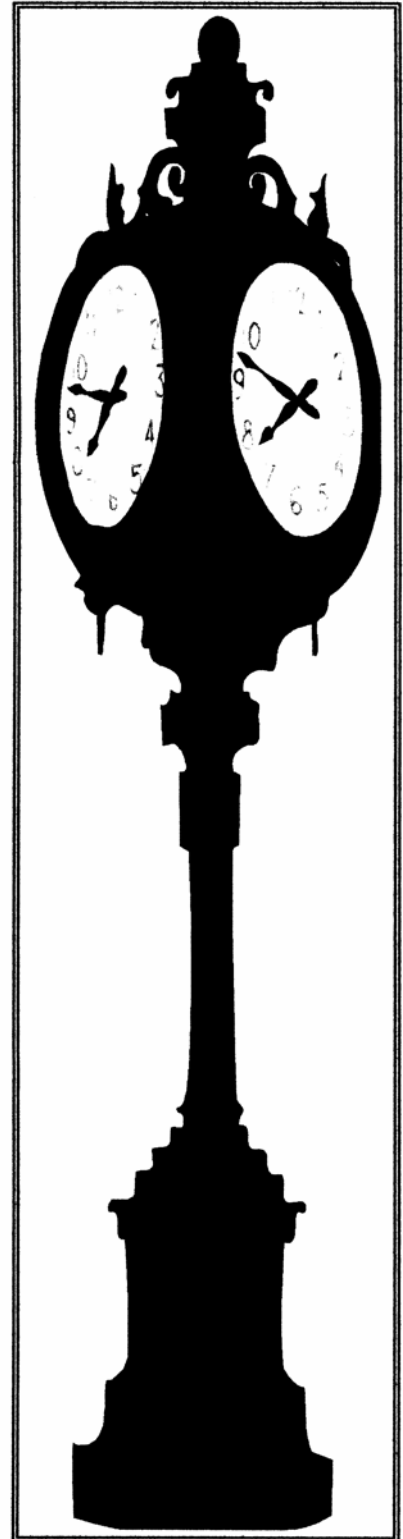


City of Northville

2006 Downtown Parking Analysis

**City of Northville,
Michigan**

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Acknowledgments

Interim City Manager

Nicolette Bateson

City Council

Christopher J. Johnson, Mayor

Carolann Ayers, Mayor ProTem

James Allen

Michele Fecht

Thomas Swigart

Prepared By

Carlisle/Wortman Associates, Inc.

Community Planners and Landscape Architects

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Introduction

Parking is a key component of a successful downtown. Parking in Northville is important because it is viewed as essential to the continued success of the downtown and its continued vitality.

Recent development proposals and the development of a long range plan for the City's downtown have resulted in a need to analyze whether the parking supply in downtown Northville is adequate. The current study updates the parking analysis included in the 1999 City of Northville Parking Management Plan.

Purpose of the Study

The purpose of this study is to inventory existing square footage of all business and residential uses, examine current parking conditions, and formulate conclusions regarding parking in downtown Northville. More specifically, the study will inventory and analyze the current parking supply within the downtown.

The first part of this study involves an inventory of the existing parking conditions within the study area. The inventory includes the parking count by block, for both private and on and off-street public parking. This inventory was accomplished using a field survey conducted by City staff in the summer of 2005. The existing parking inventory is supplemented with a parking occupancy survey of the busiest City parking lots in the downtown.

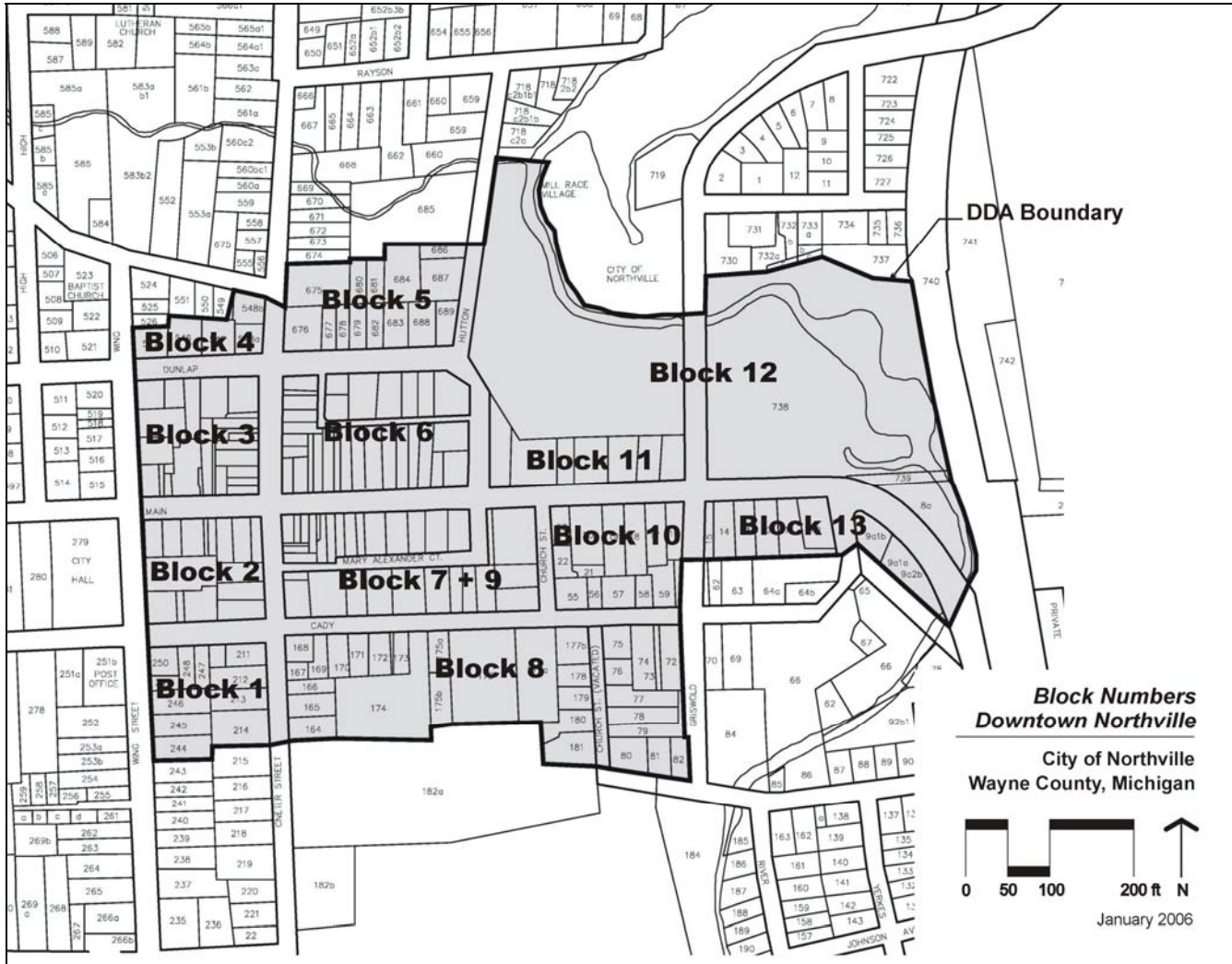
The second part of this study examines parking requirements as regulated by the City Zoning Ordinance and assesses current parking conditions. The Tax and Assessing Department of the City of Northville recently completed a comprehensive inventory of all uses and square footage within the downtown area. The building floor areas are compared to zoning requirements to assess the current parking surplus or deficiencies. Various scenarios are considered for comparison.

