



WALKER
PARKING CONSULTANTS

PARKING STUDY

**BOISE STATE
UNIVERSITY**

BOISE, IDAHO

Prepared for:
BOISE STATE UNIVERSITY





WALKER
PARKING CONSULTANTS

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January 23, 2001

Mr. Robert Seibolt
Director of Campus Safety
Boise State University
1910 University Drive
Boise, ID 83725-1280

Re: Final Report – Boise State University Parking Study
Walker Project Number: 23-6698.00

Dear Mr. Seibolt:

We are pleased to submit ten (10) copies of the final report of the Boise State University Parking Study.

In our report, we estimate that there is currently a surplus of 34 parking spaces. However, given planned future development and increased enrollment, over 2500 new parking spaces will need to be created by the year 2010. The following report details our findings and recommendations.

It has been a pleasure to serve and work with you and Boise State University, and we look forward to hearing from you with any further questions you might have.

Sincerely,

Walker Parking Consultants

John W. Dorsett
Vice President



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JANUARY 23, 2001

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Located in Boise, Idaho, the University has approximately 16,500 students and over 2,300 faculty and staff members. Walker Parking Consultants was retained to gain information and recommend solutions relative to the parking that serves BSU. Specifically, the University is interested in quantifying any parking surpluses or deficits that exist now and how they will change in the future.

Our calculations project that during peak times (mainly during the fall semester) there is a surplus of 34 spaces. Parking space occupancy data collected during the Spring 2000 semester showed the university parking lots to be 67.4% occupied during peak hours. During the Fall 2000 semester, parking facilities were 70% occupied during peak hours. (A comparison between these two figures is misleading, however, since the on-campus parking capacity increased from 4,962 to 5,410 spaces from the Spring 2000 to Fall 2000 semester.) Comparatively, on-street parking in the neighborhood south of the campus approached 90% occupancy during the spring semester even though enrollment during this semester is down from the fall semester. To best estimate parking demand, we have taken into consideration the nearly 1,000 vehicles parked in the neighborhood south of the BSU campus. Along with planned future development, growing levels of student enrollment and faculty/staff employment will cause an increase in parking demand. Our projections indicate that by the year 2010 there will be a parking demand for 7,277 spaces. Additionally, future development projects are expected to displace nearly 500 spaces, therefore, these displaced spaces were taken into consideration. Over 2,500 additional parking spaces will be needed to accommodate the growing demand and displaced parking spaces over the next ten years.

In order to provide adequate parking for all BSU patrons, the University has asked Walker to recommend various alternatives to accommodate the increased need for parking. Walker recommends the following:

- Because it is such a cost effective measure, we recommend additional study to determine the precise configuration and number of spaces to be gained from restriping the Stadium Lots, the Library Lot, and the Towers Lot. Based on our initial review, which is subject to change depending on issues such as light fixture relocation, fire lane access, pedestrian access, and loading zones, restriping these lots could add 82 spaces to the parking supply.

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- We recommend opening Parking Structure #1, Phase 2 by the year 2002. We have estimated that Phase 2 will add approximately 499 spaces to the parking supply (628 total spaces, minus 108 surface spaces displaced, minus 21 reconfigured parking structure spaces lost to new drive aisles added at each level) and should alleviate any parking demand until the year 2004. Building this structure will cost about \$4.5 million in project costs (Year 2000 dollars). It is apparent that BSU will have to increase revenues (i.e. permit rates) to cover operating expenses and annual debt service payments associated with parking improvements.
- Once Phase 2 of Parking Structure #1 is completed, the parking supply should be able to meet the increased parking demand until the year 2004. However, by the year 2004 additional parking will be needed. We suggest building an 834-space structure on Site # 6. This site is located on the block bounded by University Drive to the north, Michigan Avenue to the east, Belmont Street to the south and Lincoln Avenue to the west. Total project costs for this phase are expected to be about \$7.5 million in Year 2000 dollars.
- Due to the anticipated BSU population growth, we project that by the year 2006 additional parking spaces will again be needed. We recommend that a structure be built on Site #4, which is bounded by Belmont, Denver, Beacon, and Grant Avenue. A 1,298-space parking structure could be built on this site for an estimated cost of \$11.6 million (Year 2000 dollars).
- These structures are expected to be feasible, provided that annual permit rates are increased to cover the operating expenses and debt service payment of each structure, as well as the existing surface parking lots. Walker analyzed the current parking rate schedule at BSU in relation to rates documented at comparable universities. The parking rates at BSU are lower than the average parking rates found at the universities selected for the rate analysis. To cover the capital and operating costs of future parking facilities, we recommend that all revenue sources be increased by 50 percent in the year 2004 and by another 50 percent in the year 2006.

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Appendix A contains a series of tables that depict the current and projected future parking conditions at the Boise State University campus. Table 1 (located in the Appendix) provides a breakdown of the parking facilities that are university-owned and managed. As of April 26, 2000, there were a total of 4,962 on-campus parking spaces available to the Boise State University populations that have purchased parking permits. By September 6, 2000, this figure had increased to 5,410 spaces. After deducting for spaces lost on campus, this increase was attributable to the addition of the 649-space parking structure and the temporary 102-space dirt lot on the same block. These parking capacity figures exclude the 1,080 on-street parking spaces that are in the neighborhoods south and northwest of the campus. Excluded from these 1,080 spaces is the parking provided at Julia Davis Park.

In addition to the on-campus parking spaces that are available to BSU parking permit holders, there are 1,080 on-street parking spaces in the neighborhoods south and northwest of the campus; these are heavily utilized by Boise State University students. About 260 of these spaces have ½ to 1 hour parking restrictions from 8:00 a.m. to 5:00 p.m. on Monday through Friday. Both Tables 1 and 2 (located in the Appendix) show a supply factor and an effective supply for on-campus surface spaces and off-campus on-street spaces. The effective supply adjusts the parking inventory to allow for a cushion necessary for vehicles moving in and out of spaces and to reduce the time necessary for parking patrons to find the last few remaining spaces when parking is nearly full. The cushion varies between 5% and 15% depending on the type of parking supply and the type of user. To calculate the effective supply for Boise State University, all university owned and operated parking spaces were multiplied by 95% since the users of these areas are familiar with them and tend to park in the same vicinities every day. On-street spaces receive an 85% adjustment due to the fact that it takes longer for motorists to find the last few vacant on-street parking spaces, regardless of an individual's familiarity with the surrounding area. A parking area operates at peak efficiency when the demand for spaces is at or near the effective parking supply. When demand exceeds the effective supply, parking patrons will likely perceive the institution as providing inadequate parking even though a few spaces may be available. For the Fall 2000 semester, the effective supply is 5,140 and 918 parking spaces for off-street and on-street parking spaces, respectively.

PARKING SUPPLY

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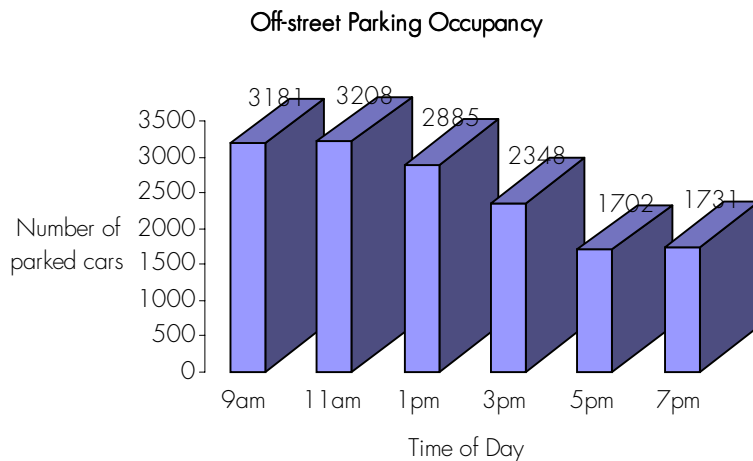
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The parking demand that was observed on Wednesday, April 26, 2000 between the hours of 9:00 a.m. and 7:00 p.m. is detailed below. Based on the information that was provided by the Department of Campus Safety and Security at Boise State, the campus parking system was divided into zones. Tables 3S – 6S ("S" designates spring semester) show the lots that were considered for each area and the car counts at 9:00 a.m., 11:00 a.m., 1:00 p.m., 3:00 p.m., 5:00 p.m., and 7:00 p.m. Below is a graphical illustration of the total occupancy of all the off-street spaces throughout the campus on April 26, 2000.

PARKING DEMAND

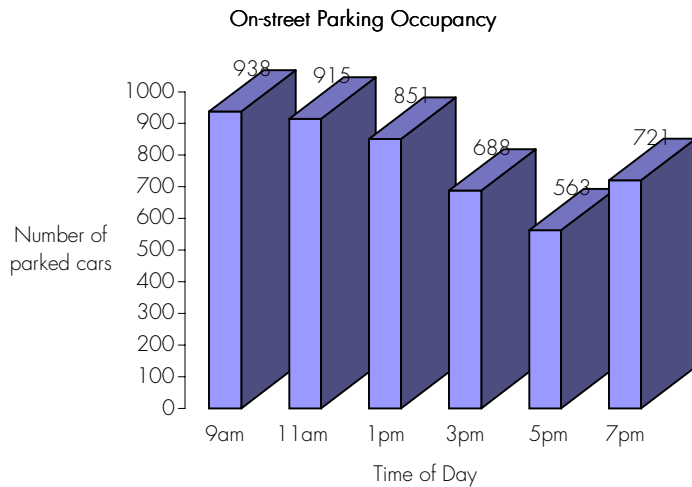
Figure 1: Off-street Parking Occupancy



Based on the data that was collected, the peak time occurred between 9:00 a.m. and 11:00 a.m. Between these times, the peak occupancy was 67%. This is a relatively low number, and is attributed to the fact that it was the end of the spring semester. And, based on our experience with other universities, we know that there is typically lower enrollment in the spring semester than in the fall semester. In order to account for this factor, a second parking occupancy study was conducted during the Fall 2000 semester, which is considered to be a typical peak time.

The chart below shows on-street parking demand in the neighborhood south of the campus. The data below were obtained from the observations made on April 26, 2000. The peak occupancy, observed between the hours of 9:00 a.m. and 11:00 a.m., was 938.

Figure 2: On-street Parking Occupancy



The on-street spaces approached 90% occupancy indicating that there are many students that are parking in the surrounding areas and walking to the campus. Table 7 (located in the Appendix) details the data that was collected on a per block basis. The peak parking occupancy based on the April 26, 2000 parking occupancy study was 4,123 vehicles. This occurred at 11:00 a.m. and includes vehicles parked on-street, including those parked in the neighborhoods south of the campus.

The second parking occupancy study, which was conducted on Wednesday, September 6, 2000, demonstrated a peak occupancy of about 5,100 vehicles. It is not possible to determine a precise figure since on-street spaces were excluded from the survey. However, based on the fact that 87% of the off-street spaces were occupied during the Spring 2000 semester, it can be implied that the maximum peak occupancy for the September 6, 2000 parking occupancy study was about 5,100 parked vehicles. Tables 3F – 6F ("F" designating fall semester) present the data collected on September 6, 2000.

In order to better understand the relationship between the parking demand numbers and the population numbers, we developed parking demand ratios. Parking demand ratios were derived by correlating the parking occupancy numbers to the user-group-population statistics provided by the University. The demand ratio represents the number of parking spaces required by each member of a user group during design conditions. For the purposes of this task report, we have projected peak conditions and have used these numbers to derive the ratios. The table below presents our derivation of parking demand using the commuter student, resident student and faculty/staff

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populations, and each group's respective parking demand ratio.

Table 1: Parking Demand Ratios

Users	Fall 2000 Population	Demand Ratio	Parking Demand
Commuter students	15,000	0.15/commuter student	2,250
Resident students	1,500	0.80/resident student	1,200
Faculty and staff	2,300	0.72/member	1,656
			<u>5,106</u>

We estimate Fall 2000 parking demand under design conditions to be 5,106 spaces. When expanding a parking system, it is important to be able to build a system that can support peak conditions but not necessarily absolute peak conditions. The demand is comprised of 2,250 commuter student spaces, 1,200 resident student spaces, and 1,656 faculty/staff spaces. Based on the total enrollment and employment numbers supplied by BSU, we were able to derive demand ratios for both student groups and the faculty and staff. We conclude that during peak periods, 0.15 spaces are needed for each commuter student, 0.80 spaces are needed for each resident student, and 0.72 spaces are needed for each faculty/staff member. While visitors are present, the significant BSU populations are the students and faculty/staff. It is difficult to obtain an exact number of visitors using the parking spaces, but it is reasonable to assume that visitors would consume a rather insignificant portion of the total parking occupancy. The area that visitors tend to park is the Administration Lot located on University Drive south of the Administration Building. While it is important to address visitor-parking needs, to adequately plan for campus-wide parking needs on a macro-level basis, reliance on student and faculty/staff population figures is sufficient.

In order to determine the current parking conditions, an examination of parking adequacy is necessary. Parking adequacy is measured in terms of supply versus demand, resulting in a surplus or deficit. The surplus/deficit is the difference between the supply of parking spaces and the demand for those spaces. However, when comparing the demand for the total supply, the supply factor is figured into the parking demand to allow for the recommended cushion. The following table indicates the current parking adequacy. Please note that we do not have specific supply and adequacy numbers for the individual user groups because the BSU parking system is classified by permit type rather than user group. In order to determine the parking adequacy, we examined the parking system as a whole, rather than by user

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group.

