Fourth Street

Winston-Salem, NC

DOWNTOWN PARKING ANALYSIS

REVISED FINAL REPORT

Prepared for

Downtown Winston-Salem Partnership, Inc.

c/o Lyons Gray
Downtown Winston-Salem Partnership, Inc.
500 W. Fourth St.
Winston-Salem, NC 27101

Prepared by

MARTIN ALEXIOU BRYSON

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2414 WYCLIFF ROAD, SUITE 101, RALEIGH, NC 27607

EXECUTIVE SUMMARY

This report examines the availability of short-term and commuter parking spaces in the area around 'Restaurant Row' in downtown Winston-Salem. This area, bounded by Second, Poplar, Fifth and Main Streets, has around 350 short-term parking spaces and over 3,500 commuter or other spaces, in a mixture of decks, surface lots and on-street spaces. Surrounding blocks also contribute to the area's parking supply.

A 'snapshot' occupancy survey found parking demand in the study area to be about 1940 long-term spaces and 240 short-term spaces. This means there is ample spare capacity for long-term parking, with just 54% of spaces in use. For short-term parking, there are ample spaces at the western end of Restaurant Row, but the spaces near the central and (to a lesser extent) eastern parts of Restaurant Row are fully occupied. The latter is consistent with suggestions that demand is being suppressed by parking shortages, although this cannot be proved or disproved by the survey.

Current parking demand was estimated, based on the existing land uses in the area and standard parking demand rates. The potential future parking demand, if all existing buildings were to become fully occupied, was also estimated. These two estimates suggest that parking demand in the study area is likely to rise by about 690 long-term spaces and 310 short-term spaces. The supply of long-term parking appears adequate to accommodate this growth, although commuters may sometimes need to walk a block or two. However, there will be a significant deficit in short-term parking across almost the whole of Restaurant Row, with a total shortfall of about 200 spaces.

The following recommendations are made to address the current and future shortfalls:

- Formalize the existing parking on Town Run Lane, between Third and Fourth Streets, into short-term parking
- Consider whether any of the loading spaces on Liberty St, between Fourth and Fifth, can be converted to short-term parking.
- Reinstate the on-street parking on Cherry Street, beside the Nissen Building, once work there is complete.
- Negotiate with the County to convert the staff-only spaces outside the Old Courthouse to public use.
- Take a partnership approach to using some existing off-street spaces for short-term parking.
- Consider whether certain spaces on Marshall Street, outside the Cherry-Marshall deck, that are closed for traffic safety reasons, can be brought back into use.
- Undertake streetscape improvements to tie vacant spaces better into Restaurant Row.
- Consider providing parking spaces on Town Run Lane, south of Third St.
- Convert Third Street to two-way traffic throughout, to assist parking search.
- Provide distinctive signage to assist parking search.
- The existing proposal to create a temporary surface lot on the Mother & Daughter site, at the heart of Restaurant Row, is supported. The increased short-term parking resulting from this temporary lot should be considered as additional

parking demands that are not included in the potential parking demands for the proposed civic plaza project. Any parking facility included in the civic plaza redevelopment project should include these short-term spaces in addition to the parking requirements of the redevelopment project.

UPDATE FROM ORIGINAL FINAL REPORT

This report includes a revised calculation of current and future parking demand for the Pepper Building and hence for block 46, plus a revised summary of the future short-term parking requirements. The text and figures have been revised accordingly.

As a result, the forecast demand for block 46, and hence for the study area as a whole, is increased by 20 short-term and 40 long-term spaces. However, the number of short-term spaces that should be created by partnership arrangements is reduced to 102-141. The additional long-term demand can be accommodated within existing vacant spaces nearby. There is accordingly no substantive change to the recommendations.

CONTENTS

1 INTRODUCTION

1.1 BACKGROUND TO THIS STUDY

'Restaurant Row' is the designation for a portion of West Fourth Street (between Main Street and Spruce Street) in downtown Winston-Salem.

While it has generally been accepted that the overall number of downtown parking spaces is sufficient to meet the total parking demands, there are concerns about whether this supply provides sufficient convenient and cost-effective parking for the casual or short-term customers of the area's commercial, retail, and restaurant businesses. Many of the spaces are in decks, and concerns have been heightened following the recent reconfiguration of Fourth Street which involved relocating a number of short-term spaces.

The Downtown Winston-Salem Plan foresees continued growth along Restaurant Row and its environs, but to achieve this, there must be convenient and readily available short-term parking that is sufficient to accommodate the growth.

Martin/Alexiou/Bryson, PLLC was therefore commissioned to undertake a parking analysis for existing and future land uses in the Restaurant Row area, and specifically:

- to determine the parking needs of workers, visitors and customers of businesses located within the study area;
- to determine parking needs by time-of-day and duration; and
- to make recommendations to improve the management of the existing parking supply to meet the existing and near term parking demand.

This report summarizes the existing parking spaces available in the area, their current level of use, and their forecast future level of use. Recommendations are made to address deficiencies.

The study area represents a section of downtown Winston-Salem, bounded by Fifth Street to the north, Main Street to the east, Second Street to the south, and Poplar Street to the west. All parking facilities within this area, plus those within close proximity (generally within a single block), have been considered in the analysis.

The analysis of future conditions is based on the City's aspirations for the next few years. It assumes full occupation of existing buildings, but does not assume any major redevelopment. Although the Downtown Plan proposes a new Civic Plaza, with associated new office buildings, the proposal is at too early a stage to estimate the resulting parking demand.

1.2 KEY USERS OF DOWNTOWN PARKING

The availability, cost and quality of parking space is a key factor in the effective functioning of a downtown. Different users have different requirements, but two user-groups are key to this study.

Short-term parking demand results from customers, visitors and service people having relatively short-term trips to a variety of destinations – for example, a five-minute visit to a drugstore or a one-hour visit to a restaurant for lunch. These visits are generally highly time-sensitive, and so users prefer to park very close to their destination. Because they

are not regularly parking in the same space, it is also important that they can find a space easily. If these two criteria are not met, customers may often choose to take their business elsewhere (e.g. to suburban malls). Generally, these users are willing to pay an hourly rate for convenient parking, although there is always a trade-off between price and attractiveness. Loading and unloading of goods has similar requirements, and often requires the same spaces as customers or visitors.

Long-term parking demand results from commuters having a regular destination and therefore prefers a regular parking spot. Although proximity to the workplace is valued, they are more likely than visitors or customers to accept a degree of distance, particularly if there is certainty of a space. (The distance might involve being on the upper levels of a deck, for example, as well as just street distance.) Parking requirements for residents of the downtown and hotel visitors are generally grouped with the long-term parking demand.

In addition to the duration of the parking, another factor that influences the attractiveness of parking supply for short versus long-term is the walk distances to the actual activity. While there are not specific criteria available in the literature related to walk distances other than to say that the parking supply should be convenient, for the purposes of this analysis we estimated that the short-term supply needed to be within one to two blocks walking distance from the desired activity.

2 AREA DESCRIPTION

2.1 THE STUDY AREA AND ITS ENVIRONS

Figure 1 shows the study area and its environs. The study is centered on 'Restaurant Row', a section of West Fourth Street in Downtown Winston-Salem. This part of the street, broadly between Liberty Street and Spruce Street, has been designated as such in the Downtown Winston-Salem Plan with the objective of developing a cluster of restaurants there.

The area immediately around Restaurant Row, from Third Street northwards to Sixth Street and beyond, has been designated as the Arts & Entertainment Area in the plan. The area's character is of pedestrian-oriented, street-level mixed use. A key linkage is northwards along Trade Street, leading to an attractive row of art-related shops north of Sixth Street (outside the study area).

To the east and north-east of the study area is the R J Reynolds factory complex. The transition from the downtown to the factory area is marked by blocks of surface-level parking for the factory's employees.

South of Third and east of Liberty is the 'Government District', which houses the new courthouse and offices for City, County and Federal governments.

The area bounded by Third / Liberty / Second / Cherry Streets is the 'Civic Plaza Area'. Currently a mixture of parking decks, offices and smaller commercial buildings, the long-term aim for this area is to create a new civic plaza surrounded by new buildings. South of here is the 'Financial District', with notable office towers owned by BB&T and Wachovia.

West of Cherry Street, to the south-west of the study area, the downtown transitions into a mixed-use area of churches, small offices, commercial buildings and houses. However, retail and commercial activities continue westwards along Fourth Street for some distance.

In the north-west of the study area, Poplar Street marks the transition from downtown to the mixed-use district. The GMAC office tower is on the edge of the study area, with the library and the landmark First Baptist Church just outside. Nearby, to the north of the study area, is the Convention Center.

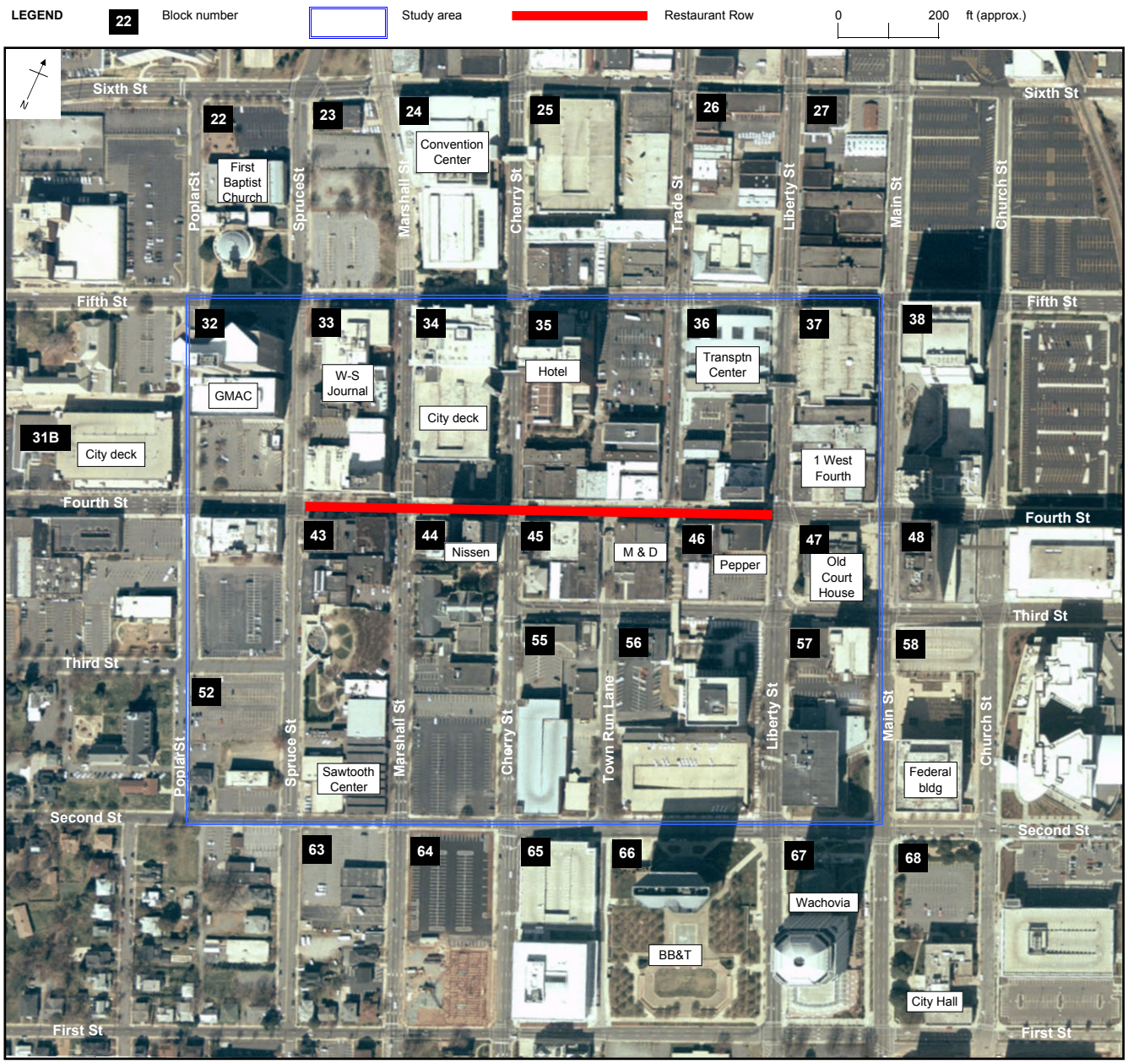
The 'Lunchline' bus service circulates in a clockwise loop around the Downtown, with a number of stops in the study area including two on Fourth Street and others nearby. The service runs from 11:30 AM to 1:30 PM on weekdays, with buses every five or six minutes.

2.2 RESTAURANT ROW

Although this study has a defined area of 19 city blocks, the key location is Restaurant Row itself.

The section between Spruce and Liberty consists mostly of typical downtown shopfront buildings with an eclectic set of uses:

Figure 1: The study area and its environs



- Shops – There is a mix of shops, including both day-to-day goods and comparison goods. There are also fast-food restaurants and services. The number of quality restaurants has increased in recent years, reflecting some success in creating Restaurant Row.

- Offices and galleries – Many of the shop units, as well as space above shopfronts, are used as art galleries or offices (such as architects and attorneys).

- Vacancies – There are a large number of vacant units along the street, such as the former Woolworths around the corner on Liberty.

Two key buildings are of particular note:

- The Nissen Building, on the south-west corner of Cherry and Fourth, is a landmark office tower currently undergoing conversion to condominiums, with potential office and retail space on the first floor.

- The Pepper Building, on the south-west corner of Liberty and Fourth, is another attractive office building. Currently vacant, it is owned by the Downtown Foundation, which has ambitions for a similar conversion here.

Between these two buildings, at the heart of the street, are two former department stores:

- The former Davis department store building (202 West Fourth) is currently home to a dance school, but has potential for redevelopment, perhaps featuring condominiums and retail.

- The former Mother & Daughter store is vacant. The City Council is considering partial demolition to create a temporary surface lot, which would address short-term parking needs. The western part of the store, plus the small adjoining office building, would be demolished to create a slim lot alongside Town Run Lane. Under the proposed design, vehicles would enter from Fourth Street and exit onto Third Street. There would be 28 spaces.

These two ex-stores are separated by Town Run Lane, which acts as the northern end of the strollway that runs from Fourth Street southwards to Old Salem. Between the Mother & Daughter and Pepper Buildings, a pedestrian walkway runs from Fourth Street to a bridge over Third Street, finishing at Liberty Plaza.

Eastwards beyond Liberty Street, where the streetscape enhancements finished, the street is dominated by two major buildings: are a relatively recent office tower (1 West Fourth Street) to the north, and the Old Courthouse to the south. The Old Courthouse was formerly home to various local government functions, but is now unused.