The last section of this study focuses on discussing the results of the parking assessment and whether the current supply of parking in downtown Northville meets zoning requirements for parking. Four different parking scenarios are identified which provides an analysis of parking supply.

Study Area

The study area encompasses the entire area covered by the DDA. Block numbers have been assigned in the same way as was done in 1999, as illustrated on the map on the following page. The map also labels the major City parking lots found in the downtown.

Figure 1. Study Area with Block Numbers



Existing Parking Conditions

The existing parking inventory includes the number of private off-street parking spaces, public off-street parking spaces and on-street parking spaces. A description of the parking occupancy surveys conducted in December of 2005, January and February of 2006 is also provided.

Existing Parking Inventory

There are currently a total of 2,200 parking spaces within the DDA area including:

- 1,179 (53%) public off-street spaces,
- 784 (36%) private spaces, and
- 237 (11%) spaces found on adjacent streets.

The following table presents the type and distribution of existing parking for the entire study area.

Table 1. Existing Parking Inventory

Block #	Block location	Private Spaces	Public Spaces	Total Off-Street Spaces	On Street Spaces	Total
1	S of Cady, W of Center	0	425	425	19	444
2	MAGS Block	0	0	0	27	27
3	S of Dunlap, W of Center	42	113	155	33	188
4	N of Dunlap, W of Center	24	0	24	3	27
5	N of Dunlap, E of Center	180	0	180	2	182
6	S of Dunlap, E of Center	41	132	173	23	196
7+9	S of Main, E of Center	44	241	285	66	351
8	S of Cady, E of Center	8	162	170	19	189
10	S of Main, W of Church	70	0	70	25	95
11	N of Main, W of Dunlap	65	43	108	11	119
12	Ford Park and E of Griswold	152	63	215	0	215
13	E of Griswold, S of Main	158	0	158	9	167
	Total	784	1,179	1,963	237	2,200

Source: Based on a parking inventory conducted by the City in the summer 2005.

*: Total parking supply is 2,221 if Edwards Café & Caterer's site is included.

The blocks containing the most parking are:

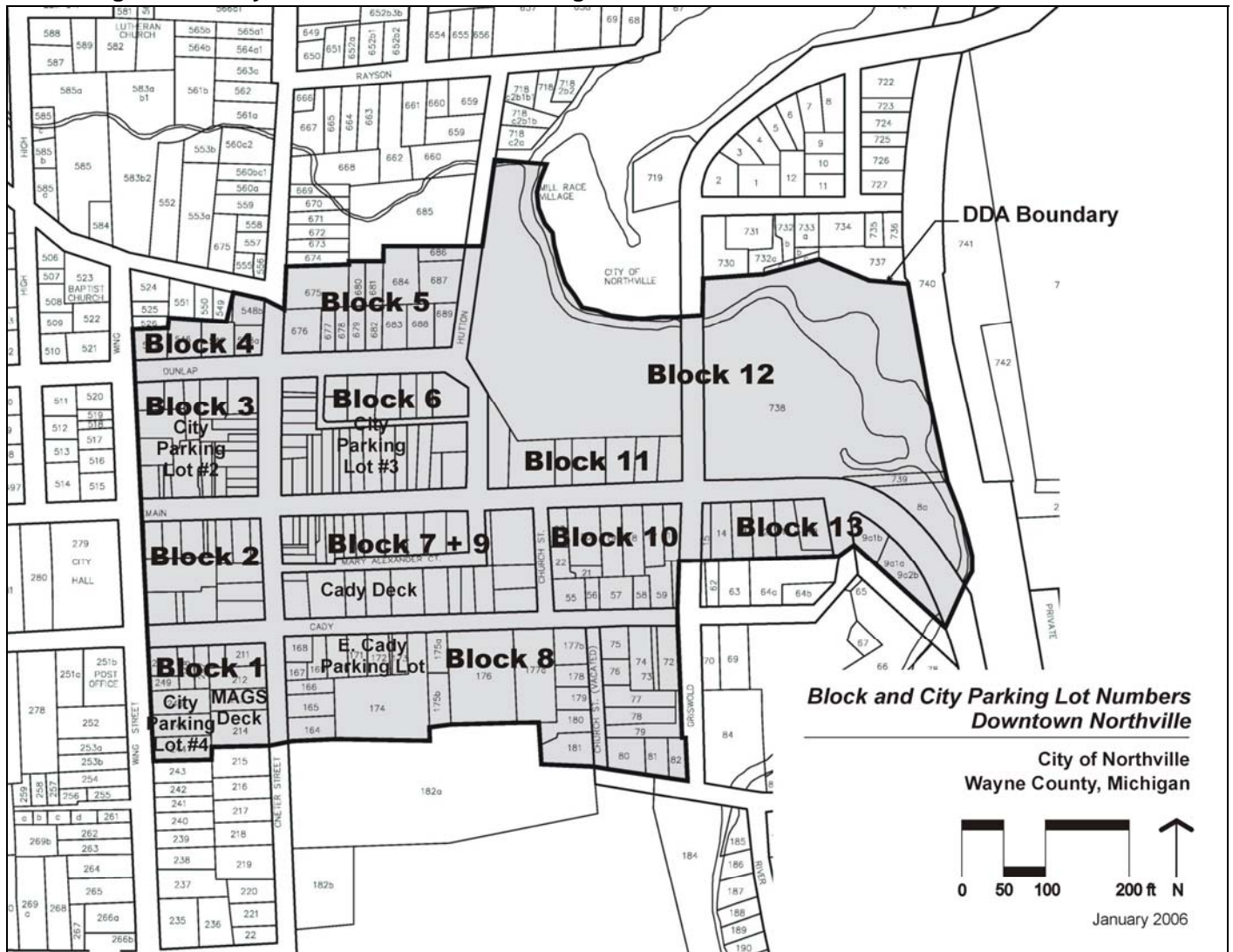
- Block 1 with 444 spaces, which contains the MAGS parking structure and the City parking lot #4
- Block 7+9 with 351 spaces, which contains the Cady parking structure, and
- Block 12 with 215 spaces, which encompasses the park including a substantial number of spaces, and
- Block 6 with 196 spaces, which contains the City parking lot #3, the largest surface parking area.