Table 2: Parking Adequacy by User Group

Users	Fall 2000 Population	Parking Demand	Supply Factor	Effective Supply	Total Adequacy
Commuter students	15,000	2,250	95%		
Resident students	1,500	1,200	95%		
Faculty and staff	2,300	1,656	95%		
		<u>5,106</u>		<u>5,140</u>	<u>34</u>

Our calculations for the parking adequacy show that there is a surplus of 34 spaces in the Fall of 2000.

Boise State University is projecting a series of improvements in addition to increases in the total student enrollment and faculty/staff employment over the next several years. Table 9 shows the chronological order in which all the capital projects are planned. Additionally, by the year 2010, the University is projecting that a number of spaces will be displaced due to the construction of new facilities. Based on the total campus enrollment and employment at 25,785 (comprised of 22,175 students and 3,610 faculty and staff), we have projected that by the year 2010 there will be a demand for nearly 7,300 parking spaces (includes cushion of spaces to create effective supply), which is almost 2,200 more than exists today. Table 8 illustrates the breakdown of spaces that will be needed per user group. Table 10 illustrates the impact of future developments and the phasing of the parking structures needed to accommodate the increased parking demand. In Task 3, we will examine alternate plans to increase the existing parking supply in order to accommodate the projected demand.

According to the enrollment statistics and future development projects provided by the University, we have projected that by the year 2010 there will be a parking demand for 7,277 spaces. Our charge is to recommend the most feasible and cost-efficient manner to increase the parking supply. In order to accomplish this task, we identified various alternatives and focused on two viable methods for increasing the current parking supply. The first method that we looked into was restriping parking space configurations of various lots. Once we were able to determine the number of spaces that could be added to the parking supply via restriping, we looked into structured parking. Based on the campus master plan and the mission of the University, it

FUTURE CONDITIONS

ALTERNATIVES ANALYSIS

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is evident that the goal is to increase the parking supply through structured parking. One initiative is to build parking structures that are on the periphery of campus in order to decrease the vehicular flow through the center of campus. We examined eight alternative sites as potential locations for a parking structure and made recommendations that were in accordance to the mission of the campus master plan.

Upon examining restriping opportunities in six lots, we were able to find three restriping opportunities that may possibly increase the current parking supply by 82 spaces. However, prior to restriping these lots, construction drawings need to be developed which is a task outside the scope of this project. During the development of these drawings, several tasks must take place. This includes a survey of parking lots to confirm overall dimensions and location of drive aisles and fire lanes, light fixture placement, and loading docks. The importance of following up on these restriping opportunities is the cost savings that this task potentially represents. For every parking space that can be gained through surface lot restriping, one less structured space needs to be built. The cost differential between restriping and structured parking is obvious. If 82 spaces can be gained through restriping, the university will have saved well over \$500,000 if lieu of building structured parking.

Initially, we looked at General Lot #3, Library Lot, CT Lot, Denver Street Lot, Stadium East and West Lots, and Towers Lot and were able to find potential restriping opportunities in the Library Lot, Stadium East and West Lots and Towers Lot. By changing the layout of the Library Lot, we were able to increase the parking capacity by three spaces. Although this seems like an insignificant number of added spaces, restriping the lot to add these three spaces would cost approximately \$2,208 or \$736 per added space. However, it would cost over \$20,000 to construct three spaces in a structured parking facility. The next lots that were examined were the Stadium East and West Lots which currently have 1,510 spaces. Our designs illustrate that by restriping these lots, the University can gain up to 63 spaces. Total restriping costs for these lots would be \$50,336 or \$799 per added space. Another restriping opportunity that we explored was the Towers Lot; if restriped, the potential exists to gain 16 spaces. The cost of restriping this lot would be about \$21,056 or \$1,316 per added space. If all these restriping opportunities were completed, the University would possibly gain a total of 82 spaces at a cost of \$898 per added space or a total of \$73,600. (Note that the restriping costs mentioned in this report exclude the potential costs associated with light fixture relocation.) Again, it is important to reiterate that the

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cost to restripe is minimal compared to the cost savings realized. The configurations for these lots are attached and are based on ACAD drawings provided by the university and believed to reflect current conditions. The table below is a summary of the restriping opportunities.

Table 3: Restriping Options

Parking Area	Current Capacity	Gained spaces	Cost per added space*
General Lot # 3	62	0	N/A
Library Lot	66	3	\$736
CT Lot	48	0	N/A
Denver Street Lot	147	0	N/A
Stadium East and West Lot	1510	63	\$799
Towers Lot	642	16	\$1,316
Total		82	\$898

*at a cost of \$32.00 per space

In order to complete the alternative site analysis, we looked at various factors to determine the feasibility of constructing a parking structure at each of the locations. We examined the total floor area of the potential structures on a site, the maximum capacity, the cost per added space, the distance to campus, location in relation to demand generators and the logistics and impact of adding a structure to that particular site.

This site would be located on the southeast corner of the Stadium East Lot. The out-to-out dimensions of a structure on this site could be 195'-0" wide by 580'-0" long. Based on the City of Boise's zoning ordinance and university's preference, the parking structure should not exceed a total floor area of 400,000 square feet and should maintain a height no taller than 4½ levels. A structure of 4½ levels on this site would total about 509,000 square feet with a maximum capacity of about 1,529 spaces. However, construction on this site would displace an estimated 636 spaces and add 893 spaces, costing about \$12,328 per added space. Total project costs are estimated to be about \$11 million in Year 2000 dollars. The total project costs that we are projecting are based on project costs of Parking Structure #1, which is now open. This site is located at the eastern border of the campus, near the stadium and the Applied Technology buildings. A structure at this site would be heavily utilized during football games and stadium events, as well as by students attending Applied Technology classes. One logistical issue with this site is that its

ALTERNATIVE SITE ANALYSIS

ALTERNATIVE SITE #1

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entrance and exit would be very close to the intersection of University Avenue and Broadway Street. During events at the Pavilion or the Stadium, it would be difficult for motorists to vacate the garage in a fast, efficient manner without causing a traffic back-up on University Drive and Broadway Avenue. Although the Framework Masterplan had not provided for a parking structure at this location, the site affords some possibilities. At this point, the following are our primary concerns: 1) increased vehicular/pedestrian conflicts in this area of the campus (particularly if the number of drive lanes and width of University Drive are reduced); 2) access to and from Broadway Avenue; and 3) the comparatively high cost per added space.

This site would be located at the north end of the West Stadium Lot. The dimensions of a structure on this site could be 181'-0" by 522'-0" with four levels. This structure would have a maximum capacity of about 1,135 parking spaces. Additional surface parking would be located adjacent to this structure, however, this capacity is excluded from this analysis. Building a parking structure on this footprint would displace an estimated 346 spaces resulting in a net gain of 788 spaces. The total project cost per added spaces is estimated to be about \$10,363 in Year 2000 dollars. Total project costs in Year 2000 dollars are estimated to be about \$8.2 million. Much like Site #1, a parking structure at this location would be available for special events parking. One benefit of this site is the possible creation of a mezzanine level entrance into the Pavilion and the potential of an enclosed skyway entrance into the proposed skybox addition to the Bronco Stadium-West Grandstand. However, one major consideration for this site is that entering and exiting vehicular traffic would need to be via Campus Drive East, which provides restricted access.

ALTERNATIVE SITE # 2

The third potential alternative would be located on the northeast portion of the block bounded by University Drive to the north, Grant Avenue to the east, Belmont Street to the south and Euclid Avenue to the west. Individuals holding general parking permits are currently utilizing this site. The site is 100'-0" wide by 200'-0" in length. Unfortunately this site is not wide enough to support an efficient parking structure. For this reason, we do not recommend building a parking structure on this site. In addition, the University is building the future ESC building on this site.

ALTERNATIVE SITE #3

This site is located on the block bounded by Belmont Street to the north, Denver Avenue to the east, Beacon Street to the south and Grant Avenue to the west. The out-to-out dimensions of a parking structure on this site could be 264'-0" wide by 400'-0" long. The University owns about one-tenth of the land on this site, and would therefore need to

ALTERNATIVE SITE #4

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acquire a reported 93,100 square feet of land. Based on the information provided by BSU, the value of land in the area is about \$5 per square foot. Since there are structures located on this site, acquisition costs would be higher than those for a site without improvements. Based on our observations of the neighborhood south of the campus, most of the structures were one level high, hence we have assumed that the footprint of the structure and the total floor area are the same. Representatives from BSU provided the acquisition cost for buildings, which is \$46.05 per square foot. Property acquisition on this site is estimated to exceed \$2 million. In addition, the buildings on this site would have to be demolished in order to clear the area for structured parking. Demolition costs are estimated to be about \$100,000.

If a structure with four levels were built on a 264' x 400' footprint, the total floor area would provide capacity for an estimated 1,298 vehicles. Although the site is capable of supporting 1,298 spaces, if only 600 spaces are needed a smaller structure could be considered. In this latter case, there will only be 3 spaces that will be displaced. The total project costs for the larger structure, including property acquisition cost and demolition costs, are estimated to be about \$11.6 million in Year 2000 dollars. This site is a distance away from the main demand generators at the campus, and is located further south than most of the main buildings in and around campus. However, provided that the University attends to the mission that is set forth by the campus master plan and starts building in the southward direction then it would be feasible to build a structure at this site. It would be our recommendation that if a structure is constructed at this site that it be built later chronologically in the phasing of the parking structures.

A fifth alternative site is located on the southwest corner of the block bounded by Belmont Street to the north, Manitou Street to the east, Beacon Street to the south and Vermont Avenue to the west. The out-to-out dimensions of a structure on this site could be 120'0" wide by 220'0" long. If a 4-1/2 level structure was constructed on this site, the garage would have a total floor area of about 118,800 square feet. We have estimated that this parking garage could have a maximum capacity of 366 spaces. Although, this is a smaller garage than the other sites evaluated, constructing a garage on this site would result in a smaller structure, however there would be a gain of 366 spaces. In order to build on this site, a minimum of 31,250 square feet of land (five parcels) would need to be acquired to allow for construction without disturbing the existing Landscape Services Compound. Based on the information provided by BSU, the value of developed land in

ALTERNATIVE SITE #5

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the area is about \$15 per square foot, placing the land acquisition and demolition cost for this structure at about \$460,000. Including land acquisition and demolition costs, the total project cost is estimated to be about \$3.0 million in Year 2000 dollars. One factor to consider with this site is that it is located in the southern most part of the campus. Although, the campus masterplan provides building for the parking structures on the periphery of campus, this site is located farther south than most university buildings – it is far removed from the campus. However, as the University begins to develop the property in a southward direction, this site would be come more desirable. A parking structure of this limited size, at this location, may only serve to provide parking for the proposed student housing development master planned for the adjacent block to the west.

This site is bounded by University Drive to the north, Michigan Street to east, Belmont Street to the south, and Lincoln Avenue to the west. Based on the information that was provided by the campus master plan, this site is being considered for a parking structure. The out-to-out dimensions of this site are 264'0" wide by 400'0" long. Two alternatives have been considered for this site. Alternative A would be to build a four-level structure that measures 130'0" by 220'0". These dimensions would yield a net gain of 234 spaces to the total supply, reflecting a loss of 91 existing surface parking spaces. Our estimations of the total project costs are expected to be about \$2.3 million for the structure in Year 2000 dollars.

However, if a larger structure is desired at this location we suggest Alternative B. This alternative requires that the University acquire additional land. BSU reports that 56,062 square feet of land would need to be acquired in order to build a structure that can support 834 spaces. Including property acquisition costs of \$1.5 million, the total Year 2000 project costs for a larger structure on this site would equal about \$7.5 million. Based on the planned future developments, there are many new additions that will be located in the direct vicinity of this site. These potential demand generators would be able to be served by a parking structure on this site. While this site is located on the south side of University Drive, it is on the fringe of the southward expansion. This site it ideally located just across from the New Student Recreation Center that is currently being constructed.

The next site examined was on the block bounded by University Drive to the north, Juanita Street to the east, the BSU neighborhood to the south and Chrisway Drive to the west. Should BSU move forward with the development of a parking structure on this site, we assume that the existing Career Center and Gateway Center operations would be

ALTERNATIVE SITE #6

ALTERNATIVE SITE #7

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relocated to make this alternative viable. Although located in a desirable area of the campus, this site is just under half-owned by the university.

If a variance could be granted to this site for side-street and side-yard setback requirements, a parking structure could be built on this site in two phases. Phase 1 would have a minimal land acquisition cost for the public alleyway (at \$5/sf, the 3,252 sf alley would cost \$16,260 in Year 2000 dollars). An estimated 429 parking spaces could be constructed on the Phase 1 parcel – eight of the parking spaces would need to be “gifted” to the adjacent property owner, a church, due to the parking structure’s denial of eight of its on-site parking spaces (these having been serviced from the former alleyway), leaving 421 added spaces.

The second phase of this project would consist of an estimated 509 spaces. This phase would carry substantial land acquisition costs (40,753 square feet of land acquisition plus an estimated \$775,000 of physical improvements along with demolition), totaling \$1.1 million.

Prior to the second phase moving forward, the university would need to purchase the 41 parking spaces of the LDS Institute. These spaces would need to be “gifted” within the second phase of construction. The cost of purchasing this surface lot (\$183,000) has been included in this analysis.

And, the final site that we examined was the location of the Parking Structure 1, Phase 2. Phase 2 of the structure would be located next to the parking structure #1 that is currently under construction. The out-to-out dimensions of a structure on this site could be 180’0” wide by 330’0” long. Based on a three and a half level structure, this would allow for 628 spaces total or 499 added spaces. We have estimated that project costs, will be \$4.5 million. The location of this parking structure is ideal, in that it is located on the periphery of campus and in close proximity to primary demand generators.

