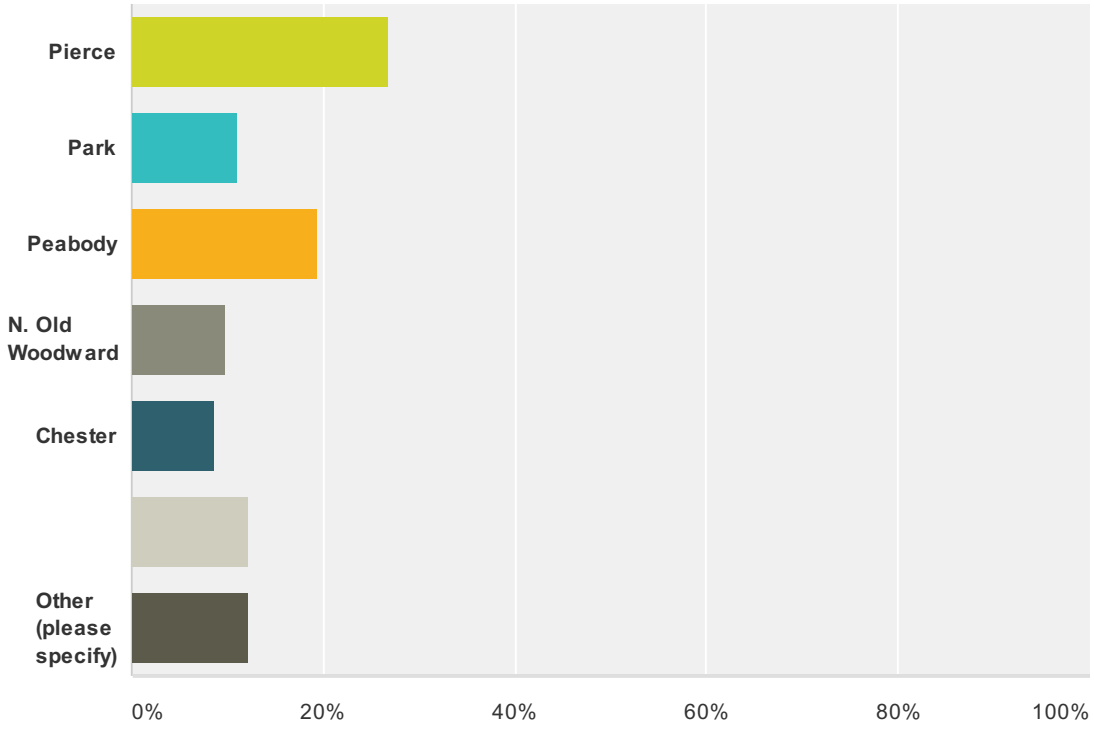
Answered: 82 Skipped: 0



Answer Choices	Responses	
Less than 1	**4.88%**	4
1 - 2	**2.44%**	2
3 - 4	**1.22%**	1
4 - 8	**9.76%**	8
9 - 12	**3.66%**	3
13 - 18	**1.22%**	1
19 - 24	**2.44%**	2
24+	**0%**	0
N/A	**74.39%**	61
Total		**82**

Q7 What is your preferred parking structure or lot to park in?

Answered: 82 Skipped: 0



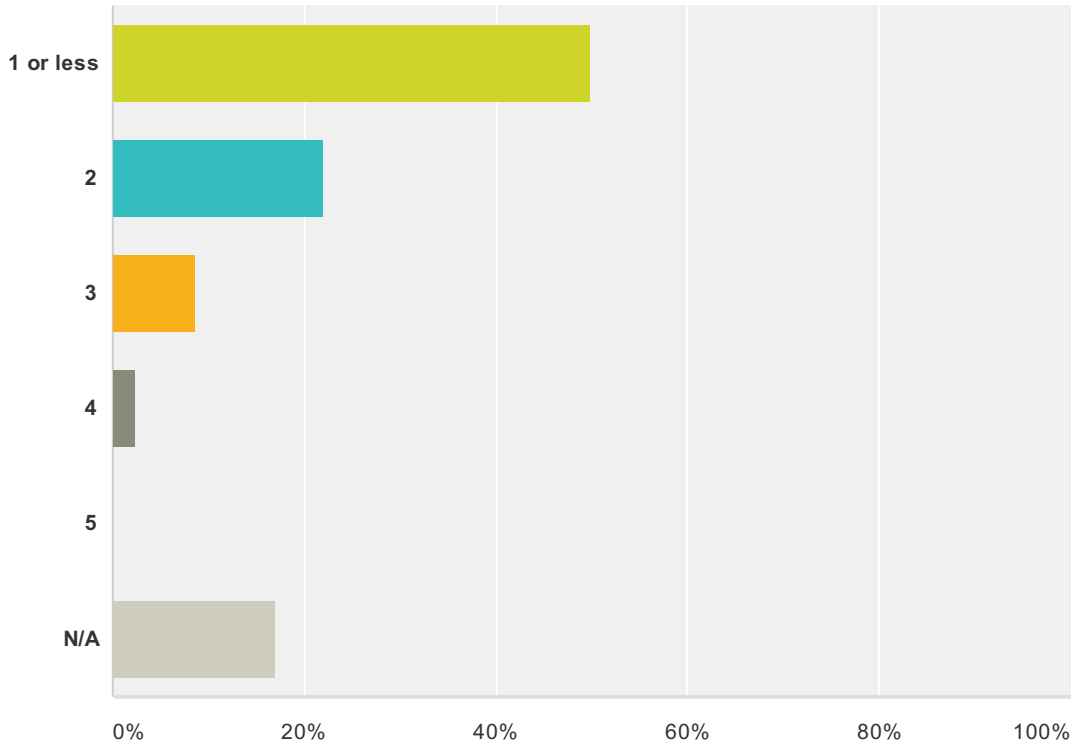
Answer Choices	Responses	
Pierce	**26.83%**	22
Park	**10.98%**	9
Peabody	**19.51%**	16
N. Old Woodward	**9.76%**	8
Chester	**8.54%**	7
Lot 6 (N. Old Woodward Area north of Willits St./Oakland Blvd.)	**12.20%**	10
Other (please specify)	**12.20%**	10
Total		**82**

#	Other (please specify)	Date
1	Lot #6 should be a covered lot. There are so many emplyees utilizing this lot that patrons have difficulty parking	1/19/2014 1:12 PM
2	N/A	1/15/2014 6:26 PM
3	I prefer the walking distance to the Park Structure, however, it is a nightmare navigating that structure due to the great quantity of folks going to the Palladium. Takes 20 min to get out if you happen to coincide with the end of a film.	1/14/2014 7:23 PM
4	555 Building or Birmingham Place	1/14/2014 4:33 PM
5	lot across from the community house	1/6/2014 2:36 PM

6	Currently we take up two spaces on N. Old Woodward (S.of Harmon)	1/3/2014 3:52 PM
7	We have our own parking within our building	1/3/2014 12:54 PM
8	N/A	1/2/2014 6:37 PM
9	Street	1/2/2014 2:36 PM
10	Have 21 spots on-site	1/2/2014 2:28 PM

Q8 If you are able to park in your preferred parking structure, how many blocks do you have to walk to get from there to your business?

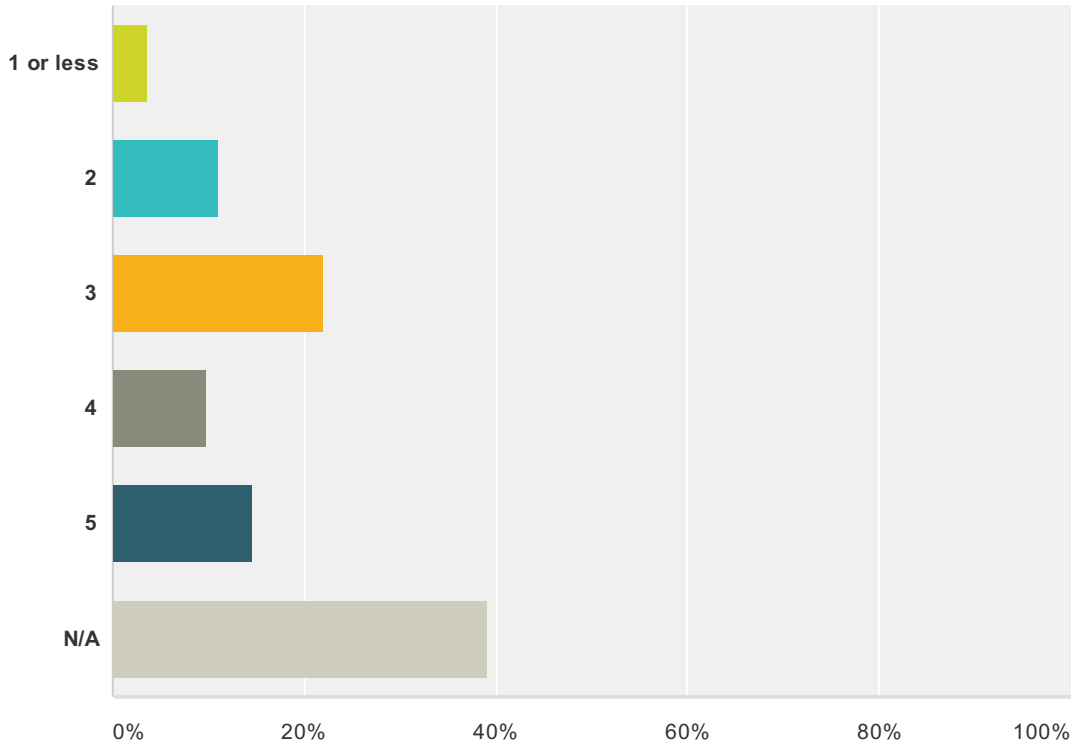
Answered: 82 Skipped: 0



Answer Choices	Responses	
1 or less	**50%**	41
2	**21.95%**	18
3	**8.54%**	7
4	**2.44%**	2
5	**0%**	0
N/A	**17.07%**	14
Total		**82**

Q9 If you are NOT able to park in your preferred parking structure, how many blocks do you have to walk to get from there to your business?

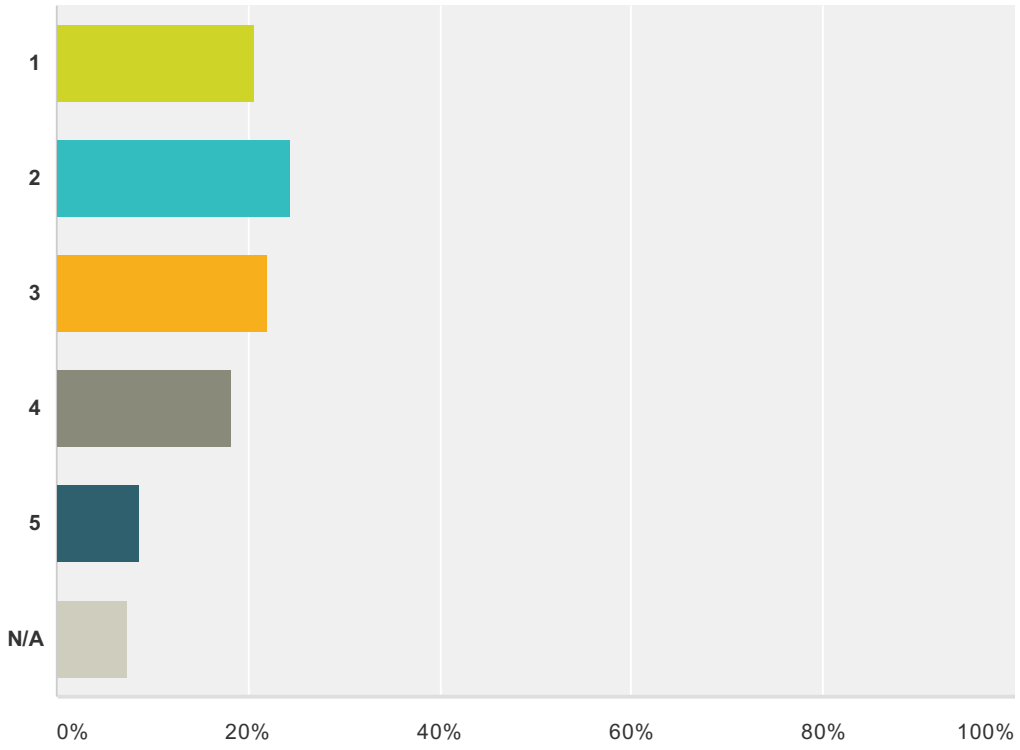
Answered: 82 Skipped: 0



Answer Choices	Responses	
1 or less	**3.66%**	3
2	**10.98%**	9
3	**21.95%**	18
4	**9.76%**	8
5	**14.63%**	12
N/A	**39.02%**	32
Total		**82**

Q10 On a scale of 1-5 (1 being poor, 5 being great), how do you feel about current parking availability for your customers coming to patronize your business?