Blocks 3, 5, 8, and 13 follow with 167 to 189 parking spaces each. Block 10 and 11 each contains about 100 spaces. The lowest amount of parking can be found in Block 2, the MAGS block and Block 4, the smallest of the block.

Parking Occupancy Survey

On December 21 and 22, 2005, January 11 and 13, and February 6 and 9, 2006, a parking occupancy survey was conducted at 8:30 a.m., 10:00 a.m., 12:00 p.m., and at 2:00 p.m. This survey was done for the major parking areas located within the DDA. The following tables present the time and distribution of cars parked at the major locations for all three dates.

Figure 2. Study Area with Block and Parking Lot Numbers



Parking Lot #2 – Block 3

This parking lot, located in Block 3, includes 133 parking spaces open to the public and 22 parking spaces assigned as private for a total of 155 parking spaces. The row of 20 parking stalls located directly behind the new Long Building are private but have been counted as public for the purpose of the occupancy survey.

Table 2. Parking Lot #2 Survey

	Occupied Spaces	Available Spaces	Percent Occupied
Wednesday, December 21, 2005			
10:00 a.m.	87	68	56%
12:00 p.m.	115	40	74%
2:00 p.m.	108	47	70%
Thursday, December 22, 2005			
8:30 a.m.	59	96	38%
10:00 a.m.	120	35	77%
12:00 p.m.	133	22	86%
2:00 p.m.	115	40	74%
Wednesday, January 11, 2006			
8:30 a.m.	60	95	39%
10:00 a.m.	91	64	58%
12:00 p.m.	127	28	82%
2:00 p.m.	106	49	68%
Friday January 13, 2006			
8:30 a.m.	56	99	36%
10:00 p.m.	92	62	59%
12:00 p.m.	116	39	75%
2:00 p.m.	110	45	71%
Monday, February 6, 2006			
8:30 a.m.	50	105	32%
10:00 a.m.	86	69	55%
12:00 p.m.	97	58	63%
2:00 p.m.	106	49	68%
Thursday, February 9, 2006			
8:30 a.m.	60	95	39%
10:00 p.m.	84	71	54%
12:00 p.m.	109	46	70%
2:00 p.m.	110	45	71%

Parking Lot #3 – Block 6

This parking lot, located in Block 6, includes 132 parking spaces open to the public and 41 parking spaces assigned as private for a total of 173 parking spaces.

Table 3. Parking Lot #3 Survey

	Occupied Spaces	Available Spaces	Percent Occupied
Wednesday, December 21, 2005			
10:00 a.m.	135	38	78%
12:00 p.m.	165	8	95%
2:00 p.m.	170	3	98%
Thursday, December 22, 2005			
8:30 a.m.	91	82	53%
10:00 a.m.	144	29	83%
12:00 p.m.	173	0	100%
2:00 p.m.	172	1	99%
Wednesday, January 11, 2006			
8:30 a.m.	76	97	44%
10:00 a.m.	99	74	57%
12:00 p.m.	137	36	79%
2:00 p.m.	131	42	76%
Friday January 13, 2006			
8:30 a.m.	88	85	51%
10:00 p.m.	106	67	61%
12:00 p.m.	136	37	77%
2:00 p.m.	131	42	76%
Monday, February 6, 2006			
8:30 a.m.	72	101	42%
10:00 a.m.	84	89	49%
12:00 p.m.	120	53	69%
2:00 p.m.	100	73	58%
Thursday, February 9, 2006			
8:30 a.m.	77	96	45%
10:00 p.m.	101	72	58%
12:00 p.m.	124	49	72%
2:00 p.m.	127	46	73%

Parking Lot #4 – Block 1

This parking lot, located in Block 1, includes 226 parking spaces open to the public.