ALTERNATIVE SITE #8

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The table below summarizes our cost comparison. Please note that project cost figures were based on the actual costs experienced for Parking Structure #1 and are stated in Year 2000 dollars.

Table 4: Project Cost Comparison

Alt. #	Out/In Dimensions	Capacity	Number of Spaces		Total Project Costs*	Cost/Added Space
			Existing	Added		
1	195'0" X 580'0"	1,529	636	893	\$ 11,009,000	\$ 12,328
2	181'0" X 522'0"	1,135	346	788	8,171,000	10,363
3	100'0" X 200'0"	200	147	53	1,440,000	27,170
4	264'0" X 400'0"	1,298	3	1,295	11,649,000	8,992
5	120'0" X 220'0"	366	-	366	3,042,000	8,311
6A	130'0" X 220'0"	325	91	234	2,340,000	10,000
6B	220'0" X 331'0"	834	91	743	7,505,000	10,101
7	259'0" X 330'0"	938	41	897	8,053,000	8,978
8	180'0" X 330'0"	628	129	499	4,522,000	9,062

*Based on \$7,200 per space in Yr. 2000 dollars. Includes construction, land and bldg. acquisition, demolition, A/E, testing, and financing costs.

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Our Supply/Demand Analysis projects that by the year 2010 there will be a parking demand of 7,277 spaces. Due to the number of future development projects that the University is planning, about 500 spaces will be displaced. In order to accommodate future parking demand that is projected; the University must add spaces to their current inventory. We addressed several options in which the University could increase the parking supply.

Upon analyzing each potential option in the Alternatives Analysis section, we have determined several options that would increase the parking supply at Boise State University. The first and most cost-effective opportunity to gain spaces is to restripe the Library Lot, the Stadium Lots, and the Towers Lot. The redesign of these lots would allow the University to gain up to 82 spaces for a nominal cost. This is a very economical alternative, in that adding 82 spaces to structured parking would cost the University over \$500,000. Additionally, we compared eight alternative sites for future structured parking and have identified the preferred alternatives.

We recommend that the parking improvements be available for use in accordance with the following schedule:

- Year 2001, Further study and restripe Stadium Lots, Library Lot and Towers Lot (Possible gain of 82 spaces)
- Year 2002, Alt. 8, Parking Structure #1 (Brady Street Garage), Phase 2 (628 spaces, 499 added spaces)
- Year 2004, Alt. 6, Parking Structure #2 (Lincoln Avenue), (834 spaces, 743 added spaces)
- Year 2007, Alt. 4, Parking Structure #3 (Belmont Street), (1298 spaces, 1295 added spaces)

CONCLUSIONS

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The following individuals were interviewed for this project:

- Director of Facilities Planning
- Director of Campus Safety
- ASBSU President (was invited but did not attend)
- Vice President for Finance and Administration
- Executive Assistant to the President
- President

Following are several key points from these interviews:

1. Some changes are anticipated in terms of the campus parking supply. A residential parking zone is being created in the neighborhood south of the university campus. As a result of this zone, a loss of about 1,200 parking spaces may be experienced. Consequently, future parking plans need to exclude the availability of these on-street spaces.
2. Some students are complaining about paying for parking in the new parking structure. Fees for parking in this structure are \$0.75 per hour, the same rates being charged at facilities in downtown Boise.
3. BSU is the cultural center of the city.
4. BSU is committed to five principles contained in the campus master plan:
 - a. BSU must be a pedestrian campus and should utilize the river as an amenity.
 - b. Cars should be stored in parking structures as opposed to parking lots.
 - c. Parking and transportation systems work together as a singular system.
 - d. All users of the parking system must pay for parking.
 - e. Parking enforcement will occur 24 hours, 7 days per week.
5. Employees and students ride the bus system of Boise Urban Stages free of charge.
6. Property along Broadway is too expensive for university to acquire. Therefore, it was excluded from master plan.
7. BSU has had four parking rate increases in the last 20 years.
8. The university community is sensitive to rate increases of any kind, including parking rates. Tuition and user fees have increased in recent years and are expected to increase. Specifically, tuition is expected to increase 7-10% annually.
9. Idaho ranks 45 of 50 states for state schools in terms of tuition.

PARKING MANAGEMENT STRATEGIES

INTERVIEWS

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10. BSU consists of a large base of commuter students who work – 90 percent of study body holds jobs. Consequently, there is an acute need for accessibility to and from the campus.
11. Alternate transportation modes have not been very popular amongst the campus population in recent years.
12. The parking system also funds campus police and security.

At BSU, parking falls under the purview of the Department of Campus Safety. The director, department of campus safety is responsible for campus police, security, parking, and transportation. The director reports to the director of facilities who reports to the vice president of finance and administration. The vice president of finance and administration reports to the president of the university.

Campus police service is currently provided by the Ada County Sheriff's Department as a contracted service. The Department of Campus Safety coordinates campus police service with the county sheriff's department. Additionally, BSU has a campus security force headed by a security officer supervisor who reports to the director of campus safety. Five BSU-employed security officers and the contracted firm of CAN-ADA Security report to the security officer supervisor.

Parking services are managed under the direction of the director, department of campus safety. A management assistant, a parking attendant supervisor, an events coordinator, a secretary, a financial technician, and a lead parking booth assistant report directly to the assistant director, department of campus safety who then reports to the director. Five customer service representatives and an office specialist II report to the management assistant. This office team, which includes the customer service representatives, is responsible for processing parking permit sales and parking violation tickets. Six parking attendants and two maintenance specialists report to the parking attendant supervisor. The six parking attendants are responsible for parking enforcement and the issuance of citations. A cadre of traffic attendants report to an events coordinator to direct traffic before and after the more than 300 special events held on campus. The lead parking booth attendant supervises the activities of six parking booth attendants.

A secretary and financial technician assist the director and assistant director, department of campus security in his (or her) daily responsibilities.

Boise Urban Stages has been contracted to operate the campus shuttle system. Management of this organization report directly to the

PARKING SERVICES ORGANIZATIONAL STRUCTURE

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director, department of campus safety.

Figure 1 (located in the Appendix) depicts the current organizational structure of the department of campus safety.

As a unit, parking operations at university campuses nationwide, typically fall under the auspices of one of the campus support service units: auxiliary services, business services, physical plant, public safety, or student affairs. Increasingly, the parking organization is an auxiliary service component. There is increasing emphasis on self-sufficient funding, both operational and capital, as well as the mandate to function as a service organization rather than as a pure regulatory entity.

Traffic control, event management, and enforcement functions all benefit from close alignment with the police department. While parking can function successfully under the public safety umbrella, the financial management responsibilities for the collection and deposit of revenue, as well as managing debt service, repair and replacement accounts, plus normal operations, require a very strong business skill level. This is usually not available under a police department or public safety umbrella.

Developing functional linkage to student billing for permit and citation fines using institutional collection services for outstanding citations, and payroll deduction payments for permits, support the argument for aligning parking with business services. Conversely, as is currently the case at BSU, regular housekeeping tasks such as litter pickup, sweeping, and striping make a case for the inclusion of parking in the physical plant organization.

Additionally, BSU has a parking committee that is chaired by the executive assistant to the president of the university. The director, department of campus safety is a committee member.

We recommend that the parking and transportation aspect of the department of safety become a true auxiliary enterprise with income sufficient to operate and fund capital improvement projects relating to parking and transportation infrastructure and services. Toward this end, we recommend the removal of any permanent commitments to provide funding of expenses not directly related to providing parking to the students, faculty, staff, alumni and visitors of Boise State University. Additionally, we recommend that parking, transportation, and the campus security and police departments have separate budgets. Parking and transportation should be funded from one budget and the

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campus police and security department should be funded from a second budget. All auxiliary and non-general fund units should be assessed for police services based on a service area or service level/manpower, whichever is appropriate.

Given the high profile of parking and BSU's plans to add structured parking facilities, the importance of treating parking as a business unit will accelerate significantly. Consequently, the management of parking will require business skills and the coordination of parking policy with the highest levels of the university. Based on these anticipated changes, we suggest that the university consider modifying its current organizational structure. Specifically, we question whether security and parking services should continue to co-exist under the Department of Campus Security. As the parking supply and budget continue to grow, the director, department of campus safety, may not have adequate time to devote to managing the parking system. Second, we find it unusual for the director, department of campus safety to report to the director of facilities planning who then reports to the vice president of finance and administration. We suggest that BSU consider having the director, department of campus safety report directly to the vice president of finance and administration as the finances of the parking department will take on a larger role at BSU. An alternate reporting structure would be for the parking to report to the president's executive assistant, the chair of the parking committee. The upside of this latter reporting structure is the increased efficiencies gained in developing parking policy.

For the 1999-2000 academic year, the university's department of campus safety reported that 48,636 parking violations tickets were written. These tickets were written over the course of 359 enforcement days, representing an average of 135.5 tickets per day. This includes Saturdays, Sundays, and holidays when school is not in session. Two hundred forty vehicles were reportedly towed because of violations.

A reported 12 percent or 6,077 tickets were excused, 4 percent or 2,153 tickets were voided, and 60 percent or 29,110 tickets were reportedly paid. Seventy-seven percent or 37,340 tickets were reportedly processed leaving a remaining 23 percent or 11,296 tickets unprocessed.

The goal is any parking enforcement program should be twofold. First, BSU wants to get people to follow parking regulations and to gain compliance with parking regulations. The second goal of the parking enforcement program is to resolve as many tickets as possible. Based on the number of tickets issued which averages about three per

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student, compliance seems to be a problem because the number of tickets written is high. This may be indicative of confusing signage or a lack of signage. It also suggests that parking violations fines may be too low to be of significant deterrence and therefore perceived by parking patrons as a cost of doing business. A substantial habitual violator fine might also be in order. For example, the third and each successive out of zone violation might be \$75 or higher.

The six parking attendants reporting to the parking attendant supervisor are responsible for parking enforcement. These six attendant positions averaged 22.6 tickets per day (based on 359 days) for the 1999-2000 academic year. Based on 250 days when most tickets are written, the average is 32.4 tickets written per day by each enforcement officer. Based on our experience with university parking operations, we believe that there is opportunity to increase the number of parking tickets written per enforcement officer.

If it pursued enforcement aggressively, a few more thousand tickets could be issued annually. BSU's urban setting, limited number of spaces (5,700) to serve 16,500 students and 2,300 employees plus large special events, conference, and continuing ed programs place very high daily demands on the parking system. Enforcement officers patrol routes from 7 a.m. to 9 p.m. daily. and are heavily involved in event management. During summer months, four of the six enforcement officers are assigned to lot and system maintenance duties.

Existing methods of designating parking areas are based on a combination of convenience and proximity to destinations and different price points. As these parking spaces should, reserved spaces at the BSU campus command a higher parking permit fee premium than general, non-reserved spaces.

Examples of designating user assignments based on proximity to destinations are the apartment permits and the resident hall permits available to denizens of the BSU campus. This arrangement provides these constituent groups with parking near the entry to their place of residence. At the same time, it discourages unauthorized use of these spaces by non-residents.

There has been some debate on the BSU campus regarding who should pay for the privilege of parking in the new parking structure and subsequent parking structures. The cost could be borne by only those using the parking structure or it could be paid by all users of the parking system. Finally, it could be a shared expense of both groups. Current charges for using the parking structure are \$0.75 per hour up

**METHODS OF
DESIGNATING PARKING
AREAS**

**WHO SHOULD PAY FOR
NEW PARKING
STRUCTURES?**

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to a daily maximum charge of \$8.00.

The debate about who should pay to park in a parking structure will likely continue and we believe that it is important that BSU administration develop policy for addressing this issue. Before proceeding, however, perhaps the opening statement to this section is incorrect. Before presuming whether it is correct, we believe that it is important to ask whether it is a privilege to park in the new parking structure or subsequent parking structures that BSU administration may decide to build.

Whether one believes using a new parking structure is a privilege or not will depend on a number of logistical circumstances. For example, if a parking structure serves a particular building exclusively, it would be an obvious conclusion that the parking structure is the most desirable place to park. However, if the parking structure is one of many parking alternatives, and not necessarily the closest option, this would not be the case. To lend perspective to this body of thinking, it has been our experience in snowbelt areas, that parking patrons would prefer to park in a close, snow covered surface lot than a more distant parking structure. Considering that one would have to walk a greater distance from the sphere of parking influence and ascend multiple levels within a structure, the new parking structure will in most cases, not be perceived by patrons as the most convenient and desirable place to park. Consequently, particular user groups must be legislated into the facility rather than be asked to pay a premium price to cover a larger portion of the structure's expenses.

Certainly in the case of BSU's parking structure, if one's destination is the Morrison Center, then being able to park in the existing parking structure is a privilege. However, if one's destination is the football stadium, then being able to park in this structure is not necessarily an attractive parking option. The same analogy can be applied to any of the sites identified in the site analysis task of this study. For example, consider the site for a new parking structure located at the southeast intersection of University Drive and Lincoln Avenue. This site would be highly desirable by those people accessing the future student health center. However, a parking structure at this location is not the preferred parking location for an individual visiting the future visual arts building.

To further illustrate our rationale for not necessarily charging higher rates in structured parking facilities, consider if the university were to construct a new parking structure on the block bounded by Belmont Street, Denver Avenue, Beacon Street, and Grant Avenue. At this time, this site is located on the periphery of campus. Parking at this location

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would be considered remote by many individuals requiring access to the campus. Nevertheless, this site is attractive for several reasons, one of which is that it is consistent with BSU's master plan which suggests parking on the periphery of campus. Certainly, individuals parking at this location would not consider it a privilege since it is not located within the central core of the campus.

