ECONOMIC FEASIBILITY OF A MULTI-PURPOSE STADIUM FOR KING COUNTY AND SEATTLE, WASHINGTON

A Study for the

BOARD OF COUNTY COMMISSIONERS OF KING COUNTY AND THE MAYOR AND CITY COUNCIL OF SEATTLE, WASHINGTON

by

Western Management Consultants, Inc.

Phoenix

Los Angeles San Diego

New York San Francisco

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I. INTRODUCTION

The Board of Commissioners of King County has been asked to consider a bond-issue election to authorize construction of a 50,000 seat multi-purpose stadium to serve the Seattle Metropolitan Area and the Puget Sound Region. The proposed stadium would provide a site for major league professional sports and for other mass spectator events which, because of the lack of suitable facilities, are not now available to residents of the area.

The project assigned to Western Management Consultants, Inc. was to update and verify a detailed economic feasibility report prepared by Stanford Research Institute in 1960 with regard to the following specific objectives:

1. Review the Seattle Area's relative position among existing and potential major league cities.
2. Project operating performance of a stadium, including revenues and cost of operation for different types of tenants, i.e., professional football, major league baseball, minor league baseball, other potential users.
3. Develop recommendations regarding alternative operating policies concerning rental rates, concession contracts, etc.
4. Prepare an estimate of the nature and magnitude of the economic impact of a major league stadium on the Puget Sound's regional economy.
5. Estimate vehicular parking requirements for a centrally located stadium and for a suburban location.
6. Discuss the effect of the availability of major league activities on attendance at sports events in the community — primarily at the football games of the University of Washington.

The engineering and architectural aspects of the study were assigned to Praeger, Kavanaugh & Waterbury of New York City.

The aggregate benefits would, if suitable tenants become available, exceed the costs to residents in the relevant political jurisdictions.

Parking. In the event that the stadium were centrally located so that it could be served by rapid transit, it should be so situated that there would be parking within walking distance of the facility for 12,000 to 13,500 automobiles. A suburban location would require parking areas adequate to accommodate 15,000 to 17,000 automobiles if peak attendance requirements were to be met.

SUMMARY

Seattle's Ability to Support a Stadium. Stadium construction and operation in the current environment implies participation of taxing agencies to subsidize the project. The degree to which such subsidization is necessary is a residual of the level of market support that the local population provides. The Seattle Area's population and income are consistent with major league status, and the region has demonstrated its capability to support local sports events with a high level of interest and loyalty. Recent support of University of Washington football teams and previously of minor league baseball are indicative of the interest levels that can prevail.

Concern over the relationship between college football attendance and the presence of professional football may be warranted; but it is difficult to discover any statistical basis for projecting a major decline in attendance at college football as a result of the advent of professional football. Between 1950 and 1964, while professional football was experiencing phenomenal growth, total attendance at college football games increased by an even larger amount, indicating that the aggregate gains of professional football did not imply a decline in attendance at college games.

The economic base in the Puget Sound Area is not typical of the diversified industrial bases of some other areas; but the local economy has shown an excellent ability to weather adverse economic conditions and continue at an acceptable rate of growth. More favorable circumstances at present, suggest that the anticipation of a total Puget Sound Regional population of nearly 4 million by the year 2000 may be conservative.

Fiscal health of local government jurisdictions is excellent and several of these agencies are presently in sufficiently strong financial position to assume the burdens that a project of this size implies.

Mobility of existing franchises, the potential addition of from two to four or more new football franchises in the next five years, and the potential expansion of baseball to a total of 24 teams offer justification for anticipating that suitable tenants could be attracted to a stadium in the Seattle Area.

Operating Revenues and Costs. Stadium operating revenues depend on levels of attendance, expenditure rates and lease provisions. Attendance is determined by population and income levels, team standing and community interest. With attractive major league baseball and professional football teams, a local level of interest comparable to that currently prevailing in Minnesota, and adequate lease arrangements, the stadium could optimistically be expected to generate total annual income of approximately $880,000 in the third to fifth year of operation. Probably a gross income of $800,000 would be a realistic expectation. Less than optimum realization of any of the variables cited would naturally cause an erosion of income to lower levels. Data are provided in Chapter VII to permit estimations based on virtually any combination of attendance, tenants, lease rates, or concessions splits.