Table 4. Parking Lot #4 Survey

	Occupied Spaces	Available Spaces	Percent Occupied
Wednesday, December 21, 2005			
10:00 a.m.	94	132	42%
12:00 p.m.	106	120	45%
2:00 p.m.	169	121	46%
Thursday, December 22, 2005			
8:30 a.m.	74	152	33%
10:00 a.m.	86	140	38%
12:00 p.m.	86	140	38%
2:00 p.m.	92	134	41%
Wednesday, January 11, 2006			
8:30 a.m.	69	157	31%
10:00 a.m.	92	134	41%
12:00 p.m.	89	137	39%
2:00 p.m.	89	137	39%
Friday January 13, 2006			
8:30 a.m.	70	156	31%
10:00 p.m.	90	136	40%
12:00 p.m.	88	138	39%
2:00 p.m.	81	145	36%
Monday, February 6, 2006			
8:30 a.m.	60	166	27%
10:00 a.m.	77	149	34%
12:00 p.m.	79	147	35%
2:00 p.m.	69	157	31%
Thursday, February 9, 2006			
8:30 a.m.	59	167	26%
10:00 p.m.	73	153	32%
12:00 p.m.	90	136	40%
2:00 p.m.	92	134	41%

MAGS Deck – Block 1

This parking lot, located in Block 1, includes 100 parking spaces on the upper level open to the public.

Table 5. MAGS Deck Survey

	Occupied Spaces	Available Spaces	Percent Occupied
Wednesday, December 21, 2005			
10:00 a.m.	39	61	39%
12:00 p.m.	55	45	55%
2:00 p.m.	64	36	64%
Thursday, December 22, 2005			
8:30 a.m.	4	96	4%
10:00 a.m.	24	76	24%
12:00 p.m.	49	51	49%
2:00 p.m.	57	43	57%
Wednesday, January 11, 2006			
8:30 a.m.	11	89	11%
10:00 a.m.	36	61	36%
12:00 p.m.	49	51	49%
2:00 p.m.	46	54	46%
Friday January 13, 2006			
8:30 a.m.	14	86	14%
10:00 p.m.	37	63	37%
12:00 p.m.	51	49	51%
2:00 p.m.	45	55	45%
Monday, February 6, 2006			
8:30 a.m.	9	91	9%
10:00 a.m.	27	73	27%
12:00 p.m.	36	64	36%
2:00 p.m.	28	72	28%
Thursday, February 9, 2006			
8:30 a.m.	9	91	9%
10:00 p.m.	14	86	14%
12:00 p.m.	35	65	35%
2:00 p.m.	48	52	48%

Cady Deck – Block 7+9

This parking deck, located in Block 7+9, includes 74 parking spaces on the upper level open to the public, and 76 parking spaces on the lower level open to the public for a total of 150 parking spaces.

Table 6. Cady Deck Survey

	Occupied Spaces	Available Spaces	Percent Occupied
Wednesday, December 21, 2005			
10:00 a.m.	84	66	56%
12:00 p.m.	146	4	97%
2:00 p.m.	117	33	78%
Thursday, December 22, 2005			
8:30 a.m.	31	119	21%
10:00 a.m.	68	82	45%
12:00 p.m.	115	35	77%
2:00 p.m.	136	14	91%
Wednesday, January 11, 2006			
8:30 a.m.	38	112	25%
10:00 a.m.	111	39	74%
12:00 p.m.	123	27	82%
2:00 p.m.	100	50	67%
Friday January 13, 2006			
8:30 a.m.	45	105	30%
10:00 p.m.	83	67	55%
12:00 p.m.	97	53	65%
2:00 p.m.	106	44	71%
Monday, February 6, 2006			
8:30 a.m.	45	105	30%
10:00 a.m.	75	75	50%
12:00 p.m.	95	55	63%
2:00 p.m.	90	60	60%
Thursday, February 9, 2006			
8:30 a.m.	44	106	29%
10:00 p.m.	78	72	52%
12:00 p.m.	85	65	57%
2:00 p.m.	98	52	65%

East Cady Parking Lot – Block 8

This parking lot, located in Block 8, includes 88 parking spaces open to the public.

Table 7. East Cady Parking Lot Survey

	Occupied Spaces	Available Spaces	Percent Occupied
Wednesday, December 21, 2005			
10:00 a.m.	11	77	13%
12:00 p.m.	40	48	45%
2:00 p.m.	38	50	43%
Thursday, December 22, 2005			
8:30 a.m.	3	85	3%
10:00 a.m.	7	81	8%
12:00 p.m.	17	71	19%
2:00 p.m.	26	62	29%
Wednesday, January 11, 2006			
8:30 a.m.	2	86	2%
10:00 a.m.	12	76	14%
12:00 p.m.	23	65	26%
2:00 p.m.	23	65	26%
Friday January 13, 2006			
8:30 a.m.	3	85	3%
10:00 p.m.	15	63	17%
12:00 p.m.	25	138	28%
2:00 p.m.	22	66	24%
Monday, February 6, 2006			
8:30 a.m.	1	87	1%
10:00 a.m.	8	80	9%
12:00 p.m.	14	74	16%
2:00 p.m.	13	75	15%
Thursday, February 9, 2006			
8:30 a.m.	3	85	3%
10:00 p.m.	14	74	16%
12:00 p.m.	26	62	30%
2:00 p.m.	27	69	31%

The parking survey indicates that parking lot #3 (Block 6) is the busiest parking area of the downtown while the East Cady parking lot (Block 8) is the least busy parking area. The other four parking areas are somewhere in the middle with the Cady Deck (Block 7+9) slightly busier than parking lot #2 (Block 3), parking lot #4 (Block 1), or MAGS Deck (Block 1).

According to the preceding data, parking peak occupancy occurred in parking lot #3 of the downtown in early afternoon (Table 3). At that peak period, the parking lot was between 98 and 100 percent occupied in December, 76 to 79 percent occupied in January, and 58 to 73 percent in February. Parking peak occupancy for the Cady Deck also occurred in early afternoon (Table 6). At that peak period, the deck was between 77 and 97 percent occupied in December, between 65 and 82 percent occupied in January, and 57 to 65 percent occupied in February.

Parking peak occupancy for parking lot #2 occurred also in early afternoon (Table 2). At that peak period, the parking lot was 74 to 86 percent occupied in December, 68 to 82 percent occupied in January, and 63 to 71 percent occupied in February. Parking peak occupancy for parking lot #4 occurred in between 10 a.m. and 2 p.m. (Table 4). At that peak period, the parking lot was 38 to 46 percent occupied in December, 36 to 41 percent occupied in January, and 31 to 41 percent occupied in February.