Higher prices within a parking facility are contrary to parking management strategies. These concerns are twofold. The first concern is that the parking structure, given its distance from major parking demand generators in other areas within the campus, dictates that the structure should serve long-term parking needs. Long-term parking needs should be provided at relatively less costly parking fees. The second concern is that pricing distant options higher than close proximity parking options is contrary to price versus convenience concepts. High levels of convenience should be the basis for the highest parking charges.

We therefore conclude that individual users should not be expected to "bear the brunt" of the expenses associated with the new parking structure or subsequent parking structures. The parking structures should be viewed as a general infrastructure improvement to the campus. Therefore, it should be subsidized by all parking patrons. Our subsequent financial analysis will be based on this philosophy.

BSU is currently using the Cardinal Ticket-Trak, a parking information and citation management software system. This equipment is the primary tool used to handle the issuance of parking violation tickets. All maintenance, collection, enforcement and event parking at BSU are performed in-house.

Boise State has been using the Cardinal software for approximately four years. This software was upgraded and is Y2K compliant. It is using the HT-30 handheld unit which we have found to be generally reliable. BSU receives dial-up remote software support from Cardinal. BSU representatives reportedly experienced problems with license plate and person record-linking which is typical of this product. Cardinal has addressed those problems and the system is performing as expected currently. BSU has a key operator to perform system maintenance under Cardinal direction on-site. There is on-going dialogue about integration and data transfer from Cardinal to BSU systems and vice versa. BSU is planning to initiate an on-line parking registration process. Information will be manually interfaced between the on-line registration and the Cardinal system. Communication with Cardinal to eventually perform these interfaces real-time is currently on-

**HAND-HELD ENFORCEMENT
SYSTEMS – CARDINAL
TRACKING SOFTWARE**

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going.

The basic ticket-writing functions and permit-registration functions are working at an acceptable level. Fully automated interfaces and data exchanges may be better accomplished by other products on the market. BSU may need to evaluate future Cardinal releases against other products to achieve a high level of automation in the future. They appear to be acceptably served by this product currently.

The following is a list of revenue control practices that we recommend. BSU reportedly follows all of these practices.

Parking tickets should be kept in a locked storage area. The tickets should be sequentially numbered. An inventory log should be maintained to record purchases and removal. The logs should document the sequential numbers of tickets purchased, the date and sequential series of tickets removed to replenish the ticket dispensers, and the name of the person taking the tickets. The log should be reviewed each month by the parking manager and kept for audit purposes. Unused tickets should have the date and location written on the roll. Cashiers should not have access to the ticket inventory.

Also, tickets should not be shared with other parking facilities. We recommend that different color and numerical series be used for each parking location. The tickets issued from the ticket dispenser should be compared on a daily master report. If significant numbers of tickets are missing, the tickets can be sorted by numerical sequence to determine what time frame the missing tickets were issued.

The following revenue control procedures are recommended for cashier activity:

1. Parking tickets should be bundled by cashier and by day.
2. Cashier Reports should be printed daily for each shift.
3. A Daily Summary Report (daily summary of cashier activity) should be printed each day.
4. A Cashier Shift Report should be completed by each cashier and turned in with the daily cash and tickets. The Shift Report should document the cashier name, date, shift, number and types of tickets collected, explanations for voids, over/under rings and other unusual transactions. The Shift Report should include the manager's reconciliation of cash collected to the fee computer revenue totals, cash over/shorts, copy of the deposit slip, and

REVENUE CONTROLS

TICKET INVENTORY

CASHIER ACTIVITY

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manager's signature indicating that the cashier activity has been reviewed.

BSU currently practices having two cashiers in booths at all times. This method, although resulting in increased labor expenses, can be an effective way to safeguard cash receipts.

The following procedures should be performed by management to provide adequate revenue controls over daily parking sales:

1. Parking tickets collected should be compared to the fee computer tape and the Cashier Shift Report for each cashier.
2. Cash collected should be compared to the fee computer tape and the Cashier Shift Report for each cashier.
3. A sample of daily tickets should be "time-checked" to determine if the correct fee was charged. A time-check is an audit procedure where the entry time stamped on the ticket by the ticket dispenser is compared to the entry time imprinted on the ticket when it is processed by the fee computer. The two entry times should match.
4. All exception tickets and manually entered tickets should be examined.
5. Validation coupons on tickets should be voided to prevent them from being peeled off and re-used.
6. Cashier Shift Reports should be reconciled to the Daily Summary Report.

Revenue control over validation coupons occur at the point of original distribution. Coupons should be sequentially numbered. The permits should be kept in a locked storage area and access limited to one person. A monthly coupon log should be maintained to record coupons purchased from the printer and sales made to other campus departments. The log should document the sequential numbers of coupons purchased, the date and sequential series of permits sold, the name of the person selling the coupons and the name and department of the person purchasing the coupons. The deposit slip should be attached to the coupon log. Each month management should reconcile the coupon sales from the log to the bank deposit slip and the coupons still in inventory.

Revenue controls over parking permits are similar to those for parking tickets. The permits should be sequentially numbered. The permits

AUDIT OF CASHIER ACTIVITY

VALIDATION COUPONS

PARKING PERMITS

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should be kept in a locked storage area and access limited to one person. A monthly sales log should be maintained to record purchases and sales of permits. The logs should document the sequential numbers of permits purchased, the date and sequential series of permits sold, and the name of the person selling the permits. The log should be reviewed each month by management and kept for audit purposes. Each month management should reconcile the permits sold to the deposits and permits remaining in inventory.

Replacement permits should be limited to one per year. Replacement permits are recorded as such on the monthly sales log and include the number of the lost permit if available.

Each time the multi-space meters are emptied, the collector should complete a report indicating the collection date, location, collector's name, and amount collected. The collector should print a meter tape at the time of collection. The meter tape should be attached to the Collection Report. The bank deposit slip should also be attached to the Collection Report. Management should reconcile the meter tape to the cash collected and deposited.

Procedures are needed that ensure that the cash collected is accurately deposited and reported. Each month management should reconcile the cash deposited to the parking reports and the accounting reports.

Procedures and policies are needed to prevent revenue loss from these exception transactions. Forms should be used to obtain patron information, allowing repeat offenders to be detected. Typically a full day's rate is charged for lost tickets. This reduces the incentive for patrons and cashiers to cheat the system.

The current method of controlling parking facilities at BSU is to rely heavily on enforcement. Parking enforcement officers patrol parking areas on a daily basis to ensure that vehicles have the proper permits. The following types of permits are available for sale at BSU: individual-designated reserved space permits (available only to President, Vice Presidents, and Deans), reserved permits, general permits, motorcycle permits, accessible permits, resident hall permits, apartment permits, weekend permits, vendor & press permits, long-term visitor permits, department special permits, and contractor permits. Also, visitors are issued day passes.

Effectively, this permitting system provides permit-holders with a "hunting-license" to find and use a parking space that corresponds with

MULTI-SPACE METERS

CASH HANDLING

LOST TICKET FORMS AND INSUFFICIENT FUNDS TRANSACTIONS

CONTROLLING USE OF PARKING FACILITIES

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their permit type. It is the most common and arguably the most effective way of controlling the use of campus parking facilities. We recommend no changes to the current approach.

The university is required by law to issue an annual report on campus safety and security. This report is required by the Crime Awareness and Campus Security Act of 1990. After review of this document, it was evident to us that the university collects and organizes data regarding security issues. Obviously, security is managed by the university as evidenced by the "Safety and Security Annual Report 2000."

Any sound security program should focus on two basic elements: 1) "passive" security measures, such as lighting, architecture, signage, etc. and 2) "active" security measures, such as card access, patrols, CCTV, duress stations, etc. We believe the best security programs are based on an integration of these elements.

To improve existing security, we offer the following recommendations:

1. Establish a preventive maintenance program for lighting and security systems to maintain them in a high state of repair. Establish a procedure whereby non-functioning security devices and/or lighting must be repaired or replaced within 24 hours of receipt of the service call or maintenance discovers the problem. The establishment of a central maintenance authority for common areas may assist with this requirement.
2. It is important to recognize that adequate lighting is perhaps the single most important passive security element. Establish minimum acceptable lighting levels as a BSU-wide policy. We suggest that BSU consider the following minimum standards:
 - Elevator landings and lobbies – 15-20 fc minimum
 - Parking levels within garages – 10 fc average, measured at the floor with no greater than a 5 to 1 ratio between extremes
 - Surface lots – 5 fc minimum, measured at surface level with no greater than a 5 to 1 ratio between extremes
 - Entry ramps and stairwells – 10-15 fc minimum
 - Interconnecting walkways – same as surface lots
 - The absorptive finish of most garage walls and ceilings contributes to the wide variances of light readings and creates shadows. All wall and ceiling surfaces should be painted with an off-white

METHODS TO INCREASE SECURITY

BOISE STATE UNIVERSITY

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- paint, semi-gloss. Floor surfaces should not be black.
- Establish a preventive maintenance program requiring the replacement of burned out bulbs and lights that have diminished below 50 percent of rated light output.

Note that the consultant does not represent these ideas as being a comprehensive security plan. Therefore, the consultant is not in any way liable for security claims that may arise in the future.

There is a body of thinking, which believes that excessively low fines are considered part of the cost of doing business by the parking patron. Therefore, the parking patron is willing to pay for a summons to park where they wish. This can be said about the BSU fine structure which has relatively low fines. There is another body of thinking which believes that excessively high fine structures encounter mass civil disobedience, especially when there is no legal mechanism to collect fines. Since the university currently is experiencing what is seemingly modest compliance with parking regulations, we see a reason to amend the fine structure.

The ideal fine structure is one which is sufficiently high to bring about compliance with rules and regulations, yet not low enough to be considered being "part of the cost of doing business." The following are current parking violation fines at BSU:

1. \$10.00 fines for:
 - a. Expired meter
 - b. Parking in "Boise State Service or Authorized Vehicle Only" spaces without proper permit
 - c. Parking in any permit required area without a matching permit
 - d. Time zone violation
 - e. Inaccurate information on vehicle registration card
 - f. Loading zones
 - g. Parking in more than one space
 - h. Blocking another vehicle
 - i. Dumpster area
 - j. Parking more than one registered vehicle in a reserved/general area at any given time (duplicate permit numbers)
2. \$25.00 fines for:
 - a. Parking in roadway

PARKING RATES AND FINES

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- b. Blocking traffic
 - c. Parking on sidewalks
 - d. Within an intersection
 - e. Blocking access ramp to sidewalk
 - f. No parking areas
 - g. In or in front of a driveway
 - h. In a crosswalk
 - i. On grass or areas not designated for parking
3. \$40.00 fines for:
- a. Parking in an accessible space without a valid accessible permit
 - b. Use of a forged or lost/stolen permit
 - c. Fire lanes
 - d. Parking anywhere on campus, when parking privileges are revoked
 - e. Blocking ADA accessible areas/parking spaces
 - f. Misuse of a Boise State parking permit
 - g. Invalid Boise State parking permit

We recommend an across-the-board increase in parking violations fines to more effectively influence compliance with parking regulations. Effective immediately, we suggest that fines be increase a minimum of 50%. Some fines, such as parking in an accessible space without a valid accessible permit, should be raised to the maximum amount allowed under state law.

A good method of evaluating the propriety of a school's pricing system is through a comparison with schools in the same athletic conference. The rates at Boise State are low compared to other schools in the Big West. Table 5 lists permit prices for universities in the Big West as well as some "benchmark universities."

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Table 5: Parking Rate Comparison

Institution	Students		Faculty/Staff	
	Economy	Premium	Economy	Premium
*Boise State	\$ 40	\$ 110	\$ 60	\$ 130
*Iowa State	\$ 40	\$ 40	\$ 57	\$ 285
*North Carolina State	\$ 45	\$ 260	\$ 12	\$ 612
*U. of California/Davis	\$ 72	\$ 396	\$ 492	\$ 492
*U. of Maryland/C.P.	\$ 165	\$ 165	\$ 190	\$ 190
*Utah State University	\$ 10	\$ 35	\$ 60	\$ 90
Colorado State	\$ 70	\$ 70	\$ 80	\$ 80
New Mexico State	\$ 20	\$ 20	\$ 60	\$ 60
Oregon State	\$ 80	\$ 80	\$ 110	\$ 110
U. of North Texas	\$ 70	\$ 70	\$ 50	\$ 50
University of Idaho	\$ 25	\$ 70	\$ 140	\$ 140
MEDIAN	\$ 45	\$ 70	\$ 60	\$ 130

* Note: Indicates the institution has a parking structure

Source: Walker Parking Consultants, January 2000

As seen in Table 5, the following are average parking rates for institutions comparable to Boise State: \$40 for economy (general) student permits, \$110 for premium (reserved) student permits, \$60 for economy (general) faculty/staff permits, and \$130 for premium (reserved) faculty/staff permits. The pricing scale at BSU is significantly

lower than the average in each of these categories. The difference between the average rates at the sample universities and BSU are listed below:

	Students		Faculty/Staff	
	Economy	Premium	Economy	Premium
Average Parking Rates	\$60	\$121	\$125	\$211
Boise State Parking Rates	\$40	\$110	\$60	\$130
Difference	\$20	\$11	\$73	\$99

Another valid comparison to BSU parking rates is parking rates in downtown Boise. Current rates are \$65 to \$70 per month at many facilities. Earlier this year, the Boise City Council approved a plan to increase parking rates by up to 300 percent. Specifically, meter rates were increased from 25 cents per hour to \$1.00.