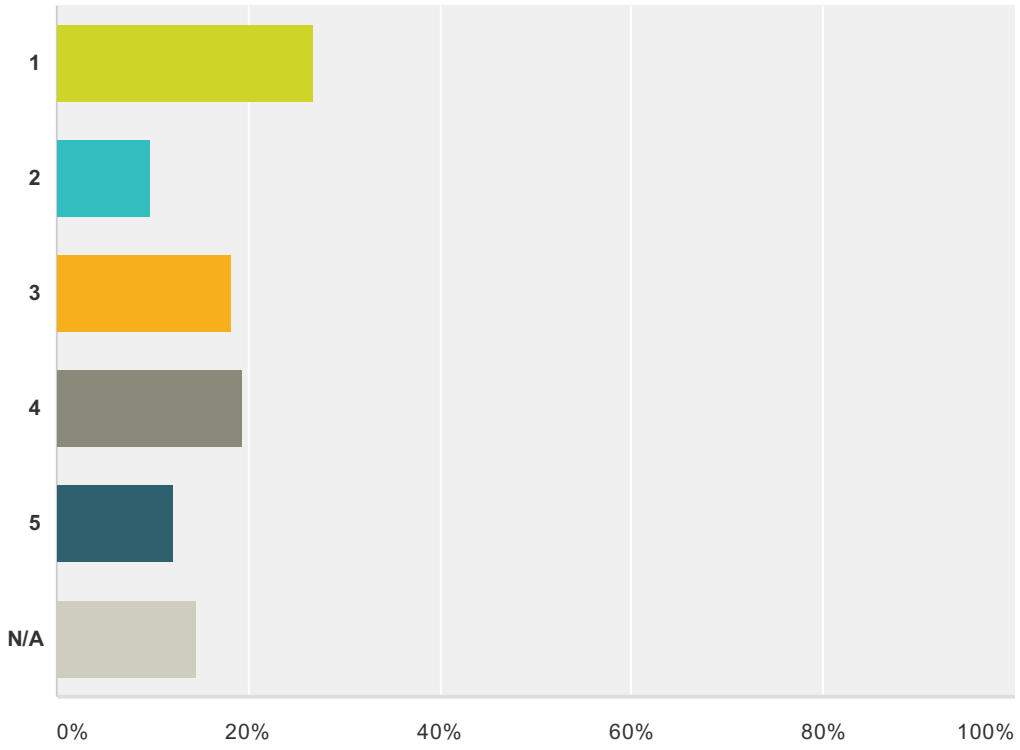
Answered: 82 Skipped: 0



Answer Choices	Responses	
1	**20.73%**	17
2	**24.39%**	20
3	**21.95%**	18
4	**18.29%**	15
5	**8.54%**	7
N/A	**7.32%**	6
Total Respondents: 82		

Q11 On a scale of 1-5 (1 being poor, 5 being great), how do you feel about current parking availability for your employees coming to work at your business?

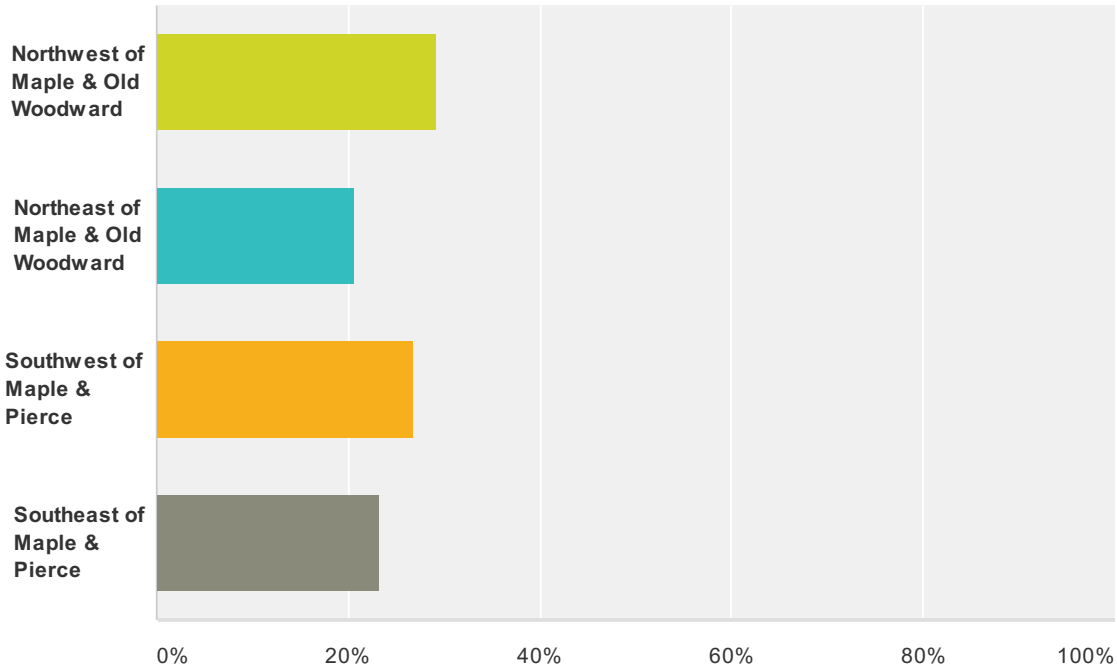
Answered: 82 Skipped: 0



Answer Choices	Responses	
1	**26.83%**	22
2	**9.76%**	8
3	**18.29%**	15
4	**19.51%**	16
5	**12.20%**	10
N/A	**14.63%**	12
Total Respondents: 82		

Q12 If the City were to construct a significant number of new parking spaces (200+), which general area of downtown would you prefer to see them?

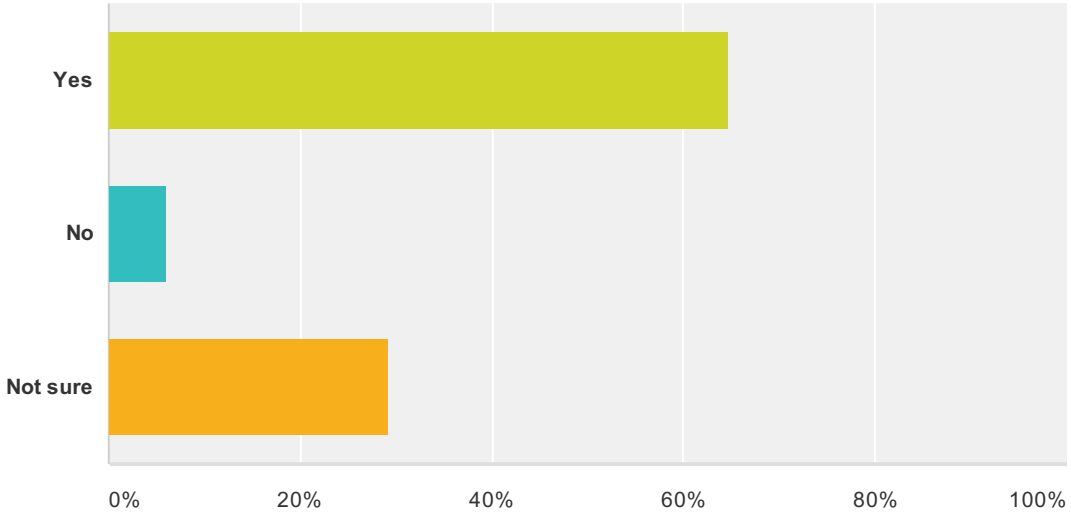
Answered: 82 Skipped: 0



Answer Choices	Responses	
Northwest of Maple & Old Woodward	**29.27%**	24
Northeast of Maple & Old Woodward	**20.73%**	17
Southwest of Maple & Pierce	**26.83%**	22
Southeast of Maple & Pierce	**23.17%**	19
Total		**82**

Q13 Assuming the City moves ahead to build a significant number of new parking spaces in the general area you noted in #12, do you feel that this is the right decision at this time?

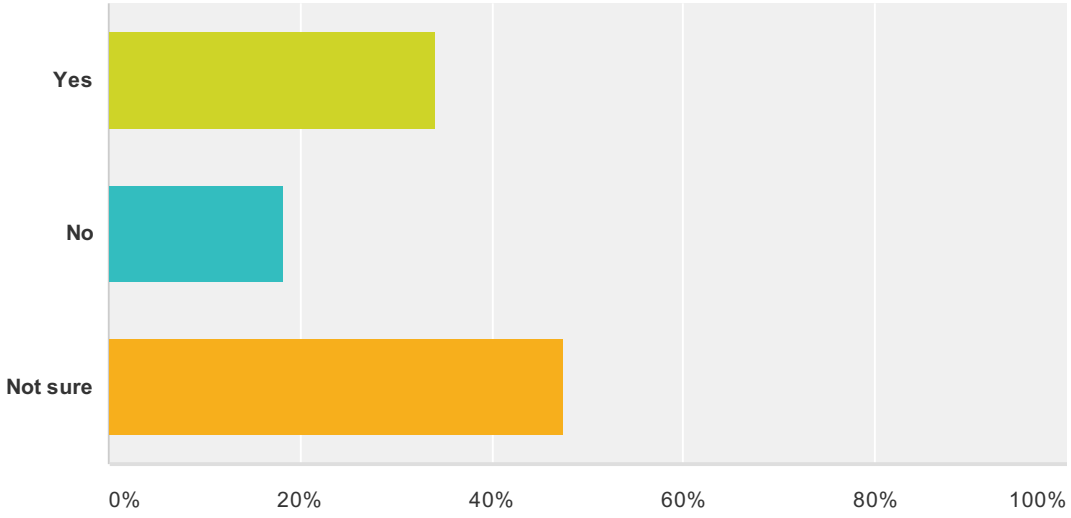
Answered: 82 Skipped: 0



Answer Choices	Responses	
Yes	**64.63%**	53
No	**6.10%**	5
Not sure	**29.27%**	24
Total		**82**

Q14 Assuming the City moves ahead to build a significant number of new parking spaces NOT in the general area you noted in #12, do you feel that this is the right decision at this time?

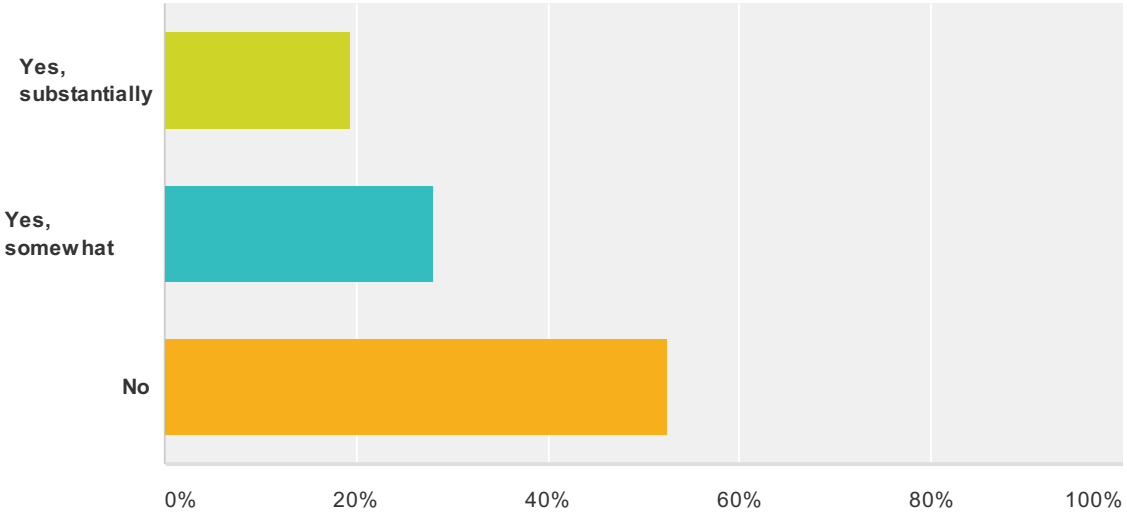
Answered: 82 Skipped: 0



Answer Choices	Responses	
Yes	**34.15%**	28
No	**18.29%**	15
Not sure	**47.56%**	39
Total		**82**

Q15 Does the current parking shortage for daytime employees have you reconsidering the future plans you may have for your property or business? If so, to what extent?

Answered: 82 Skipped: 0



Answer Choices	Responses	
Yes, substantially	**19.51%**	16
Yes, somewhat	**28.05%**	23
No	**52.44%**	43
Total		**82**

#	Comments	Date
1	Parking should be more available on the north end. Lot #6 could be a covered structure. We work and socialize in Birmingham daily, the north end is the only area under served by a covered structure and ample paring.	1/19/2014 1:12 PM
2	The parking capacity restricts the potential growth for retailers. With somerset less than 2 miles away, our guests will opt for driving when they are unable to find available parking. Ample parking will attract more patrons to the area. I believe that expanding the parking in 2 lots will help to grow the demand for retail establishments in bhma	1/19/2014 7:37 AM
3	Customers / clients get discouraged to come into stores being of the shortage of parking spaces and the amount of time it takes driving around to find one, over and over again in the same area. Especially in the cold weather. Please consider to add more parking spaces in the areas of downtown Birmingham. It is extremely frustrating to also live in downtown Birmingham (I live on Townsend street) and everytime I leave my house finding a parking spot is such a reoccurring issue. Please take this all into consideration. Thank you.	1/16/2014 10:33 PM
4	Parking is drastically needed for the Southeast corner of Maple and Woodward.	1/16/2014 8:57 PM
5	There is a significant lack of parking on North Old Woodward, and the time limits on the meters are unrealistic.	1/16/2014 4:32 PM
6	I will try and work at home more.	1/16/2014 10:45 AM