2.3 RECENT STREET LAYOUT CHANGES ON FOURTH STREET

Fourth Street was previously a one-way street, with three traffic lanes plus curbside parking. The street saw a major transformation recently as part of the Downtown Plan. The entire length was converted to two-way traffic. The section between Spruce and Liberty saw major streetscape improvements, with widened sidewalks, curb build-outs at intersections, and new trees and flower beds (Figure 2).

To accommodate this, traffic was reduced to one lane in each direction, plus curbside loading spaces at certain locations. The lost curbside parking spaces were replaced elsewhere on the local street network. Nevertheless, there remain concerns that there is insufficient attractively-located short-term parking available to meet the demands of businesses along the street. As well as servicing requirements, many of these businesses see short-term visits by car as being a key part of their customer base.

2.4 CIVIC PLAZA PLANS

The Downtown Winston-Salem Plan generally foresees continued regeneration and re-occupation of the downtown, aided by a number of key infrastructure, development and cultural projects.

Among those projects, the proposed Civic Plaza is particularly relevant to this study. A landscaped public plaza, with parking underneath, would take over the site of the existing Mother & Daughter building, extending south to a relocated Third Street, and would also replace the hard landscaping to the north of the Liberty Plaza building. New office buildings would complete the urban form alongside the Pepper building and Liberty Plaza, as well as along Town Run Lane.

For the near future, the City is considering partial demolition of the Mother & Daughter Building (as described in section 2.2 above) to create a temporary surface parking lot, pending full redevelopment. This is specifically intended to address concerns over short-term parking availability.

After the full redevelopment, the parking space underneath the plaza could provide additional short-term parking for this area of Restaurant Row, as well as commuter parking for the surrounding offices.

The Downtown Partnership is in the process of issuing a Request for Proposals for part of the area, as a first step in the redevelopment. This project area includes the Old Courthouse, the Pepper Building and its block, the Mother & Daughter building and the landscaped area of Liberty Plaza.

Figure 2: The new layout of Fourth Street at Restaurant Row

3 CURRENT PARKING SUPPLY

3.1 OVERALL PARKING SUPPLY

Martin/Alexiou/Bryson surveyed the current supply of parking spaces in the study area, using a complete field survey and checking against the existing parking map. Table 1 summarizes the parking supply in the study area.

Table 1: Summary of parking supply in the study area

Type	*Short-term*	*Long-term*	*Total*
On-street	318	13	331
Off-street, surface lot	22	1,033	1,055
Off-street, deck	11	2,519	2,530
Total	351	3,565	3,916

Table 2 (at the end of this section) breaks these totals down into block-by-block supply, and also shows the spaces in the blocks immediately surrounding the study area. To put the supply into a clearer context, Figure 3 maps the off-street spaces and Figure 4 maps the on-street spaces.

3.2 PARKING DECKS

The study area has four parking decks, with a total of 2,530 spaces.

One of them, just north of Fourth Street between Cherry and Marshall, is city-owned and charges 75¢ per hour. Eleven spaces on the lower levels are dedicated to short-term parking. Many of the remaining spaces in this deck are used by people at the adjoining hotel or the convention center, particularly during major conventions.

The other three decks are privately-owned, and are slightly further from Fourth Street. All charge $1 per hour for casual parking, with no specific allocation of short-term spaces. Many spaces in these decks are used by commuters with long-term permits.

Altogether, the decks provide about 71% of the long-term parking in the study area.

3.3 SURFACE LOTS

There are a number of large and small surface lots in the study area, with a total of 1,055 spaces. Almost all these spaces are privately-owned. Most are reserved for employees or residents of particular buildings, such as the Sheriff's Office. However, the Presbyterian Church opens 151 of its spaces to the public on weekdays, charging $2 per day. There is also a 22-space lot with short-term meters beside the Transportation Center; this is the only surface lot with specific short-term spaces.

3.4 ON-STREET SPACES

The 331 on-street spaces in the study area are a mixture of meters and free spaces. Most are 30-minute, 1-hour or 2-hour spaces, with some loading spaces. Twelve on-street spaces outside the Old Courthouse are posted as being for County staff only (and have been regarded as long-term for this survey).

Table 2: Parking supply in the study area and fringe

Block #	Study area / fringe	On-street ST	On-street LT	Surface lots ST	Surface lots LT	Decks ST	Decks LT	TOTAL ST	TOTAL LT	TOTAL All	Notes
22	**Fringe**	7	-	-	25	-	-	7	25	32	Surface Lot private (Baptist Church)
23	**Fringe**	12	-	-	221	-	-	12	221	233	Surface Lot private (W-S Journal)
24	**Fringe**	10	-	-	-	-	-	10	0	10	Convention Center. No off-street parking
25	**Fringe**	11	-	-	-	30	859	41	859	900	City deck. 75c per hour
26	**Fringe**	30	-	-	45	-	-	30	45	75	surface lots private (21 spaces north-east lot, 24 spaces west lot)
27	**Fringe**	19	-	-	27	-	-	19	27	46	surface lots private (13 spaces in north-east lot, 14 in west lot)
31B	**Fringe**	25	-	-	-	69	693	94	693	787	City deck. Short-term spaces are P&D, $1 per hour, max $10 all day. Upper levels are reserved for passholders. Unattended.
32	**Study area**	23	-	-	92	-	-	23	92	115	surface lot private for GMAC tower
33	**Study area**	42	-	-	23	-	-	42	23	65	Surface lots private (10 in north-west lot, 13 in south-west lot). 11 on-street spaces are loading-only.
34	**Study area**	13	-	-	-	11	616	24	616	640	City deck. 75c per hour.
35	**Study area**	10	-	-	120	-	-	10	120	130	surface lot private (hotel)
36	**Study area**	14	-	22	-	-	-	36	0	36	surface lot is public, 1hr meters. Nine of the on-street spaces are loading-only
37	**Study area**	14	-	-	-	-	700	14	700	714	Public deck (Central Parking), $1 per hour. On-street spaces include 7 for loading.
38	**Fringe**	2	-	-	-	-	-	2	0	2	Two loading spaces
42	**Study area**	36	-	-	150	-	-	36	150	186	surface lot private (for residents of apartments and businesses)
43	**Study area**	44	-	-	33	-	-	44	33	77	Two private lots (18 and 15 spaces respectively)
44	**Study area**	13	-	-	209	-	-	13	209	222	Church-owned lots - 151 public spaces ($2/day) and 58 private spaces. On-street spaces alongside Nissen Bldg curently closed for construction work.
45	**Study area**	14	-	-	-	-	-	14	0	14	Five of the on-street spaces are loading only.
46	**Study area**	17	-	-	55	-	-	17	55	72	Public surface lot, privately-owned
47	**Study area**	10	13	-	-	-	-	10	13	23	On-street spaces include 13 reserved for County staff and 4 commercial.
48	**Fringe**	17	-	-	-	-	-	17	0	17	No off-street parking. On-street parking spaces include 2 loading.
52	**Study area**	18	-	-	208	-	-	18	208	226	176 public surface spaces (management / use unclear). Also 32 private spaces (in two lots of 12 and 20 respectively)
55	**Study area**	4	-	-	62	-	574	4	636	640	Four small private surface lots. Public deck (Central Parking) $1/hr
56	**Study area**	26	-	-	45	-	629	26	674	700	surface lot private (Sheriff's office). Public deck (Central Parking) $1/hr
57	**Study area**	20	-	-	36	-	-	20	36	56	surface lot private. Public deck (Central Parking) $1/hr
58	**Fringe**	-	-	-	-	-	*327*	0	*327*	327	Federal building - no access. 327 spaces - some reserved, some public.
63	**Fringe**	-	21	-	24	-	-	0	45	45	Surface lot for a BB&T branch
64	**Fringe**	-	21	-	130	-	-	0	151	151	surface lot public (church-owned) $1.50/day
65	**Fringe**	-	-	-	-	-	-	0	0	0	deck closed
66	**Fringe**	-	-	-	-	35	605	35	605	640	Underground public deck (city-owned), 75c/hr
67	**Fringe**	-	-	-	-	40	260	40	260	300	underground; short term for Wachovia customers, lower levels private for Wachovia
68	**Fringe**	25	-	-	89	-	-	25	89	114	Public lot (city-owned), $1/hr. Alongside City Hal
Total	**All blocks**	**476**	**55**	**22**	**1,594**	**185**	**5,263**	**683**	**6,912**	**7,595**	
	Study area	**318**	**13**	**22**	**1,033**	**11**	**2,519**	**351**	**3,565**	**3,916**	

Summary for all blocks (study area plus fringe)

	ST	LT	Total
On-street	476	55	531
Off-street, surface lot	22	1,594	1,616
Off-street, deck	185	5,263	5,448
Total	683	6,912	7,595

Summary for study area

	ST	LT	Total
On-street	318	13	331
Off-street, surface lot	22	1,033	1,055
Off-street, deck	11	2,519	2,530
Total	351	3,565	3,916

ST = Short-term spaces
LT = Long-term spaces

As Figure 4 shows, the largest concentrations of on-street spaces are in the western part of the study area, with relatively fewer in the centre of the area. Along Restaurant Row, there are loading spaces on Fourth itself but parking is accommodated on the side roads.

3.5 ADDITIONAL PARKING ON THE FRINGE OF THE STUDY AREA

Table 3 shows the supply of parking spaces if the blocks on the fringe of the study area (within about one block of the study area) are also taken into account. These spaces are also shown in Table 2 and Figures 3-4.

Table 3: Summary of parking supply in the study area and its fringe

Type	*Short-term*	*Long-term*	*Total*
On-street	476	55	531
Off-street, surface lot	22	1,594	1,616
Off-street, deck	185	5,263	5,448
Total	683	6,912	7,595

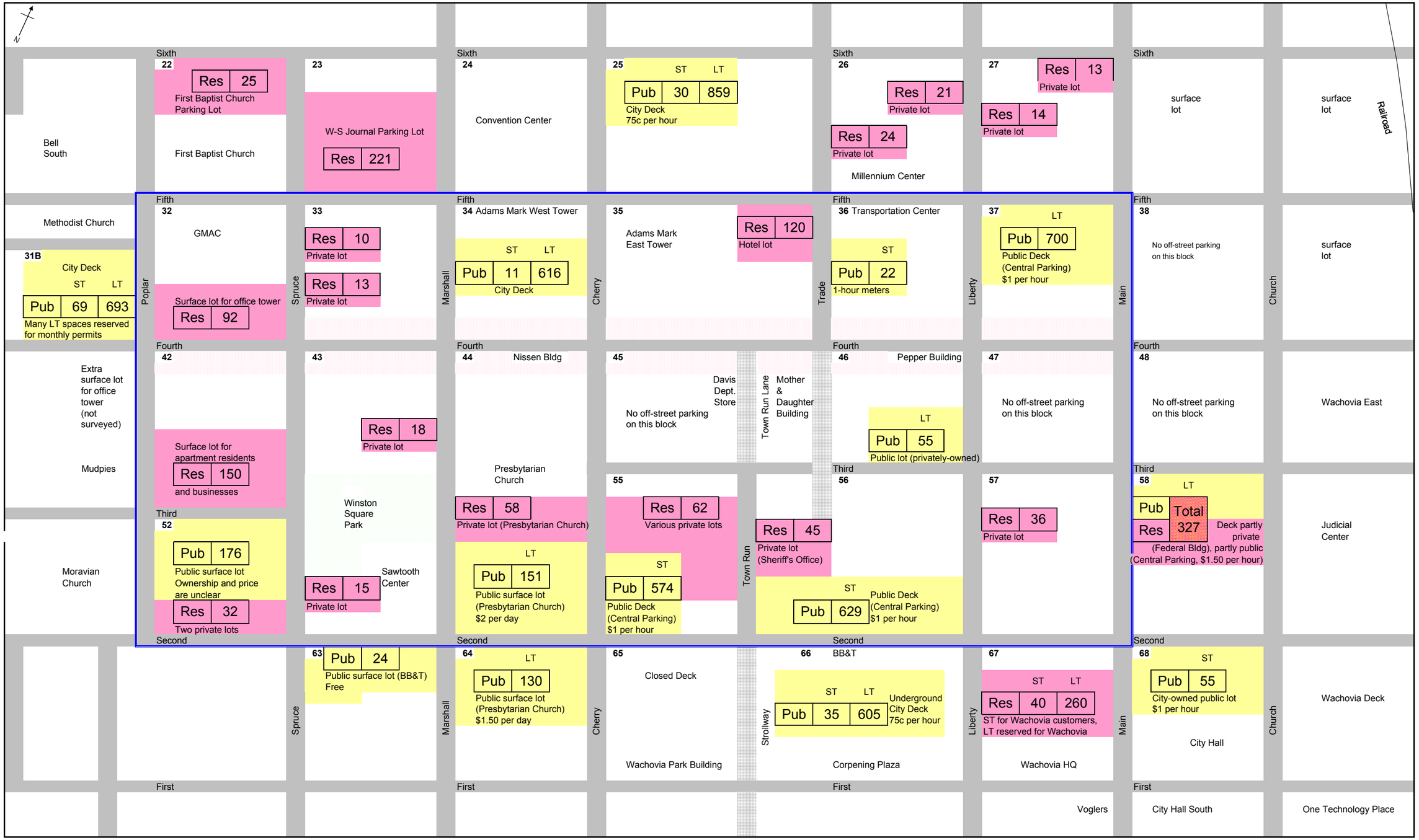
The fringe area has some substantial surface lots and additional on-street parking spaces. However, the majority of the fringe's parking supply is in decks, which provide nearly 3,000 spaces. The decks are generally associated with particular office towers.

The modern city-owned deck at the north-west corner of Fourth and Poplar has 69 short-term pay-and-display spaces and 693 permit-based commuter spaces. The commuter spaces are essentially used by GMAC employees.

South of Second Street, there are two large decks under the BB&T and Wachovia towers, plus a closed above-ground deck. Unlike the Fourth-Poplar deck, none of these are convenient for Fourth Street.

LEGEND 22 Block number | ST Short-term spaces | LT Long-term spaces | Res Reserved (i.e. private lot or permit-holder spaces), with number of spaces | Pub Public (i.e. free or pay-per-use spaces, open to anyone), with number of spaces | Study area

Figure 3: Off-street parking spaces



LEGEND 22 Block number

Short-term spaces: 30 mins, 1 hour, 2 hours

Other spaces: 10 hours, Loading or commercial-only

Study area

Figure 4: On-street parking spaces

4 ANALYSIS OF EXISTING PARKING OCCUPANCY

4.1 SURVEY METHOD

Martin/Alexiou/Bryson surveyed the occupancy levels of all parking facilities in the study area. The survey was undertaken on a weekday. On-street parking occupancy (and the few short-term deck spaces) was surveyed at lunchtime, when it was likely to be at its greatest. Commuter deck spaces were surveyed in the morning and afternoon, as these were likely to have no lunchtime peak. This arrangement made best use of survey resources. Surface lots were surveyed at all three times of the day. Where resources permitted, parking occupancy in the fringe around the study area was also surveyed.