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Since modest changes in the price of parking permits will neither significantly change parking demand characteristics, nor aid in the funding of the proposed structure, we recommend that parking rates be raised substantially to \$60 annually for student general (50% increase), \$120 for student reserved (9% increase), \$125 for faculty/staff general (108% increase), and \$210 for faculty/staff reserved (62% increase) per year for all student and faculty/staff locations, with the exception of the economy lots. The rate increase in the stated user categories conservatively adjusts the parking rates within range of the average parking rates documented at comparable universities. The increase in permit prices should increase the use of the economy lots. This strategy will provide parking for those individuals who truly cannot afford the increase as well as increase usage of peripheral parking areas.

Building spaces vertically necessitates the need for a parking structure, and therefore, rates must be set high enough to support the structure. Since we envision BSU heading in the same direction as many of these schools, parking rates must also be increased to help fund the proposed parking structure. The current price of a permit at BSU is not only very low; it simply cannot generate sufficient funding for the proposed parking structure. And, as a general rule, state and Federal monies are not available to fund parking projects. Moreover, university priorities are typically high for academic research and classroom buildings with parking facilities falling low on the priority list. Consequently, user fees are the only reasonable funding source for structured parking facilities.

Overall, BSU is at a critical point in managing its parking system. All patrons currently have adequate parking. However, parking demand continues to increase, while the supply is decreasing. The university must find a way to accommodate all of its patrons, either by increasing the supply or reducing the demand. A parking structure would significantly increase the parking supply but a substantial increase in revenue generated from permit sales is needed to assist in its funding. Similarly, eliminating freshmen parking would provide a considerable reduction in the parking demand, which would render adequate parking conditions well into the future. Accommodating all of its patrons is BSU's initial task, however creating more convenient parking is another objective.

To fund future parking improvements, a number of financial alternatives are being considered by the university. All of these options necessitate that adequate revenues are available to service debt on bonds. The

FINANCIAL PLAN

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following are these options:

- A commercial bank would issue a letter of credit (that would secure the bonds) and the university would issue variable-rate bonds. The interest rate on these bonds would be set at frequent intervals (typically weekly) and paid monthly. This allows the university to have the lowest interest rates available on the bonds, yet maintain maximum flexibility to convert to a long-term financing when a greater operating history has been achieved and bond market conditions are ideal for structuring long-term financing. This plan may be the most cost effective method of financing as well as one that would maintain the separation of the parking system from direct student fees.
- The university could issue parity debt with the outstanding bonds. These bonds would be secured by the matriculation fee ("the fee") charged to all students. The revenues received from the parking system would still be used to pay debt service on the bonds, but bondholders would be able to look to the revenues from the fee and the pledge by the State Board of Education, acting as trustees for the university to set and collect the fee at levels sufficient to pay debt service on the bonds. This structure is identical to that through which funds were provided for the parking structure that opened in the Fall 2000 semester.
- Student fee revenue bonds are another option. Under this scenario, parking revenue bonds would be issued. Student parking and transportation fees would be pledged as revenue sources toward the operating expenses and debt service of a newly constructed parking facility.
- Other options include foundation financing, Idaho State Building Authority financing, and a "stand-alone" lease purchase.

Note: some of the information above regarding financing options was provided by the university.

The option that we favor is the most common form of financing university parking facilities today. This option is the student fee revenue bonds. We believe that this method is the most clean-cut option. It separates the cost of the university's parking and transportation system from the general fund. Consequently, those who use parking and transit facilities on campus are the ones paying for these services. Conversely, those not using university parking and transit facilities do

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not pay for these services. This option is equitable to all user groups and provides a funding mechanism for future parking and transit improvements. Revenues and expenses can be managed to facilitate timely debt service payments to bondholders.

Currently, parking fund expenses at BSU are nearly equal to the revenues generated through permit sales and fines. (Historically, parking revenues exceeded expenses by \$200,000 to \$250,000 annually. However, FY2001 and FY2002 were exceptions and experienced a near breakeven.) To successfully implement the issuance of student fee revenue bonds to support future parking facilities, we suggest the following changes:

1. Allocate expenses unrelated to parking and transportation to a budget other than the existing parking fund budget. This may include existing campus security expenses.
2. Increase permit fees in accordance with the attached schedule to generate the income necessary to fund future parking facilities and parking facility operating expenses.
3. Hold the parking fund and the manager of this fund responsible for funding the cost of future parking facilities and parking facility operating expenses.

Walker highly recommends that funds be set-aside on a regular basis to cover structural maintenance costs. We suggest that a *minimum of \$75 per space* annually be placed in a sinking fund. Once a sinking fund is established, contributions to this fund accumulate over time and are available to cover structural maintenance and structural repairs. Even the best-designed and constructed parking facility requires structural maintenance. For example, expansion joints need to be replaced and concrete invariably deteriorates over time and needs to be repaired to ensure safety and to prevent further deterioration.

The structural maintenance cost typically represents the largest portion of the total maintenance budget. Facility owners tend to grossly underestimate the structural maintenance cost and budget inadequately for timely corrective actions that must be performed to cost-effectively extend the service life of the facility. Also, the adverse impact of ineffective structure maintenance is deferred. Therefore, it is difficult for most owners to recognize or realize the long-term benefits of timely corrective and preventive maintenance actions. The cost of structure maintenance is relatively small considering the potential liability

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associated with the neglect to properly maintain the facility.

Table provides a brief description of typical maintenance costs that can be anticipated for each proposed parking structure. For the purpose of this analysis, Walker shows 25-years of anticipated maintenance costs. This does not mean that the projected useful life of the parking structures will be 25-years. The table is presented to provide an understanding of the conceptual maintenance and repair expenses associated with a structured parking facility.

Table 6: Conceptual Structural Repair and Maintenance Costs

Item Description	Total Cost	Frequency	\$ /SF/YR	
Replacement/preventive costs				
Sealants				
Replace tee/tee and cove joint sealants	\$ 56,000	10	\$	0.04
Sealant at column/spandrel joints	3,000	10		-
Architectural sealants	35,000	12		0.02
Traffic coating strip at perimeter	54,000	12		0.04
Penetrating sealer at supported levels	38,000	5		0.06
Replace drainage system	80,000	25		0.03
Supplemental drains and piping	15,000	25		-
Replace lighting/conduits	235,000	20		0.09
Replace light fixtures	60,000	20		0.02
Replace parking and revenue control	40,000	10		0.03
Replace signage	23,000	25		0.01
Replace expansion joints	12,000	10		0.01
Periodic repairs and/or corrective actions				
Maintain miscellaneous joint sealants	1,300	1		0.01
Maintain traffic topping	1,200	1		0.01
Floor slab patching	3,000	1		0.02
Beam and column repairs	1,000	3		-
Miscellaneous stairtower maintenance	1,000	1		0.01
Maintain drainage system	1,000	3		-
Maintain parking/revenue control equipment	2,000	1		0.02
Annual inspection and testing	5,000	1		0.05
Average annual maintenance cost per SF per year			\$	0.47
Repair schedule during:				
	\$ per SF	SF per Space	\$ per Space	Annual Cost
1 to 5 years	\$ 0.18	310	\$ 55.80	\$ 36,270
6 to 10 years	\$ 0.26	310	\$ 80.60	\$ 52,390
11 to 25 years	\$ 0.47	310	\$ 145.70	\$ 94,705

Note: Figures above are based on historical data and are conceptual in nature. The above numbers will deviate from actual costs incurred. Figures above are based on a 650-space structure.

Source: *Parking Structures 2nd Edition: Planning, Design, Construction, Maintenance and Repair*

The age and the geographic location of a parking facility will impact maintenance costs. Older facilities require more maintenance than a new facility. The cost of maintaining the structure will also increase as

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the structure ages. A structure located in a moderate climatic region is likely to require less maintenance than a structure located in the northern climatic region, which is subjected to harsher exposure conditions.

Additionally, the structural system of the parking facility will influence maintenance costs. However, it is important to realize that the true cost over the life of the structure consists of two components – the initial cost to construct the facility, and the maintenance cost. Structural systems that initially cost less may eventually turn out to be more expensive considering the higher cost of maintaining the structure over the entire service life of the facility. Conventionally reinforced structural systems are more likely to incur higher maintenance costs than a cast-in-place post-tensioned parking structure. Pre-cast pre-stressed structures are likely to require more frequent maintenance and may also incur higher maintenance costs.

The periodic structural maintenance includes items such as patching concrete spalls and delaminations in floor slabs, beams, columns, walls, etc. In many instance there are maintenance costs associated with the topping membranes, the routing and sealing of joints and cracks, and the expansion/construction joint repairs. The cost of these repairs can vary significantly from one structure to another. The factors that will impact the maintenance cost include but are not limited to the value the owner places on the maintenance of the facility, the local climate, and the age of the structure.

A review by a restoration specialist is usually necessary to identify the preventive maintenance needs of a facility. In addition to the annual or other periodic inspections, material testing and examinations may also be necessary to determine and recommend maintenance measures. One example of this is the chloride monitoring testing that is necessary to monitor the effectiveness of sealer and coatings. The chloride testing also helps to determine the frequency and extent of sealer reapplication. The results of the periodic inspections may also indicate the need for other material examinations and laboratory testing.

For the purpose of this analysis, Walker assumes the planned layout of the proposed parking facilities are self-park with fully automated

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revenue control equipment. Direct labor expenses are not calculated as part of the operating expenses.

Located in the Appendix, Walker presents, in Table 11, the forecasted operating revenues, expenses, annual debt service, and debt coverage ratios for the evaluated parking system. The financial pro forma identifies the parking rate schedule that needs to be administered in order to produce a debt coverage ratio greater than 1.25 over the next ten years.

Limited or no investigation has been made and therefore, no responsibility is assumed for legal matters associated with this project. This includes but is not limited to property ownership issues, tax matters, etc.

LIMITING CONDITIONS

1. Information furnished by others, upon which all or portions of this report are based is believed to be reliable, however, it has not been verified in all cases. No warranty is given as to the accuracy of such information.
2. No soils analysis or geotechnical surveys were ordered or made in conjunction with this report, nor was an investigation made of any water, oil, gas, coal or other subsurface mineral and use rights or conditions.
3. It is assumed that there are no hidden or unapparent conditions of the property, subsoil, or structures that render it more or less costly to construct. No responsibility is assumed for such conditions or for arranging for engineering studies that may be required to discover them.
4. Size of the facilities (number of parking stalls) was based upon footprint and expected height of the facility.
5. Responsible ownership and competent property management are assumed.
6. No responsibility is taken for changes in market conditions, and no obligation is assumed to revise this report to reflect events or conditions which occur subsequent to the date hereof.
7. Any estimates, projections, or information provided by Walker will be premised in part upon assumptions provided by others.

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Walker may not have independently investigated the accuracy of the assumptions.

8. Because of the inherent uncertainty and probable variation of the assumptions, actual results will vary from estimated and projected results and such variations can be material. As such, Walker makes no warranty or representation, express or implied, as to the accuracy of estimates or projections.
9. This report may NOT be used to obtain project financing.