7	I have the ability to change offices and either remain in Birmingham or move to Bloomfield Hills and I anticipate moving based on my clients needs and my needs.	1/15/2014 11:41 AM
8	Can't say that the situation would be better anywhere else. It's the chance taken.	1/15/2014 10:46 AM
9	Having to walk 5 blocks especially with the weather being so bad so far this year it is really not conveient. If the wether was nicer this would not be a problem but to tell me that there is at least a 2 year wait for the Pierce garage is just not acceptable.	1/15/2014 10:28 AM
10	Need additional elevator at Pierce at the south end.	1/15/2014 10:10 AM
11	The lack of parking in Birmingham is a MAJOR PROBLEM for retailers because customers advise me constantly that they won't stop to shop with me unless they can find a parking spot nearby. If their objective is to stop in for a quick look, they want street parking. If their objective is to have lunch/dinner AND shop, they will park in a structure. As Birmingham has increased in qty of restaurants and office space, the parking problem has worsened. What we need to do in three-fold: 1) increase street parking by providing for angled parking such as what exists on Old Woodward. I understand that Shain Park was originally slated for angled parking around all four sides but for unknown reasons was minimized. 2) Build two new deck(s) in the areas NE and NW of Old Woodward & Maple -- or add additional floors to the existing decks. 3) Provide a Park & Ride flat lot (and small bus service) N, S, E or W of Birmingham to accommodate large quantities of shoppers on Saturdays and week nights when there is an evening event planned i.e. Late Night Thursdays. Also, this last suggestion (#3) should become the immediate short-term solution to our parking problem. Currently, I don't see anyone talking about the "short-term solution" - and we MUST. Without a short-term parking solution, retailers will continue to suffer which I hope is something the City folks actually care about!	1/14/2014 7:23 PM
12	You really need to add security cameras in your parking structure.	1/13/2014 5:09 PM
13	I have major concerns regarding the proposed changes to the Pierce Street parking lot. The extreme negative impact that lengthy construction would have on my business is not worth the additional parking spots in my opinion.	1/13/2014 5:07 PM
14	Surface parking is what is needed for retail, without it Retail will continue is constant decline in Birmingham. Any assessment to retail for additional parking in the structures will result in even more retail moving out. Adding parking to the structures should be assessed 100% to 2nd floors and higher in the office buildings as they are the reason for the needed spaces not retail.	1/7/2014 1:20 PM
15	Employee's parking at street meters all day, everyday does not help the parking situation either.	1/5/2014 10:36 PM
16	New parking structure in Lot 6. N. Old Woodward retailers are under pressure from 2 new restaurants (Luxe and Market) and all the salons and Booth Park. Also, not on your survey, Booth Park needs bathrooms. Has any consideration been given to having a shuttle service among all the parking areas?	1/3/2014 3:52 PM
17	The 100 parking spaces given over to expand Shain Park was a mistake based upon usage of that lot vs the few days per year that the new staging area is used. The staging area could have been done without the lose of parking. Restore the 100 spaces for a start.	1/3/2014 3:30 PM
18	If we need more monthly passes, and cannot receive them for new employees, then we will move out of the area. We cannot pay full price everyday for parking if no passes are available.	1/3/2014 3:11 PM
19	Our employees have parking under our building, so we are not affected. Our clients, however, have a hard time finding parking near our office and often drive around for a long time and get frustrated finding something. We are at 251 E. Merrill. I'm not sure that they are parking in the structure, they may be looking for street parking. Either way I think parking in Birmingham could be improved on.	1/3/2014 10:53 AM
20	the proposals under consideration appear at most to be playing catch-up with a rapidly growing need. They hardly seem adequate for long term planning. It is likely needed to execute both of these proposals and to continue to looking for additional solutions for long term growth. At some point, excessive costs will limit demand for additional real estate in Birmingham. It is important to determine that tipping point before committing funds to projects that become unused and occupancy rates decline. I would like to see us increase assessments ahead of project completion so they are in part prefunded.	1/2/2014 8:33 PM
21	Despite the supposed shortage of parking at Chester Street structure, the parking deck is seldom completely full. So spending this money and assessing businesses at this time seems premature.	1/2/2014 7:44 PM
22	none	1/2/2014 6:37 PM

23	Our lease is up in 15 months. With over 50 employees and growing, we may look for a new location or expansion space elsewhere. We already have employees walking 5+ blocks from a further parking structure, and we have to issue daily passes to a number of employees, who find the garages full during the day.	1/2/2014 6:36 PM
24	When our sales managers, who have monthly permits in the Pierce structure, go out on sales calls during the day, the often can not find a parking spot in the garage with they return, or have to wait a signifcant amount of time for one. This is a major issue.	1/2/2014 3:01 PM
25	There is never a shortage of parking spaces in the Pierce Street structure. People are just too lazy to drive up to the roof. The only time there was any shortage was during construction this summer and that only happened a few times.	1/2/2014 2:56 PM
26	There is a large parking shortage in the triangle district.	1/2/2014 2:36 PM
27	Too many restaurants are in Birmingham currently, taking up many parking spaces. Also too much construction is happening around the retail areas in Birmingham causing disruption and loss of business. A parking structure will disrupt my business yet again, enough is enough. Being a retail business I feel squeezed out and I am pretty sure I will not renew my lease in Birmingham and look elsewhere.	1/2/2014 2:27 PM
28	Parking must be available to our businesses clients and employees or we will need to relocate to an area which can accommodate us.	1/2/2014 2:27 PM
29	More parking please! Plus if anything can be done to extend maintenance intervals for existing garages it would be appreciated.	1/2/2014 2:26 PM
30	We have considered moving our business out of downtown and possibly out of Birmingham due to the lack of parking for customers and employes. Those only making 10-12$ an hour should not have to spend $10 a day to park because there are no more monthly permits available.	12/31/2013 12:50 PM
31	6 needs a na	12/20/2013 7:21 PM

BIRMINGHAM AUTO PARKING SYSTEM UPDATE

January, 2014

City of Birmingham
Engineering Dept.

AUTO PARKING SYSTEM SUMMARY

The Auto Parking System was started in the 1950's to satisfy the growing demand of the Central Business District.

Currently, there are **4,820** public parking spaces.

Parking Structures (5) = 3,579 (74%)

Metered Spaces on Streets = 1,052 (22%)

Metered Parking Lots = 189 (4%)

AUTO PARKING SYSTEM FISCAL YEAR REVIEW 2012-13

Total Revenues

(parking structures & meters) = $4.36 million

Operating Expenses = $2.34 million

Capital Improvements = $1.46 million

Savings for the year = $457,000

Savings account (June 30, 2013) = $4.5 million

AUTO PARKING SYSTEM CURRENT RATES

Parking Meters = 50¢ to $1 per hour

Monthly Permits = $35 to $55 per month

Daily Rates: Less than 2 hours = Free

Less than 3 hours = $1

Less than 4 hours = $2

Less than 5 hours = $3

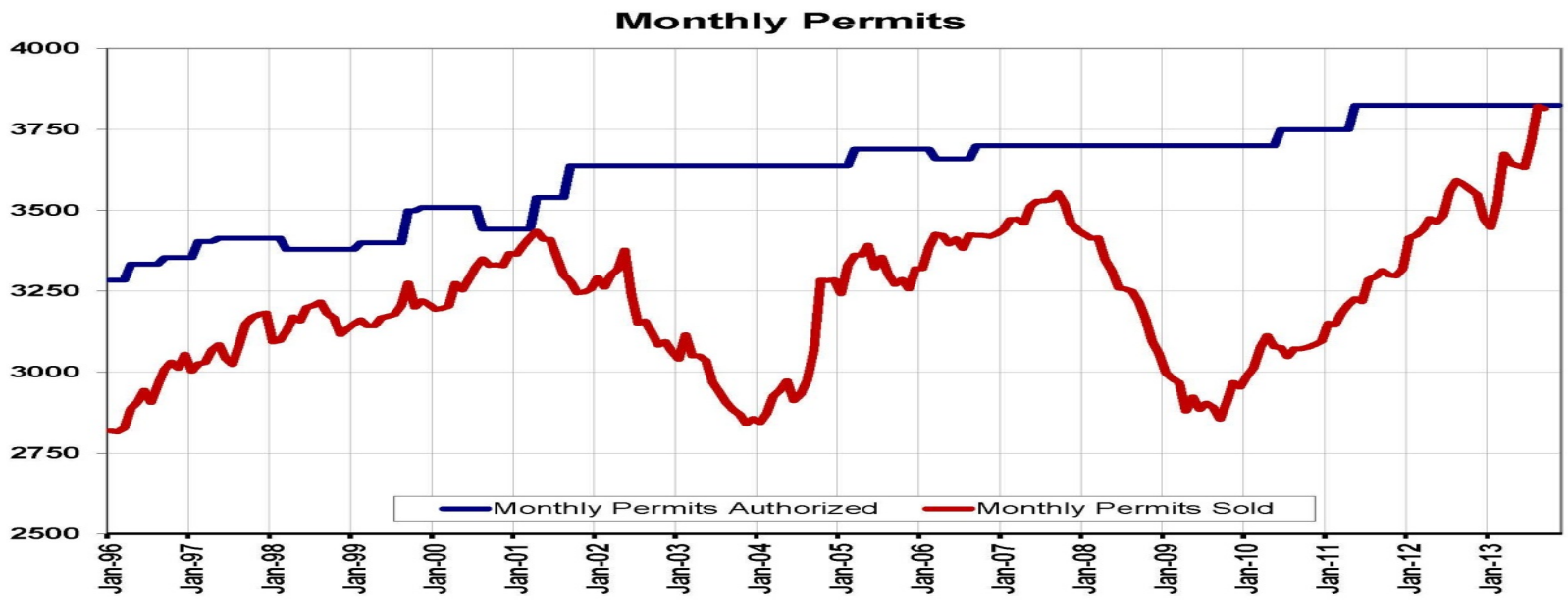
Less than 6 hours = $4

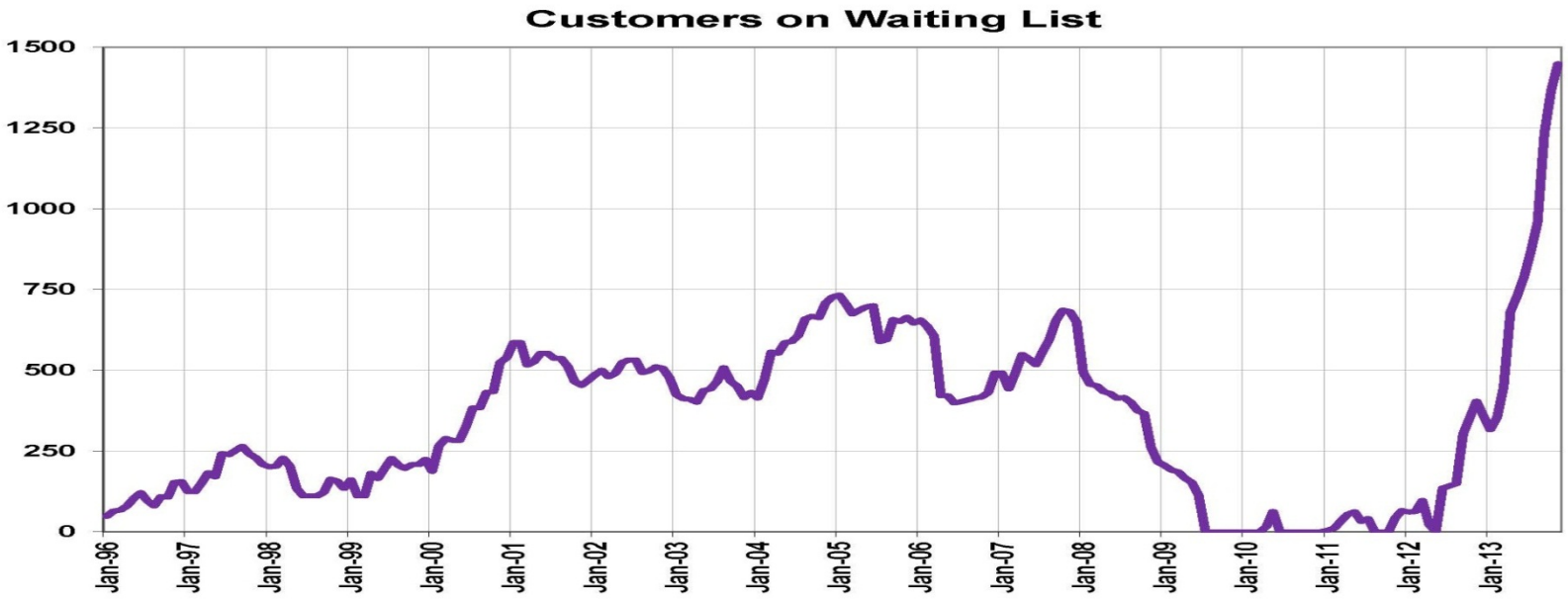
6 hours or More = $5

SUMMER, 2013

- In order to avoid parking structures filling, a cap is placed on the number of monthly permits that can be sold at each structure.
- As is often done, permit sales were suspended at the Park St. Structure during construction starting in May, 2013. Even so, the structure was often filled each weekday by 10 AM.
- By the time the project was finished in September, the district-wide demand was much more than the Park St. Structure could supply.

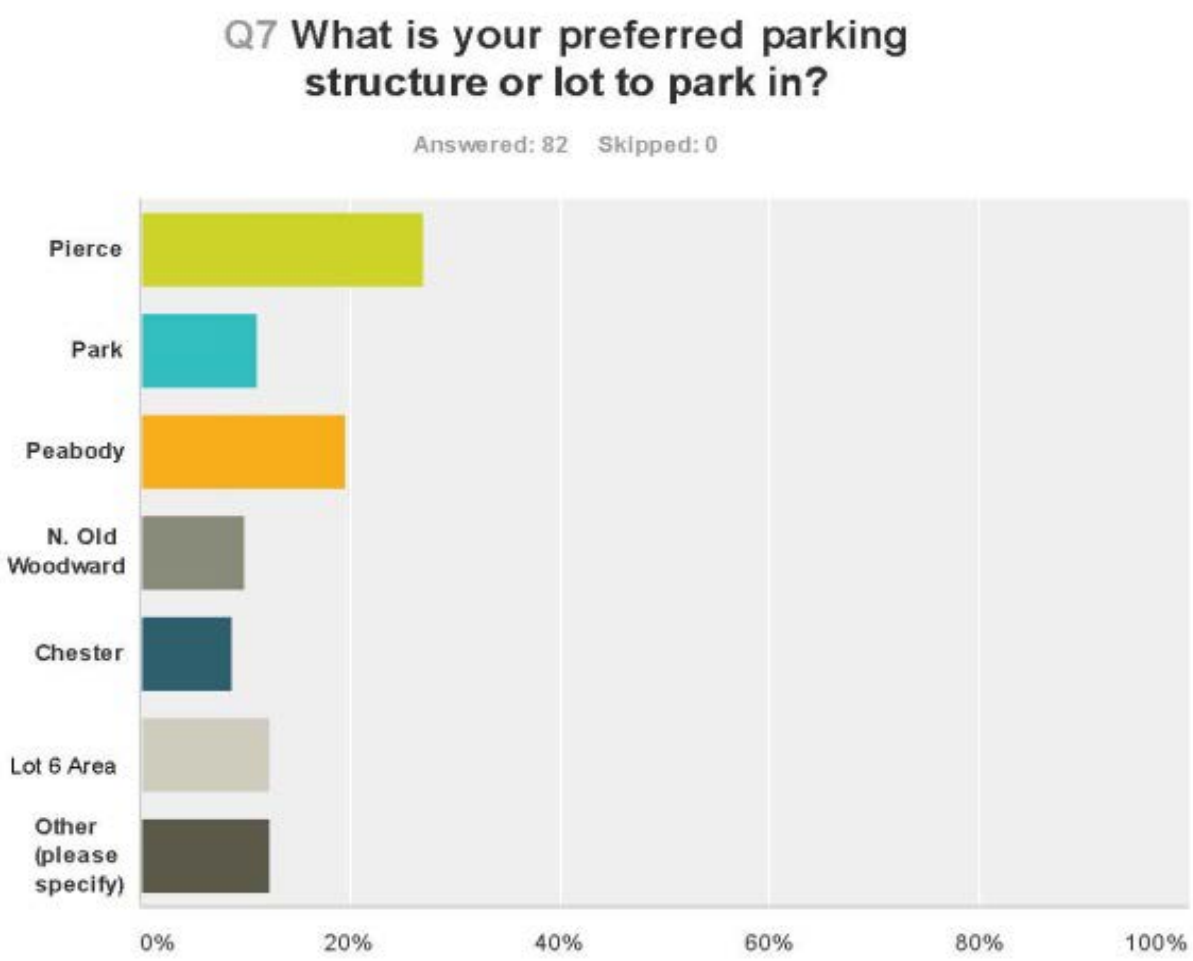
- As of November, there are over 1,000 parkers waiting for a permit.
- Customers have to wait almost 2 years to obtain a permit at the Pierce St. Structure.
- Phase 2 of planned work at the Park St. Structure (April, 2014) will require another ban on the sale of all permits. Frequent closures are again expected this summer.