On the survey date, the conference center was not hosting a major event. Such events would change the parking situation – for example, the Sixth-Cherry deck (in the fringe of the study area) will likely fill up on event days.

4.2 RESULTS

Table 4 (at the end of this section) shows the observed demand, including conservative estimates for missing data, in each type of space in each block.

Table 5 shows the resulting occupancy rates. A few blocks have on-street parking occupancy above 100%, resulting from vehicles parked outside designated spaces.

Table 6 translates the data into the number of vacant spaces. The bold figures highlight where parking exists but is fully utilized or nearly so. Negative numbers again reflect people parked outside designated spaces.

Figure 5 maps the vacancies in summary form.

4.3 ANALYSIS

There is plenty of spare capacity for long-term parking in the study area, with an overall utilization rate of just 47%. With the exception of block 33 (around the Winston-Salem Journal offices), there were vacant spaces in all blocks that had any spaces. In particular, the parking decks were poorly-utilized, with more than 400 vacant spaces in the Cherry-Marshall deck, another 400+ in the privately-owned Cherry-Second deck, and another 200+ in the Liberty-Second deck beside the courthouse. The best-utilized deck in the study area was the Liberty-Main-Fifth deck, which was 90% full – perhaps reflecting its convenience for the office tower at 1 West Fourth Street.

Interestingly, the Fourth-Poplar deck, just outside the study area, was also well-utilized, at 95% of capacity – perhaps reflecting its proximity to the GMAC tower. However, there are plenty of spaces available in the other fringe decks.

Short-term parking presents a much more complex picture. For short-term parking to be attractive, there needs to be a certain level of vacancies, so that people can be reasonably sure of finding a convenient space. This means, in practice, that occupancy levels greater than about 90% indicate a shortage of parking supply.

Overall, there is sufficient supply, with only 66% of short-term spaces in the study area being occupied, representing 120 vacant spaces. However, it is clear from Figure 5 that the vacant spaces are concentrated at the west end of the study area, from Marshall

Street westwards. The survey observations and a further site visit confirmed that these vacancies included spaces on Fourth Street itself (between Spruce and Poplar, and also west of Poplar) as well as on the side roads.

East of Marshall Street, by contrast, three blocks had short-term occupancy rates above 90% for all three times of the day, with others above 80%. There were few vacant short-term spaces on the blocks directly facing Fourth Street. Some of these vacancies were the short-term spaces in the Cherry-Marshall deck. The Cherry/Third/Town Run/Second block (55) was also almost fully utilized, as was the metered lot beside the Transportation Center. However, the blocks east of this one, bounded by Town Run/Third/Main/Second (56 and 57), both had significant numbers of unused spaces.

It is not possible to determine, from an occupancy survey, whether there is suppressed demand for short-term parking (i.e. whether customers and visitors are staying away due to lack of parking). However, if there is suppressed demand, the survey suggests that it is likely to be affecting businesses in the area east of Marshall Street.

Table 4: Observed demand

LEGEND

ST Short-term spaces
LT Long-term spaces

Shading denotes blocks on the fringe of the study area
"-" denotes no such parking on the block

N/R denotes data not collected
Italic figures are conservatively estimated from counts at other times

	AM Peak									Noon									PM Peak								
	On-street		Surface lots		Decks		TOTAL			On-street		Surface lots		Decks		TOTAL			On-street		Surface lots		Decks		TOTAL		
Block #	ST	LT	ST	LT	ST	LT	ST	LT	All	ST	LT	ST	LT	ST	LT	ST	LT	All	ST	LT	ST	LT	ST	LT	ST	LT	All
22	N/R	-	-	22	-	-	N/R	22	N/R	N/R	-	-	20	-	-	N/R	20	N/R	N/R	-	-	16	-	-	N/R	16	N/R
23	N/R	-	-	145	-	-	N/R	145	N/R	N/R	-	-	165	-	-	N/R	165	N/R	N/R	-	-	174	-	-	N/R	174	N/R
24	N/R	-	-	-	-	-	N/R	-	N/R	N/R	-	-	-	-	-	N/R	-	N/R	N/R	-	-	-	-	-	N/R	-	N/R
25	N/R	-	-	-	21	95	N/R	95	N/R	N/R	-	-	-	*21*	*95*	N/R	*95*	N/R	N/R	-	-	-	27	57	N/R	57	N/R
26	N/R	-	-	33	-	-	N/R	33	N/R	N/R	-	-	*33*	-	-	N/R	*33*	N/R	N/R	-	-	35	-	-	N/R	35	N/R
27	*1*	-	-	18	-	-	*1*	18	*19*	1	-	-	*18*	-	-	1	*18*	*19*	*1*	-	-	19	-	-	*1*	19	*20*
31B	*4*	-	-	-	37	658	*41*	658	*699*	4	-	-	-	43	*658*	47	*658*	*705*	*4*	-	-	-	41	668	*45*	668	*713*
32	*18*	-	-	37	-	-	*18*	37	*55*	18	-	-	68	-	-	18	68	86	*18*	-	-	76	-	-	*18*	76	*94*
33	*27*	-	-	17	-	-	*27*	17	*44*	27	-	-	23	-	-	27	23	50	*27*	-	-	23	-	-	*27*	23	*50*
34	*11*	-	-	-	*6*	*151*	*17*	*151*	*168*	11	-	-	-	6	151	17	151	168	*11*	-	-	-	4	184	*15*	184	*199*
35	*8*	-	-	80	-	-	*8*	80	*88*	8	-	-	67	-	-	8	67	75	*8*	-	-	73	-	-	*8*	73	*81*
36	*13*	-	10	-	-	-	*23*	-	*23*	13	-	20	-	-	-	33	-	33	*13*	-	16	-	-	-	*29*	-	*29*
37	*5*	-	-	-	-	630	*5*	630	*635*	5	-	-	-	-	*630*	5	*630*	*635*	*5*	-	-	-	-	545	*5*	545	*550*
38	*6*	-	-	-	-	-	*6*	-	*6*	6	-	-	-	-	-	6	-	6	*6*	-	-	-	-	-	*6*	-	*6*
42	*8*	-	-	66	-	-	*8*	66	*74*	8	-	-	83	-	-	8	83	91	*8*	-	-	78	-	-	*8*	78	*86*
43	*29*	-	-	13	-	-	*29*	13	*42*	29	-	-	16	-	-	29	16	45	*29*	-	-	18	-	-	*29*	18	*47*
44	*14*	-	-	180	-	-	*14*	180	*194*	14	-	-	124	-	-	14	124	138	*14*	-	-	103	-	-	*14*	103	*117*
45	*12*	-	-	-	-	-	*12*	-	*12*	12	-	-	-	-	-	12	-	12	*12*	-	-	-	-	-	*12*	-	*12*
46	*16*	-	-	21	-	-	*16*	21	*37*	16	-	-	22	-	-	16	22	38	*16*	-	-	24	-	-	*16*	24	*40*
47	*12*	*13*	-	-	-	-	*12*	*13*	*25*	12	13	-	-	-	-	12	13	25	*12*	*13*	-	-	-	-	*12*	*13*	*25*
48	*5*	-	-	-	-	-	*5*	-	*5*	5	-	-	-	-	-	5	-	5	*5*	-	-	-	-	-	*5*	-	*5*
52	*16*	-	-	79	-	-	*16*	79	*95*	16	-	-	107	-	-	16	107	123	*16*	-	-	128	-	-	*16*	128	*144*
55	*3*	-	-	40	-	162	*3*	202	*205*	3	-	-	38	-	*162*	3	*200*	*203*	*3*	-	-	45	-	94	*3*	139	*142*
56	*14*	-	-	40	-	364	*14*	404	*418*	14	-	-	43	-	*364*	14	*407*	*421*	*14*	-	-	39	-	208	*14*	247	*261*
57	*5*	-	-	23	-	-	*5*	23	*28*	5	-	-	27	-	-	5	27	32	*5*	-	-	29	-	-	*5*	29	*34*
58	-	-	-	-	-	96	-	96	96	-	-	-	-	-	*96*	-	*96*	*96*	-	-	-	-	-	103	-	103	103
63	-	N/R	-	4	-	-	-	N/R	N/R	-	N/R	-	*4*	-	-	-	N/R	N/R	-	N/R	-	6	-	-	-	N/R	N/R
64	-	N/R	-	79	-	-	-	N/R	N/R	-	N/R	-	*79*	-	-	-	N/R	N/R	-	N/R	-	83	-	-	-	N/R	N/R
65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
66	-	-	-	-	28	174	28	174	202	-	-	-	-	*28*	*174*	*28*	*174*	*202*	-	-	-	-	26	299	26	299	325
67	-	-	-	-	22	77	22	77	99	-	-	-	-	*22*	*77*	*22*	*77*	*99*	-	-	-	-	26	72	26	72	98
68	-	N/R	-	70	-	-	-	N/R	N/R	-	N/R	-	36	-	-	-	N/R	N/R	-	N/R	-	65	-	-	-	N/R	N/R
All blocks	N/R	N/R	**10**	**967**	***114***	***2,407***	N/R	N/R	N/R	N/R	N/R	**20**	***973***	***120***	***2,407***	N/R	N/R	N/R	N/R	N/R	**16**	**1,034**	**124**	**2,230**	N/R	N/R	N/R
Study area	***211***	***13***	**10**	**596**	***6***	***1,307***	***227***	***1,916***	***2,143***	**211**	**13**	**20**	**618**	**6**	**1,307**	**237**	***1,938***	***2,175***	***211***	***13***	**16**	**636**	**4**	**1,031**	***231***	**1,680**	***1,911***

SUMMARIES FOR THE STUDY AREA

AM Peak	ST	LT	Total
On-street	211	13	224
Off-street, surface lot	10	596	606
Off-street, deck	6	1,307	1,313
Total	227	1,916	2,143

Noon	ST	LT	Total
On-street	211	13	224
Off-street, surface lot	20	618	638
Off-street, deck	6	1,307	1,313
Total	237	1,938	2,175

PM Peak	ST	LT	Total
On-street	211	13	224
Off-street, surface lot	16	636	652
Off-street, deck	4	1,031	1,035
Total	231	1,680	1,911

Table 5: Observed occupancy rates

LEGEND

ST Short-term spaces
LT Long-term spaces

Shading denotes blocks on the fringe of the study area
"-" denotes no such parking on the block

"N/R" denotes data not collected
Bold figures denote occupancy level over 90%

	AM Peak									Noon									PM Peak								
	On-street		Surface lots		Decks		TOTAL			On-street		Surface lots		Decks		TOTAL			On-street		Surface lots		Decks		TOTAL		
Block #	ST	LT	ST	LT	ST	LT	ST	LT	All	ST	LT	ST	LT	ST	LT	ST	LT	All	ST	LT	ST	LT	ST	LT	ST	LT	All
22	N/R	-	-	88 %	-	-	N/R	88 %	N/R	N/R	-	-	80 %	-	-	N/R	80 %	N/R	N/R	-	-	64 %	-	-	N/R	64 %	N/R
23	N/R	-	-	66 %	-	-	N/R	66 %	N/R	N/R	-	-	75 %	-	-	N/R	75 %	N/R	N/R	-	-	79 %	-	-	N/R	79 %	N/R
24	N/R	-	-	-	-	-	N/R	-	N/R	N/R	-	-	-	-	-	N/R	-	N/R	N/R	-	-	-	-	-	N/R	-	N/R
25	N/R	-	-	-	70 %	11 %	N/R	11 %	N/R	N/R	-	-	-	70 %	11 %	N/R	11 %	N/R	N/R	-	-	-	**90 %**	7 %	N/R	7 %	N/R
26	N/R	-	-	73 %	-	-	N/R	73 %	N/R	N/R	-	-	73 %	-	-	N/R	73 %	N/R	N/R	-	-	78 %	-	-	N/R	78 %	N/R
27	5 %	-	-	67 %	-	-	5 %	67 %	41 %	5 %	-	-	67 %	-	-	5 %	67 %	41 %	5 %	-	-	70 %	-	-	5 %	70 %	43 %
31B	16 %	-	-	-	54 %	**95 %**	44 %	**95 %**	89 %	16 %	-	-	-	62 %	**95 %**	50 %	**95 %**	90 %	16 %	-	-	-	59 %	**96 %**	48 %	**96 %**	**91 %**
32	78 %	-	-	40 %	-	-	78 %	40 %	48 %	78 %	-	-	74 %	-	-	78 %	74 %	75 %	78 %	-	-	83 %	-	-	78 %	83 %	82 %
33	64 %	-	-	74 %	-	-	64 %	74 %	68 %	64 %	-	-	**100 %**	-	-	64 %	**100 %**	77 %	64 %	-	-	**100 %**	-	-	64 %	**100 %**	77 %
34	85 %	-	-	-	55 %	25 %	71 %	25 %	26 %	85 %	-	-	-	55 %	25 %	71 %	25 %	26 %	85 %	-	-	-	36 %	30 %	63 %	30 %	31 %
35	80 %	-	-	67 %	-	-	80 %	67 %	68 %	80 %	-	-	56 %	-	-	80 %	56 %	58 %	80 %	-	-	61 %	-	-	80 %	61 %	62 %
36	**93 %**	-	45 %	-	-	-	64 %	-	64 %	**93 %**	-	**91 %**	-	-	-	**92 %**	-	**92 %**	**93 %**	-	73 %	-	-	-	81 %	-	81 %
37	36 %	-	-	-	-	**90 %**	36 %	**90 %**	89 %	36 %	-	-	-	-	**90 %**	36 %	**90 %**	89 %	36 %	-	-	-	-	78 %	36 %	78 %	77 %
38	**300 %**	-	-	-	-	-	**300 %**	-	**300 %**	**300 %**	-	-	-	-	-	**300 %**	-	**300 %**	**300 %**	-	-	-	-	-	**300 %**	-	**300 %**
42	22 %	-	-	44 %	-	-	22 %	44 %	40 %	22 %	-	-	55 %	-	-	22 %	55 %	49 %	22 %	-	-	52 %	-	-	22 %	52 %	46 %
43	66 %	-	-	39 %	-	-	66 %	39 %	55 %	66 %	-	-	48 %	-	-	66 %	48 %	58 %	66 %	-	-	55 %	-	-	66 %	55 %	61 %
44	**108 %**	-	-	86 %	-	-	**108 %**	86 %	87 %	**108 %**	-	-	59 %	-	-	**108 %**	59 %	62 %	**108 %**	-	-	49 %	-	-	**108 %**	49 %	53 %
45	86 %	-	-	-	-	-	86 %	-	86 %	86 %	-	-	-	-	-	86 %	-	86 %	86 %	-	-	-	-	-	86 %	-	86 %
46	**94 %**	-	-	38 %	-	-	**94 %**	38 %	51 %	**94 %**	-	-	40 %	-	-	**94 %**	40 %	53 %	**94 %**	-	-	44 %	-	-	**94 %**	44 %	56 %
47	**120 %**	**100 %**	-	-	-	-	**120 %**	**100 %**	**109 %**	**120 %**	**100 %**	-	-	-	-	**120 %**	**100 %**	**109 %**	**120 %**	**100 %**	-	-	-	-	**120 %**	**100 %**	**109 %**
48	29 %	-	-	-	-	-	29 %	-	29 %	29 %	-	-	-	-	-	29 %	-	29 %	29 %	-	-	-	-	-	29 %	-	29 %
52	89 %	-	-	38 %	-	-	89 %	38 %	42 %	89 %	-	-	51 %	-	-	89 %	51 %	54 %	89 %	-	-	62 %	-	-	89 %	62 %	64 %
55	75 %	-	-	65 %	-	28 %	75 %	32 %	32 %	75 %	-	-	61 %	-	28 %	75 %	31 %	32 %	75 %	-	-	73 %	-	16 %	75 %	22 %	22 %
56	54 %	-	-	89 %	-	58 %	54 %	60 %	60 %	54 %	-	-	**96 %**	-	58 %	54 %	60 %	60 %	54 %	-	-	87 %	-	33 %	54 %	37 %	37 %
57	25 %	-	-	64 %	-	-	25 %	64 %	50 %	25 %	-	-	75 %	-	-	25 %	75 %	57 %	25 %	-	-	81 %	-	-	25 %	81 %	61 %
58	-	-	-	-	-	29 %	-	29 %	29 %	-	-	-	-	-	29 %	-	29 %	29 %	-	-	-	-	-	31 %	-	31 %	31 %
63	-	N/R	-	17 %	-	-	-	N/R	N/R	-	N/R	-	17 %	-	-	-	N/R	N/R	-	N/R	-	25 %	-	-	-	N/R	N/R
64	-	N/R	-	61 %	-	-	-	N/R	N/R	-	N/R	-	61 %	-	-	-	N/R	N/R	-	N/R	-	64 %	-	-	-	N/R	N/R
65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
66	-	-	-	-	80 %	29 %	80 %	29 %	32 %	-	-	-	-	80 %	29 %	80 %	29 %	32 %	-	-	-	-	74 %	49 %	74 %	49 %	51 %
67	-	-	-	-	55 %	30 %	55 %	30 %	33 %	-	-	-	-	55 %	30 %	55 %	30 %	33 %	-	-	-	-	65 %	28 %	65 %	28 %	33 %
68	-	N/R	-	79 %	-	-	-	N/R	N/R	-	N/R	-	40 %	-	-	-	N/R	N/R	-	N/R	-	73 %	-	-	-	N/R	N/R
All blocks	N/R	N/R	45 %	61 %	62 %	46 %	N/R	N/R	N/R	N/R	N/R	**91 %**	61 %	65 %	46 %	N/R	N/R	N/R	N/R	N/R	73 %	65 %	67 %	42 %	N/R	N/R	N/R
Study area	66 %	**100 %**	45 %	58 %	55 %	52 %	65 %	54 %	55 %	66 %	**100 %**	**91 %**	60 %	55 %	52 %	68 %	54 %	56 %	66 %	**100 %**	73 %	62 %	36 %	41 %	66 %	47 %	49 %