Parking peak occupancy for the MAGS Deck occurred in early afternoon (Table 5). At that peak period, the deck was 49 to 57 percent occupied in December, 28 to 51 percent occupied in January, and 28 to 48 percent occupied in February. East Cady parking lot was generally the least busy parking lot surveyed (Table 7). Parking peak occupancy for that lot occurred in early afternoon with the parking lot 19 to 45 percent occupied in December, 24 to 26 percent in January, and 15 to 31 percent in February.

Overall, the parking occupancy survey indicates that adequate parking is currently available for these busy blocks of the downtown, even in December at what may be considered the busiest time of the year. The surplus of parking observed is occurring in blocks containing some of the highest concentrations of retail businesses, where parking demand is most needed.

It is safe to say that most of the occupied spaces are by cars owned by office workers or employees. It should also be noted that private areas in some of these lots were not counted and the occupants' surveys assume that these spaces had cars parked in them. In other words, the parking occupancy survey may indicate more cars being parked in lots than what actually occurs. The worst-case scenario for parking occupancy has therefore been provided.

This data is consistent with the data collected in August and December 1998. In August 1998, parking peak occupancy in Blocks 6 and 7 of the downtown (Marquis Lot and Cady Deck) occurred on weekdays at 1:00 pm. At that peak period, 24 spaces in Block 6 were vacant, while in Block 7, a total of 61 spaces were vacant. In December 1998, parking peak occupancy in four blocks of the downtown occurred on a Saturday while a Handcrafter's show was occurring. While there were no spaces available at that peak

period for Block 2, the other three blocks show available spaces of 42 (Block 3), 6 (Block 6), and 29 (Block 7).

Parking Analysis

Downtown parking requirements are usually established by the standards set in the Zoning Ordinance and vary according to land uses and floor areas. The City of Northville downtown parking analysis was done considering four scenarios:

1. **Scenario 1** presents the parking analysis in the same fashion as was done in the 1999 Parking Management Plan to allow for comparison. It excludes Main Street Courtyard (MAGS) as well as Casterline Funeral Home, the Marquis Theater, and the Presbyterian Church. These uses are treated differently because their parking needs occur outside normal business hours and because, in the case of MAGS, parking demand for that use, although great, was infrequent.
2. **Scenario 2** presents the parking analysis considering all land uses present within the study area and determining parking surplus or deficiency on that overall basis. This assumes that all uses in the downtown are operating concurrently and represents peak parking demand.
3. **Scenario 3** presents the parking analysis excluding all places of assembly whose parking needs arise outside normal business hours, but including MAGS or Main Street Courtyard, which is proposed to include retail, office, and restaurant uses.
4. **Scenario 4** presents parking requirements with a 10% - 30% adjustment for downtown mixed-use parking.

The parking requirements for the study area are established by the standards set in the City's current Zoning Ordinance as listed below:

- | | |
|--------------------------------|------------------------|
| • Residential – 1 bedroom unit | 1 space/unit |
| • Residential – 2 bedroom unit | 2 spaces/unit |
| • Retail | 1 space/200 sq. ft. |
| • Office – First Floor | 1 space/200 sq. ft. |
| • Office – Upper Floors | 1 space/300 sq. ft. |
| • Restaurant | 1 space/100 sq. ft. |
| • Funeral Home | 1 space/50 sq. ft. |
| • Assembly Hall | 15 spaces/1000 sq. ft. |

Parking Analysis - Scenario 1: For Comparison with 1999 Parking Management Plan

Table 8 presents the existing land uses, floor areas, parking requirements, and the resulting parking surplus or deficiency under scenario 1.

Table 8. Parking Analysis – Scenario 1: For Comparison with 1999 Parking Management Plan (Excludes MAGS, Funeral Home, Theater, and Church)

Block #	Existing Land Use	Floor Area	Dwelling Units	Parking Required	Existing Parking	Surplus/ Deficiency
1				0	444	444
2	Retail	17,643		88.22		
	Office/1st floor	6,309		31.55		
	Restaurant	6,865		68.65		
	Residential	90,123	40/1 bed	40		
			28/2 bed	56		
				284.42	27	(257)
3	Retail	28,817		144.09		
	Office/1st floor	5,765		28.83		
	Office/Upper floors	15,023		50.08		
	Restaurant	3,000		30		
	Residential	6,100	6/2 bed	12		
	Long Building	22,472		66		
				331	188	(143)
4	Retail	1,693		8.47		
	American Legion	3,708		11.12		
				19.59	27	7
5	Retail	16,400		82		
	Office/1st floor	7,445		37.23		
	Office/Upper floors	3,458		11.53		
	Restaurant	6,453		64.53		
				195.29	182	(13)
6	Retail	37,299		186.5		
	Office/1st floor	6,875		34.38		
	Office/Upper floors	16,375		54.58		
	Restaurant	16,510		165.10		
	Residential	9,950	6/2 bed	12		
				452.56	196+21*	(236)

Table 8 – Scenario 1 (cont.)						
Block #	Existing Land Use	Floor Area	Dwelling Units	Parking Required	Existing Parking	Surplus/ Deficiency
7+9	Retail	21,744		108.72		
	Office/1st floor	18,958		94.79		
	Office/Upper floors	38,271		127.57		
	Restaurant	9,928		99.28		
	Residential	10,374	24/2 bed	48		
	Eagles	5,236		78.54		
	Poise Yoga/Pilates	2,200		11		
	Masonic Temple	4,225		63.38		
					631.28	351
8	Retail	1,000		5		
	Office/1st floor	2,103		10.52		
	Office/Upper floors	746		2.49		
	Residential	3,173	4/2 bed	8		
	Northville Downs	1,482		7.41		
				33.42	189	156
10	Retail	4,125		20.63		
	Office/1st floor	9,623		48.12		
	Office/Upper floors	3,239		10.8		
	Residential	13,547	11/2 bed	22		
				101.55	95	(7)
11	Retail	5,045		25.23		
	Office/1st floor	8,586		42.93		
	Office/Upper floors	13,035		43.45		
	Restaurant	2,496		24.96		
				136.57	119	(18)
12	Office/1st floor	25,832		129.16		
	Waterwheel Health	5,800		29		
				158.16	215	57
13	Retail	2,833		14.17		
	Office/1st floor	2,544		12.72		
	Residential	9,611	8/1 bed	8		
			7/2 bed	14		
				48.89	167	118
Total				2,392.73	2,200+21*	(172)

Based on the City of Northville December 2005, DDA inventory and excluding MAGS, the Funeral Home, the Marquis Theater, and the Presbyterian Church for 1999 comparison.