Monthly Permits
4000
3750
3500
3250
3000
2750
2500
Monthly Permits Authorized
Monthly Permits Sold
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13


Customers on Waiting List
1500
1250
1000
750
500
250
0
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13

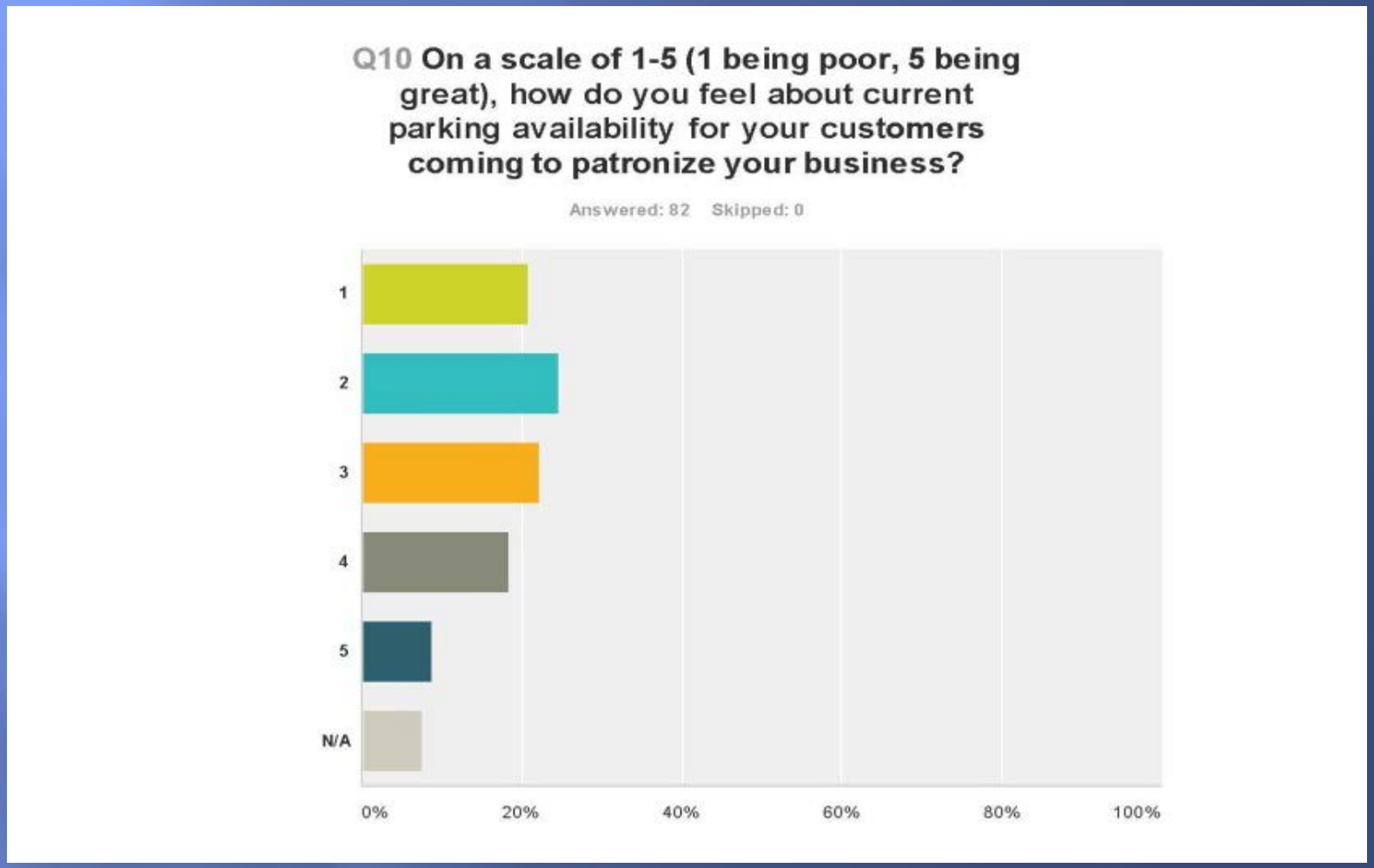
MONTHLY PERMIT STATUS as of NOVEMBER 30, 2013

PARKING SURVEY RESULTS



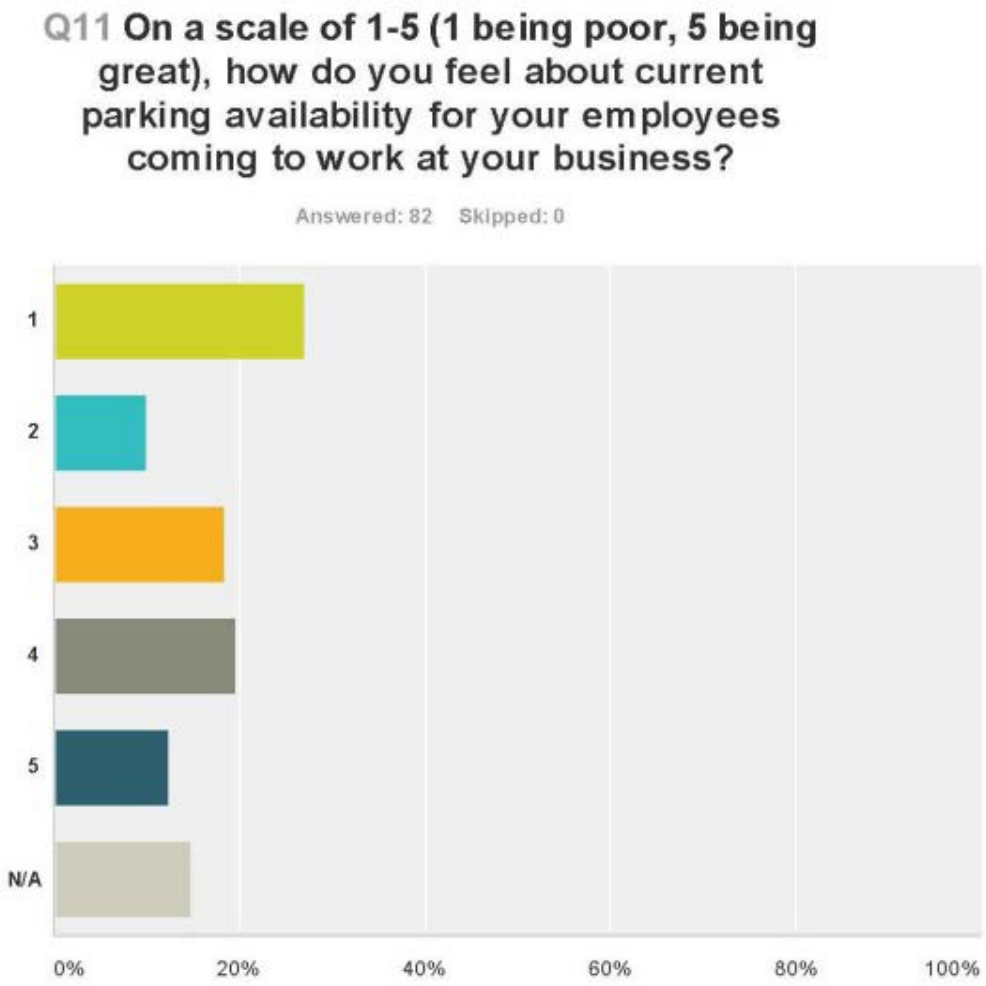
46% of Respondents want to park at Pierce St. or Peabody St. Structures

PARKING SURVEY RESULTS



45% of Respondents rated the system poorly (2 or less).

PARKING SURVEY RESULTS



36% of Respondents rated the system poorly (2 or less).

PARKING SURVEY RESULTS

47% of Businesses will Consider Moving Elsewhere (Due to Parking).

FINDINGS AND RECOMMENDATIONS

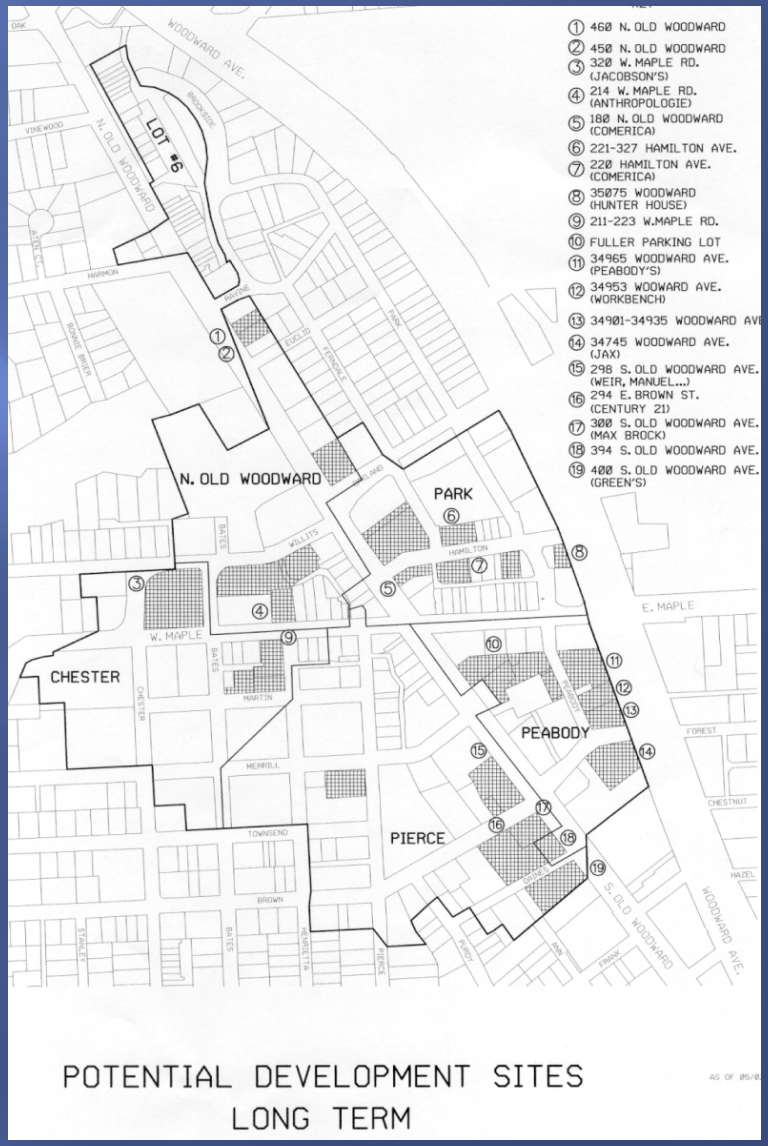
Ad Hoc Parking Study Committee

Geoffrey Hockman, Principal Shopping District Board
Tom McDaniel, Historic District & Design Review Commission
Jeff Salz, Advisory Parking Committee
Chuck Tholen, Planning Board
Jill Bahm, City Planner
John Heiney, Director, Principal Shopping District
Paul O'Meara, Assistant Director of Engineering

(dated winter, 2000)