SUMMARIES FOR THE STUDY AREA

AM Peak	ST	LT	Total
On-street	66%	**100%**	N/A
Off-street, surface lot	45%	58%	N/A
Off-street, deck	55%	52%	N/A
Total	65%	54%	55%

Noon	ST	LT	Total
On-street	66%	**100%**	N/A
Off-street, surface lot	**91%**	60%	N/A
Off-street, deck	55%	52%	N/A
Total	68%	54%	56%

PM Peak	ST	LT	Total
On-street	66%	**100%**	N/A
Off-street, surface lot	73%	62%	N/A
Off-street, deck	36%	41%	N/A
Total	66%	47%	49%

Table 6: Vacant spaces

LEGEND

ST Short-term spaces
LT Long-term spaces

Shading denotes blocks on the fringe of the study area
"-" denotes no such parking on the block

"N/R" denotes data not collected
Bold figures denote occupancy level over 90%

	AM Peak									Noon									PM Peak								
	On-street		Surface lots		Decks		TOTAL			On-street		Surface lots		Decks		TOTAL			On-street		Surface lots		Decks		TOTAL		
Block #	ST	LT	ST	LT	ST	LT	ST	LT	All	ST	LT	ST	LT	ST	LT	ST	LT	All	ST	LT	ST	LT	ST	LT	ST	LT	All
22	N/R	-	-	3	-	-	N/R	3	N/R	N/R	-	-	5	-	-	N/R	5	N/R	N/R	-	-	9	-	-	N/R	9	N/R
23	N/R	-	-	76	-	-	N/R	76	N/R	N/R	-	-	56	-	-	N/R	56	N/R	N/R	-	-	47	-	-	N/R	47	N/R
24	N/R	-	-	-	-	-	N/R	-	N/R	N/R	-	-	-	-	-	N/R	-	N/R	N/R	-	-	-	-	-	N/R	-	N/R
25	N/R	-	-	-	9	764	N/R	764	N/R	N/R	-	-	-	9	764	N/R	764	N/R	N/R	-	-	-	3	802	N/R	802	N/R
26	N/R	-	-	12	-	-	N/R	12	N/R	N/R	-	-	12	-	-	N/R	12	N/R	N/R	-	-	10	-	-	N/R	10	N/R
27	18	-	-	9	-	-	18	9	27	18	-	-	9	-	-	18	9	27	18	-	-	8	-	-	18	8	26
31B	21	-	-	-	32	35	53	35	88	21	-	-	-	26	35	47	35	82	21	-	-	-	28	25	49	25	74
32	5	-	-	55	-	-	5	55	60	5	-	-	24	-	-	5	24	29	5	-	-	16	-	-	5	16	21
33	15	-	-	6	-	-	15	6	21	15	-	-	**0**	-	-	15	**0**	15	15	-	-	**0**	-	-	15	**0**	15
34	**2**	-	-	-	5	465	7	465	472	**2**	-	-	-	5	465	7	465	472	**2**	-	-	-	7	432	9	432	441
35	**2**	-	-	40	-	-	**2**	40	42	**2**	-	-	53	-	-	**2**	53	55	**2**	-	-	47	-	-	**2**	47	49
36	**1**	-	12	-	-	-	13	-	13	**1**	-	**2**	-	-	-	3	-	3	**1**	-	6	-	-	-	7	-	7
37	9	-	-	-	-	70	9	70	79	9	-	-	-	-	70	9	70	79	9	-	-	-	-	155	9	155	164
38	**-4**	-	-	-	-	-	**-4**	-	**-4**	**-4**	-	-	-	-	-	**-4**	-	**-4**	**-4**	-	-	-	-	-	**-4**	-	**-4**
42	28	-	-	84	-	-	28	84	112	28	-	-	67	-	-	28	67	95	28	-	-	72	-	-	28	72	100
43	15	-	-	20	-	-	15	20	35	15	-	-	17	-	-	15	17	32	15	-	-	15	-	-	15	15	30
44	**-1**	-	-	29	-	-	**-1**	29	28	**-1**	-	-	85	-	-	**-1**	85	84	**-1**	-	-	106	-	-	**-1**	106	105
45	**2**	-	-	-	-	-	**2**	-	**2**	**2**	-	-	-	-	-	**2**	-	**2**	**2**	-	-	-	-	-	**2**	-	**2**
46	**1**	-	-	34	-	-	**1**	34	35	**1**	-	-	33	-	-	**1**	33	34	**1**	-	-	31	-	-	**1**	31	32
47	**-2**	**0**	-	-	-	-	**-2**	**0**	**-2**	**-2**	**0**	-	-	-	-	**-2**	**0**	**-2**	**-2**	**0**	-	-	-	-	**-2**	**0**	**-2**
48	12	-	-	-	-	-	12	-	12	12	-	-	-	-	-	12	-	12	12	-	-	-	-	-	12	-	12
52	**2**	-	-	129	-	-	**2**	129	131	**2**	-	-	101	-	-	**2**	101	103	**2**	-	-	80	-	-	**2**	80	82
55	**1**	-	-	22	-	412	**1**	434	435	**1**	-	-	24	-	412	**1**	436	437	**1**	-	-	17	-	480	**1**	497	498
56	12	-	-	5	-	265	12	270	282	12	-	-	**2**	-	265	12	267	279	12	-	-	6	-	421	12	427	439
57	15	-	-	13	-	-	15	13	28	15	-	-	9	-	-	15	9	24	15	-	-	7	-	-	15	7	22
58	-	-	-	-	-	231	-	231	231	-	-	-	-	-	231	-	231	231	-	-	-	-	-	224	-	224	224
63	-	N/R	-	20	-	-	-	N/R	N/R	-	N/R	-	20	-	-	-	N/R	N/R	-	N/R	-	18	-	-	-	N/R	N/R
64	-	N/R	-	51	-	-	-	N/R	N/R	-	N/R	-	51	-	-	-	N/R	N/R	-	N/R	-	47	-	-	-	N/R	N/R
65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
66	-	-	-	-	7	431	7	431	438	-	-	-	-	7	431	7	431	438	-	-	-	-	9	306	9	306	315
67	-	-	-	-	18	183	18	183	201	-	-	-	-	18	183	18	183	201	-	-	-	-	14	188	14	188	202
68	-	N/R	-	19	-	-	-	N/R	N/R	-	N/R	-	53	-	-	-	N/R	N/R	-	N/R	-	24	-	-	-	N/R	N/R
All blocks	**N/R**	**N/R**	**12**	**627**	**71**	**2,856**	**N/R**	**N/R**	**N/R**	**N/R**	**N/R**	**2**	**621**	**65**	**2,856**	**N/R**	**N/R**	**N/R**	**N/R**	**N/R**	**6**	**560**	**61**	**3,033**	**N/R**	**N/R**	**N/R**
Study area	**107**	**0**	**12**	**437**	**5**	**1,212**	**124**	**1,649**	**1,773**	**107**	**0**	**2**	**415**	**5**	**1,212**	**114**	**1,627**	**1,741**	**107**	**0**	**6**	**397**	**7**	**1,488**	**120**	**1,885**	**2,005**

SUMMARIES FOR THE STUDY AREA

AM Peak	ST	LT	Total
On-street	107	0	107
Off-street, surface lot	12	437	449
Off-street, deck	5	1,212	1,217
Total	124	1,649	1,773

Noon	ST	LT	Total
On-street	107	0	107
Off-street, surface lot	2	415	417
Off-street, deck	5	1,212	1,217
Total	114	1,627	1,741

PM Peak	ST	LT	Total
On-street	107	0	107
Off-street, surface lot	6	397	403
Off-street, deck	7	1,488	1,495
Total	120	1,885	2,005

LEGEND

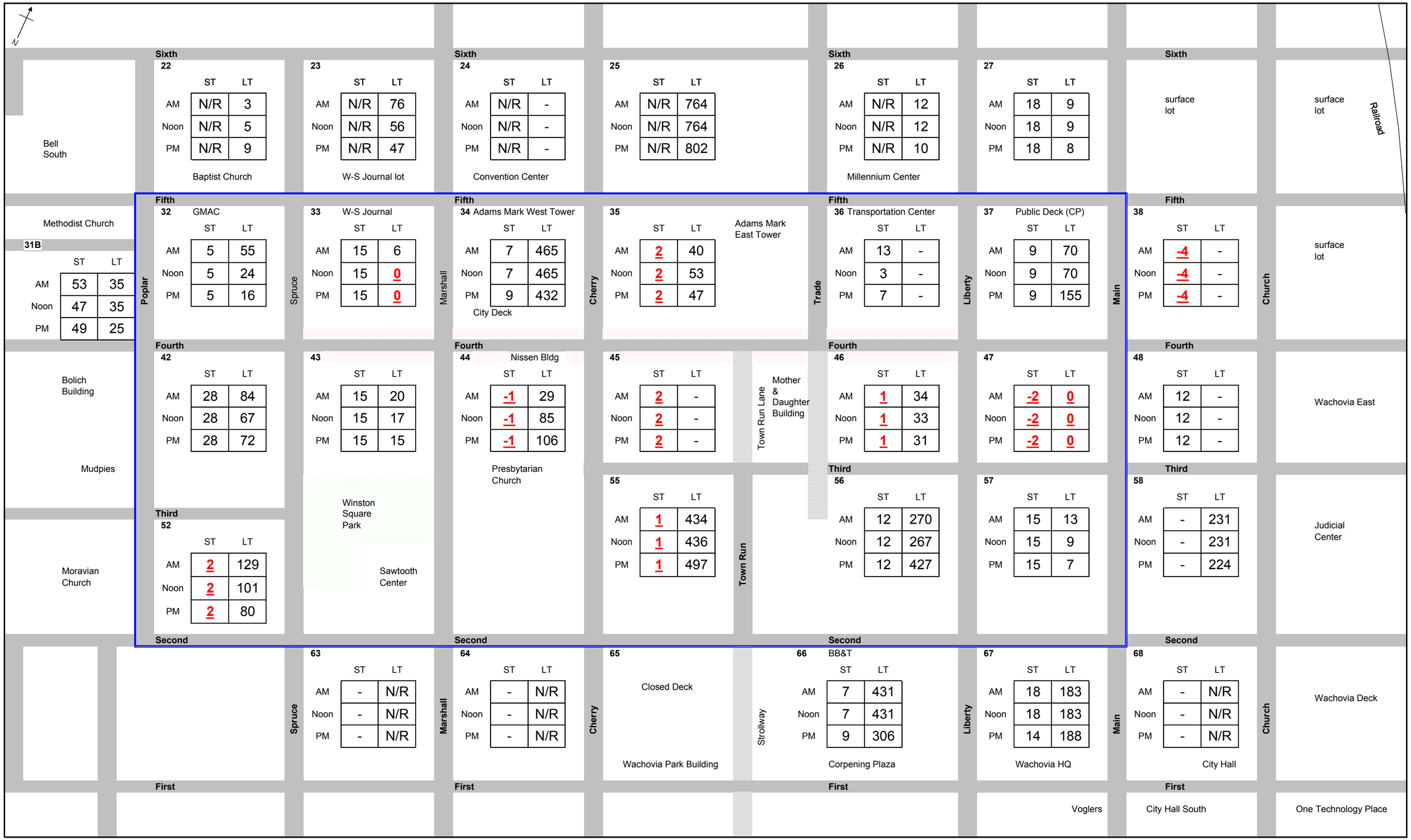
22 Block number
N/R Data not recorded

ST Short-term spaces
LT Long-term spaces

Bold underlined figures denote a low number of vacancies
(negative numbers include parking outside marked spaces)

Study area

Figure 5: Vacancy map (2004)



5 ANALYSIS OF CURRENT AND FUTURE DEMAND

5.1 REASONS FOR MAKING DEMAND CALCULATIONS

It is possible that that parking shortages are suppressing trips to Restaurant Row, and hence the amount of parking required. This is evidenced by business-owners' views, and is consistent with the low level of observed vacancies in part of the study area. To estimate the un-suppressed level of demand, estimates were made of the theoretical parking demand generated by the current businesses in the study area.