APPENDIX A

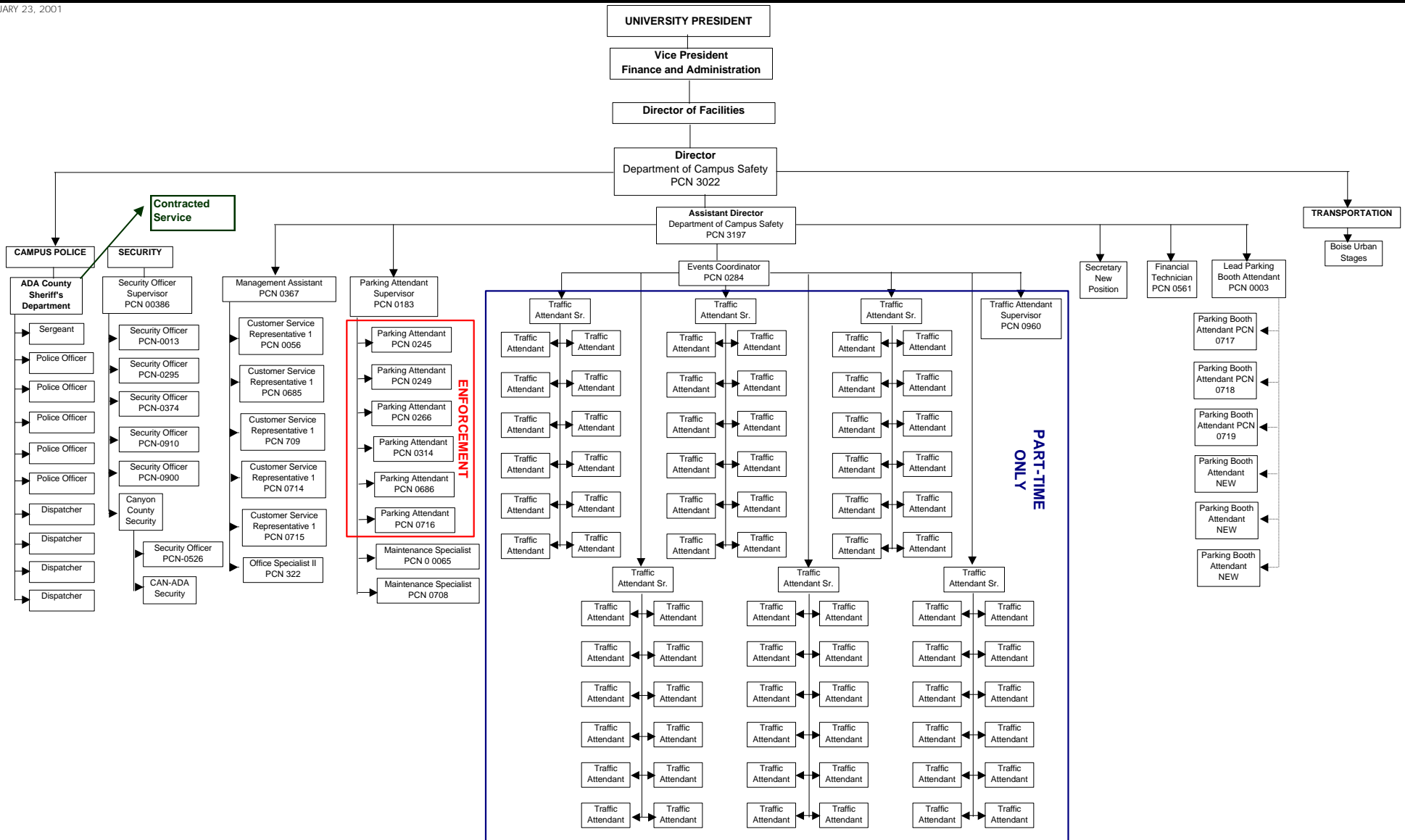


Table 1: Surface Lot Parking Inventory

Lot Number	Name	Reserved	Service	Meters	HC	Motorcycle	Loading	Housing	General	Visitor	Total	Supply Factor	Effective Supply
1	Administration Visitor Lot	193	1		7					40	241	95%	229
2	Liberal Arts	89		4	6	1	3				103	95%	98
3	Morrison Driscoll			2	3	1	1	98			105	95%	100
4	Campus Drive East						1		107		108	95%	103
5	Chaffee Hall	2		5	5	1	1		150		164	95%	156
6	Stadium	6		42	49		5		1,380	28	1,510	95%	1,435
7	Bronco Lane					1	1		75		77	95%	73
8	Auto Mechanics	2	1								3	95%	3
9	Service Area	3	13	5	3		2				26	95%	25
10	Student Union	3	4	9	7	1	2		141		167	95%	159
11	Science Circle Drive	28		2	6	2	2				40	95%	38
12	Health Center	45		6	1		1				53	95%	50
13	Courts Apartment		1	6	1	1		96			105	95%	100
14	Morrison Center	38					2				40	95%	38
15	Library	48		11	4	1	2				66	95%	63
16	Heights Apartments			3	1	1		34			39	95%	37
17	Career Center	8		14	1						23	95%	22
18	Towers	180	1	25	12	2	3		278		501	95%	476
19	Campus Drive West	1	2				2				5	95%	5
20	Towers Circle East			8	1		2				11	95%	10
21	Towers Circle West		1								1	95%	1
22	Business Building		2	4							6	95%	6
23	Parking Structure			649							649	95%	617
24	Health Science	3		5	1						9	95%	9
25	Physical Plant Compound	37			2		1			10	50	95%	48
26	College of Technology	34	1	10	2	1					48	95%	46
27	Towers Residence Hall Lot								102		102	95%	97
28	Public Affairs/Arts West	24		2	2		2				30	95%	29
29	Homemaker Services	2							2		4	95%	4
30	Computer Center Annex	13			1						14	95%	13
31	Diploma Street								8		8	95%	8
32	Heat Plant	16									16	95%	15
33	Sub Annex	8			1				82		91	95%	86
34	Manor Apartments			4	1	1	1	74			81	95%	77
35	General #3 (Lincoln-Belmont)								62		62	95%	59

Lot Number	Name	Reserved	Service	Meters	HC	Motorcycle	Loading	Housing	General	Visitor	Total	Supply Factor	Effective Supply
36	Art-English Annex	8									8	95%	8
39	Lincoln Hall	33					1				34	95%	32
40	Theater Arts	4					1				5	95%	5
42	Denver Street Lot					1			146		147	95%	140
43	ISBDC			5	2						7	95%	7
44	Campus Safety/ACSO	8		6	1		1				16	95%	15
45	Tennis Complex			9	4				81		94	95%	89
46	Village Apartments			6	5	1	1	80			93	95%	88
47	Park Apartments			4	3	1		57			65	95%	62
48	Architects Office	7									7	95%	7
49	Children's Center	1			1		12			1	15	95%	14
50	Health Science Riverside	73		14	3		1				91	95%	86
51	Health Science Riverside General Lot					1			149		150	95%	143
52	TAA: 2611 West Boise	6			1		1		5		13	95%	12
53	NWASC: 1123-1125 Lincoln		6						4		10	95%	10
54	A/C/P Annex; 1426 Belmont	1					1		3		5	95%	5
55	Constr. Mgmt: 1029 Manitou		2								2	95%	2
56	Grounds : 1110 Vermont		2								2	95%	2
57	International Program - 1136-38 Euclid						2		2		4	95%	4
58	General #6 - 1129 Euclid								31		31	95%	29
59	Physical Plant Training : 1216 Beacon	5									5	95%	5
60	Child Development Lab : 1119 Grant	2					1				3	95%	3
61	Grounds: 1510 Belmont										-	95%	-
62	Geology Annex: 1202 Belmont			2			1		6		9	95%	9
63	Gateway Center	5		10	2		1				18	95%	17
64	OSH - 1113-1115 Denver	2						1			3	95%	3
65	Flex Mods: 1105 Grant	6		1	1				2		10	95%	10
66	Tech Help: 1375 Belmont	3	1								4	95%	4
67	Lock Shop : 1109 Michigan		1								1	95%	1
Total Number of Spaces		947	39	873	140	18	58	440	2,816	79	5,410	95%	5,140

Table 2: On-Street Parking Inventory

Block Number	Total Supply	Supply Factor	Effective Supply
1	18	85%	15
2	29	85%	25
3	27	85%	23
4	32	85%	27
5	33	85%	28
6	29	85%	25
7	41	85%	35
8	32	85%	27
9	75	85%	64
10	24	85%	20
11	10	85%	9
12	43	85%	37
13	32	85%	27
14	28	85%	24
15	49	85%	42
16	28	85%	24
17	59	85%	50
18	0	85%	0
19	36	85%	31
20	57	85%	48
21	42	85%	36
22	50	85%	43
23	27	85%	23
24	40	85%	34
25	26	85%	22
26	64	85%	54
Earl Street	12	85%	10
Sherwood	38	85%	32
Lusk (Sherwood-Island)	15	85%	13
Lusk (Island - Royal)	10	85%	9
Lusk (Royal-End)	60	85%	51
Royal	14	85%	12
	1,080		918

Table 3: Zone A Parking Occupancy Counts

Lot name	Parking Supply	Effective Supply	Parking Occupancy					
			9:00 AM	11:00 AM	1:00 PM	3:00 PM	5:00 PM	7:00 PM
Arts English Annex	8	8	6	6	5	5	2	2
Architects Office	7	7	4	5	3	4	2	2
Administration Lot	241	229	194	195	185	194	118	218
Heat Plant	16	15	8	2	5	7	0	12
Gateway Center	18	17	11	11	10	5	1	2
Career Center	23	22	12	9	8	9	5	2
Health Center	53	50	21	30	38	39	18	13
Courts Apartment	105	100	55	58	49	39	42	47
Village Apartments	93	88	39	35	36	29	39	47
Heights Apartments	39	37	22	20	23	21	19	16
TAA: 2611 W. Boise	13	12	2	3	0	2	0	2
Total	616	585	374	374	362	354	246	363
Percent Occupied			64%	64%	62%	60%	42%	62%

Table 3S: Zone A Surface Lot Parking Occupancy

Lot name	Parking Supply	Effective Supply	Parking Occupancy						
			9am	11am	1pm	3pm	5pm	7pm	
Arts English Annex									
Arts English Annex	8	8	6	6	5	5	2	2	
Architects Office									
Reserved	7		4	5	3	4	2	2	
Total	7	7	4	5	3	4	2	2	
Administration Lot									
Reserved	193		98	111	105	107	94	170	
SVC	1		2	0	2	2	2	12	
Visitor	40		88	77	70	78	20	32	
HC	7		6	7	8	7	2	4	
Total	241	229	194	195	185	194	118	218	
Heat Plant									
SVC	16		8	2	5	7	0	12	
Total	16	15	8	2	5	7	0	12	
Gateway Center									
Reserved	5		1	4	4	3	1	1	
Metered	10		10	7	6	2	0	1	
HC	2								
Loading zone	1								
Total	18	17	11	11	10	5	1	2	
Career Center									
Reserved	8		4	4	2	3	1	1	
Metered	14		8	5	6	6	4	1	
HC	1								
Total	23	22	12	9	8	9	5	2	
Health Center									
Reserved	43		20	29	35	30	15	12	
Designated Reserv	2		0	0	0	0	0	0	
Loading Zone	1		1	1	1	2	2	0	
Metered	6		0	0	1	6	0	0	
HC	1		0	0	0	0	0	0	
Total	53	50	21	30	37	38	17	12	
Courts Apartment									
SVC	1		6	6	6	5	8	8	
Metered	6		4	6	6	4	0	1	
Housing	96		44	46	37	30	34	38	
HC	1		1	0	0	0	0	0	
Motorcycle Zones	1		0	0	0	0	0	0	
Total	105	100	55	58	49	39	42	47	
Village Apartments									
Housing	80		37	33	36	27	38	45	
HC	5		1	1	0	1	0	1	
Metered	6		1	1	0	1	1	1	
Loading Zone	1								
Motorcycle Zone	1								
Total	93	88	39	35	36	29	39	47	
Heights Apartments									
SVC	1		1	0	1	2	1	2	
Housing	34		17	18	20	18	18	12	
Metered	3		2	2	2	1	0	2	
HC	1		2	0	0	0	0	0	
Total	39	37	22	20	23	21	19	16	
TAA: 2611 W. Boise									
Reserved	6		2	3	0	2	0	2	
HC	1		0	0	0	0	0	0	
Loading Zone	1		0	0	0	0	0	0	
General	5		0	0	0	0	0	0	
Total	13	12	2	3	0	2	0	2	
Total	616	585	374	374	361	353	245	362	
			64%	64%	62%	60%	42%	62%	

Table 3F : Zone A Surface Lot Parking Occupancy

Lot name	Parking Supply	Parking Occupancy					
		9am	11am	1pm	3pm	5pm	7pm
Arts English Annex							
Reserved	8	5	0	5	5	2	1
Total	8	5	0	5	5	2	1
Architects Office							
Reserved	7	3	3	4	3	2	1
Total	7	3	3	4	3	2	1
Administration Lot							
Reserved	193	192	208	178	176	138	248
SVC	1	1	0	1	0	0	0
Visitor	40						
HC	7	3	5	5	4	2	3
Total	241	196	213	184	180	140	251
Heat Plant							
SVC	16	3	2	6	6	6	6
Total	16	3	2	6	6	6	6
Gateway Center							
Reserved	5	5	5	3	5	3	0
Metered	10	5	6	5	3	3	4
HC	2	0	1	0	0	0	0
Loading zone	1	0	0	0	0	0	0
Total	18	10	12	8	8	6	4
Career Center							
Reserved	8	8	8	7	7	4	0
Metered	14	4	3	1	3	1	2
HC	1	0	0	0	0	0	0
Total	23	12	11	8	10	5	2
Health Center							
Reserved	43	31	37	36	26	17	11
Designated Reserv	2	2	2	2	2	1	0
Loading Zone	1	0	0	1	0	0	0
Metered	6	5	2	3	4	3	0
HC	1	0	0	1	0	0	0
Total	53	38	41	43	32	21	11
Courts Apartment							
SVC	1	1	1	1	1	0	0
Metered	6	5	4	5	5	2	0
Housing	96	57	50	51	47	51	63
HC	1	0	0	0	0	0	0
Motorcycle Zones	1	0	0	0	0	0	0
Total	105	63	55	57	53	53	63
Village Apartments							
Housing	80	45	44	52	46	46	57
HC	5	1	1	1	1	1	1
Metered	6	0	0	2	1	1	3
Loading Zone	1	0	1	0	1	0	0
Motorcycle Zone	1	0	0	1	0	1	1
Total	93	46	46	56	49	49	62
Heights Apartments							
SVC	1	1	0	0	0	0	0
Housing	34	24	22	23	25	24	24
Metered	3	1	0	1	2	0	0
HC	1	0	0	0	0	0	0
Total	39	26	22	24	27	24	24
TAA: 2611 W. Boise							
Reserved	6	3	4	3	4	2	0
HC	1	0	0	0	0	0	0
Loading Zone	1	0	0	0	0	0	0
General	5	2	2	2	5	0	2
Total	13	5	6	5	9	2	2
Total	616	407	411	400	382	310	427
		70%	70%	68%	65%	53%	73%

Table 4S: Zone B Surface Lot Parking Occupancy

Lot name	Inventory	Effective Supply	Parking Occupancy					
			9:00am	11:00 AM	1pm	3pm	5pm	7pm
Student Union	199	189	134	125	123	79	95	29
Physical Plant Compound	47	45	19	16	22	19	20	20
College of Technology	48	46	27	36	31	23	9	17
Homemaker Services	4	4	1	2	2	2	1	1
Computer Center Annex	14	13	8	8	10	8	3	0
Sub Annex	91	86	78	79	79	64	42	50
Manor Apartments	81	77	37	31	29	29	21	31
Gen #3(Lincoln-Belmont)	62	59	54	56	55	44	24	8
Gen #1 and #4 (Grant Street)	146	139	80	93	70	44	15	6
Lincoln Hall	21	20	10	7	10	10	3	6
Theater Arts	5	5	1	2	1	1	1	1
Denver Street	147	140	14	19	15	10	7	4
ISBDC	7	7	0	0	0	0	0	0
Campus Safety/ACSO	16	15	5	5	3	5	4	6
Tennis Complex	96	91	3	3	4	8	11	0
Children's Center	15	14	3	6	3	7	6	0
NWASC; 1123-1125 Lincoln	10	10	5	4	10	6	7	4
A/C/P Annex; 1426 Belmont	5	5	3	4	4	3	2	0
Constr. Mgmt.; 1029 Manitou	1	1	2	2	2	2	2	2
Grounds; 1110 Vermont	2	2	1	0	1	1	3	3
Intrntl. Prog.; 1136-38 Euclid	4	4	1	1	1	1	1	1
General #6 -1129 Euclid	31	29	6	9	5	7	4	1
Physical Plant Training	5	5	3	0	2	1	1	4
CDL; 1119 Grant	3	3	1	1	1	0	0	0
Geo annex; 1202 Belmont	9	9	3	2	3	3	2	1
OSH; 1113-15 Denver	3	3	1	1	0	0	0	0
Flex Mod; 1105 Grant	10	10	4	4	5	3	0	0
Tech Help; 1375 Belmont	4	4	1	2	2	2	2	0
Lock Shop; 1109 Michigan	1	1	0	0	0	0	0	0
Total	1,087	1,028	502	514	489	379	284	195
			49%	50%	48%	37%	28%	19%