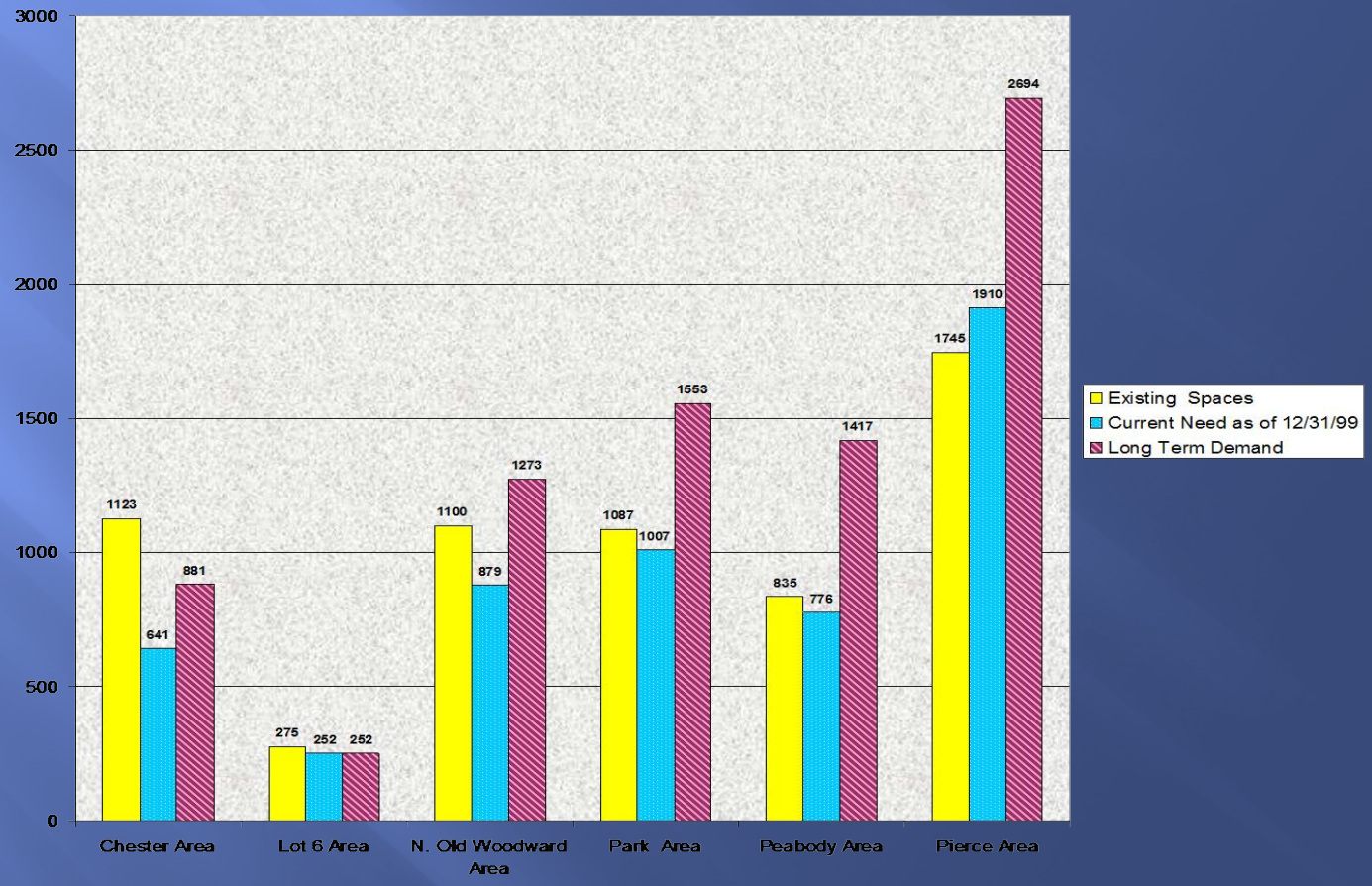
Future Demand Forecast (From 2000 Study)

- Long-Term developments based on future development assumptions (includes short-term developments)



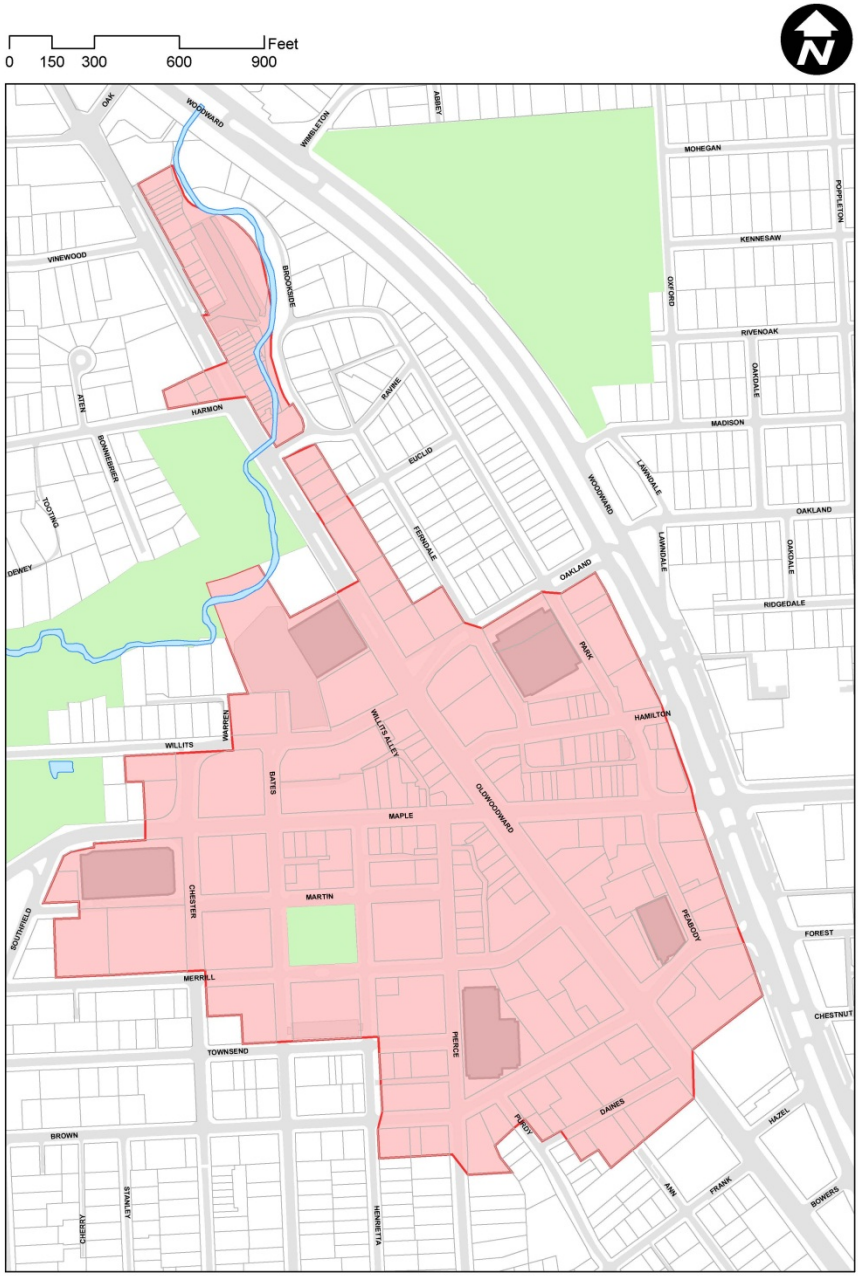
Future Demand Forecast (From 2000)

- Long-Term Projection



Remaining (2014) properties with high re-development potential.

CITY OF BIRMINGHAM
DOWNTOWN PARKING ASSESSMENT DISTRICT



PIERCE ST. STRUCTURE PROPOSED EXPANSION

- Existing footings and columns can support two more floors.
- Existing 720 spaces would increase to 1008 spaces.
- Total cost, including engineering and contingencies, is $9.5 million

  ($32,000 per space)
- Estimated service life is 35 years.

PROJECT FUNDING SOURCES

- $5 million from Parking Fund savings
- $4.5 million from some combination of increased rates and assessments. (Long term interest expenses would increase this number over repayment period.)

WHAT IS NEXT?

- Advisory Parking Committee (APC) will review survey results.
- APC will determine if building more spaces is the prudent next step.
- APC will review expansion opportunities and costs.
- If appropriate, APC will make recommendation to the City Commission.

Memorandum

DATE: November 14, 2013

TO: Advisory Parking Committee

FROM: Paul T. O'Meara, City Engineer

RE: Pierce St. Parking Structure Expansion

Beginning early this summer, the Auto Parking System experienced a new phenomenon: demand for monthly permits exceeded supply in <u>all five</u> parking structures.

At first, it appeared that this problem was at least in part precipitated by the artificial cap in sales at the Park St. Structure, while construction was underway. Referring to the attached monthly permit report for last May, most of the parking structures were at or near capacity, except for Park St. When the restoration project started, 132 permits were available for sale. Since the lot was filling up every day with approximately one whole floor (20%) of its normal capacity closed, staff made the decision to temporarily halt permit sales. However, as the summer progressed, demand continued to rise, including in the area of the Park St. Structure. By the time permit sales could again be started (during the last week of September), the unsatisfied demand for permits system-wide was way past the 132 permits being temporarily held at Park St. (The attached report at the end of September shows the situation in flux, as permit holders were moving from other structures, such as N. Old Woodward Ave., to Park St. (their preferred location)).

Birmingham has become a popular location for high-tech companies that employ large numbers of people working at computer stations. The work model being employed now at several offices in the downtown area results in a lot of workers in a smaller area, all wishing to park during the work day, and most hoping to purchase a parking permit. While this demand is great for downtown and the parking system, it has caught the system unable to meet the demand anytime soon. If tenants find the parking situation a negative that is not being resolved, they can elect to move elsewhere as leases expire.

The Auto Parking System constructed the five current parking structures during the period of 1966 to 1989. Once the Chester St. Parking Structure opened in 1989, there was a period of relatively little growth downtown, and for many years, it appeared as though the system's newest facility would be chronically under-utilized.

During this same time, demand was consistently strong at the Pierce St. Structure, and to a lesser extent, the Peabody St. Structure. With the passage of the Downtown 2016 Master Plan, and its new liberal zoning rules that would encourage more building, the Advisory Parking Committee became concerned that the system was not going to be able to handle the upcoming increase in demand. These concerns led to several actions, such as:

1. An effort to increase the supply of parking spaces on the street wherever possible.
2. A study of the Pierce St. Structure, to consider the idea of expanding it up by two levels.
3. A system-wide parking study, which was conducted and finalized in 2000. The study concluded that the City should increase its parking capacity first in the southeast corner of the City, as not only was demand the strongest there, it also had several under-developed properties that were poised to be expanded upon. (However, since the growth in demand was not imminent, the City decided to take no action.)

While several buildings were built as a result of the new zoning regulations, the type of demand increase mostly resulted in evening uses, which the system could handle with its present facilities. A lot of residential space was also constructed, which had no impact on the parking system. Then, the economy declined starting in 2007, and the system continued to operate with the ability to meet the needs of most of the surrounding businesses. It was in this climate that the talks regarding the expansion of Shain Park began in 2005. Largely due to the concerns of the Community House, and the ongoing lack of monthly permit parking space in the Pierce St. Parking Structure, the City made the decision in 2007 to build a new 2 level underground facility under the proposed expanded Shain Park. A 200 space parking structure was fully designed and bids were accepted in September, 2008, a month before the stock market crash that completely changed the demand for construction. Bids were much higher than expected ($13.8 million). With the demand for new parking spaces declining, the City decided to cancel the project. It then proceeded to build a new Parking Lot #7, and lost about 100 parking spaces in the process. About 40 of these lost spaces were later recouped in the widened Martin St. project, but the system did see a net loss of about 60 spaces.

Moving back to the present, given the chronic shortage of parking spaces in the southeast part of downtown, I met with the City Commission and discussed the feasibility of either implementing a joint use project with a private developer, or actually purchasing a property.

We first discussed joint use options with the owner of the Balmoral Building (at the NW corner of Woodward Ave. and Brown St.). A four story mixed use building has been designed for this property, and it is now scheduled to start construction in the near future. Due to the relatively small size of the property, only about 50 parking spaces could be constructed on each level. Even if regular zoning height restrictions were waived, the numbers quickly confirmed that this would not be a wise venture. A brief study was also done on the property at the SW corner of Woodward Ave. and Brown St. The size and configuration of this property also did not lend itself to a parking facility, so it is not going to be pursued.

Without any new properties under consideration, the system must then look closer at its existing holdings. The two properties where expansion is feasible are:

1. **The Pierce St. Parking Structure** – The original building (built in 1968) was designed such that two additional floors could be constructed on the existing footings and column system. We asked Walker Parking Consultants, who had done an extensive feasibility study on this in 1998, to review and update that study. The results are now attached.
2. **N**. **Old Woodward Ave. Parking Structure and Lot** – The Birmingham 2016 Plan proposed expansion of this facility into the adjacent parking lot, an extension of Bates St. through the property to N. Old Woodward Ave., and the creation of at least two new parcels of private property, one commercial (on Willits St.) and one residential (backing on to the Rouge River).

The above ideas will be discussed in reverse order.

N. OLD WOODWARD AVE. PARKING FACILITY EXPANSION

At the encouragement of some local residents, the proposal in the Downtown Birmingham 2016 Plan for this property was discussed by the City Commission in 2007. The idea was to survey the property, and begin some high level conceptual discussions about how the land could be used. The hope was that the sale or lease of the areas that could be devoted to private uses could generate enough income to finance the expansion and renovation of the parking structure. The Commission had not yet resolved the renovation plans for Shain Park at the time, and it was felt that the City should focus its downtown development efforts there, and the idea was not pursued. It has not been seriously pursued since.

Given the new demand for parking system-wide, the idea of expanding this structure has been brought up for consideration again. However, the demand for new spaces at this location is not as great. Nor is the potential for growth in demand from the neighboring properties nearly as great (no nearby private properties appear ready to be expanded upon.) Since new parking spaces here would not be very attractive to those wishing to visit or work at buildings in the southeast part of downtown, parking spaces built in this area would likely not be utilized to a level that would make this the best option. Particularly if there are other options available. That requires a closer look at Pierce St.

PIERCE ST. PARKING STRUCTURE EXPANSION

Walker's in depth study of this expansion idea (adding two floors and 280 parking spaces to the facility) was done in 1998. It was estimated to cost $4.5 million, and have an expected service life of 25 years. The idea was not seriously considered for two reasons:

1. Investing a large sum of money in an older building would result in a shortened time span for the new parking spaces (estimated at 25 years at the time). Since demand for parking was not extreme, it did not seem like a wise decision.
2. The expansion of Shain Park had been proposed, but was far from resolved. Since the Parking System owned a whole block of land just to the west of here,

and the opportunity to build more parking spaces existed there, expanding at the Pierce St. Structure could not be taken as the best approach at the time.