The study is also considering the effects of planned near-future growth in the downtown – that is, a revival of activity that brings life to currently-vacant buildings. A similar estimate was therefore made, based on the theoretical parking demand generated by current and potential future businesses in the study area.

It is important to recognize that the calculated demand is simply an estimate. Where there is no evidence of suppressed demand, the observed demand is undoubtedly the better indicator.

5.2 STUDY METHOD

The City of Winston-Salem had made a similar estimate in 2001, and supplied Martin/Alexiou/Bryson with the data that had been used in that study. This included floor areas and uses of property parcels within the study area. The 2001 methodology was broadly followed in the current study.

The principal use of each building was checked with a field survey, and amended as necessary. In a few cases, parcels were split into their component uses where this would likely improve the accuracy of the estimates (e.g. taking account of a café on the ground floor of an office building).

The basic level of parking demand for each land-use, in terms of spaces per square foot or a similar measure, was estimated. Wherever possible, the rates given in the Institution of Transportation Engineers' report *Parking Generation* (3rd edition, 2004), which is a widely-accepted manual, were used. However, the report's data are limited. In many cases, expert judgment was required to determine a suitable rate or a bespoke estimate of parking demand from a particular building – particularly for non-standard uses such as the Dance School. The estimates used by the City in its 2001 study were re-used where appropriate. It is not feasible to split the calculations by the time-of-day, but the rates have been based on the peak daytime period of demand.

Because the study area is a downtown with a mixture of uses, has transit routes, and has some employers with travel demand management programs, the parking demand is likely to be lower than the standard rates. The 2001 study applied an across-the-board reduction of 20% to allow for this, and the present study followed suit.

The estimates must also be reduced to allow for the high vacancy level in many properties. 'Occupancy factors', ranging from 60% (retail) to 100% (restaurants), were therefore used. After consultation with the City, the same occupancy factors as in the 2001 study were used where possible, although some new occupancy factors had to be estimated. In addition, major empty buildings (e.g. Davis, Pepper) were specifically allocated no demand.

Finally, the resulting demand figure must be split into long-term and short-term demand. This varies by land-use, but few data are available. Estimates were made using professional judgment plus close examination of certain data in *Parking Generation*. For example, restaurants were assumed to require 10% long-term and 90% short-term parking, but for offices the proportions were reversed.

The results from this study are not directly comparable to those from the 2001 study, since the methodology is slightly different, some land uses have changed, and the standard parking demand rates have changed. However, comparison of the two studies showed that they were within 6% of each other for the total parking demand in the present study area. (A block-by-block comparison showed some substantial differences, but these largely reflect changes in the occupancy of major buildings between 2001 and 2004.)

The near-future estimate assumes (with one exception) that the currently-vacant space becomes occupied (i.e. all occupancy factors become 100%). As well as full use of the smaller buildings, this includes re-use of the Nissen and Pepper buildings, redevelopment of the Davis building, and re-use of the Old Courthouse. However, it assumes no further redevelopment. It also assumes that the Mother and Daughter building remains vacant pending long-term plans for the Civic Plaza area. Long-term parking for the Nissen Building has been assigned to the Cherry-Marshall deck across the road, reflecting a known space-leasing agreement. The methodology is otherwise unchanged.

Appendix A shows the full dataset for these calculations.

5.3 RESULTS AND ANALYSIS

Theoretical estimate of current demand

Table 7 shows the theoretical demand for the current situation. The theoretical demand is over three thousand spaces higher than the actual demand, leading to a theoretical shortage of about 1,650 spaces. However, this is a misleading figure, since some employers (particularly GMAC, and also the Journal) have parking spaces outside the study area which were not included in the observed totals. Even within the study area, it is difficult to compare the two figures on a block-by-block basis, since many buildings have their parking spaces on a different block (e.g. the former YMCA on block 43 has its parking spaces on block 42). The theoretical calculations are therefore a poor indicator of whether or not there is currently suppressed demand.

Theoretical estimate of future demand

Table 8 shows the theoretical demand figures for the future estimate. This shows a deficit of about 2,650 spaces in the study area, although again this is a misleading figure, for the same reasons as before.

Estimated demand growth

However, the change from the 2004 theoretical estimates is a useful indicator of the level of demand growth. It is forecast that demand will grow by about 1,000 spaces overall, made up of about 310 short-term spaces and 690 long-term spaces. Figure 6 summarizes this growth diagrammatically. (It should be noted, however, that the forecasts in the central part of Fourth Street are heavily dependent on the assumptions made for the major building re-uses and the Davis building redevelopment.) Almost all of

the study area blocks see at least some growth, including major new short-term parking requirements in some of the blocks fronting Fourth Street. Long-term parking requirements also increase in almost all blocks, with strong increases in blocks with office towers (which are assumed to gain in occupancy level). The large increase in block 34 represents spaces assumed to be used by Nissen building residents. The major reduction in long-term demand in block 45 reflects the conversion of the Davis Building from a dance school to condominiums plus retail.

Estimate of future demand using observed demand plus estimated growth

The most reliable way to forecast future demand is to combine the current observed demand with the estimated near-term *change* in demand. Figure 7 shows how this would translate into future vacancy levels. For the current demand, the noon observations have been used here, representing the likely peak demand time.

The negative numbers on Figure 7 indicate, in theory, a shortage of parking on the block. However, some demand can be satisfied on nearby blocks that have vacancies (assuming that commercial terms can be agreed). For example, the deficit of long-term parking in block 43 is likely, in practice, to be met on the block 42 surface lot, and the deficiency on block 57 (perhaps also that on block 47) can be met in the block 56 deck. Comparison with Figure 5, which shows the current level of vacancies in the study area fringe as well as the study area itself, suggests that the fringe can also satisfy some of the additional demand. Overall, it is likely that long-term parking needs can be satisfied, thanks to the currently high level of vacant spaces.

For short-term parking, however, such flexibility does not exist. Only two blocks are forecast to have more than four vacant short-term spaces, and these are not enough to make up for deficits on surrounding blocks. Overall, there is a forecast shortage of 200 short-term spaces (plus an amount to ensure a reasonable vacancy level) in the study area. The major areas of shortage are:

- Block 44, where the commercial elements of the re-used Nissen Building are a major contributor to the demand, and where there is little spare capacity in the surrounding blocks.
- Blocks 35 and 36, on the north side of Fourth between Cherry and Liberty. These blocks have a lot of vacant property, particularly retail. The forecasts assume this property to be fully-occupied, with a high short-term demand rate. Again, there is little or no spare capacity in the surrounding blocks. (As most of the growth is on Fourth Street itself, short-term spaces on or north of Sixth Street would not be attractive).

Many of the remaining blocks are close to an even match between supply and forecast demand. However, because some vacancy level is needed in practice to allow turnover, and because of the inherent uncertainty of the forecasts, it is likely that more spaces would eventually be required to serve some or all of these blocks.

Table 7: Estimated parking demand (2004)

(Revised)

Block	Actual 2004 supply			2004					
				Estimated demand			Surplus / (-)Deficit		
	ST	LT	Total	ST	LT	Total	ST	LT	Total
32	23	92	115	99	894	994	-76	-802	-879
33	42	23	65	48	226	273	-6	-203	-208
34	24	616	640	75	253	329	-51	363	311
35	10	120	130	163	215	378	-153	-95	-248
36	36	0	36	99	54	153	-63	-54	-117
37	14	700	714	93	734	827	-79	-34	-113
42	36	150	186	17	149	165	19	1	21
43	44	33	77	97	240	337	-53	-207	-260
44	13	209	222	13	35	47	0	174	175
45	14	0	14	69	99	168	-55	-99	-154
46	17	55	72	7	11	18	10	44	54
47	10	13	23	0	0	0	10	13	23
52	18	208	226	32	0	32	-14	208	194
55	4	636	640	55	68	122	-51	568	518
56	26	674	700	262	640	902	-236	34	-202
57	20	36	56	197	628	826	-177	-592	-770
Grand Total	**351**	**3,565**	**3,916**	**1,325**	**4,245**	**5,570**	**-974**	**-680**	**-1,654**

Table 8: Estimated parking demand (future)

(Revised)

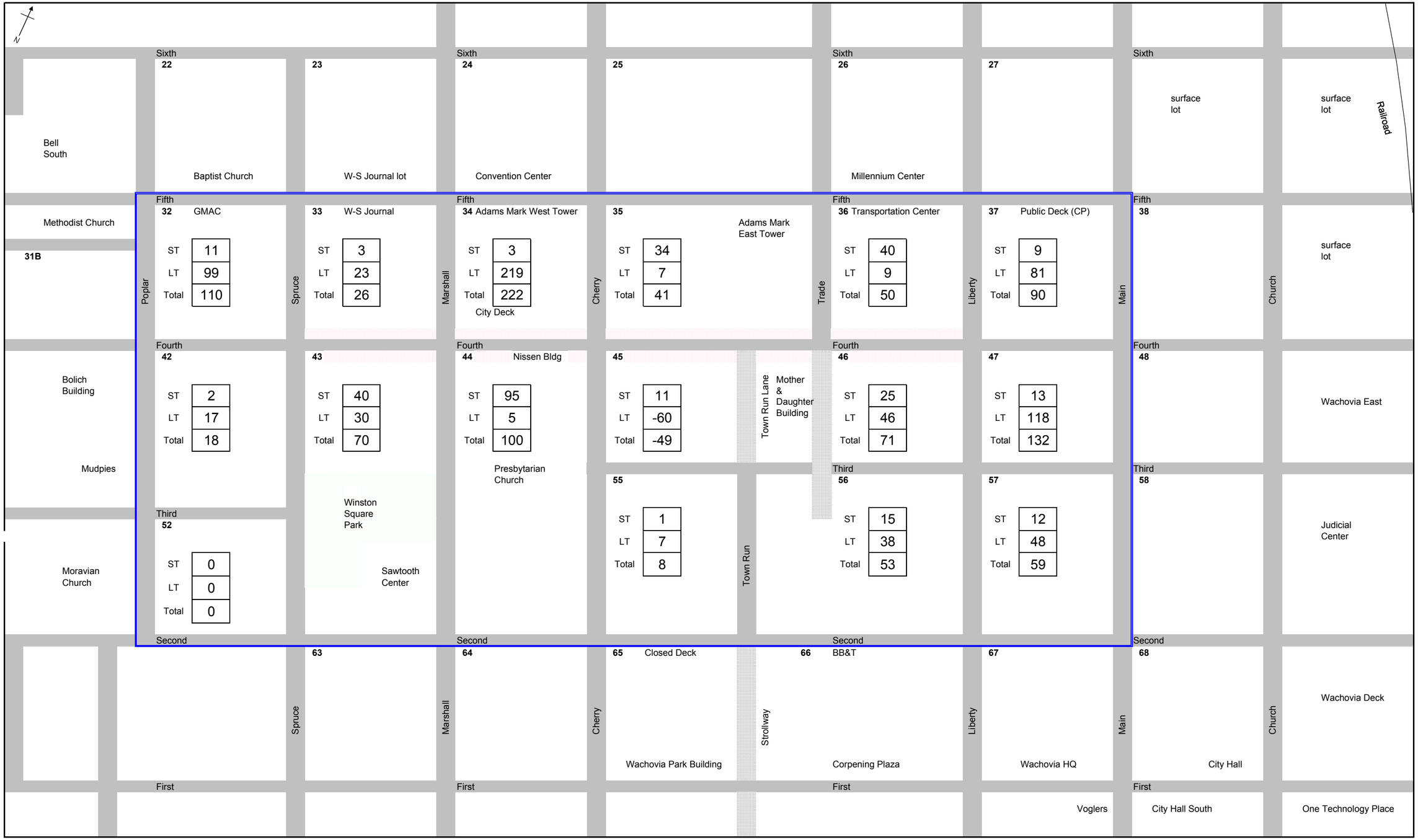
Block	Future								
	Estimated demand			Change from 2004 estimate			Surplus / (-)Deficit		
	ST	LT	Total	ST	LT	Total	ST	LT	Total
32	110	994	1,104	11	99	110	-87	-902	-989
33	50	249	299	3	23	26	-8	-226	-234
34	79	472	550	3	219	222	-55	144	90
35	197	222	419	34	7	41	-187	-102	-289
36	139	64	203	40	9	50	-103	-64	-167
37	102	815	917	9	81	90	-88	-115	-203
42	18	165	184	2	17	18	18	-15	2
43	137	269	406	40	30	70	-93	-236	-329
44	108	40	147	95	5	100	-95	169	75
45	80	39	119	11	-60	-49	-66	-39	-105
46	32	57	89	25	46	71	-15	-2	-17
47	13	118	132	13	118	132	-3	-105	-109
52	32	0	32	0	0	0	-14	208	194
55	56	75	130	1	7	8	-52	561	510
56	276	678	954	15	38	53	-250	-4	-254
57	209	676	885	12	48	59	-189	-640	-829
Grand Total	**1,639**	**4,933**	**6,571**	**314**	**687**	**1,001**	**-1,288**	**-1,368**	**-2,655**

LEGEND 22 Block number

ST Additional demand for short-term spaces
LT Additional demand for long-term spaces

Study area

Figure 6: Estimated demand growth (2004 to future)
(revised)