Table 4F: Zone B Surface Lot Parking Occupancy

Lot name	Parking Inventory	Parking Occupancy					
		9am	11am	1pm	3pm	5pm	7pm
Student Union	199	74	71	82	76	28	11
Physical Plant Compound	47	15	29	19	18	20	22
College of Technology	48	40	41	35	35	24	14
Homemaker Services	4	2	2	2	2	0	0
Computer Center Annex	14	8	11	4	7	2	2
Sub Annex	91	80	85	79	75	51	46
Manor Apartments	81	46	44	41	38	35	37
Gen #3(Lincoln-Belmont)	62	27	49	37	25	19	8
Gen #1 and #4 (Grant Street)	146	0	0	0	0	0	0
Lincoln Hall	21	10	10	10	7	5	4
Theater Arts	5	2	2	3	2	2	2
Denver Street	147	50	55	52	33	15	7
ISBDC	7	2	3	4	2	0	0
Campus Safety/ACSO	16	2	2	3	4	2	1
Tennis Complex	96	3	3	6	16	2	2
Children's Center	15	5	6	2	7	8	2
NWASC; 1123-1125 Lincoln	10	6	6	6	3	1	2
A/C/P Annex; 1426 Belmont	5	3	3	3	3	2	0
Constr. Mgmt.; 1029 Manitou	1	2	2	2	2	2	2
Grounds; 1110 Vermont	2	2	2	2	2	4	5
Intrntl. Prog.; 1136-38 Euclid	4	4	4	4	3	1	1
General #6 - 1129 Euclid	31	28	28	22	15	5	2
Physical Plant Training	5	0	0	2	2	2	2
CDL; 1119 Grant	3	1	2	3	1	1	0
Geo annex; 1202 Belmont	9	0	0	0	0	0	0
OSH; 1113-15 Denver	3	1	1	3	2	0	1
Flex Mod; 1105 Grant	10	4	4	6	4	0	0
Tech Help; 1375 Belmont	4	2	2	3	1	1	0
Lock Shop; 1109 Michigan	1	0	0	1	0	0	0
Total	1087	419	467	436	385	232	173
		41%	45%	42%	37%	22%	17%

Table 5S: Zone C Surface Lot Parking Occupancy

Lot name	Parking Inventory	Effective Supply	Parking Occupancy					
			9am	11am	1pm	3pm	5pm	7pm
Science Circle Drive								
Reserved	28		9	19	14	16	17	12
Metered	2		1	2	2	2	1	2
Service	2		2	4	3	2	3	2
Designated	2		7	2	0	3	3	0
HC	6		5	6	4	7	2	2
Total	40	38	24	33	23	30	26	18
Public Affairs/Arts West								
Reserved	24		8	13	15	11	10	16
Metered	2		1	2	1	2	1	1
Designated Reserve	2		0	0	0	0	0	0
Loading Zone	1		0	0	0	0	0	0
Total	29	28	9	15	16	13	11	17
Towers								
Reserved	175		166	126	121	121	0	0
General	317		306	224	275	244	291	344
Housing	100		101	92	82	87	71	85
Metered	25		16	22	24	9	11	24
Service	1		1	1	0	0	0	0
Designated	5		11	3	2	2	0	3
HC	12		1	5	4	3	1	6
Motorcycle Zone	3		0	0	0	0	0	0
Loading Zone	3		0	0	0	0	0	0
Housing Reserved	1		0	0	0	0	0	0
Total	642	610	602	473	508	466	374	462
Towers Circle East								
Metered	8		3	4	5	6	5	6
Loading Zones	2		1	1	0	1	1	0
HC	1		0	0	0	0	0	0
Total	11	10	4	5	5	7	6	6
Towers Circle West								
Service	1		1	0	0	0	0	0
Total	1	0	1	0	0	0	0	0
Diploma Street								
General	8		21	22	22	20	20	19
Total	8	8	21	22	22	20	20	19
Health Science								
Reserved	3		3	3	1	4	0	0
HC	1		1	4	5	1	0	0
Metered	5		0	0	0	0	1	2
Total	9	9	4	7	6	5	1	2
Morrison Center								
Reserved	10		9	13	8	4	0	7
General	28		18	18	17	18	19	20
Loading Zone	2		0	0	0	0	0	0
Total	40	38	27	31	25	22	19	27
Business Building								
Reserved	0		0	2	0	1	2	0
Service	2		2	4	2	1	1	0
HC	4		1	3	3	0	2	2
Total	6	6	3	9	5	2	5	2
Campus Drive West								
Service	4		1	4	3	5	3	1
Designated Reserve	1		0	0	0	0	0	0
Total	5	5	1	4	3	5	3	1
Health Science Riverside								
Reserved	72		41	36	27	21	17	0
General	149		152	131	108	59	43	13
Metered	14		11	8	2	0	1	0
Loading Zone	1		1	1	2	0	3	0
Designated	1		1	1	0	1	3	0
HC	3		0	0	0	0	0	0
Motorcycle Zone	1		0	0	0	0	0	0
Total	241	229	206	177	139	81	67	13
Park Apartments								
Housing	57		24	22	23	20	23	21
HC	3		1	0	1	1	0	0
Metered	4		0	0	0	0	0	0
Motorcycle Zone	1		0	0	0	0	0	0
Total	65	62	25	22	24	21	23	21
Total	1097	1041	927	798	776	672	555	588
			89%	77%	75%	65%	53%	56%

Table 5F: Zone C Surface Lot Parking Occupancy

Lot name	Parking Inventory	Parking Occupancy					
		9am	11am	1pm	3pm	5pm	7pm
Science Circle Drive							
Reserved	28	15	15	15	15	8	18
Metered	2	2	0	0	1	1	1
Service	2	2	2	2	1	1	1
Designated	2	0	2	0	2	1	1
HC	6	2	5	1	5	2	2
Total	40	21	24	18	24	13	23
Public Affairs/Arts West							
Reserved	24	15	21	16	15	13	19
Metered	2	2	1	0	1	1	2
Designated Reserve	2	2	2	2	2	1	1
Loading Zone	1	0	0	0	0	0	0
Total	29	19	24	18	18	15	22
Parking Structure							
Total	649	212	223	186	90	44	94
Towers Dirt Lot							
Total	102	102	102	102	98	49	47
Towers							
Reserved	175	117	117	102	96	74	163
General	317	317	317	317	286	238	236
Housing	100	100	99	93	95	94	91
Metered	25	11	10	15	10	7	9
Service	1	0	0	0	0	0	0
Designated	5	0	3	2	1	1	2
HC	12	5	9	8	8	2	4
Motorcycle Zone	3	2	9	8	6	3	4
Loading Zone	3	0	0	0	0	0	0
Housing Reserved	1	0	1	1	1	0	1
Total	642	552	565	546	503	419	510
Towers Circle East							
Metered	8	5	5	2	2	2	0
Loading Zones	2	0	0	2	1	0	2
HC	1	0	0	0	1	0	0
Total	11	5	5	4	4	2	2
Towers Circle West							
Service	1	0	0	0	0	0	0
Total	1	0	0	0	0	0	0
Diploma Street							
General	8	8	8	8	7	7	7
Total	8	8	8	8	7	7	7
Health Science							
Reserved	3	1	1	2	1	0	1
HC	1	1	1	1	0	0	0
Metered	5	3	2	3	0	1	0
Total	9	5	4	6	1	1	1
Morrison Center							
Reserved	10	10	8	8	5	2	2
General	28	21	21	21	21	21	16
Loading Zone	2	1	0	0	0	0	0
Total	40	32	29	29	26	23	18
Business Building							
Reserved	0	0	0	0	0	0	0
Service	2	6	4	1	1	2	0
HC	4	1	1	2	2	1	0
Total	6	7	5	3	3	3	0
Campus Drive West							
Service	4	4	4	6	6	1	0
Designated Reserve	1	1	1	2	2	1	0
Total	5	5	5	8	8	2	0
Health Science Riverside							
Reserved	72	37	36	48	31	35	18
General	149	149	143	132	73	15	21
Metered	14	6	6	3	1	1	2
Loading Zone	1	0	0	0	0	0	0
Designated	1	0	1	0	0	0	0
HC	3	1	1	2	1	1	1
Motorcycle Zone	1	1	1	2	1	1	1
Total	241	194	188	187	107	53	43
Park Apartments							
Housing	57	37	36	33	31	41	32
HC	3	0	0	0	0	0	0
Metered	4	0	0	0	0	0	0
Motorcycle Zone	1	0	1	0	0	0	1
Total	65	37	37	33	31	41	33
Total	1848	1199	1219	1148	920	672	800
		65%	66%	62%	50%	36%	43%

Table 6S: Zone D Surface Lot Parking Occupancy

Lot name	Parking Inventory	Effective Supply	Occupancy					
			9am	11am	1pm	3pm	5pm	7pm
Bronco Lane								
General	75		79	76	72	45	47	43
Loading Zone	1		0	0	0	0	0	0
Motorcycle Zone	1		0	0	0	0	0	0
Total	77	73	79	76	72	45	47	43
Auto Mechanics/Body								
Designated Reserve	2		5	4	5	3	9	9
Service	1		0	0	0	0	0	0
Total	3	3	5	4	5	3	9	9
Service Area								
Reserved	3		0	0	0	0	0	0
Metered	5		3	1	3	2	1	1
HC	3		0	0	0	0	0	1
Loading Zone	2		1	0	0	0	0	0
Service	13		20	16	9	14	18	18
Total	26	25	24	17	12	16	19	20
Stadium								
Meters	42		14	15	16	13	12	7
General	1380		827	943	720	463	204	110
ISMI	28		4	7	11	9	7	5
Loading Zone	5		1	2	3	0	3	1
HC	49		3	3	2	1	0	0
Designated Reserve	6		0	0	0	0	0	0
Total	1510	1435	849	970	752	486	226	123
Chaffee Hall								
Metered	5		1	0	0	2	2	5
HC	5		4	1	3	3	3	3
Reserved	149		154	147	134	126	105	112
Loading Zone	1		0	1	0	3	0	0
Designated Reserve	2		0	0	0	0	0	0
Motorcycle Zone	1		0	0	0	0	0	0
Housing Reserved	1		0	0	0	0	0	0
Total	164	156	159	149	137	134	110	120
Campus Drive East								
General	107		57	62	58	55	46	45
Loading Zone	1		0	0	0	0	0	0
Total	108	103	57	62	58	55	46	45
Morrison Driscoll								
Metered	2		1	0	2	1	3	1
HC	3		0	0	1	1	0	0
Housing	97		95	101	79	86	80	77
Loading Zone	1		0	1	0	0	1	0
Motorcycle Zone	1		0	0	0	0	0	0
Housing Reserved	1		0	0	0	0	0	0
Total	105	100	96	102	82	88	84	78
Library								
Metered	11		7	10	9	7	6	11
Reserved	44		41	45	41	43	32	43
Loading zone	2		0	1	2	1	1	0
Designated Reserve	4		0	0	0	0	0	0
HC	4		0	0	0	0	0	0
Motorcycle Zone	1		0	0	0	0	0	0
Total	66	63	48	56	52	51	39	54
Liberal Arts								
Meters	4		2	1	4	2	1	4
Reserved	89		57	76	83	60	36	86
HC	6		2	4	1	2	1	2
Loading Zone	3		0	5	1	2	0	2
Motorcycle Zone	1		0	0	0	0	0	0
Total	103	98	61	86	89	66	38	94
	2162	2056	1378	1522	1259	944	618	586
			67%	74%	61%	46%	30%	29%