*: 21 parking spaces were added in place of the City-owned Edwards Café & Caterer.

According to this data, there is currently a deficit of 172 parking spaces compared to the 27 surplus observed in 1999 in downtown Northville. The 1999 Parking Management Plan indicated that there were 1,992 spaces provided and 1,965 spaces required at that

time. Differences between the 1999 study and the current study can be explained by the different City zoning standards, the new developments, as well as the re-striping of stalls.

City parking standards have changed since 1999. Second and upper floor office spaces now require 1 space per 300 square feet of floor area compared to 200 in 1999. Residential parking requirements have also changed varying from one to two spaces depending on the number of bedroom units.

A few years ago, the City also constructed 38 on-street parking spaces on Cady Street. This increase together with the 1999 27-space parking surplus has been gradually offset by the sale of 246 parking credits that have been sold by the City from April 1998 through January 2005. The loss of parking as a result of new construction at Old Church Square (21 spaces) and the Long Building (41 spaces) is part of this analysis and another factor contributing to the differences between 1999 and 2006.

Parking Analysis – Scenario 2: Inventory of All Land Uses

Table 9 presents all existing land uses, floor areas, parking requirements, and the resulting parking surplus or deficiency under scenario 2. Under this scenario, parking spaces are provided for each unit of land use as though those spaces served only that land use. This scenario also assumes that peak demand for parking in downtown Northville occurs at the same time for all land uses present. It assumes that all uses in the downtown are in operation at the same time. This includes Main Street Courtyard, Marquis Theatre, Casterline Funeral Home, the American Legion, Eagles, and the Presbyterian Church.

Table 9. Parking Analysis – Scenario 2: Inventory of All Land Uses

Block #	Existing Land Use	Floor Area	Dwelling Units	Parking Required	Existing Parking	Surplus/ Deficiency
1				0	444	444
2	Retail	17,643		88.22		
	Office/1st floor	6,309		31.55		
	Restaurant	6,865		68.65		
	Residential	90,123	40/1 bed	40		
			28/2 bed	56		
	MAGS	91,372		370		
				654.42	27	(627)

Table 9 – Scenario 2 (cont.)						
Block #	Existing Land Use	Floor Area	Dwelling Units	Parking Required	Existing Parking	Surplus/ Deficiency
3	Retail	28,817		144.09		
	Office/1st floor	5,765		28.83		
	Office/Upper floors	15,023		50.08		
	Restaurant	3,000		30		
	Residential	6,100	6/2 bed	12		
	Long Building	22,472		66		
					331	188
4	Retail	1,693		8.47		
	Funeral Home	10,261		205.22		
	American Legion	3,708		11.12		
				224.81	27	(198)
5	Retail	16,400		82		
	Office/1st floor	7,445		37.23		
	Office/Upper floors	3,458		11.53		
	Restaurant	6,453		64.53		
				195.29	182	(13)
6	Retail	37,299		186.5		
	Office/1st floor	6,875		34.38		
	Office/Upper floors	16,375		54.58		
	Restaurant	16,510		165.10		
	Residential	9,950	6/2 bed	12		
	Marquis Theater	12,078		166.67		
				619.23	196+21*	(402)
7+9	Retail	21,744		108.72		
	Office/1st floor	18,958		94.79		
	Office/Upper floors	38,271		127.57		
	Restaurant	9,928		99.28		
	Residential	10,374	24/2 bed	48		
	Eagles	5,236		78.54		
	Poise Yoga/Pilates	2,200		11		
	Masonic Temple	4,225		63.38		
	First Presbyterian Church	42,209		175		
				806.28	351	(455)
8	Retail	1,000		5		
	Office/1st floor	2,103		10.52		
	Office/Upper floors	746		2.49		
	Residential	3,173	4/2 bed	8		
	Northville Downs	1,482		7.41		
				33.42	189	156
10	Retail	4,125		20.63		
	Office/1st floor	9,623		48.12		
	Office/Upper floors	3,239		10.8		
	Residential	13,547	11/2 bed	22		
			101.55	95	(7)	

Table 9- Scenario 2 (cont.)							
Block #	Existing Land Use	Floor Area	Dwelling Units	Parking Required	Existing Parking	Surplus/ Deficiency	
11	Retail	5,045		25.23			
	Office/1st floor	8,586		42.93			
	Office/Upper floors	13,035		43.45			
	Restaurant	2,496		24.96			
				136.57	119	(18)	
12	Office/1st floor	25,832		129.16			
	Waterwheel Health	5,800		29			
				158.16	215	57	
13	Retail	2,833		14.17			
	Office/1st floor	2,544		12.72			
	Residential		9,611	8/1 bed	8		
				7/2 bed	14		
				48.89	167	118	
Total				3,309.62	2,200+21*	(1,088)	

Based on the City of Northville December 2005, DDA inventory.
 *: 21 parking spaces were added in place of the City-owned Edwards Café & Caterer.

Under this scenario, a deficit of 1,088 parking spaces is observed. This is truly a worst-case scenario assuming maximum number of people using all facilities and that all these facilities and uses operate concurrently. Because this is not representative of the parking conditions in Northville, a third scenario is offered for consideration, which excludes the places of assembly whose uses and resulting parking needs occur infrequently or at different times than retail, restaurant, and office uses.