Since then, several things have changed:

1. Shain Park has been completely redeveloped, and overall parking stock has deceased by about 60 spaces, rather than increased, as originally hoped. Now that this decision has been made, there are no other opportunities to expand parking capacity in this area unless other properties are bought or leased.
2. In the 1998 report, the Brown St. entrance/exit was identified as an existing shortcoming to the idea of expansion. It was felt that increasing the capacity of the structure by almost 39% would require looking at the poorly designed entrance and exit lanes. The Brown St. area was highlighted in that it could be improved upon in this area. In 2003, the Brown St. entrance/exit was completely renovated and expanded to handle more exiting traffic, and to make it more aesthetically pleasing, so this problem has been addressed.
3. The building continues to be well maintained – new LED lights were installed in 2010, new elevators were installed in 2011, and all of the levels have been structurally repaired and waterproofed within the last two years, at a cost of almost $2 million.
4. The knowledge base of buildings of this sort continues to improve. In 2011, Walker conducted an in-depth service life analysis of the Park St. Structure, at our request. The analysis was done due to concerns that the continued decay of the building may force the City to start considering disinvesting in it as it nears a potential demolition. Instead, we were surprised to find that <u>maintaining it regularly will result in another 40 years of service life, and that doing so is definitely more cost effective than any other option, particularly demolition and replacement.</u>

With the above in mind, this summer we asked Walker to update their study from 1998, based on 2013 dollars. A new code analysis was also done, as structural code requirements have changed since 1998. Walker's cost estimate to undertake this project is now set at $9 million (including "soft" costs such as design and inspection), but the service life expectancy has now been extended to 35 years (even though 15 years has passed).

What the above reveals is that given the cost of land in this area, and the lack of opportunities in general, it may well be reasonable to have the parking system undertake a project of this scope in order to provide an additional 280 parking spaces in a prime location with high demand.

FINANCIAL ANALYSIS

If the new 280 parking spaces were able to be built and opened to the public immediately, it is important to consider what their impact would be. Assuming that the authorized permit cap is based on the daily traffic demand in the area, and that that would not

change, the entire new area should be available and open for permit sales. Since we oversell permits on a regular basis, and only 60% of permits tend to be present at any one time, applying the 60% factor to the new spaces would result in the ability to sell an additional 467 permits. The waiting list at the end of September was 315, so it appears that the waiting list would go away. There are 346 waiting at the Peabody St. Structure. If permits were open and available at Pierce St., we expect that many would take advantage of them, while continuing to wait for an opening at Peabody St. In other words, we expect, given current conditions, that the spaces would be well occupied, but perhaps not to the point where the garage would again have a waiting list. The potential revenues, if we assume anticipated revenue of slightly below the maximum for periods when sales are down or receipts are not all collected, we can estimate the revenues at:

(450 permits x $55 each x 12 months) = $297,000 annual income

Walker's construction cost, with contingencies, is set at $32,000 per space. (The industry generally is using $25,000 per space to build a new, relatively low budget parking structure, not including land costs.) If the permit rate is left at $55 per month, 9.3 parking spaces will be earned back per year. (The analysis also does not consider that the new spaces would be used by people that are already paying into the system somewhere else, and it is not truly new income. It is difficult to quantify this element. In the bigger picture, though, the benefitting commercial properties would have better parking, become more valuable and easier to lease, thereby hopefully generating more usage and more customers as a result.)

Historically, the City has charged the property owners in the Parking Assessment District at a rate of 40% of the construction cost. If the project costs $9 million, $3.6 million could be raised as an assessment over a 10 year payback period. This lowers the actual dollars that the parking system ultimately pays to $5.4 million. However, these funds would not be available at the beginning of the project, so the cash balance in the system, coupled with a bond, would be needed to raise the capital at the time of construction.

A rough cash flow analysis is attached (it will be refined in the coming months as the next year budget is put together). It projects a cash balance after expenses at $5.5 million, rising quickly to over $7 million in two years. The City has used the policy that at least $2 million should be left in the account at all times to cover unexpected problems or emergencies. However, if a project of this magnitude is proposed to be started in one or two years, the City could clearly make a case that parking rates need to go up in general to reduce borrowing costs, and to better reflect the value of what is being sold. An assumption that $5 million cash would be available for this project seems reasonable. That would leave $4 million to be bonded. Using a 5% annual interest charge for 20 years, the cost of interest results in borrowing costs of $2.3 million. The total cost of the project after 20 years is then $11.3 million.

Using the total cost of the project at $11.3 million, (construction plus interest), minus the special assessment revenue of $3.6 million (a final cost of $7.7 million) earning a flat $297,000 per year, it would take 26 years to pay back the expense. On the cost side, this

analysis does not consider the cost to maintain the additional parking spaces. That cost would be relatively small, particularly for the first 20 years when the spaces are still quite new. On the revenue side, it is highly unlikely that the $55 per month permit rate would be locked during that time period. As conditions change, and the value of the dollar continues to decline, the monthly rate could be increased to reduce the payback time, and to cover the cost of maintenance.

SUMMARY

Using the quick, simplified analysis above, it appears that the cost to provide an additional 280 parking spaces in the Pierce St. Structure can be paid back approximately 10 years before the service life would end (conservatively). They also would help relieve the current ongoing shortage in spaces that exists, clearly benefitting the property owners in the entire south half of the Central Business District. The Advisory Parking Committee is encouraged to discuss and review this analysis, raise questions and concerns, and start to develop a position for the City Commission to consider.

No suggested resolution has been provided at this time, assuming the Committee will need time to consider all the ramifications of this decision. Staff stands ready to provide answers as needed.

MONTHLY PARKING PERMIT REPORT

For the month of:May 2013
Date Compiled: June 14, 2013

	Pierce	Park	Peabody	N. Wood	Lot #6/$150	Lot #6/$90	Chester	Total
1. Total Spaces	706	811	437	745	174	79	880	3832
2. Daily Spaces	370	348	224	359	N/A	N/A	425	1726
3. Monthly Spaces	336	463	213	386	174	79	560	2211
4. Monthly Permits Authorized	550	813	431	900	150	40	940	3824
5. Permits - end of previous month	550	681	431	826	144	40	852	3524
6. Permits - end of month	550	681	431	888	144	40	940	3674
7. Permits - available at end of month	0	132	0	12	6	0	0	150
8. Permits issued in month includes permits effective 1st of month	4	0	0	70	0	0	98	172
9. Permits given up in month	4	0	0	8	0	0	10	22
10. Net Change	0	0	0	62	0	0	88	150
11. On List - end of month*	269	159	295	0	0	0	8	731
12. Added to list in month	6	17	11	0	0	0	7	41
13. Withdrawn from list in month (w/o permit)	0	0	0	0	0	0	0	0
14. Average # of weeks on list for permits issued in month	70	0	67	0	0	0	0	N/A
15. Transient parker occupied	262	216	182	228	N/A	N/A	99	987
16. Monthly parker occupied	338	306	255	517	N/A	N/A	422	1838
17. Total parker occupied	600	522	437	745	N/A	N/A	521	2825
18. Total spaces available at 1pm on Wednesday 5/22/13	106	289	0	0	0	0	359	1007
19. "All Day" parkers paying 5 hrs. or more								
A:Weekday average.	112	63	62	61	N/A	N/A	39	337
B:Maximum day	196	90	82	101	N/A	N/A	86	555
20. Utilization by long term parkers	57%	70%	76%	60%	N/A	N/A	45%	61%

(1) Lot #6 does not have gate control, therefore no transient count available
(2) (Permits/Oversell Factor + Weekday Avg.) / Total Spaces

MONTHLY PARKING PERMIT REPORT

For the month of: September 2013
Date Compiled: October 16, 2013

	Pierce	Park	Peabody	N. Wood	Lot #6/$150	Lot #6/$90	Chester	Total
1. Total Spaces	706	811	437	745	174	79	880	3832
2. Daily Spaces	370	348	224	359	N/A	N/A	425	1726
3. Monthly Spaces	336	463	213	386	174	79	560	2211
4. Monthly Permits Authorized	550	813	431	900	150	40	940	3824
5. Permits - end of previous month	550	636	429	900	141	40	940	3636
6. Permits - end of month	551	749	431	855	141	40	933	3700
7. Permits - available at end of month	-1	64	0	0	9	0	7	79
8. Permits issued in month includes permits effective 1st of month	3	120	12	25	6	2	57	225
9. Permits given up in month	2	7	10	70	0	0	64	153
10. Net Change	1	113	2	-45	6	2	-7	72
11. On List - end of month*	315	184	341	149	0	0	244	1233
12. Added to list in month	31	83	40	107	0	0	132	393
13. Withdrawn from list in month (w/o permit)	15	0	0	13	0	0	17	45
14. Average # of weeks on list for permits issued in month	92	25	84	8	0	0	16	N/A
15. Transient parker occupied	310	124	183	169	N/A	N/A	131	917
16. Monthly parker occupied	267	358	254	572	N/A	N/A	442	1893
17. Total parker occupied	577	482	437	741	N/A	N/A	573	2810
18. Total spaces available at 1pm on Wednesday 9/18/13	129	329	0	4	0	0	307	1022
19. "All Day" parkers paying 5 hrs. or more								
A:Weekday average.	118	65	69	53	N/A	N/A	41	346
B:Maximum day	143	86	95	75	N/A	N/A	54	453
20. Utilization by long term parkers	83%	76%	73%	71%	N/A	N/A	76%	76%

(1) Lot #6 does not have gate control, therefore no transient count available
(2) (Permits/Oversell Factor + Weekday Avg.) / Total Spaces

MEMORANDUM

SUBJECT

WALKER PARKING CONSULTANTS

525 Avis Drive, Suite 1
Ann Arbor, MI 48108

Office: 734.663.1070
Fax: 734.663.1717
www.walkerparking.com

DATE:	October 4, 2013
TO:	Paul O'Meara
COMPANY:	City of Birmingham
ADDRESS:	
CITY/STATE:	
CC:	
HARD COPY TO FOLLOW:	No
FROM:	Mike Johnson
PROJECT NAME:	Pierce St. Vertical Expansion Feasibility Study
PROJECT NUMBER:	20-1405.00
SUBJECT:	Summary of Results

Overview

The City of Birmingham has requested that Walker provide a concept level feasibility study of the possibility of adding two (2) floors to the Pierce Street Parking Structure. This would increase the parking capacity of the structure from approximately 720 spaces today to approximately 1000 spaces, for a net gain of approximately 280 spaces. Walker had reviewed this question for the City in 1999 and, as construction costs, condition of the structure and building design codes have all changed significantly in the intervening 14 years, we have provided this brief summary to provide more current information.

The proposed expansion would add two (2) floors to the structure. Pierce Street was originally designed for this loading, and we have reviewed the current codes to obtain an indication of how they might affect the feasibility of the project. We see no reason that the project would incur any major costs for structural upgrades or reinforcing under current codes. This conclusion is based on a similar review that Walker did for this structure in 1999, with updates related to current design codes. This is not a substitute for a thorough analysis of the structure that would be required if the project moves forward, but is a good general indicator that structural remediation (if any) will not be extensive or costly. We are able to offer this due to our previous experience with this structure and suggest it may remove some uncertainty from your review process.

Construction Cost

We have attached an opinion of probable cost for the project based on experience with recent bids for new construction projects supplemented by our judgment regarding the project conditions. We expect the base construction cost for the project to be on the order of $7.2 million, or approximately $26,000 per parking space. After allowing what we consider to be conservative allowances for contingency, design, testing and other soft costs, we suggest that a total project budget of $9.0 million, or $32,000 per space, is reasonable.

Life Cycle Costs – Repair & Maintenance

Due to the age of the structure, there will be some concern that the City is investing in a project that will have a shortened life and a shorter payback period. This concern is realistic considering the existing structure is 45 years of age. On the other hand, Birmingham has always made an effort to maintain facilities in good condition and has been more aggressive in maintenance work than many owners. We have suggested a 30 - 35 year life cycle as reasonable to evaluate this project.

We have provided projections for future maintenance of the original portion of the structure as part of this study for your consideration. This projection is based on our experience with this facility in major repair projects in 2002/2003 and 2011/2012, and assumptions regarding the acceleration of maintenance costs with age. Overall, our assumption for future maintenance is that with the continuation of regular repair and preventative maintenance projects on a 7 year cycle, the general template of patching repairs can be continued over the next 28 years, with the total life of the facility extending 30 – 35 years.

The projections of future costs assume that select system replacement and upgrade work will be done to the original structure at the same time the vertical expansion is constructed, including replacement of the original drainage pipes and installation of an upgraded (current code compliant) vehicle barrier/pedestrian guard at the edges of the interior ramped bays. We have also assumed that light fixture replacement will be required in both the original structure and the vertical expansion structure approximately 20 years in the future. Beyond this, we have not accounted for discretionary system replacement such as elevator replacement or Parking Access and Revenue Control (PARCs) system replacement.