Table 6F: Zone D Surface Lot Parking Occupancy

Lot name	Parking Inventory	Occupancy					
		9am	11am	1pm	3pm	5pm	7pm
Bronco Lane							
General	75	71	70	71	69	52	73
Loading Zone	1	1	0	1	0	0	0
Motorcycle Zone	1	0	0	3	3	0	0
Total	77	72	70	75	72	52	73
Auto Mechanics/Body							
Designated Reserve	2	0	0	0	0	0	0
Service	1	0	0	0	0	0	0
Total	3	0	0	0	0	0	0
Service Area							
Reserved	3	0	0	0	0	0	0
Metered	5	1	1	2	3	0	0
HC	3	0	1	1	1	0	0
Loading Zone	2	0	2	0	1	1	1
Service	13	10	11	11	10	7	9
Total	26	11	15	14	15	8	10
Stadium							
Meters	42	26	24	20	24	39	6
General	1380	1372	1318	1102	960	421	338
ISMI	28	4	3	6	17	17	1
Loading Zone	5	0	4	1	3	2	2
HC	49	6	6	7	5	3	1
Designated Reserve	6	0	0	0	3	3	3
Total	1510	1408	1355	1136	1012	485	351
Chaffee Hall							
Metered	5	4	4	3	3	3	3
HC	5	1	1	1	0	0	0
Reserved	149	146	146	145	138	136	142
Loading Zone	1	0	1	1	0	1	1
Designated Reserve	2	0	0	0	1	1	1
Motorcycle Zone	1	1	1	3	1	1	0
Housing Reserved	1	0	0	0	1	1	1
Total	164	152	153	153	144	143	148
Campus Drive East							
General	107	107	94	82	51	53	45
Loading Zone	1	0	0	0	0	1	0
Total	108	107	94	82	51	54	45
Morrison Driscoll							
Metered	2	0	1	2	2	1	0
HC	3	0	0	0	0	1	0
Housing	97	92	91	92	91	90	90
Loading Zone	1	0	0	0	0	0	0
Motorcycle Zone	1	0	0	2	2	0	0
Housing Reserved	1	0	0	0	0	0	0
Total	105	92	92	96	95	92	90
Library							
Metered	11	3	8	1	6	5	7
Reserved	44	39	44	39	36	20	12
Loading zone	2	0	3	1	0	0	0
Designated Reserve	4	2	3	1	1	0	0
HC	4	2	1	0	1	1	0
Motorcycle Zone	1	0	1	1	1	0	0
Total	66	46	60	43	45	26	19
Liberal Arts							
Meters	4	4	4	2	3	1	2
Reserved	89	81	81	78	67	54	70
HC	6	2	2	1	2	0	0
Loading Zone	3	1	3	0	1	0	0
Motorcycle Zone	1	2	0	2	1	0	0
Total	103	90	90	83	74	55	72
	2162	1978	1929	1682	1508	915	808
		96%	94%	82%	73%	45%	39%

Table 7: On-Street Parking Occupancy

Block number	Parking Supply	Supply Factor	Effective Supply	Occupancy Counts					
				9am	11am	1pm	3pm	5pm	7pm
1	18	85%	15	9	11	11	9	6	4
2	29	85%	25	23	16	19	13	13	13
3	27	85%	23	22	17	19	8	4	16
4	32	85%	27	29	28	24	20	9	22
5	33	85%	28	31	27	22	15	11	15
6	29	85%	25	30	28	22	22	13	15
7	41	85%	35	32	32	26	25	17	27
8	32	85%	27	21	24	22	18	13	19
9	75	85%	64	27	29	28	21	20	22
10	24	85%	20	29	31	22	23	18	21
11	10	85%	9	8	9	8	7	9	9
12	43	85%	37	28	35	30	23	21	21
13	32	85%	27	46	44	51	40	37	46
14	28	85%	24	28	31	30	24	31	30
15	49	85%	42	52	52	50	49	43	49
16	28	85%	24	30	26	24	24	23	24
17	59	85%	50	50	46	41	29	38	59
19	36	85%	31	35	38	38	31	22	38
20	57	85%	48	47	60	54	42	29	58
21	42	85%	36	43	41	42	36	29	50
22	50	85%	43	52	51	52	44	34	45
23	27	85%	23	32	31	29	19	5	18
24	40	85%	34	0	0	0	0	0	0
25	26	85%	22	15	15	14	12	12	13
26	64	85%	54	65	66	55	44	51	49
Earl Street	12	85%	10	12	10	9	8	10	10
Sherwood	38	85%	32	32	28	26	14	17	14
Lusk (Sherwood-Island)	15	85%	13	9	11	10	6	5	6
Lusk (Island - Royal)	10	85%	9	12	9	9	7	1	0
Lusk (Royal-End)	60	85%	51	63	52	48	37	9	3
Royal	14	85%	12	26	17	16	18	13	5
Total	1080		918	938	915	851	688	563	721
				102%	100%	93%	75%	61%	79%

Table 8: Future Growth @ Boise State University

	Total Student Population	Resident Student	Commuter Student	Faculty and Staff	Total Parking Demand
2000	16,500	1,500	15,000	2,300	5,106
2001	16,995	1,593	15,402	2,386	5,303
2002	17,505	1,641	15,864	2,482	5,479
2003	18,030	1,690	16,340	2,588	5,667
2004	18,571	1,741	16,830	2,704	5,864
2005	19,128	1,793	17,335	2,830	6,072
2006	19,702	1,847	17,855	2,966	6,291
2007	20,293	1,902	18,390	3,112	6,521
2008	20,902	1,960	18,942	3,268	6,762
2009	21,529	2,018	19,510	3,434	7,014
2010	22,175	2,079	20,096	3,610	7,277

Table 9: Future Developments

Name of Planned Development	Size	Estimated Construction Start Dates	Number of Parking Spaces	
			Added	Displaced
Idaho Sports Medicine Institute	12,105 GSF	2000	-	-
Student Recreation Center	87,000 GSF	2001	25	-
Addition to Mathematics/Geosciences Building		2002	-	-
Student Health and Wellness Center	30,000 GSF	2002	-	34
Competition Tennis Facility	3,100 GSF (interior)	2003	-	-
Materials Handling Building/Maintenance Shop	28,000 GSF	2003	-	2
Student Union Expansion	85,000 GSF	2004	-	138
Multi-purpose Classroom Facility, Phase 2	62,000 GSF	2005	-	12
Central Receiving and Maintenance Shops	10,000 GSF	2005	-	2
New Student Housing	48,000 GSF	2005	-	1
New Business Building	93,000 GSF	2006	-	40
Extended Studies Center, Phase 2	10,000 GSF	2006	-	63
Skybox Expansion	57,250 GSF	2006	-	30
Visual Arts Building	85,000 GSF	2007	-	100
Engineering Research Building	64,000 GSF	2007	-	5
New Student Services Building	55,000 GSF	2008	-	40
Health Sciences Building	30,000 GSF	2009	-	28
			25	495

Table 10 : Future Impacts

	Existing	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Displaced Parking Spaces	-	-	(34)	(2)	(138)	(15)	(133)	(105)	(40)	(28)	-
Future Parking Improvements											
Restriping	-	82	-	-	-	-	-	-	-	-	-
Student Recreation Center	-	25	-	-	-	-	-	-	-	-	-
Parking Structure #1, Phase 2	-	-	499	-	-	-	-	-	-	-	-
Parking Structure #2	-	-	-	-	743	-	-	-	-	-	-
Parking Structure #3	-	-	-	-	-	-	1,295	-	-	-	-
Subtotal	-	107	499	-	743	-	1,295	-	-	-	-
Parking Supply Balance	5,410	5,517	5,982	5,980	6,585	6,570	7,732	7,627	7,587	7,559	7,559
x Effective Supply Factor	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%
= Total Effective Parking Supply	5,140	5,241	5,683	5,681	6,256	6,242	7,345	7,246	7,208	7,181	7,181
- Parking Demand	5,106	5,303	5,479	5,667	5,864	6,072	6,291	6,521	6,762	7,014	7,277
= Parking Adequacy	34	(62)	203	14	392	169	1,054	724	446	167	(96)

BOISE STATE UNIVERSITY

FINANCIAL PLAN



Pro Forma Operating Statement of Net Income of BSU Parking System

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Number of Permits Sold	Increase =	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Reserved - Employees	894	921	948	977	1,006	1,036	1,067	1,100	1,132	1,166	1,201
Reserved - Students	341	351	362	373	384	395	407	419	432	445	458
General - Employees	807	831	856	882	908	936	964	993	1,022	1,053	1,085
General - Students	6,771	6,974	7,183	7,399	7,621	7,849	8,085	8,327	8,577	8,835	9,100
Motorcycle - Employees	12	12	13	13	14	14	14	15	15	16	16
Motorcycle - Students	118	122	125	129	133	137	141	145	149	154	159
Accessible - Employees	28	29	30	31	32	32	33	34	35	37	38
Accessible - Students	174	179	185	190	196	202	208	214	220	227	234
Resident Hall Permits	779	802	826	851	877	903	930	958	987	1,016	1,047
Apartment Permits	419	432	445	458	472	486	500	515	531	547	563
Weekend - Employees	9	9	10	10	10	10	11	11	11	12	12
Weekend - Students	30	31	32	33	34	35	36	37	38	39	40
	10,382	10,693	11,014	11,345	11,685	12,036	12,397	12,769	13,152	13,546	13,953
1											
Permit Rates (for 1 academic year)	Increase =	-	3%	3%	50%	3%	50%	3%	3%	3%	3%
Reserved - Employees	\$130	\$210	\$216	\$223	\$334	\$344	\$516	\$532	\$548	\$564	\$581
Reserved - Students	110	120	124	127	191	197	295	304	313	322	332
General - Employees	60	125	129	133	199	205	307	317	326	336	346
General - Students	40	60	62	64	95	98	148	152	157	161	166
Motorcycle - Employees	40	50	52	53	80	82	123	127	130	134	138
Motorcycle - Students	20	40	41	42	64	66	98	101	104	107	111
Accessible - Employees	60	125	129	133	199	205	307	317	326	336	346
Accessible - Students	40	60	62	64	95	98	148	152	157	161	166
Resident Hall Permits	40	60	62	64	95	98	148	152	157	161	166
Apartment Permits	40	60	62	64	95	98	148	152	157	161	166
Weekend - Employees	18	30	31	32	48	49	74	76	78	81	83
Weekend - Students	12	30	31	32	48	49	74	76	78	81	83
Operating Revenues from Permit Sales	\$532,912	\$852,948	\$904,893	\$960,001	\$1,483,201	\$1,573,528	\$2,431,101	\$2,579,155	\$2,736,225	\$2,902,861	\$3,079,646
Other Operating Revenues:	Increase =	3%	3%	3%	50%	3%	50%	3%	3%	3%	3%
Administrative Lot	\$126,696	\$130,497	\$134,412	\$138,444	\$207,666	\$213,896	\$320,844	\$330,470	\$340,384	\$350,595	\$361,113
Event parking	170,207	\$175,313	\$180,573	\$185,990	\$278,985	\$287,354	\$431,031	\$443,962	\$457,281	\$471,000	\$485,130
Towing	1,945	\$2,003	\$2,063	\$2,125	\$3,188	\$3,284	\$4,926	\$5,073	\$5,225	\$5,382	\$5,544
P.S. #1	0	\$270,000	278,100	286,443	429,665	442,554	663,832	683,747	704,259	725,387	747,148
2 Meter revenues	96,980	\$193,960	\$199,779	\$205,772	\$308,658	\$317,918	\$476,877	\$491,183	\$505,919	\$521,096	\$536,729
Fines from parking violations	327,919	\$347,889	\$369,076	\$391,552	\$604,949	\$641,790	\$991,565	\$1,051,952	\$1,116,016	\$1,183,981	\$1,256,085
TOTAL OPERATING REVENUES	\$1,256,659	\$1,972,611	\$2,068,895	\$2,170,328	\$3,316,311	\$3,480,324	\$5,320,176	\$5,585,541	\$5,865,309	\$6,160,302	\$6,471,395
Operating Expenses	\$1,321,234	\$1,118,479	\$1,152,033	\$1,186,594	\$1,222,192	\$1,258,858	\$1,296,624	\$1,335,522	\$1,375,588	\$1,416,856	\$1,459,361
Number of Structured Parking Spaces	-	649	1,277	1,277	2,111	2,111	3,409	3,409	3,409	3,409	3,409
Operating Expenses, Structured Parking	-	172,131	348,853	359,319	611,807	630,161	1,048,160	1,079,605	1,111,993	1,145,353	1,179,713
3 TOTAL OPERATING EXPENSES	\$1,321,234	\$1,290,610	\$1,500,887	\$1,545,913	\$1,833,999	\$1,889,019	\$2,344,784	\$2,415,127	\$2,487,581	\$2,562,209	\$2,639,075
Net Operating Income, Parking System	\$ (64,575)	\$ 682,001	\$ 568,009	\$ 624,414	\$ 1,482,312	\$ 1,591,305	\$ 2,975,392	\$ 3,170,414	\$ 3,377,728	\$ 3,598,094	\$ 3,832,320
Debt Service, Parking Structures:											
4 P.S. #1 Expansion	-	-	(424,768)	(424,768)	(424,768)	(424,768)	(424,768)	(424,768)	(424,768)	(424,768)	(424,768)
5 P.S. #2	-	-	-	-	(707,947)	(707,947)	(707,947)	(707,947)	(707,947)	(707,947)	(707,947)
6 P.S. #3	-	-	-	-	-	-	(1,094,958)	(1,094,958)	(1,094,958)	(1,094,958)	(1,094,958)
Total Debt Service	-	-	(424,768)	(424,768)	(1,132,715)	(1,132,715)	(2,227,673)	(2,227,673)	(2,227,673)	(2,227,673)	(2,227,673)
Cash Flow, Parking System	\$ (64,575)	\$ 682,001	\$ (281,528)	\$ (225,122)	\$ (783,118)	\$ (674,125)	\$ (1,479,954)	\$ (1,284,932)	\$ (1,077,618)	\$ (857,252)	\$ (623,026)
Debt Coverage Ratio			1.34	1.47	1.31	1.40	1.34	1.42	1.52	1.62	1.72

Note:

- 1 Year 2001 permit rates represent the recommended parking rates.
- 2 Year 2000 parking meter revenues represent actual revenues collected based on rates of \$.50/hr. Year 2001 reflects forecasted revenues based on an increased meter rate of \$1.00/hr.
- 3 Year 2000 operating expenses represent data obtained from the Director of the Department of Campus Safety. Year 2000 includes special capital costs incurred on the Administration Lot and Sub Lot projects that totaled \$260,332.
- 4 In January 2002, P.S. #1 phase 2 will open.