Several factors auger a high stadium revenue per capita attendance in this market. The local population, as in most West Coast sports markets, is affluent. Newer stadiums with excellent appointments stimulate a higher level of per capita expenditure. Stadium revenues per capita, even in older stadiums, appear to be rising over time. Commercial sports operations — particularly football — may be more amenable to favorable stadium leases because the high revenues which they are beginning to receive from television and radio income permits them to enjoy better profit prospects.

Annual cash operating requirements, excluding debt service, should run approximately $475,000 per year, assuming effective management and both major league baseball and professional football tenants. Under these tenant assumptions, gross income (as noted above) should be substantially in excess of cash flow requirements. But, if the tenant combination consisted of a professional football team (even though well supported) and a minor league baseball team, gross revenue to the stadium could fall to $275,000 per year. In this event, operating expenses could probably be reduced and some long-term improvements deferred. Nevertheless, it is doubtful that total cash needs for operating purposes could be reduced substantially; in fact, an operating subsidy of up to $100,000 per year might well be required if the stadium were not to be allowed to deteriorate. Of course,

if highly preferential leases, such as that accorded the Kansas City Chiefs, were to develop, the deficits could run to a maximum of $450,000 per year in addition to the debt service. In a market as good as the Seattle Area's, with a new stadium, and with the bargaining strength lent by the local television and radio potential, this is an unlikely eventuality.

Economic Impact. Construction and operation of a stadium implies a demand for goods and services which will stimulate local business activity. Up to one thousand part-time workers are required for a single sports event. The stadium, if in full operation, will employ a permanent staff, and the associated sports organizations will create local employment directly and through purchases of supplies, utilities, and the expenditures of their employees. Although many analysts classify these activities as sources of economic impact, a more conservative approach to the concept dictates that to a large extent, in a full employment economy like Seattle's, these effects represent primarily a redirection of existing demand. A less ambiguous concept of economic impact relates to the effects of a stadium on the regional economy's import/export balance with the rest of the United States and the world.

By several channels — visiting team expenditure, spending by out-of-town fans, television and radio revenue, etc. — the existence of a stadium will attract purchasing power from other parts of the United States into the Puget Sound economy. This, in effect, introduces new income flows or generators of demand which are net additions to local aggregate demand and do not imply a reduction in purchases from other local suppliers of goods and services as an alternative to spending for stadium activities. These estimated net primary income inflows could reach $6.5 million per year. Induced consumption and investment expenditure will multiply their impact on local purchasing power by about 3.5 times, providing the basis for an upper estimate of $20-$25 million of new demand generated annually by a stadium in full operation at levels anticipated for the third to fifth year of operation.

of sports interest. There are some with a lower index. This can be the result of the city's population having too few opportunities to demonstrate its interest in sports or else a general lack of interest. Buffalo, for example, which has a ratio of 1.6, has a large population of higher income families. Support for the Buffalo Bills is reported to be excellent — but impossible to measure because of the limited number of available event days per year and the physical limitation imposed by the stadium's size. In contrast, the Dallas-Fort Worth Standard Metropolitan Area, has a stadium of adequate size, but is among the communities with poorest attendance in the NFL. It also has a very low ratio.

A high ratio does not necessarily indicate that the teams are well supported. Support is determined by the interest level times the population base, divided by the number of available events over which this demand must be spread. Kansas City's population supports its teams well in terms of the population base; but that base would actually require a ratio of over 10.0 to provide the two sport attendance levels realized in Minneapolis.

Whether Tacoma is included or not in evaluating the Puget Sound spectator market, the local area ranks well in comparison with such areas as Cincinnati, Twin Cities, Buffalo, and Milwaukee. Among the major cities in this ranking by number of families with over $7,000 per year incomes (Exhibit IV-13), only Seattle, ranking well above the bottom, is without any form of major league sports activity. And only Seattle, Cincinnati, and Anaheim, among the top 23 areas, are without a professional football team. There are, indeed, no other metropolitan areas of comparable size which have no major league sports activity of any type.

Another comparison (Exhibit IV-12) in which the standard metropolitan statistical areas were ranked by the estimated population falling within a hundred mile radius of the center of the standard metropolitan statistical area relates to the broader available market included in the associated hinterland areas. In this tabulation Seattle has twice the population of Denver within a hundred mile radius and is roughly on a par with Miami and San Diego, both of which have available at least one major league sports activity.