Parking Analysis – Scenario 3: Excluding Places of Assembly

Table 10 presents the existing land uses, floor areas, parking requirements, and the resulting parking surplus or deficiency under scenario 3. This scenario excludes the funeral home, Marquis Theatre, the Presbyterian Church, the American Legion, Eagles, and the Masonic Temple.

Table 10. Parking Analysis – Scenario 3: Excluding Places of Assembly

Block #	Existing Land Use	Floor Area	Dwelling Units	Parking Required	Existing Parking	Surplus/ Deficiency
1				0	444	444
2	Retail	17,643		88.22		
	Office/1st floor	6,309		31.55		
	Restaurant	6,865		68.65		
	Residential	90,123	40/1 bed	40		
			28/2 bed	56		
	MAGS	91,372		370		
				654.42	27	(627)
3	Retail	28,817		144.09		
	Office/1st floor	5,765		28.83		
	Office/Upper floors	15,023		50.08		
	Restaurant	3,000		30		
	Residential	6,100	6/2 bed	12		
	Long Building	22,472		66		
				331	188	(143)
4	Retail	1,693		8.47		
				8.47	27	19
5	Retail	16,400		82		
	Office/1st floor	7,445		37.23		
	Office/Upper floors	3,458		11.53		
	Restaurant	6,453		64.53		
				195.29	182	(13)
6	Retail	37,299		186.5		
	Office/1st floor	6,875		34.38		
	Office/Upper floors	16,375		54.58		
	Restaurant	16,510		165.10		
	Residential	9,950	6/2 bed	12		
				452.56	196+21*	(236)
7+9	Retail	21,744		108.72		
	Office/1st floor	18,958		94.79		
	Office/Upper floors	38,271		127.57		
	Restaurant	9,928		99.28		
	Residential	10,374	24/2 bed	48		
	Poise Yoga/Pilates	2,200		11		
				489.36	351	(138)
8	Retail	1,000		5		
	Office/1st floor	2,103		10.52		
	Office/Upper floors	746		2.49		
	Residential	3,173	4/2 bed	8		
	Northville Downs	1,482		7.41		
				33.42	189	156

Table 10- Scenario 3 (cont.)						
Block #	Existing Land Use	Floor Area	Dwelling Units	Parking Required	Existing Parking	Surplus/ Deficiency
10	Retail	4,125		20.63		
	Office/1st floor	9,623		48.12		
	Office/Upper floors	3,239		10.8		
	Residential	13,547	11/2 bed	22		
				101.55	95	(7)
11	Retail	5,045		25.23		
	Office/1st floor	8,586		42.93		
	Office/Upper floors	13,035		43.45		
	Restaurant	2,496		24.96		
				136.57	119	(18)
12	Office/1st floor	25,832		129.16		
	Waterwheel Health	5,800		29		
				158.16	215	57
13	Retail	2,833		14.17		
	Office/1st floor	2,544		12.72		
	Residential	9,611	8/1 bed	8		
			7/2 bed	14		
				48.89	167	118
Total				2,609.69	2,200+21*	(388)

Based on the City of Northville December 2005, DDA inventory and excludes the funeral home, Marquis Theater, the church, Eagles, American Legion, and Masonic Temple.

*: 21 parking spaces were added in place of the City-owned Edwards Café & Caterer.

Scenario 3 shows a current deficit of 388 parking spaces in downtown Northville. Greatest parking shortages are found in:

- Block 2 with a deficit of 627 spaces, which contains the Main Street Courtyard and Center and offers no areas for parking,
- Block 6 with a deficit of 236 spaces, which contains parking lot #3, and
- Block 3 with a deficit of 143 spaces, which encompasses parking lot #2.

Greatest excess parking is found in:

- Block 1 with 444 excess spaces, which contains the MAGS parking structure, the City parking lot #4, and no buildings,
- Block 8 with 156 excess spaces, which contains the East Cady parking lot, and
- Block 13 with 118 excess spaces, which encompasses the greatest proportion of residential uses compared with office, restaurant, and retail uses.

Parking Demand Established by Zoning Ordinance Standards

While these scenarios all indicate an inadequate supply of parking in downtown Northville, two significant mitigating factors should be examined to gain a true understanding of the current parking situation in Northville:

- the use of zoning standards to establish parking requirements and
- the results of the parking occupancy survey.

While Northville maintains an off-street parking requirement and payment-in-lieu of parking option, many communities such as Ann Arbor, Howell, Royal Oak, Plymouth and Birmingham have established parking exempt zones in their downtown. One reason behind these relaxed standards is that most downtown patrons make multi-destination trips. A shopper may visit a clothing store, gift shop, restaurant, and a café, all without moving his/her car. Another factor affecting parking needs in a downtown area is that different land uses have different parking demand patterns. For example, office uses generate peak parking demand on weekdays, mid-morning and mid-afternoon, while weekend or evening demand is very low. Retail uses, on the other hand, generate the greatest parking demand on Saturdays and at midday on weekdays.

When uses are combined in a mixed-use development, such as in a downtown, the total number of parking spaces required is less than the sum of the spaces required when the same land use activities exist as stand-alone developments, such as in a suburban environment. In communities where the City actively manages public parking through a DDA or other organization, public parking provides a more efficient use of parking spaces through maximized utilization and space saving design. According to a study by the Urban Land Institute (Barton-Aschman Associates, *Shared Parking*, 1983), a reduction of up to 20 – 25% in parking needs has been observed in most downtowns. The shared parking situation in Northville would, according to this, reduce the deficit in scenario 3 by over 500 spaces and create a surplus of 92 spaces.

Another publication by the ITE, National Main Street Center and the National Trust for Historic Preservation, entitled *The Parking Handbook for Small Communities* (1994), compiled data from the ITE and the Urban Land Institute to estimate parking demand within downtowns of small communities. According to this publication, downtown parking generation rates are substantially lower than the typical suburban rates used for Northville. These downtown rates are listed as follows:

- General Office: 1 space/454 sq. ft. compared to 1 space/200 or 300 sq. ft.
- Retail: 1 space/500 sq. ft. compared to 1 space/200 sq. ft.