LEGEND 22 Block number

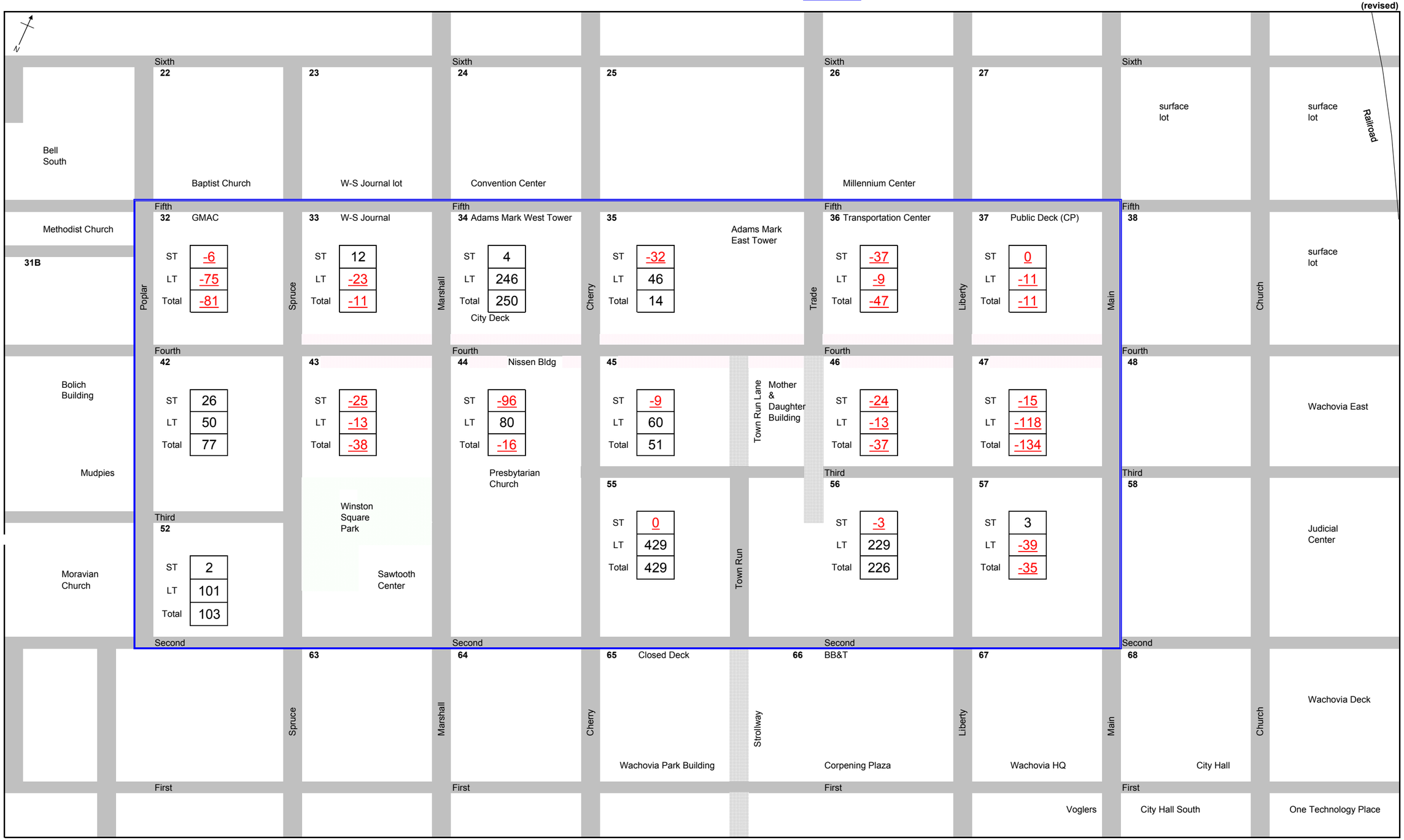
ST Short-term spaces
LT Long-term spaces

Red underlined figures denote a low number of vacancies
(negative numbers denote un-met demand)

Study area

Figure 7: Forecast vacancies (future)

(observed existing use, plus near-term growth)
(revised)



6 CONCLUSIONS AND RECOMMENDATIONS

6.1 CONCLUSIONS

The supply of long-term parking appears to be easily adequate for present needs. The supply also appears sufficient to accommodate future growth along and around Restaurant Row, provided that suitable commercial terms for access can be reached where necessary, but this may require parking to be supplied a block or two further away than would be ideal.

Short-term parking supply is currently plentiful at the west end of Restaurant Row, but is effectively fully-utilized in the centre of the Row. It is likely that some demand is suppressed in the central area as a result of this high utilization. At the east end, there are some spaces available, although these are at least one block's walk away from the Row. If the buildings along Restaurant Row become fully occupied in future, almost the whole of the Row will have a substantial shortage of space, with only the westernmost blocks having adequate supply.

6.2 RECOMMENDATIONS

The options for re-allocating existing parking space in the short-term are limited. Most of the existing curbspace is already used for short-term parking, and so the recommendations relating to on-street parking are relatively minor. Surface lots are almost all outside the City's control, and so any recommendations for these will require a partnership approach.

Martin / Alexiou / Bryson's recommendations are as follows. They are also summarized graphically in Figure 8.

<u>Recommendations involving reallocating existing parking supply</u>

1. **Town Run Lane**. On both site visits, about 8 vehicles were observed parked (closely-packed) on Town Run Lane (Figure 9). It is not clear who the users are, but they did not appear to be turning over quickly. It is recommended that the area be formalized into 30-minute or 1-hour spaces. This would gain about 6-8 short-term spaces, depending on the final design, which might simply involve striping.
2. **Loading spaces on Liberty Street**. The sixteen on-street spaces on Liberty Street between Fourth and Fifth are all loading spaces. Their allocation should be reviewed, as it may be possible to convert some of these to short-term parking. This would be particularly beneficial in the future as adjoining buildings (e.g. the former Woolworth's) come back into use.

   The loading spaces on Restaurant Row itself appear to be well-used, and so reviewing these is not specifically recommended. The current principle of providing loading spaces on Restaurant Row itself, rather than the side roads, is supported, to minimize the amount of parking search by trucks and the resulting truck movements.
3. **On-street parking beside the Nissen Building on Cherry Street**. A few spaces have been taken out of use on Cherry Street alongside the Nissen Building, for construction work. These will presumably be reinstated after the works, and such a move is supported.

4. **County Staff spaces outside the Old Courthouse.** These 13 spaces appear to be used by County staff, but the building should only require service vehicles at present. The possibility of converting these to public short-term spaces should be explored with the County. Although not located in an ideal position directly on Restaurant Row, they are in a highly visible location with good circulation, and could well be attractive for the east end of the Row. In any case, they will likely be needed for visitor parking when the building is re-occupied.

5. **A partnership approach to existing under-used decks and lots.** The survey showed that a number of privately-operated locations convenient to Fourth Street have vacancies. It may be possible to adopt a collaborative approach within the Downtown Partnership to use some of these spaces for short-term parking. The 55-space lot behind the Pepper building and the hotel's surface lot on Trade Street are two key locations, since they are both close to Fourth Street and are in the heart of the area, where short-term parking is scarce. As a reserve option, the deck on Cherry Street north of Second Street is slightly further from Fourth Street, but it is a relatively attractive deck and is only a short walk from the heart of Restaurant Row.

   Commercial terms would have to be agreed. It is likely that any displaced commuter parking could be accommodated in vacant deck or surface spaces nearby.

Other recommendations

6. **Marshall Street exit from Cherry-Marshall deck.** Some curbspace, the equivalent of about 4 spaces, has been bollarded-off in order to provide adequate sight distance for vehicles exiting the deck. An engineering study should address whether there are alternative management measures that could allow the curbspace to be used for parking. In view of the low level of gain, it is recommended that only low-cost measures be explored (e.g. buildouts, but not signalization).

7. **Streetscape improvements that tie spaces better into Restaurant Row.** There are under-utilized metered spaces within one block of Restaurant Row, at the western end on Marshall, Spruce, Poplar and Fourth itself. These might become more attractive if they became more closely identified with Restaurant Row. It is therefore recommended that the streetscape enhancements made on Restaurant Row be extended as far as Poplar Street, and also a short way southwards on Marshall and Spruce Streets. Importantly, the streetscape improvements should retain the existing highway width and the existing level of on-street parking. This would bring perhaps 20-40 under-utilized spaces into the quality streetscape. In addition, the group of under-utilized metered spaces on Fourth west of Poplar would become psychologically closer to the Row.

   Similar streetscape improvements in conjunction with parking changes on Town Row Lane might similarly help to tie those spaces into the Row.

8. **Providing spaces on Town Run Lane between Second and Third Streets**. An engineering study should address the feasibility of providing on-street parking spaces on one side of Town Run Lane, between Second and Third Streets, by narrowing the travel lanes. This could potentially gain about ten spaces within 250 feet of Third Street, partly along commercial frontages. Although not directly benefiting Fourth Street, it would ease pressure on Third Street, which is effectively fully-utilized.

9. **Convert Third Street to two-way throughout.** Third Street is one-way between Main Street and Town Run Lane. Two-way traffic would assist parking search for customers of both Third St and Fourth St businesses. It would be particularly useful if short-term parking were formalized on the northern portion of Town Run Lane and provided on the southern portion.

10. **Signage** Distinctive signage would help to direct visitors to short-term parking spaces. Because these spaces are spread among multiple locations, particularly side streets, drivers need a clear indication of where they should search for a space. Even relatively-frequent visitors may not be aware of all the options. Although there is currently parking signage along Fourth Street, it uses standard traffic signs which are neither distinctive nor specifically identified with short-term parking.

    There would be two types of sign. Firstly, the main approach roads to Downtown (Cherry, Marshall, Liberty and Main Streets) would have 'welcome' type signs which would attune visitors to the signs that they need to watch for. Secondly, signs in downtown would flag the actual locations of spaces. The existing signs in downtown Raleigh are a useful example of this approach.

    The signs themselves could be plates, banners, or bespoke street furniture, depending on the City's preference and on detailed examination of the streetscape. The design could be an opportunity to further promote the theme of Restaurant Row or the Arts & Entertainment Area as a whole.

11. **Temporary surface lot(s) on Mother & Daughter / Revco sites**. The possibility of building a temporary surface lot on part of the Mother & Daughter site, pending construction of the Civic Plaza, is supported. It is ideally-situated in relation to the area of greatest short-term parking need. It is also an easily-accessible site, directly on Fourth Street and avoiding the need to search a series of side streets.

    The City has indicated that demolition of the western part of the building, alongside Town Run Lane, could allow 25-35 surface spaces. This would be sufficient to make up for the observed shortage of short-term parking, allowing for the need to have a certain level of vacancies.

    To accommodate the additional spaces that are forecast to be needed in future years, the remainder of the building and/or the ex-Revco building could also be demolished for further temporary parking spaces. This would have to be balanced against the loss of streetscape. The buildings are expected to be replaced, in any case, under the Civic Plaza scheme. The short-term spaces provided during the temporary period prior to construction of the Civic Plaza project should be retained in the final project facilities. This would be in addition to the parking demands generated by the Civic Plaza redevelopment project.

    For any scheme, the engineering design would need to taken account of the slope of the land and the need for access and egress. Entry from Fourth Street would be preferred. Although mid-block access would be possible, use of the existing signalized intersection at Fourth and Trade Streets could simplify traffic flow and safety issues (Figure 10).

6.3 OTHER ISSUES

Initial discussions had considered the possibility of reallocating some long-term or service spaces in the Cherry-Marshall deck to short-term use. This is <u>not</u> recommended.

The deck is difficult and unattractive to enter or leave on foot, and has a confusing vehicular layout (Figure 11). It is unlikely that customers would happily use it for short-term parking. It is notable that the existing short-term spaces there are under-used. However, the long-term spaces, although under-used on the survey day, are better used during conventions and at other times when the hotel is busy. Many spaces will also be allocated to the Nissen Building, following an agreement with the City.

The pay-and-display short-term spaces in the Fourth/Poplar deck (Figure 12) also have some vacancies. There are no specific recommendations for these spaces, which are more attractive than those in the Cherry-Marshall deck, but the recommendations for signage and streetscape improvements will enhance their attractiveness as a location.

The proposed Civic Plaza redevelopment project could contain as much as 40,000 square feet of additional retail space in the study area. This additional retail space will generate the demand for approximately 120 short-term spaces.

6.4 POTENTIAL SPACES GAINED FROM THE RECOMMENDATIONS

Table 9 summarizes the recommendations, along with an estimate of the number of short-term parking spaces that could be made available by each.

The study has suggested that 200 short-term spaces would need to be gained in order to accommodate future demand.

The recommendations involving reallocation of existing spaces or relatively simple street works, within the City and County's control, could provide 34-38 additional short-term spaces. With the addition of a temporary surface lot on the Mother & Daughter site and/or adjoining sites, the total gain could be 59-98 spaces.

The remaining requirement would be for 102-141 existing off-street spaces to be reallocated to short-term use through partnership arrangements.

Table 9: Summary of recommendations

	Potential extra short-term spaces
Town Run Lane – formalize parking	6-8
Loading spaces on Liberty Street – re-examine allocation	-
On-street parking beside Nissen Building	3-4
County Staff spaces outside the Old Courthouse	13
Additional spaces to be found by partnership	see below
Marshall Street – address exit from Cherry-Marshall deck	2-3
Streetscape improvements	-
Parking on Town Run Lane between Second and Third Streets	10
Convert Third Street to two-way throughout	-
Signage	-
Temporary surface lot(s)	25-60
Total of above	**59-98**
Estimated future deficit of short-term spaces *	200
Additional spaces required to be found by partnership *	**102-141**

* excluding allowance for retaining a vacancy level

LEGEND 22 Block number | Measures to provide additional parking | Measures to improve use of existing parking | Measures not recommended