Discounting the population increases which Boeing's expansion will occasion, Seattle appears to have the largest untapped population potential to support major league sports of any metropolitan area in the country. At present, the area appears well able to support at least one of the two types of activity that would be presented in a stadium. There is some evidence that by the time the impact of Boeing's expansion has occurred and by the

time the stadium could be constructed, the income and population levels in the Puget Sound area would be adequate (assuming a high level of sports interest) to support both a major league baseball team and professional football.

A high level of interest in sports by Puget Sound residents is demonstrated by support received by the University of Washington football team (see Exhibit IV-11). Although attendance at the games of the University of Southern California is nearly as great, no true comparison of the two can be made because of differences in the stadiums. The University of Washington Stadium is regularly sold out but only 58.8 per cent of the University of Southern California's aggregate home stadium capacity has been used in recent seasons. In the case of Oregon and Oregon State and to some extent Washington State, attendance seems also to be limited by the capacity of the stadium. If the same sort of loyalty which is exhibited in these cases could be focused on a professional football team, high levels of attendance could be forecasted with a considerable degree of confidence.

In polls taken in the area, residents have indicated strong interest in having a stadium and the sports activities that such a facility implies.

Total minor league baseball attendance in the area, though not at levels of several years ago, is still respectable as compared with other potential major league cities (see Exhibit IV-4).

Availability of Other Sports Activities. It has been suggested that the plethora of participation activities available to Puget Sound residents would make it difficult for professional sports activities to attract the type of support required. Availability of boating, hiking, hunting, skiing, climbing, etc., all the things which make this a desirable place to live, also contribute to the spectrum of activities which local residents have available and which are competitive with attendance at major league sports. Several arguments could be advanced relative to this relationship. Probably in the last analysis, success or failure of a bond election will provide the best answer. However, it does seem germane to suggest some of the considerations which may bear on these objections. The wide range of amenity resources alluded to above existed during the same years in which the Seattle residents were generating a very high level of support for the minor league baseball club and for the University of Washington football teams. It also should be recognized that in the Outdoor Recreation Resources Study of 1960 it was found that the West Coast population showed a

participation rate in spectator sports of 4.07 participant days per year per capita population as compared with the national average of 3.75 participant days per capita. The West Coast as a whole has greater outdoor recreation resources than the rest of the country, and, in 1960, had a relative shortage of major league sports activities available to it. Nonetheless through their support of minor league activities and their higher than typical support of the the then available major league activities, the western residents generated a higher participation rate per capita than people living in areas with lesser apparent inventories of alternative outdoor recreation activities available to them.

Review of long term consumer recreation expenditure patterns indicates that in the post war years expenditure for spectator sports admissions has grown about as fast as total consumer recreation spending and that increases in expenditure for participant recreation and the purchase of sports equipment have not been realized at the expense of declines in spectator sports expenditures. Seattle, because of a shortage of facilities, has not had an opportunity to demonstrate its capacity to support major league sports. Nonetheless, residents recently subscribed $700,000 worth of season tickets for an unknown baseball team to play in an unknown stadium.

In a study prepared for the Washington State Parks & Recreation Commission it has been estimated that in 1965 the statewide demand for outdoor spectator sports attendance would, if met, amount to almost 11 million occasions per year. This demand will increase by 150 per cent over the next twenty years to create an annual demand for more than 27 million occasions in which residents of the state would attend outdoor spectator sports. If major league sports could meet 10 per cent of the estimated demand for spectator sports attendance occasions in 1970, a major league baseball team could anticipate attendance of 1 million and a professional football team 4 million.

By the time that a stadium can be completed, i.e., by 1968 or 1969, the Puget Sound area's population and income potential will place it in the same range as the Twin Cities and Houston are at present. The area's isolation from most other population centers is both a benefit and a hinderance. No competitive facilities exist within 600 miles, suggesting that out-of-town support would gravitate from Portland, Vancouver, and the cities of eastern Washington and Oregon. On the other hand, the sparsely settled nature of the Northwest indicates that interest must be maintained at a high level if the area is to support

both football and baseball. There appears little question, but that the area has the population and income basis to support either football or baseball alone at the present time.