Opinion of Probable Cost
Pierce Street Parking Structure Vertical Expansion
Birmingham, Michigan 3-Oct-13 20-1405.00.00

Horizontal Dimensions: 340 ft x 210 f				
Standard Stall Dimensions: Per existing		GROSS AREA		
		GRADE (sf)	SUPPORTED (sf)	CARS (#)
VERTICAL ADDITION 1			51,000	140
VERTICAL ADDITION NEW ROOF			51,000	140
	ON GRADE	0		
TOTALS	SUPPORTED		102,000	
	COMBINED	102,000		280
		SQUARE FEET PER CAR:	GROSS sf/car	364
		SUPPORTED CARS=		280

TOTAL SQUARE FEET (GROSS) 102,000

ITEM	DESCRIPTION	UNIT	TYPICAL COST/UNIT	QUANTITY	COST	$/SF	REMARKS
1	DEMOLITION & PREP - Stair & elevator tops	EA	$35,000.00	3	**$ 105,000**	$1.03	
2	COLUMN CONNECTIONS AT ROOF	EA	$500.00	56	**$ 28,000**	$0.27	
3	COULMNS - FORM & PLACE	EA	$3,200.00	56	**$ 179,200**	$1.76	$1000/cy
4	FLOOR SLAB	SF	$35.00	102,000	**$ 3,570,000**	$35.00	Note 5
5	EXTEND STAIR/ELEV TOWERS	SF	$300.00	2,200	**$ 660,000**	$6.47	Note 1
6	SPANDREL / BUMPER WALL	LF	$300.00	2,100	**$ 630,000**	$6.18	Note 3
7	EXPANSION JOINTS	LF	$100.00	450	**$ 45,000**	$0.44	
8	SEALANTS AND CAULK	SF	$0.50	102,000	**$ 51,000**	$0.50	
9	STRIPING	SF	$0.10	102,000	**$ 10,200**	$0.10	
10	ELECTRICAL	SF	$3.00	102,000	**$ 306,000**	$3.00	
11	PLUMBING	SF	$1.00	102,000	**$ 102,000**	$1.00	Note 2
12	STANDPIPES	SF	$0.75	102,000	**$ 76,500**	$0.75	.
13	REINFORCE STAIR FOOTINGS	EA	$35,000.00	3	**$ 105,000**	$1.03	
14	INTERIOR METAL GUARDRAILS	LF	$100.00	600	**$ 60,000**	$0.59	
15	ELEV. EQUIP. RELOCATION	EA	$75,000.00	2	**$ 150,000**	$1.47	
16	**Subtotal Trades**				**$ 6,077,900**		
17							
18	**GENERAL CONDITONS & SITE CONTROLS**		10.00%		$ 607,790		
19	**OVERHEAD AND PROFIT**		8.00%		$ 486,232		
		TOTAL CONST.			**$ 7,171,922**	$70.31	
		CONTINGENCY	10%		$ 717,192	$7.03	
		ENG & TESTING	15%		$ 1,075,788		Note 4
		BUDGET			**$ 8,964,903**	**$87.89**	

CONST. COST PER CAR	**280**	**$ 25,614**	**$/CAR**
TOTAL W/ CONT. & ENG	**280**	**$ 32,018**	**$/CAR**

NOTES
1 Extend stair/elev 2 floors, plus roof
2 Drain replacments for existing deck included in maintenance estimate
3 Allowance - Existing exterior is complicated to replicate.
4 Allowance used for budgeting only. Includes construction phase testing & inspection.
5 This unit cost has been validated by two major SE Michigan Contractors

Pierce Street Parking Structure - Expansion and Maintenance Costs						
	Year 1	Year 7	Year 14	Year 21	Year 28	Year 35
		New Addition Construction				
Construction of New 2 Level Vertical Addition	$ 9,000,000					
		Addition Repair and Maintenance				
Concrete and Waterproofing Maintenance	$ -	$ 107,000	$ 160,000	$ 214,000	$ 321,000	$ -
Lighting Fixture Replacement (2 addition levels)				$ 102,000		
		Original Structure Repair and Maintenance				
Concrete and Waterproofing Maintenance	$ 2,710,000	$ 2,981,000	$ 3,388,000	$ 3,930,000	$ 4,336,000	$ -
Drainage System Replacement (original structure)	$ 186,000					
Interior Ramp Bays - Barrier/Guard Upgrade	$ 288,000					
Lighting Fixture Replacement (original structure)				$ 307,000		
Demolition and New Deck Construction						
Subtotal	$ 3,184,000	$ 2,981,000	$ 3,388,000	$ 4,237,000	$ 4,336,000	$ -
GRAND TOTAL	**$ 12,184,000**	**$ 3,088,000**	**$ 3,548,000**	**$ 4,553,000**	**$ 4,657,000**	**$ -**

ALL COSTS ARE IN 2013 DOLLARS

FEASIBILITY STUDY

PIERCE STREET PARKING FACILITY EXPANSION

BIRMINGHAM, MICHIGAN

Prepared for:
CITY OF BIRMINGHAM

February 1, 1999

Mr. Dennis Dembiec, P.E.
Director of Public Works
City of Birmingham
151 Martin St.
Birmingham, MI 48009

Re: Pierce Street Parking Facility Expansion.
Project No: 4412.00

Dear Dennis:

Thank you for the opportunity to assist you with the review and evaluation of a possible expansion of the Park Street Parking Facility. We have included our structural evaluation as well as the cost and financial comparisons you requested. We would be pleased to discuss any of the issues raised in this report further if you require. Please call if you have any questions.

We are pleased to be of service to the City of Birmingham and look forward to assisting you in the future.

Sincerely,
Walker Parking Consultants/Engineers Inc.

Michael E. Johnson, P.E.
Manager

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ATTACHMENTS

ATTACHMENTS

- Expansion Cost
- Projected Maintenance Expenses
- Financial Analysis
- Brown Street Exit Plan

SUMMARY

The City of Birmingham has requested that Walker Parking Consultants evaluate the structural design and cost issues related to the addition of two levels of additional parking to the Pierce Street Parking Facility. We have completed this review and present our findings in this report. The discussion and financial estimates address three basic issues:

- The structural feasibility of expanding the parking facility with similar construction. This would increase the parking capacity from 720 spaces to approximately 1000 spaces.

- The expected construction costs of the expansion and the expected maintenance costs for the entire facility.

- A financial comparison of the alternatives including maintaining the structure at it's current capacity, expanding as noted above and, as a point of reference, a comparison to replacement costs for a new structure.

Any decision regarding the future of this facility will depend on the cost information provided as well as many planning issues that are not addressed in this review. This report is provided to assess the financial aspects of the expansion. The City of Birmingham will need to address the parking demand, traffic and target service areas for this expansion independently.

An increase of this size will affect the required entry/exit capacity for the facility. As it will be difficult to add capacity at the Pierce St. entry/exit, we have suggested a conceptual plan for an increase in the number of entry and exit lanes for the Brown St. side of the facility. Actual needs for this location may vary, but the suggested layout demonstrates the feasibility of adding two (2) equipment lanes to the three (3) that are present now. This will be sufficient for the proposed project.

In general, we find that the facility is in good condition for it's age and that the Pierce Street Parking Structure will continue to provide cost effective parking for a 25 to 30 year period. We have assumed a 25 year planning period for this analysis. The financial analysis indicates that the expansion option will require a considerably higher annual expected expense due the need to amortize the construction costs over a fairly short time frame, but this is still favorable when compared to the replacement costs of the same amount of parking. The City may explore other alternatives but, if the parking demand in this location should increase or otherwise justify the project, we suggest that the expansion option does provide a realistic development alternative.

STRUCTURAL SUMMARY

The purpose of this analysis was to assess the feasibility of a vertical expansion of the structure based on the structural capacity of the original design. In order to assess the overall feasibility without the need for an exhaustive analysis of every component, we performed a computerized structural analysis of selected representative frames and column lines. In our judgement and experience, these will be the controlling factors in design. Due to the amount of repetition and similarity in the original design, we have a high level of confidence that this approach provides a good review of the overall feasibility. While there may be some issues that become apparent if the project proceeds, we find that the expansion is feasible from a structural point of view. There do not appear to be any major non-compliant items that will significantly increase the cost of the proposed project. We do find selected items where some structural reinforcing may be required and have allowed for those modifications in the cost estimate.

The facility is a five level cast in place concrete structure with a 12.5 inch thick "two way flat slab" concrete floor slab. The floor design supports gravity loads, and concentrated "strips" of reinforcing along the column lines also act as part of the lateral loads (wind) resisting frames. The original design code required that wind be considered in design but recent versions of the BOCA code also require that basic seismic loads also be addressed. Our analysis considered the current seismic loads required by BOCA 1996.

For efficiency, Walker analyzed a typical east/west frame of the parking structure consisting of two columns and the affected portion of the floor. As there are six columns in each north/south frame line and the loads are similar, we did not conduct an analysis of this frame direction for the parking structure. We also performed analysis of the stair/elevator tower in both the east/west and north/south direction. Since the framing in the two other stair towers is similar, we have used our analysis of the stair/elevator as representative.

Some specific observations follow:

For the parking structure, the currently required seismic loadings are 2 to 2.5 times greater than the original wind loads. Despite this increase, we find that the typical columns and floor strips are only loaded to approximately 60% to 70% of their theoretical capacity.

We suspect that the additional capacity is due to the use of conservative design methods that were in practice at the time the structure was built. This result does not consider the effects of corrosion or deterioration of the reinforcing for the last 30 years. Since the structure has been maintained fairly well and there is adequate margin in the results, we do not see the need for the expense of a physical inspection of the reinforcing for a more exact evaluation at this time. Some inspections may be prudent if and when the design of the expansion takes place.

The results for the stair/elevator tower are similar. The columns have considerable additional capacity and the beams that participate in the lateral load system have 10% to 20% more strength than required for current load requirements. Because of the lighter floor system in the stair, the seismic loads are proportionately smaller and the wind condition still controls the design.

We have identified certain portions of the foundations where calculated loads exceed the design capacity by some amount. For the typical footing under gravity loads only (self weight plus live loads), the soil pressure is approximately 95% of the capacity stated on the original drawings. This is adequate and complies with the code requirements.

For the wind load condition, we find that the typical footing soil pressure is 3% over allowable and consider this negligible.

For the seismic loads, we find that the soil pressure is approximately 12% over allowable based on a linear analysis of the soil pressure at the extreme edge of the footing. We consider this an acceptable situation for the extreme, short-term earthquake loading. Factors of safety for actual soil capacity are typically in the range of 2 to 2.5. As a result, the 12% excess is a small portion of the actual capacity of the soil. In addition, the original design specifications required test drilling every foundation location before construction, and there are no signs of settlement or movement of the structure after 30 years. This gives added credibility to the soil capacity listed in the specifications and reduces any concern about the slight overstress for this extreme condition.

We did identify one area of concern where calculated loads are above acceptable levels by approximately 25%. There are several footings near the stairs that support both parking deck columns and stair columns. This condition produces loads that are offset from the center of the footing and produces pressures at one edge of the footing that are much higher than desired. In this case, we recommend that the situation be corrected as part of the expansion project. This can be done by excavating and extending the footing, or tying it to an adjacent footing to distribute the load. We have not identified a specific repair, but have allowed for this effort in the cost estimate.

For reference, our review of code requirements included a check for strength as well as selected detailing requirements for main members per the standards in effect for new constriction. BOCA 1996 (p. 1614.2) requires that an existing structure comply with the current design code if an addition will increase the loads on the structure by more than 5%. We conducted our review according to loads specified in the BOCA 1996 standard and evaluated structural capacity in accordance with the American Concrete Institute ACI 318/95, the structural design code in effect at this time. As this structure is in an area of low seismic risk, the special seismic detailing requirements of ACI 318/95 (Chapter 21) do not apply. With minor exceptions, the column and slab details meet the standard provisions of ACI. These issues relate to detailing and construction practice and are not expected to affect the strength of the structure.

COST ESTIMATES

Construction Cost

Walker's opinion of probable construction cost is included with the attachments. Our approach has been to use typical industry expenses for major items and adjust the expected prices for factors that will affect the project. Some of these include the level of difficulty working near existing facilities and the relatively small size of the project compared to the fixed contractor costs for mobilization and management of the project. Our assumptions are as follows:

Costs are in 1998 dollars. The City may apply escalation factors depending on the year the work is proposed.

We do not have design specifications or details for the three elevators, nor have we conducted an inspection of their condition. These are the sheave type with hoists located in a penthouse at the top of the towers. They will need to be removed, stored and reinstalled at the new top level. We have included an allowance for equipment relocation but we suggest the City of Birmingham independently check this allowance with the elevator service contractor you currently employ. We have provided an estimate for the costs of the physical extension of the shaft and stairs.

Costs are based on expansion of the facility with architectural details and type of construction similar to the existing.

We have not allowed for any other improvements to the structure, graphics, lighting or other features that the City may consider in the future. The proposed expansion will probably require that the City increase the capacity of the Brown St. entry/exit area and we have attached a plan of one possible approach.

Maintenance Costs

We have provided maintenance cost estimates based on industry norms and our experience with this structure. The existing structure is 30 years old and will have higher maintenance costs that a new facility. We have attempted to provide a comparison that will allow the City to evaluate the investment for the proposed vertical expansion.

The City of Birmingham typically maintains it's parking system in better condition than industry average but we suggest that, even with an aggressive maintenance program, the economic life span of the existing structure cannot be expected to be more that an additional 25 to 30 years. We have used 25 years in this analysis and have assumed than the structure will be abandoned at the end of that period.

The average repair cycle (time between significant restoration projects) for the industry is approximately 7 years depending on the type of client and age and use of the facility. Since the City maintains a high standard for the condition of it's facilities, maintenance cycles are more on the order of 4 to 5 years. Our cost estimates are based more on the industry average period and are meant only to provide a general indicator over time. Actual work at the structure may occur more or less frequently, as conditions require.

FINANCIAL ANALYSIS

The attached table summarizes several alternatives according to both net present value of the investment and an equivalent annual expense over the expected life of the structure. To help review this information, we have provided these estimates both in terms of total costs and on a "per parking space" basis. The options included are:

Status Quo: Maintain the structure at its current capacity. This provides approximately 720 parking spaces for an assumed service life of 25 years.

Expansion: Add two levels to the existing facility. This will increase the capacity to approximately 1000 spaces. The expected service life of this option is also approximately 25 years based on the condition of the existing portion of the structure.

Replacement: For comparison, we have also listed the expected costs to replace the existing structure with a new facility. We do not suggest that this is a realistic possibility in the short term, but the annual costs for this option may be an interesting benchmark for the proposed expansion. With current practices, the expected life of a new facility will be on the order of 50 years, and the annual maintenance costs will be significantly lower than for the proposed expansion. For this option to be meaningful, the City of Birmingham must either demolish the existing structure or replace it in a different location. Since we have little information regarding land costs in Birmingham, we have presented the option as if the existing structure were to be demolished. We have allowed for $350,000 for this item and shown it as part of the initial cost. If the City prefers to consider replacement at a different location, this cost item can be factored based on the expected cost of the land required.

Assumptions

Most significantly, we have assumed the economic life span of the structure can be extended for an additional 25 years. This time period is somewhat longer than industry averages for a facility of this period and would result in a 55 year total life span. We have taken this approach for several reasons. The structure is in generally good condition, having been maintained well for the last 10 to 12 years. In addition, the City of Birmingham has adopted a regular and thorough maintenance program for all of the existing parking facilities.