Figure 8: Recommendations

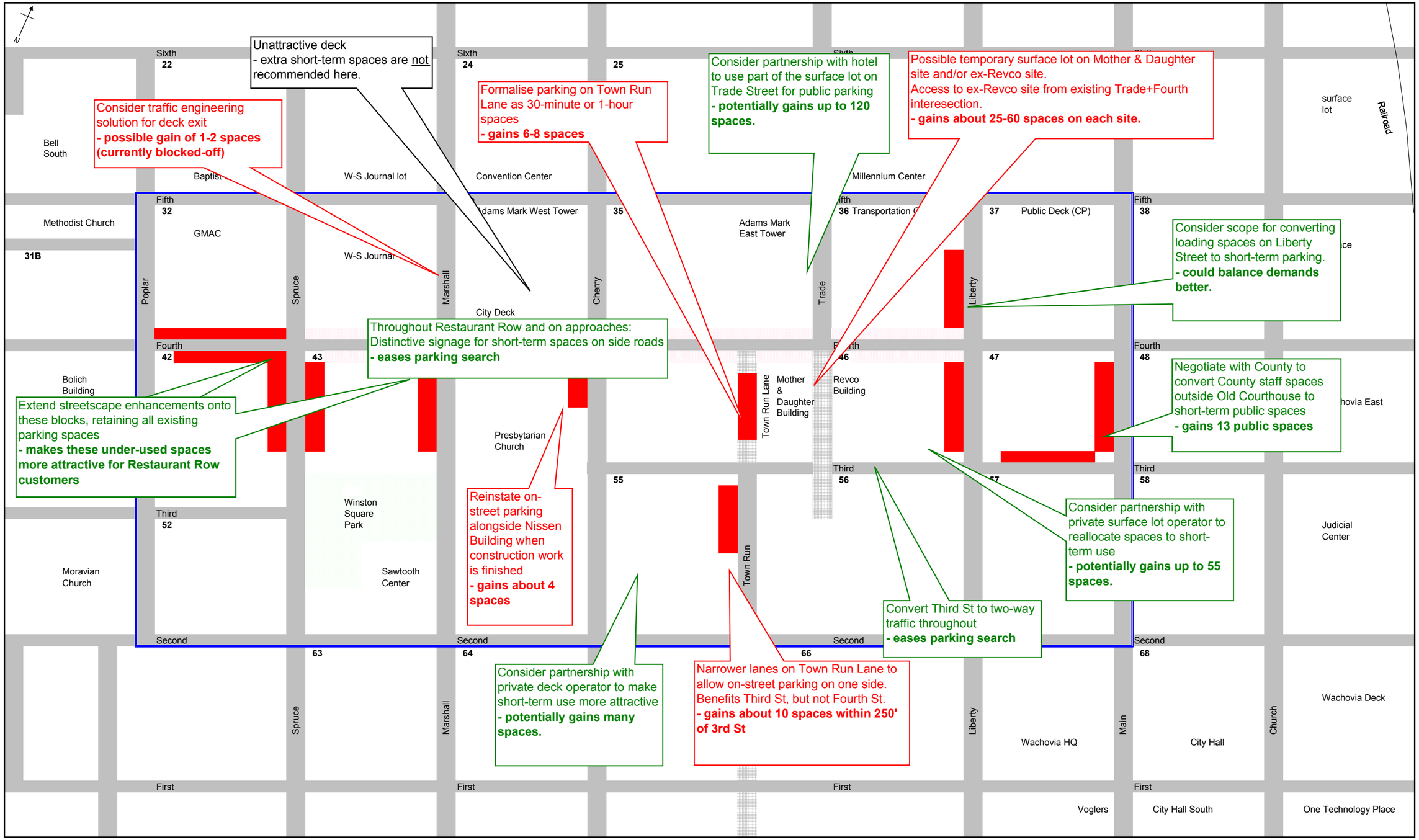


Figure 9: Town Run Lane

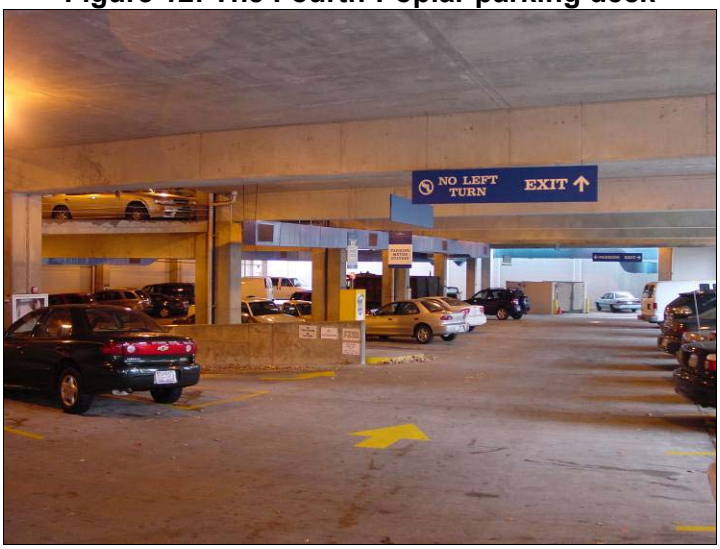
Figure 10: Fourth Street at Trade St

Revco building in left background, Mother & Daughter building in right background

Figure 11: The Cherry-Marshall parking deck

(a) Marshall Street entrance (b) Cherry Street entrance

Figure 12: The Fourth-Poplar parking deck



Appendix A page 1:
Standard land uses and parameters

The main datasheet has links to this table. The links provide a drop-down list of land uses and retrieve the parameters for each site.

ITE Code	Use	Notes	ITE Average weekday peak parking demand	2004 Occupancy factor	Reduction for transit, TDM	% long-term	Future Occupancy factor
701	General office	(a)	2.84 spaces per 1,000 sq ft	0.90	20%	90%	1.00
800s	Retail [unspecified]	(b)	2.50 spaces per 1,000 sq ft	0.60	20%	10%	1.00
730	Government Office	(c)	4.15 spaces per 1,000 sq ft	0.95	20%	70%	1.00
150	Auto parts store	(d)	0.50 spaces per 1,000 sq ft	0.90	20%	10%	1.00
N/A	Dance School	(e)	4.00 spaces per 1,000 sq ft	1.00	20%	90%	1.00
560	Church		1.20 spaces per 1,000 sq ft	0.95	20%	90%	1.00
230	Condominiums	(f)	1.25 spaces per 1,000 sq ft	0.90	0%	80%	1.00
310	Hotel		2.00 spaces per room	1.00	5%	90%	1.00
N/A	Art gallery	(g)	1.50 spaces per 1,000 sq ft	0.60	20%	10%	1.00
N/A	Vacancy		0.00	0.00	0%	50%	1.00
890	Furniture Store		0.94 spaces per 1,000 sq ft	0.90	20%	10%	1.00
441	Live theater	(h)	0.25 spaces per seat	1.00	5%	95%	1.00
732	US Post Office	(i)	33.20 spaces per 1,000 sq ft	1.00	20%	10%	1.00
931	Quality restaurant	(j)	11.40 spaces per 1,000 sq ft	1.00	20%	10%	1.00
933	Fast-food rest. Without D/T	(k)	8.20 spaces per 1,000 sq ft	1.00	20%	10%	1.00
870	Apparel store	(l)	2.50 spaces per 1,000 sq ft	0.60	20%	10%	1.00
880	Pharmacy/drugstore w/o D/T		1.83 spaces per 1,000 sq ft	0.60	20%	10%	1.00
438	Billiard Hall	(m)	3.00 spaces per 1,000 sq ft	0.60	20%	10%	1.00

Notes

D/T = drive-through

(a) Urban rate 2.40, suburban rate 2.84, suburban minus 20% gives 2.27. This study uses the suburban rate and maintains the standard 20% reduction. %LT estimated from hour-by-hour figures.

(b) For these calculations, retail uses (ITE codes 800-899) have been amalgamated. City survey 2001 used rate 2.50. ITE rates for similar uses are mixed; 2.50 is a reasonable overall estimate. %LT estimated from hour-by-hour figures.

(c) Slightly up from earlier rate of 3.84. %LT estimated from hour-by-hour figures.

(d) No ITE rate. Large back area suggests that 'warehouse' rate (0.41) is plausible.

(e) Peak use likely to be outside business hours.

(f) ITE gives 1.46 suburban (one urban site 0.85). Assume the same as for apartments. Assume no daytime sharing of residents' spaces.

(g) No ITE data. Figures estimated based on other land uses.

(h) Assume that most shows last too long for attendees to use short-term parking

(i) ITE data has only one study

(j) ITE gives quality restaurant as 15.4 for 7-8pm. Highest daytime rate is 74% of peak (2-3pm). Therefore use 74% of 15.4 = 11.4.

(k) Using the non-Hamburger sub-set.

(l) ITE data is inconclusive. Conservatively use 2.50 as per City 2001 survey.

(m) ITE data had one site, weekday evening demand 6.6 vehs per 1,000 GSF. Assume daytime demand is less than this.

Appendix A page 2: Study area buildings and demand estimates

(revised)