Although a specific market analysis which assumes a particular stadium site and requires a detailed census tract by census tract analysis is beyond the scope of this study, it is conservative to anticipate that if there were a facility available, the local area's business and residential populations would easily support a professional football team. Given the expansionary effects anticipated for the coming decade, the region will have a population and income base sufficient to support teams of both major professional sports by the time a stadium is completed and the initial attendance boom has worked itself out.

Variables such as team standings, whether the teams are expansion teams or franchise shifts, the leagues involved, etc., are difficult to anticipate in preparing attendance forecasts.

Aggregating these judgmental factors and the objective bases discussed above, the consultants consider attendance of 900,000 for baseball and 400,000 for football to be defensible estimates for the third to fifth year of operation (1971-1973) of a stadium in Seattle. Income projections for levels above and below these estimates are arrayed in Chapter VII.

EXHIBIT IV-5

MAJOR LEAGUE BASEBALL ATTENDANCE FIRST YEAR IN A NEW CITY
COMPARED WITH
MINOR LEAGUE ATTENDANCE IN THE SAME CITY THE PREVIOUS YEAR

City	Year	Attendance	Increase	
			Number	Per Cent
Milwaukee	1952 (Minor)	195,839		
	1953 (Braves)	1,826,397	1,630,558	833
Baltimore	1953 (Minor)	207,182		
	1954 (Orioles)	1,069,910	853,728	412
Kansas City	1954 (Minor)	141,905		
	1955 (Athletics)	1,393,054	1,251,149	882
Los Angeles	1957 (Minor)	220,547		
	1958 (Dodgers)	1,845,556	1,625,009	737
San Francisco	1957 (Minor)	284,532		
	1958 (Giants)	1,272,625	988,093	347
Minneapolis/St. Paul	(Minor-			
	1960 2 teams)	235,628		
	1961 (Twins)	1,256,722	1,021,094	433
Houston	1961 (Minor)	120,104		
	1962 (Colt 45's- now Astros)	924,456	804,352	670

Sources. Report of Harris County Board of Park Commissioners, 1958; Encyclopedia of Baseball; American League, Baseball Highlights.

EXHIBIT IV-6

TEAM ATTENDANCE COMPARISON BEFORE AND AFTER FRANCHISE SHIFT
SINGLE YEAR BEFORE AND AFTER MOVE

Moved From			To			Increase	
						Number	Per Cent
Boston	(1952)	281,278	Milwaukee	(1953)	1,826,397	1,545,119	549
St. Louis	(1953)	297,238	Baltimore	(1954)	1,060,910	763,672	257
Philadelphia	(1954)	304,666	Kansas City	(1955)	1,393,054	1,088,388	357
Brooklyn	(1957)	1,028,256	Los Angeles	(1958)	1,845,556	817,300	79
New York	(1957)	652,923	San Francisco	(1958)	1,272,625	619,702	95

EXHIBIT IV-7

AVERAGE ANNUAL ATTENDANCE COMPARISON,
THREE YEARS BEFORE AND AFTER MOVE

Before		After		Increase	
				Number	Per Cent
Boston	571,048	Milwaukee	1,987,874	1,416,826	248
St. Louis	369,941	Baltimore	938,083	568,142	154
Philadelphia	431,293	Kansas City	1,103,125	671,832	156
Brooklyn	1,091,802	Los Angeles	2,056,829	965,027	88
New York	702,071	San Francisco	1,496,704	794,633	113

Sources. American League and National League data.

EXHIBIT IV-8

STADIUM REVENUE PER CAPITA — ALL EVENTS —
MILWAUKEE COUNTY STADIUM AND BALTIMORE MEMORIAL STADIUM
1954-1964

Year	Milwaukee County	Baltimore
1954	$0.189	$0.153
1955	.190	.175
1956	.206	.169
1957	.195	.145
1958	.304	.189
1959	.331	.252
1960	.350	.318
1961	.378	.304
1962	.420	.345
1963	.357	.382
1964	.332	.335

Sources. Milwaukee County Information and Statistics and City of Baltimore, Annual Report of the Department of Recreation and Parks.