We feel that this policy will allow repair of the inevitable problems before maintenance costs become extreme. We have also assumed that, if the City pursues this option, the level of regular maintenance will be increased to protect the investment in the new portion of the structure. This would entail traffic coating for the entire structure and an increased level of repair and maintenance. We have allowed for the probable costs of this effort in our analysis.

We have also considered a difference in the escalation rate of construction costs and the rate of return used to evaluate the present value of different options. The rate of escalation of construction costs for restoration and maintenance has been significantly lower than the general rate of inflation for the last 5 to 10 years. This is due to increased competition and changes in the technology of producing and installing the materials used for this industry. In addition, the discount rate for alternative investments or use of City funds may be significantly higher than the change in the Consumer Price Index. We have attempted to allow for this difference in the

attached table. Any estimate will be subject to discussion on these issues, and we have provided the specific factors for your information. The City's experience may indicate that slight adjustments are reasonable. For the purposes of this analysis, we have assumed the escalation rate for construction repairs to be 3.0% annually. We have assumed the discount rate, or cost of financing, to be on the order of 7%. For your reference, we have also provided a similar analysis assuming a discount rate of 5%.

Our review is intended to provide cost information related to construction and repair options for the facility and an overall financial comparison of these options as they appear at this time. While we cannot anticipate every eventuality, change in usage, or level of maintenance in the future, these estimates do provide reasonable comparisons for your use in the decision process at this time.

We have included initial construction costs and maintenance/repair costs in this analysis. Operating costs and expected revenue will also differ slightly and should be considered in the evaluation.

City of Birmingham
Pierce Street Parking Facility Vertical Expansion

Probable Construction Cost 30-Jan-99

TOTAL SQUARE FOOTAGE 102,000

ITEM	DESCRIPTION	UNIT	TYPICAL COST/UNIT	QUANTITY	COST	REMARKS
1	DEMOLITION & PREP	EA	$40,000.00	1	$40,000.00	Stair & wall
1	COLUMN CONNECTIONS AT ROOF	EA	$300.00	56	$16,800.00	
2	COULMNS - FORM & PLACE	EA	$1,200.00	56	$67,200.00	$400/cy
3	FLOOR SLAB	SF	$20.00	102,000	$2,040,000.00	
4	SPANDREL / BUMPER WALL	LF	$80.00	2,100	$168,000.00	
5	EXPANSION JOINTS	LF	$100.00	450	$45,000.00	
6	SEALANTS AND CAULK	SF	$0.50	102,000	$51,000.00	
7	STRIPING	SF	$0.04	102,000	$4,080.00	
8	SIGNAGE	SF	$0.20	306,000	$61,200.00	Note 1
9	ELECTRICAL	SF	$1.75	102,000	$178,500.00	
10	PLUMBING	SF	$0.50	102,000	$51,000.00	
11	REINFORCE STAIR FOOTINGS	EA	$10,000.00	3	$30,000.00	
12	INTERIOR METAL GUARDRAILS	LF	$60.00	600	$36,000.00	
13	STAIR/ELEVATOR TOWERS	SF	$150.00	1,575	$236,250.00	Note 2
14	ELEV. EQUIP. RELOCATION	EA	$20,000.00	3	$60,000.00	Note 3
15	PARKING & REVENUE CONTROL	LS	$200,000.00	1	$200,000.00	Note 4
	GENERAL CONDITIONS	LS	10%	1	$328,503.00	
						SQ. FT. Costs
	Construction Cost / Space $12,905.48	SUBTOTAL			$3,613,533.00	$35.43
		CONTINGENCY	10%		$361,353.30	
		ENG & TESTING	15%		$542,029.95	
		TOTAL			$4,516,916.25	$44.28
			CARS =	280	$16,132	$/CAR

NOTES
1. Allownce for industry typical graphics for entire structure. Owner may elect more elaborate signage.
2. Includes 2 floors plus penthouse at each of 3 stairs for total of 1575 sf.
3. Estimated cost for removal, temporary storage and reinstallation of elevator hoist equipment. Does not allow for upgrades. Elevator allowance assumes equipment is originally designed for vertical expansion similar to the parking structure.
4. See report. We have included an allowance for additional exit lanes
5. Unless specifically noted, costs represent the cost related to the additional floors. It is assumed that capacity of electrical, and plumbing is adequate for the expansion

City of Birmingham
Pierce Street Parking Facility Maintenance Projections

30-Jan-99

CURRENT CAPACITY 720 SPACES

Year				96/97	2003	2010	2017
Description	Units	Base Quantity	Unit Price	**Quantity/ Cost**	**Quantity/ Cost**	**Quantity/ Cost**	**Quantity/ Cost**
Concrete Overlay Repair	SF	85000	$10.00	7700 $77,000	15000 $150,000	30000 $300,000	30000 $300,000
Structural Floor	SF	204000	$25.00	500 $12,500	1500 $37,500	3000 $75,000	6000 $150,000
Ceiling & Overhead	SF	204000	$60.00	1350 $81,000	2000 $120,000	2500 $150,000	3000 $180,000
Columns, walls, other structural concrete	N/A	N/A	N/A	$13,600	$15,000	$20,000	$25,000
Masonry and Stairs	N/A	N/A	N/A	25,950	$10,000	$10,000	$10,000
Expansion Joints	LF	900	N/A	$47,100	$50,000	$60,000	$70,000
Cracks & Sealant	LF	N/A	$3.00	8,434 $25,302	5000 $15,000	5000 $15,000	5000 $15,000
New Deck Coating	SF	N/A	$3.00	26200 $78,600	52000 $156,000	0 $0	0 $0
Repair Deck Coating	SF	N/A	$4.00	4975 $19,900	6000 $24,000	7500 $30,000	9000 $36,000
Recoat Deck Coating	SF	N/A	$1.50	117,200 $175,800	117,200 $175,800	204,000 $306,000	204,000 $306,000
Penetrating Sealer	SF	N/A	$0.40	52000 $20,800	0 $0	0 $0	0 $0
Miscellaneous	N/A	N/A		$13,397	$15,000	$20,000	$25,000
Totals Per Repair Cycle				**$577,552**	**$753,300**	**$966,000**	**$1,092,000**
Annual Total				**$82,507**	**$107,614**	**$138,000**	**$156,000**
Annual Total per Parking Space				**$115**	**$149**	**$192**	**$217**
Annual Total per Suqare Foot				**0.40**	**0.53**	**0.68**	**0.76**

Proposed Addition Maintenace Costs

Number of Spaces 280 Total Area 102000

Annual Total per Square Foot	**$0.10**	**$0.15**	**$0.25**
Annual Total per Parking Space	**$36**	**$55**	**$91**
Annual Total	**$10,200**	**$15,300**	**$25,500**

Grand Average Maintenance Costs

Number of Spaces 1000 Total Area 306000

Annual Total per Square Foot	**$0.39**	**$0.50**	**$0.59**
Annual Total per Parking Space	**$118**	**$153**	**$182**
Annual Total	**$117,814**	**$153,300**	**$181,500**

Notes
1. Equipment costs (elevator maintenance, revenue control obsolescence) not included
2. All costs in 1998 dollars
3. 96/97 year prices are industry averages and do not match actual bids for the work. Included for reference only
4. Maintenance costs for slab on grade level assumed to be negligeable. Floor areas only include supported floors. Resulting total represents entire parking facility within the limits of the accuracy of the estimate.

City of Birmingham
Pierce Street Parking Facility - Financial Analysis

DISCOUNT RATE 7% 30-Jan-99

EXPANSION OPTION	1-Jan-99	1-Jan-03	1-Jan-10	1-Jan-17	1-Jan-25
Initial Costs (2 levels)	$4,517,000	$0	$0	$0	$0
Expected Maintenance	$0	$929,990	$1,480,740	$2,162,400	$0
Subtotal	$4,517,000	$929,990	$1,480,740	$2,162,400	$0

Financial Summary			**TOTAL COST**	**COST PER SPACE**
Net Present Value	SPACES	1,000	**$6,568,635**	**$6,569**
Annulaized Costs	YEARS	25	**$563,658**	**$564**

STATUS QUO	1-Jan-99	1-Jan-03	1-Jan-10	1-Jan-17	1-Jan-25
Initial Costs	$0	$0	$0	$0	$0
Expected Maintenance	$0	$929,990	$1,480,740	$2,162,400	$0
Subtotal	$0	$929,990	$1,480,740	$2,162,400	$0

Financial Summary			**TOTAL COST**	**COST PER SPACE**
Net Present Value	SPACES	720	**$2,051,635**	**$2,849**
Annulaized Costs	YEARS	25	**$176,052**	**$245**

REPLACEMENT FACILITY	1-Jan-99	1-Jan-03	1-Jan-10	1-Jan-17	1-Jan-25
Initial Costs	$7,350,000	$0	$0	$0	$0
Expected Maintenance	$0	$27,685	$50,715	$83,300	$0
Subtotal	$7,350,000	$27,685	$50,715	$83,300	$0

Financial Summary			**TOTAL COST**	**COST PER SPACE**
Net Present Value	SPACES	700	**$7,419,820**	**$10,600**
	COST/CAR *	$10,500		
Annulaized Costs	YEARS	50	**$537,639**	**$768**

* Includes $350,000 allowance for demolition of existing structure

City of Birmingham, Michigan
Automobile Parking System Fund
Projected Cash Flow Analysis

CITY OF BIRMINGHAM
AUTOMOBILE PARKING SYSTEM FUND
CASH FLOW PROJECTION

	ACTUAL 2007-2008	ACTUAL 2008-2009	ACTUAL 2009-2010	ACTUAL 2010-2011	ACTUAL 2011-2012	ACTUAL 2012-2013	PROJECTED 2013-2014	PROJECTED 2014-2015	PROJECTED 2015-2016	PROJECTED 2016-2017	PROJECTED 2017-2018
CASH FLOWS FROM OPERATING ACTIVITIES:											
CASH RECEIVED FROM CUSTOMERS	$3,733,210	$3,671,119	$3,433,107	$3,827,643	$3,957,644	$4,366,702	$4,366,702	$4,366,702	$4,366,702	$4,366,702	$4,366,702
CASH RECEIVED FROM FEDERAL GRANT				125,120	-	-	-	-	-	-	-
CASH PAYMENT TO SUPPLIER/CONTRACTORS FOR GOODS & SERVICES	(357,388)	(900,349)	(696,928)	(547,599)	(509,294)	(601,165)	(617,994)	(635,328)	(653,182)	(671,571)	(690,512)
CASH PAYMENT TO CENTRAL PARKING SYSTEM CONTRACTOR	(1,513,234)	(1,607,480)	(1,362,731)	(1,339,731)	(1,388,576)	(1,367,792)	(1,345,863)	(1,385,931)	(1,431,098)	(1,477,799)	(1,526,090)
CASH PAYMENT TO CITY EMPLOYEES FOR SERVICES	(358,012)	(339,900)	(335,955)	(365,840)	(305,345)	(372,135)	(383,788)	(396,005)	(408,637)	(421,701)	(434,783)
NET CASH PROVIDED BY OPERATING ACTIVITIES	1,504,576	823,390	1,037,493	1,699,593	1,754,429	2,025,610	2,019,057	1,949,439	1,873,786	1,795,631	1,715,317
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:											
PROCEEDS FROM BOND ISSUE	-	-	-	-	-	-	-	-	-	-	-
PROCEEDS FROM SPECIAL ASSESSMENTS	-	-	-	-	-	-	-	-	-	-	-
BOND PAYMENTS - PRINCIPAL AND INTEREST (CHESTER STRUCTURE)	(761,624)	-	-	-	-	-	-	-	-	-	-
BOND PAYMENTS - PRINCIPAL AND INTEREST	-	-	-	-	-	-	-	-	-	-	-
BOND ISSUANCE COSTS										-	
ACQUISITION AND CONSTRUCTION OF CAPITAL ASSETS	(640,757)	(762,083)	(1,015,972)	(1,527,775)	(1,018,553)	(1,461,432)	(1,636,500)	(1,200,000)	(1,200,000)	(1,200,000)	(1,200,000)
DESIGN AND CONSTRUCTION	(302,316)	502,992									
TRANSFER IN FROM OTHER FUNDS	-	-	-	-	-	-	-	-	-	-	-
TRANSFER OUT TO OTHER FUNDS	-	-	-	-	-	-	-	-	-	-	-
NET CASH USED FOR CAPITAL AND RELATED FINANCING ACTIVITIES	(1,704,697)	(259,091)	(1,015,972)	(1,527,775)	(1,018,553)	(1,461,432)	(1,636,500)	(1,200,000)	(1,200,000)	(1,200,000)	(1,200,000)
CASH FLOWS FROM INVESTING ACTIVITIES:											
INTEREST AND DIVIDENDS ON INVESTMENTS	161,792	103,938	51,347	29,984	40,328	(7,560)	74,000	83,100	100,980	130,680	143,690
INTEREST EARNED ON CONSTRUCTION BOND											
PROCEEDS FROM SALE OF INVESTMENT SECURITIES											
NET CASH PROVIDED BY INVESTING ACTIVIITES	161,792	103,938	51,347	29,984	40,328	(7,560)	74,000	83,100	100,980	130,680	143,690
NET INCREASE (DECREASE) IN CASH AND INVESTMENTS	**(38,329)**	**668,237**	**72,868**	**201,802**	**776,204**	**556,617**	**456,557**	**832,539**	**774,766**	**726,311**	**659,007**
CASH AND INVESTMENTS AT BEGINNING OF YEAR	2,868,705	2,830,376	3,498,613	3,571,481	3,773,283	4,549,487	5,106,104	5,562,661	6,395,200	7,169,966	7,896,276
CASH AND INVESTMENTS AT END OF YEAR	$2,830,376	$3,498,613	$3,571,481	$3,773,283	$4,549,487	$5,106,104	$5,562,661	$6,395,200	$7,169,966	$7,896,276	$8,555,283