Table 11. Parking Analysis Using ITE and ULI Standards

Downtown Floor Area	Square Feet	Standard	Parking Requirement
Retail	136,599	1 space/500 sq. ft.	273
First Floor Office	94,040		
Second Floor Office	90,147		
	184,187	1 space/454 sq. ft.	406
Restaurant	45,252	1 space/100 sq. ft.	453
Residential	134 units: 48/1 bed. & 86/2 bed.	1 space/1 bed. unit 2 spaces/2 bed. unit	220
Other*	123,326	Varies	483
Total			1,835

* Includes Main Street Courtyard, the Long Building, Poise Yoga/Pilates, Northville Downs property, and Waterwheel Health. Does not include the following places of assembly: the funeral home, the American Legion, the Marquis Theater, Eagles, the Masonic Temple, and the First Presbyterian Church.

Using these downtown parking standards, the current supply of 2,200+21 (21 spaces to account for the Edwards Café & Caterer building space) parking spaces appear more than adequate to serve the required 1,835 spaces. This method yields a surplus of 386 spaces. It should also be noted that the City’s parking credit system has established a fund that can assist with the building of new surface parking lots and/or parking structures. This may become necessary as future development occur in the downtown.

Table 12. Scenario 4: Parking Analysis Using Downtown Adjustments

Parking Required (Scenario 3)	Scenario 4			Existing Parking Supply
	10% Adjustment	20% Adjustment	30% Adjustment	
2,610 spaces	2,349 spaces	2,088 spaces	1,827 spaces	2,200+21* spaces
	128 space deficit	133 space surplus	394 space surplus	

*: 21 parking spaces were added in place of the City-owned Edwards Café & Caterer.

Based upon common downtown parking adjustments which considers mixed use or shared parking as well as studies conducted by the Urban Land Institute and the Institute of Traffic Engineers, a downtown parking adjustment ranging from 10 percent to 30 percent is quite typical. Table 12 therefore, provides a fourth scenario which incorporates an adjustment for the downtown areas. An adjustment of 10 to 30 percent has been applied to scenario 3 which requires 2,610 spaces. A 10 percent adjustment yields a slight deficit while a 20 or 30 percent adjustment to the City of Northville required parking would provide a surplus of 133 or almost 400 spaces respectively. Applying a parking adjustment of 20 percent, the overall parking supply in downtown Northville is adequate to meet demand for current needs. However, long range parking needs may require the addition of new parking facilities.

Parking Demand Based on Parking Occupancy Survey

Parking standards for downtown areas should be based upon specific site demand and use patterns. As this generally varies from city to city, total reliance on national standards or zoning standards is ill advised. Instead, it has been recommended to use flexible parking standards based upon actual supply and demand. This would suggest a greater reliance on parking occupancy surveys in downtown areas to determine parking needs.

According to both the parking occupancy surveys conducted in August and December 1998 and in December 2005, January and February 2006, at most times, there were vacant parking stalls in the City parking lots available for use. This occurred in blocks containing some of the highest concentrations of retail uses, where parking demand is most needed. While a parking surplus may be currently observed, it should be pointed out that this supply will be reduced when new buildings are added, current parking lost, parking requirements waived, and/or parking credits approved. The City of Northville needs to continue conducting parking occupancy surveys of its downtown to monitor parking supply and demand as the DDA expands and development occurs.

Parking Management

In 1999, the City of Northville Parking Management Plan included specific recommendations for the management of parking within the downtown. Of particular concern was employee parking use of prime spaces within the downtown area. On any given day within the downtown, a significant percentage of public parking spaces are occupied by vehicles owned by downtown employees. Efforts to encourage employees to park in non-prime perimeter parking spaces have been ongoing. The DDA has initiated numerous campaigns to encourage employees to park in these perimeter areas. These include:

- “Park on the Dot” programs and incentives
- Newsletters and education programs sponsored by the DDA
- Consideration of shuttle services to peripheral parking areas
- Time limitations for various parking stalls
- Increased enforcement

Recently the DDA recommended an increase in parking ticket fines for repeat offenders of time limited parking. Parking Enforcement Officials have recently purchased new software and hardware to monitor and identify parking violations. A graduated schedule of fines for repeat offenders was recommended by the DDA in February 2006. These fines include the following:

1 st Offense	\$5
2 nd Offense	\$10
3 rd Offense	\$25
4 th Offense	\$50
5 th Offense	\$75

It is believed that these graduated fines will impose significant penalties on the repeat offenders in prime parking areas. It is hoped that with this new program, problems with employee parking can be better managed.

Parking Analysis Summary

The adequacy of parking within Northville downtown is measured by a comparison of zoning standards and by on-site occupancy surveys. Four zoning standards scenarios are presented in this report. The scenarios present a wide range of parking adequacy varying from a 172 parking space deficit (Scenario 1) to a 1,088 parking space deficit (Scenario 2). If a downtown parking adjustment is applied for mixed uses, a 10 percent reduction will reduce the parking deficit to 128 spaces. A 20 percent reduction indicates that the City actually has a surplus of 133 spaces (Scenario 4).

The 2006 Downtown Parking Analysis concludes that at most times, there is adequate parking available for the downtown area. However, there are prime parking lots which do approach levels of peak occupancy. When these peak occupancy periods occur, many shoppers and downtown users “perceive” the parking lots as full when in actuality, open parking is available. Never the less, this perception of limited parking can influence use patterns in the downtown. The City must therefore be vigilant in the evaluation of parking supply.

If substantial new construction occurs and if on going parking occupancy surveys indicate that the current parking availability has declined, the City will need to consider the construction of the new deck or other parking solutions. The area most in need of additional parking includes the Marquis Theater block (Block 6) where parking occupancy surveys indicate the fewest number of available spaces during peak time. It is therefore recommended that the City continue to monitor the parking supply and demand and develop a long-term parking policy as part of the 2006 downtown plan.