EXHIBIT IV-12

STANDARD METROPOLITAN STATISTICAL AREAS RANKED BY ESTIMATED POPULATION WITHIN 100 MILE RADIUS

Standard Metropolitan Statistical Area	Estimated Population Within 100 Mile Radius	Major League Teams Within 100 Miles				
		Total	Baseball		Football	
			AL	NL	AFL	NFL
New York	18,118,000	6	1	2	1	2
Philadelphia	11,301,000	6	1	2	1	2
Chicago	10,494,700	5	1	2	0	2
Milwaukee	9,893,200	5	1	2	0	2
Los Angeles	9,402,300	3	1	1	0	1
Anaheim	9,167,100	4	1	1	1	1
Cleveland	8,742,600	4	1	1	0	2
Detroit	8,742,100	4	2	0	0	2
Boston	7,258,100	2	1	0	1	0
Baltimore	6,831,100	4	2	0	0	2
Cincinnati	6,782,100	1	0	1	0	0
Pittsburgh	6,259,000	2	0	1	0	1
Washington, D.C.	5,822,100	4	2	0	0	2
Oakland/San Francisco	5,757,100	3	0	1	1	1
Indianapolis	4,861,800	1	0	1	0	0
St. Louis	3,364,500	2	0	1	0	1
Buffalo	3,062,700	1	0	0	1	0
Louisville	2,966,000	1	0	1	0	0
Minneapolis/St. Paul	2,826,700	2	1	0	0	1
Dallas/Ft. Worth	2,757,400	1	0	0	0	1
Atlanta	2,608,100	2	0	1	0	1
Houston	2,438,800	2	0	1	1	0
San Diego	2,331,200	2	1	0	1	0
Seattle	2,091,900	0	0	0	0	0
Miami	1,926,400	1	0	0	1	0
New Orleans	1,544,000	0	0	0	0	0
Portland	1,464,500	0	0	0	0	0
Kansas City	1,310,600	2	1	0	1	0
Green Bay	1,299,100	1	0	0	0	1
Denver	1,106,500	1	0	0	1	0

Note: Some discrepancies may exist because of differences in the selection of the center for the radii being used, differences in data available, and differences arising from estimates employed. Franchises being moved were counted in both places. Green Bay was included with Milwaukee.

Source. Survey of Buying Power, 1965. Estimates by Western Management Consultants, Inc.

EXHIBIT IV-14

RECENT MAJOR LEAGUE BASEBALL
ATTENDANCE FIGURES BY CITY

(in thousands)

City	1962	1963	1964	1965
NATIONAL LEAGUE				
Los Angeles	2,775	2,539	2,229	2,554
Houston	924	720	726	2,151*
New York City	922	1,080	1,733*	1,768
San Francisco	1,593	1,571	1,504	1,546
St. Louis	954	1,171	1,143	1,241
Philadelphia	762	907	1,426	1,162
Cincinnati	982	859	862	1,048
Pittsburgh	1,091	784	759	909
Chicago	610	980	752	641
Milwaukee	767	773	911	556
Total	11,380	11,384	12,045	13,576
AMERICAN LEAGUE				
Minneapolis/St. Paul	1,433	1,407	1,208	1,463
New York	1,494	1,309	1,306	1,213
Chicago	1,132	1,159	1,250	1,130
Detroit	1,208	822	816	1,030
Cleveland	716	563	653	935
Baltimore	790	774	1,116	782
Boston	733	943	883	652
Los Angeles	1,144	821	760	567
Washington, D.C.	730	536	600	560
Kansas City	636	762	642	528
Total	10,016	9,096	9,234	8,860

* First year in new stadium.

Source. World Almanac.