Site details					2004 demand estimates												Future demand estimates											
Enter building details in these columns						Automatic lookup of parameters				Automatic demand figures			Manual over-ride			Final demand figures				Automatic lookup of parameters				Automatic demand figures			Manual over-ride			Final demand figures		
						These columns automatically find the parameters for the relevant land use				These columns calculate demand, based on the parameters			If necessary, over-ride the automatic calculations here.			Uses the manual over-ride (if any) or else the automatic figures				These columns automatically find the parameters for the relevant land use				These columns calculate demand, based on the parameters			If necessary, over-ride the automatic calculations here.			Uses the manual over-ride (if any) or else the automatic figures		
Block	Building	Notes on building / site	Notes on assumptions	Building sq ft	Use (pick from list or enter manually)	Demand rate	Occupancy factor	Reduction for transit, TDM	% long-term	Total demand	LT	ST	Total demand	LT	ST	Total demand	LT	ST	Use (pick from list or enter manually)	Demand rate	Occupancy factor	Reduction for transit, TDM	% long-term	Total demand	LT	ST	Total demand	LT	ST	Total demand	LT	ST
32	**500 Fifth St**	GMAC (tower)		486,019	General office	2.84	0.90	20%	90%	994	894	99				994	894	99	General office	2.84	1.00	20%	90%	1,104	994	110				1,104	994	110
33	**411 Fourth St**	Commerce Plaza" - "Cat's Corner Café"		4,000	Fast-food rest. Without D/T	8.20	1.00	20%	10%	26	3	24				26	3	24	Fast-food rest. Without D/T	8.20	1.00	20%	10%	26	3	24				26	3	24
33	**411 Fourth St**	Commerce Plaza" - Software office + 'Hutch Catalog Showroom'		32,840	General office	2.84	0.90	20%	90%	67	60	7				67	60	7	General office	2.84	1.00	20%	90%	75	67	7				75	67	7
33	**481 Marshall**	Fox 8 WGHP, W-S Journal		80,238	General office	2.84	0.90	20%	90%	164	148	16				164	148	16	General office	2.84	1.00	20%	90%	182	164	18				182	164	18
33	**401 Fourth**	Stevens Center (NC Sch of the Arts) 1380 seats	No sq ft given. City study assumed demand of 20 (minus 20% for transit etc)		Live theater	0.25	1.00	5%	95%	0	0	0	16	15	1	16	15	1	Live theater	0.25	1.00	5%	95%	0	0	0	16	15	1	16	15	1
34	**315 Fourth St**	Art gallery. WAS RETAIL IN 2001		5,400	Art gallery	1.50	0.60	20%	10%	4	0	3				4	0	3	Art gallery	1.50	1.00	20%	10%	6	1	6				6	1	6
34	**304 [305?] Fourth St**	"Chatham Bldg" - "Arts Council"		40,800	General office	2.84	0.90	20%	90%	83	75	8				83	75	8	General office	2.84	1.00	20%	90%	93	83	9				93	83	9
34	**460 Cherry St**	Part of Adams-Mark hotel - see block 35	No sq ft given. City study assumed demand of 240 (minus 20% for transit etc)	0	Hotel	2.00	1.00	5%	90%	0	0	0	192	173	19	192	173	19	Hotel	2.00	1.00	5%	90%	0	0	0	192	173	19	192	173	19
34	**321 Fourth St**	"Kabas Indian Bar & Grill" Was retail in 2001		5,400	Quality restaurant	11.40	1.00	20%	10%	49	5	44				49	5	44	Quality restaurant	11.40	1.00	20%	10%	49	5	44				49	5	44
34		Spaces in Cherry-Marshall Deck used by Nissen Building	The Nissen Building will use long-term spaces in the Cherry-Marshall Deck - the spaces appear here																								210	210		210	210	0
35	**227 Fourth St**			4,524	Apparel store	2.50	0.60	20%	10%	5	1	5				5	1	5	Apparel store	2.50	1.00	20%	10%	9	1	8				9	1	8
35	**215 Fourth**	"Tokyo Shapiro"		4,000	Fast-food rest. Without D/T	8.20	1.00	20%	10%	26	3	24				26	3	24	Fast-food rest. Without D/T	8.20	1.00	20%	10%	26	3	24				26	3	24
35	**209 Fourth St**	"The Downtown Deli"		11,200	Fast-food rest. Without D/T	8.20	1.00	20%	10%	73	7	66				73	7	66	Fast-food rest. Without D/T	8.20	1.00	20%	10%	73	7	66				73	7	66
35	**425 Cherry St**	"Adam's Mark Hotel" 603 rooms	No sq ft given. City study assumed demand of 240 (minus 20% for transit etc) - will use those figures again	603	Hotel	2.00	1.00	5%	90%	1,146	1,031	115	192	173	19	192	173	19	Hotel	2.00	1.00	5%	90%	1	1	0	192	173	19	192	173	19
35	**201 Fourth St**	Drugstore + Pharamacy		6,610	Pharmacy/drugstore w/o D/T	1.83	0.60	20%	10%	6	1	5				6	1	5	Pharmacy/drugstore w/o D/T	1.83	1.00	20%	10%	10	1	9				10	1	9
35	**211 Fourth St**	Cobblers		9,975	Retail [unspecified]	2.50	0.60	20%	10%	12	1	11				12	1	11	Retail [unspecified]	2.50	1.00	20%	10%	20	2	18				20	2	18
35	**418 Trade St**	Vacant offices		4,800	General office	2.84	0.90	20%	90%	10	9	1				10	9	1	General office	2.84	1.00	20%	90%	11	10	1				11	10	1
35	**412 Trade St**	Vacant offices		9,720	General office	2.84	0.90	20%	90%	20	18	2				20	18	2	General office	2.84	1.00	20%	90%	22	20	2				22	20	2
35	**411 Cherry St**	Vacant shop with law firm above.		9,732	Retail [unspecified]	2.50	0.60	20%	10%	12	1	11				12	1	11	Retail [unspecified]	2.50	1.00	20%	10%	19	2	18				19	2	18
35	**235 Fourth St**	ex-Jeweller shop. On 'property available' list		18,250	Retail [unspecified]	2.50	0.60	20%	10%	22	2	20				22	2	20	Retail [unspecified]	2.50	1.00	20%	10%	37	4	33				37	4	33
36	**415 Trade St**	Attorney		3,912	General office	2.84	0.90	20%	90%	8	7	1				8	7	1	General office	2.84	1.00	20%	90%	9	8	1				9	8	1
36	**409 Trade St**	Quality restaurant	Seems shut at lunchtime, but include it anyway to be sure	4,128	Quality restaurant	11.40	1.00	20%	10%	38	4	34				38	4	34	Quality restaurant	11.40	1.00	20%	10%	38	4	34				38	4	34
36	**414 Liberty St**	Newsagent. WAS RETAURANT IN 2001		7,820	Retail [unspecified]	2.50	0.60	20%	10%	9	1	8				9	1	8	Retail [unspecified]	2.50	1.00	20%	10%	16	2	14				16	2	14
36	**418 Liberty St**	Barber + Western Union + Cigarettes		7,990	Retail [unspecified]	2.50	0.60	20%	10%	10	1	9				10	1	9	Retail [unspecified]	2.50	1.00	20%	10%	16	2	14				16	2	14
36	**424 Liberty St**	"Camel Pawn Shop", 422-424 Liberty		13,083	Retail [unspecified]	2.50	0.60	20%	10%	16	2	14				16	2	14	Retail [unspecified]	2.50	1.00	20%	10%	26	3	24				26	3	24
36	**131 Fourth. St**	Pawn shop. Continues up Trade		14,610	Retail [unspecified]	2.50	0.60	20%	10%	18	2	16				18	2	16	Retail [unspecified]	2.50	1.00	20%	10%	29	3	26				29	3	26
36	**408 Liberty St**	Currently vacant. ex-Woolworths		11,827	Retail [unspecified]	2.50	0.60	20%	10%	14	1	13				14	1	13	Retail [unspecified]	2.50	1.00	20%	10%	24	2	21				24	2	21
36	**100 Fifth St**	Corner of 4th and 5th. "O'Hanlon's" office bldg. Appears vacant.		20,000	General office	2.84	0.90	20%	90%	41	37	4				41	37	4	General office	2.84	1.00	20%	90%	45	41	5				45	41	5
37	1 Fourth St [1st floor]	"Café Carolina & Bakery" corner of Trade & 4th, in office block. Est area		2,000	Fast-food rest. Without D/T	8.20	1.00	20%	10%	13	1	12				13	1	12	Fast-food rest. Without D/T	8.20	1.00	20%	10%	13	1	12				13	1	12
37	**1 Fourth St**	Est area of café subtracted		398,000	General office	2.84	0.90	20%	90%	814	732	81				814	732	81	General office	2.84	1.00	20%	90%	904	814	90				904	814	90
42	**500 Fourth St**	"WSSU Center for Community Safety", "Downtwon W-S Partnership;, "March of Dimes Birth Defects Fndn"		80,852	General office	2.84	0.90	20%	90%	165	149	17				165	149	17	General office	2.84	1.00	20%	90%	184	165	18				184	165	18
43	**226 Marshall [majority of space]**	Sawtooth Center.	Art area = bldg total 68,240 minus bar area	64,240	Art gallery	1.50	0.60	20%	10%	46	5	42				46	5	42	Art gallery	1.50	1.00	20%	10%	77	8	69				77	8	69
43	226 Marshall [part of space]	Part of Sawtooth Center. "Auction House" sports bar.	Estimated area of bar	4,000	Fast-food rest. Without D/T	8.20	1.00	20%	10%	26	3	24				26	3	24	Fast-food rest. Without D/T	8.20	1.00	20%	10%	26	3	24				26	3	24
43	**101-510 Spruce St**	(converted ex-YMCA)		41,046	Condominiums	1.25	0.90	0%	80%	46	37	9				46	37	9	Condominiums	1.25	1.00	0%	80%	51	41	10				51	41	10
43	**416 Fourth St**	Anonymous offices		13,760	General office	2.84	0.90	20%	90%	28	25	3				28	25	3	General office	2.84	1.00	20%	90%	31	28	3				31	28	3
43	**0 [315?] Spruce St**	(converted ex-YMCA) Law offices, Horn & Stronach, Democratic Party, M Creative, Capital Development		21,842	General office	2.84	0.90	20%	90%	45	40	4				45	40	4	General office	2.84	1.00	20%	90%	50	45	5				50	45	5
43	**0 [400?] Fourth St**	various occupants		70,008	General office	2.84	0.90	20%	90%	143	129	14				143	129	14	General office	2.84	1.00	20%	90%	159	143	16				159	143	16
43	**410 Fourth St**	"Speakeasy Jazz" Closed until 5pm. WAS RETAIL IN 2001	Closed until 5pm, but some staff/visitors may be present in daytime	10,190	Jazz café	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	2	1	1	2	1	1	Jazz café	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	2	1	1	2	1	1
43	**201 Spruce**	Vacant, ex-"United Automotive Service". Some people park on frontage	No ITE rate for this use, so code as 'retail', ITE data for hardware store is consistent with this.	24,384	Auto parts store	0.50	0.90	20%	10%	9	1	8	0	0	0	0	0	0	Auto parts store	0.50	1.00	20%	10%	10	1	9				10	1	9
44	**Presbytarian Church**	Presbytarian Church	Assume most weekday church activity is in the office annex (listed separately)		Church	1.20	0.95	20%	90%	0	0	0	10	1	9	10	1	9	Church	1.20	1.00	20%	90%	0	0	0	10	1	9	10	1	9
44	**230 Cherry**	Church annex		18,240	General office	2.84	0.90	20%	90%	37	34	4				37	34	4	General office	2.84	1.00	20%	90%	41	37	4				41	37	4
44	**314 Fourth St**	Numbered as 322 Fourth, presumably parcel is 312-322 Fourth		6,470	Vacancy	0	0	0%	50%	0	0	0				0	0	0	Retail [unspecified]	2.50	1.00	20%	10%	13	1	12				13	1	12
44	**310 Fourth St**	Nissen Bldg. Under conversion to 145 aptmts (1 or 2 bed) plus restaurant & office space. 7.5 bays of street-level frontage	WILL USE L/T SPACES IN THE BLOCK 34 DECK.	194,446	Vacancy	0	0	0%	50%	0	0	0				0	0	0	Condominiums	1.25	1.00	0%	80%	243	194	49	49	0	49	49	0	49
44	310 Fourth St	Nissen Bldg. Under conversion to 145 aptmts (1 or 2 bed) plus commercial space. 7.5 bays of street-level frontage	Assume a ground floor restaurant of 4,000ft… WILL USE L/T SPACES IN THE BLOCK 34 DECK.	4,000	Vacancy	0	0	0%	50%	0	0	0				0	0	0	Quality restaurant	11.40	1.00	20%	10%	36	4	33	33	0	33	33	0	33
44	310 Fourth St	Nissen Bldg. Under conversion to 145 aptmts (1 or 2 bed) plus commercial space. 7.5 bays of street-level frontage	… and ground floor offices of 6,000sq ft. (The rest of the ground floor would be entrance and lobby for unstairs.) WILL USE L/T SPACES IN THE BLOCK 34 DECK.	6,000	Vacancy	0	0	0%	50%	0	0	0				0	0	0	General office	2.84	1.00	20%	90%	14	12	1	1	0	1	1	0	1
45	**209 Third St**	WAS RETAIL IN 2001		4,370	Art gallery	1.50	0.60	20%	10%	3	0	3				3	0	3	Art gallery	1.50	1.00	20%	10%	5	1	5				5	1	5
45	Cnr of 3rd & Cherry	Catholic Church - not in City Data	Demand estimated		Church	1.20	0.95	20%	90%				5	1	4	5	1	4	Church	1.20	1.00	20%	90%	0	0	0				0	0	0
45	**202 Fourth St / 201 Third St**	"The Artistic Studio School for Performing Arts". Davis Bldg. WAS RETAIL IN 2001. Proposed condos + retail (sale pending)	Total 29,016. Assume that future retail wil be…	7,000	Dance School	4.00	1.00	20%	90%	22	20	2				22	20	2	Retail [unspecified]	2.50	1.00	20%	10%	14	1	13				14	1	13
45	202 Fourth St / 201 Third St	"The Artistic Studio School for Performing Arts". Davis Bldg. WAS RETAIL IN 2001. Proposed condos + retail (sale pending)	… and the remaining space will be condos	22,016	Dance School	4.00	1.00	20%	90%	70	63	7				70	63	7	Condominiums	1.25	1.00	0%	80%	28	22	6				28	22	6
45	**214 Fourth St**	"Dill Pickle"		2,090	Fast-food rest. Without D/T	8.20	1.00	20%	10%	14	1	12				14	1	12	Fast-food rest. Without D/T	8.20	1.00	20%	10%	14	1	12				14	1	12
45	**207 Third St**	"Murphy's Lunch"		4,370	Fast-food rest. Without D/T	8.20	1.00	20%	10%	29	3	26				29	3	26	Fast-food rest. Without D/T	8.20	1.00	20%	10%	29	3	26				29	3	26
45	**206 Fourth St**	"Contempo" High-class furniture & furnishings WAS OFFICE IN 2001		16,010	Furniture Store	0.94	0.90	20%	10%	11	1	10				11	1	10	Furniture Store	0.94	1.00	20%	10%	12	1	11				12	1	11
57	125 Third St	"City Center Building" Attorney, Realtor. Est area		10,000	General office	2.84	0.90	20%	90%	20	18	2				20	18	2	General office	2.84	1.00	20%	90%	23	20	2				23	20	2
45	**205 Third St**	Attorney		4,370	General office	2.84	0.90	20%	90%	9	8	1				9	8	1	General office	2.84	1.00	20%	90%	10	9	1				10	9	1
45	**212 Fourth St**	CURRENTLY VACANT		3,841	Retail [unspecified]	2.50	0.60	20%	10%	5	0	4				5	0	4	Retail [unspecified]	2.50	1.00	20%	10%	8	1	7				8	1	7
45	**124-126 Fourth St**	(Rec as 122 4th) Old Mother & Daughter Bldg. Possible demolition for new 30-space lot	Assume it remains vacant pending long-term development	52,732	Vacancy	0	0	0%	50%	0	0	0				0	0	0	Vacancy	0	1.00	0%	50%	0	0	0				0	0	0
46	**115 Third St**	Not recorded in field trip -assume to still be an office		5,504	General office	2.84	0.90	20%	90%	11	10	1				11	10	1	General office	2.84	1.00	20%	90%	13	11	1				13	11	1
46	**114-116 Fourth St**	VACANT. Ex-Revco. City-owned. Uncertain future		5,250	Retail [unspecified]	2.50	0.60	20%	10%	6	1	6				6	1	6	Retail [unspecified]	2.50	1.00	20%	10%	11	1	9				11	1	9
46	**110 Fourth St**	Demolished	Assume it remains vacant pending long-term development	0	Vacant site	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0	0	0	0	0	0	Condominiums	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0	0	0	0	0	0
46	**100-104 Fourth St [upper levels]**	Pepper Bldg (inc 316 Liberty). Vacant. Possible condos & retail. Owned by D/T Fndn	Area of condos = building total 49,000 sq ft minus retail area	43,000	Vacancy	0	0	0%	50%	0	0	0				0	0	0	Condominiums	1.25	1.00	0%	80%	54	43	11				54	43	11
46	100-104 Fourth St [ground level]	Pepper Bldg (inc 316 Liberty). Vacant. Possible condos & retail. Owned by D/T Fndn	Assume ground floor is 7,000 sq ft, of which 1,000 sq ft will be lobby for condos, leaving 6,000 sq ft for retail	6,000	Vacancy	0	0	0%	50%	0	0	0				0	0	0	Retail [unspecified]	2.50	1.00	20%	10%	12	1	11				12	1	11
47	**11 Third St**	Old courthouse. S and E sides have on-street staff spaces		57,911	Vacancy	0	0	0%	50%	0	0	0				0	0	0	General office	2.84	1.00	20%	90%	132	118	13				132	118	13
52	206 Spruce	Center for Home Ownership. City gave no SF data. SF from property available list.Assume demand is satisfied by its own lot.	Assume all demand for this site is accommodated on its private lot.	17,538	General office	2.84	0.90	20%	90%	36	32	4	20	0	20	20	0	20	General office	2.84	1.00	20%	90%	40	36	4	20	0	20	20	0	20
52	207 Poplar	N J Nifong, Attorney. City gave no SF data. Assume demand is satisfied by its own lot.	Assume all demand for this site is accommodated on its private lot.		General office	2.84	0.90	20%	90%	0	0	0	4	0	4	4	0	4	General office	2.84	1.00	20%	90%	0	0	0	4	0	4	4	0	4
52	205 Poplar	R L Hendrix, Appraisals. City gave no SF data.Assume demand is satisfied by its own lot.	Assume all demand for this site is accommodated on its private lot.		General office	2.84	0.90	20%	90%	0	0	0	4	0	4	4	0	4	General office	2.84	1.00	20%	90%	0	0	0	4	0	4	4	0	4
52	2nd at Poplar	Eric S Ellison, Attorney. City gave no SF data.Assume demand is satisfied by its own lot.	Assume all demand for this site is accommodated on its private lot.		General office	2.84	0.90	20%	90%	0	0	0	4	0	4	4	0	4	General office	2.84	1.00	20%	90%	0	0	0	4	0	4	4	0	4
55	**200 Third St**	Realtor		2,160	General office	2.84	0.90	20%	90%	4	4	0				4	4	0	General office	2.84	1.00	20%	90%	5	4	0				5	4	0
55	**230 Town Run Ln.**	Attorney		2,592	General office	2.84	0.90	20%	90%	5	5	1				5	5	1	General office	2.84	1.00	20%	90%	6	5	1				6	5	1
55	**224 Town Run Ln**	Opthalmist		3,128	General office	2.84	0.90	20%	90%	6	6	1				6	6	1	General office	2.84	1.00	20%	90%	7	6	1				7	6	1
55	**224 Town Run Ln**	Opthalmist		4,350	General office	2.84	0.90	20%	90%	9	8	1				9	8	1	General office	2.84	1.00	20%	90%	10	9	1				10	9	1
55	**202 Third St**	Lawyer. Site includes 204 Third upstairs - vacant		6,780	General office	2.84	0.90	20%	90%	14	12	1				14	12	1	General office	2.84	1.00	20%	90%	15	14	2				15	14	2
55	**0 [235?] Cherry St**			14,898	General office	2.84	0.90	20%	90%	30	27	3				30	27	3	General office	2.84	1.00	20%	90%	34	30	3				34	30	3
55	200 Town Run Ln	Est area		2,000	US Post Office	33.20	1.00	20%	10%	53	5	48				53	5	48	US Post Office	33.20	1.00	20%	10%	53	5	48				53	5	48
56	Third St beside deck	"Courtside Café" Est area		1,500	Fast-food rest. Without D/T	8.20	1.00	20%	10%	10	1	9				10	1	9	Fast-food rest. Without D/T	8.20	1.00	20%	10%	10	1	9				10	1	9
56	**120 Third St**			38,752	General office	2.84	0.90	20%	90%	79	71	8				79	71	8	General office	2.84	1.00	20%	90%	88	79	9				88	79	9
56	**102 Third St**	Register of Deeds. Property list shows space available		257,112	Government Office	4.15	0.95	20%	70%	811	568	243				811	568	243	Government Office	4.15	1.00	20%	70%	854	598	256				854	598	256
56	Town Run beside deck	"PIP Printing". Est area		1,500	Retail [unspecified]	2.50	0.60	20%	10%	2	0	2				2	0	2	Retail [unspecified]	2.50	1.00	20%	10%	3	0	3				3	0	3
57	**0 [10?] Third St**	"Piedmont Federal"		12,480	General office	2.84	0.90	20%	90%	26	23	3				26	23	3	General office	2.84	1.00	20%	90%	28	26	3				28	26	3
57	**16 Third St**	"Piedmont Federal"		17,280	General office	2.84	0.90	20%	90%	35	32	4				35	32	4	General office	2.84	1.00	20%	90%	39	35	4				39	35	4
57	**8 Third St**	Subway est area subtracted. Property list shows some space available		97,926	General office	2.84	0.90	20%	90%	200	180	20				200	180	20	General office	2.84	1.00	20%	90%	222	200	22				222	200	22
57	8 Third St	"Subway". Est area		1,500	Fast-food rest. Without D/T	8.20	1.00	20%	10%	10	1	9				10	1	9	Fast-food rest. Without D/T	8.20	1.00	20%	10%	10	1	9				10	1	9
57	**200 Main**	New courthouse		169,373	Government Office	4.15	0.95	20%	70%	534	374	160				534	374	160	Government Office	4.15	1.00	20%	70%	562	394	169				562	394	169
	TOTAL															**5,570**	**4,245**	**1,325**												**6,571**	**4,933**	**1,639**
																															Change from 2004	**1,001**	**687**	**314**