EXHIBIT VI-5

SEATING CAPACITY AND THEORETICAL MAXIMUM REVENUE
AMERICAN LEAGUE AND NATIONAL LEAGUE STADIUMS*

City	Total No. Seats	Weighted Average Seat Price	Theoretical Max. Rev. at Sell-out	Rank of Max. Rev. at Sell-out	Rank by Weighted Average Seat Price
AMERICAN LEAGUE					
Baltimore	48,336	$1.92	$ 92,805	10	14
Boston	33,357	2.13	71,050	15	8
Chicago	46,550	2.00	93,100	8	13
Cleveland	73,811	1.92	141,717	3	14
Detroit	53,350	1.76	93,896	6	15
Kansas City	32,561	2.29	74,565	13	5
Los Angeles	56,000	2.69	150,640	1	1
Minneapolis	39,525	2.35	92,884	9	4
New York	67,338	2.12	142,757	2	9
Washington, D.C.	45,015	2.04	91,831	11	10
NATIONAL LEAGUE					
Chicago	36,755	2.02	74,245	14	11
Cincinnati	30,274	2.13	64,484	18	8
Houston	32,221	2.59	83,452	12	2
Los Angeles	56,000	2.69	150,640	1	1
Milwaukee	43,827	2.25	98,611	5	6
New York	55,131	1.69	93,171	7	16
Philadelphia	33,608	1.92	64,527	17	14
Pittsburgh	35,000	2.01	70,350	16	12
St. Louis	27,838	2.17	60,548	19	7
San Francisco	42,553	2.56	108,810	4	3

* Based on stadiums in use, 1971.

Source: Calculated from data available in Exhibits VI-3 & 4. "Sell-out" revenue based on weighted average seat price rounded to whole cents.

VII. REVENUE PROJECTIONS

MAJOR LEAGUE SPORTS

The major source of most stadium income is the share received of three types of spectator expenditures: ticket purchases, concession expenditure, and parking fees. Other elements do contribute to stadium income; but many of these sources are closely related to the stadium's prime use as a site for major league sports, i.e., scoreboard advertising, stadium club, office rental. Projection of the income flows represented by operation of a stadium involves consideration of a number of somewhat irregular variables. Primary factors are the volume of spectators that will actually patronize the stadium during the year and their expenditure patterns. Expenditure is dependent on several determinants including the socio-economic characteristics of the spectators and in the nature of the stadium itself.

The pattern of stadium revenue per capita attendance has shown a fairly strong upward trend over the last ten years, (Exhibit IV-8) reflecting increased levels of expenditure by spectators. A new facility, catering to an interested and affluent market, would probably have exhibited higher revenue per capita than these two examples given in Exhibit IV-8. These data are of interest primarily as a demonstration of tendencies for stadium income per capita to rise.

One determinant of the expenditure per spectator is the quality of the product offered. There is wide diversity in the weighted average ticket prices for stadiums in the United States, particularly as regards baseball, (see Exhibit VI-5). These variations reflect differences in seating quality and differences of management opinion regarding the effect of ticket prices on attendance. Stadium operators comment on the need for excellence in seating and in the concession operation, both of which help stimulate a high level of spectator expenditure.

Prices range over a spread of 200 to 300 per cent for many of the concession purchases associated with attendance at a stadium event; but there is little evidence to suggest that lower prices tend to generate increased patronage. Demand appears to be somewhat

inelastic over the relevant price range. A third variable, in addition to the volume of spectators and their rates of expenditure, is the contractural arrangements by which the income from stadium operations is shared among the tenants, concessionaires, and the agency which controls the facility.

Ticket Sales. The type of contractural arrangements for distribution of income between the stadium and the other participants in its operation, is in large part a product of the relative bargaining strengths of the parties involved. Lease rates range from lows of one dollar per year, charged in Kansas City to the Kansas City Chiefs, to highs of 15 per cent of ticket sales reportedly charged by the new stadium in Washington D.C. Attempts to generalize about the lease arrangements also involve interpretation of the bases to which the percentage leases are applied. The term "gross ticket sales" may either include or exclude taxes, visiting teams' share, and the league's share. These distinctions make significant differences in the actual absolute amount of revenue generated for the stadium.

Some lease contracts embody sliding rates at different levels of attendance. On the basis of the available data, adjusted by judgments about the nature of lease contracts which could be negotiated with potential tenants of the Seattle stadium, it is possible to project per capita stadium rental income of $0.12 for baseball and $0.30 for football. These represent per capita levels somewhat lower than what may actually be the relevant range of negotiations for a new stadium, but are higher than rates currently being realized in many older facilities. Rental figures in Exhibits VII-1 & 2 are based on projections of the revenue per paid attendance, regardless of whether the event is a league game or an exhibition.

It is suggested that affluence of the Seattle population, the area's isolation from competition, and the effect of a well scaled new stadium in producing higher than average ticket prices will partly offset the bargaining disadvantage implied by the existence of other stadiums for which tenants are being sought (such as Oakland and San Diego in the case of major league baseball) and permit a Seattle stadium to attract suitable tenants without having to make overly severe contractual concessions.

Concession Income. Stadium revenue per capita from food and beverage operations in a stadium is determined by the volume of expenditure per capita and the contractual arrangement for sharing the gross food and beverage income. There is substantial variation in the estimates of the per capita gross expenditure that can be anticipated. Knowledgeable estimates

for expenditure in Seattle range from $0.50 per capita for football spectators, assuming no beer is available and assuming limited concession stands, to well over $1.00 per capita for baseball games where beer is available and the games are played during warm summer afternoons. The stadium share of gross food and beverage income can range from 15 to 45 per cent of gross receipts depending on the composition of the sales volume, the lease terms, and other variables. Concession sales which have a high proportionate volume of alcoholic beverages produce higher incomes for the stadium. A stadium club or other facility of this type can be a significant source of stadium income through its appeal to an affluent segment of the market. The stadium's share of concession income is quite often split with one or more of the tenants. Because of variations in the division of this income, stadium share of the gross concession revenue, net after payments if any, to the ball clubs, ranges from 30 down to 7.5 per cent of total food and beverage sales.

The projections in Exhibits VII-1 & 2 assume concession expenditure of $0.75 per capita for major league football and $0.80 per capita for baseball, and are, it is believed, conservative estimates of the gross expenditure pattern. It was assumed that the stadium will receive 15 per cent of gross concession revenue for major league baseball (i.e., half of the revenue available after the concessionaire receives 70 per cent for operating the concession) and 30 per cent of the gross food and beverage sales for football games, with no share to the football team. On a per spectator basis this is equivalent to $0.12 per spectator for baseball fans and $0.225 per spectator for football. These sources of revenue too, may be subject to downward adjustment as a result of difficult lease negotiations.

Parking Income. Low parking rates charged at the University of Washington Stadium ($0.50 per car) and at Seattle Center ($0.75 per car) may make it difficult to impose a $1.00 per car parking charge at a multi-purpose stadium. The range of typical parking rates at multi-purpose stadiums is very broad, from $0.25 per auto in some localities to as high as $2.00 in others. Most West Coast facilities charge $1.00 per car; and some private parking lots (in the vicinity of Los Angeles Colesium, for instance) charge as high as $4.00 per car for parking during football games. There is substantial evidence that the West Coast sports spectator represents an affluent segment of the population and that pricing is a matter of relative indifference to him when he attends major league sports events. On the basis of this assumption, it is felt that few, if any, potential spectators would be deterred significantly by a parking fee of $1.00 per car. This rate has been the basis for the income projections given in Exhibits VII-1 & 2. If it is assumed that a parking

rate of $1.00 per car prevails and that 20 per cent of the total spectators arrive by chartered buses which are parked at a rate of $4.00 per bus and carry an average of 30 persons each per bus, then the net parking revenue to the stadium would amount to $0.2345 per paid attendance. Being unable at present to determine the probable location of the stadium and, therefore, unable to evaluate the percentage of spectators which will arrive by bus, rapid transit, or by other means, a range of estimates is given for parking revenue. The high figure is based on a parking revenue rate of about $0.26 per spectator and the low on a rate of $0.20 per spectator. The high estimate assumes three persons per car, and low, one auto for every four spectators. Both projections assume an 80 per cent contract with the parking concessionaire, and that the entire parking revenue will accrue to the stadium with no shares being granted to tenants.

REVENUE FROM OTHER SPORTS

In addition to major league football and baseball, which for most multi-purpose stadiums are the largest contributors of revenue, other sports events may be held in such facilities. Most significant of these potential uses would be college football and professional boxing. Secondary activities of this nature are not expected, however, to comprise a major source of revenue because of the availability of alternative facilities in the Seattle area able to accommodate most events of this type.

Non-Professional Football. High school and college football teams are not expected to be significant users of the new stadium. The University team will have a stadium which is currently larger than the proposed multi-purpose stadium, and which will have even greater capacity when the anticipated remodeling is completed. Little advantage would accrue to the University by playing its games in the proposed multi-purpose stadium unless this were a domed structure to which access could be a benefit for games played at certain times of the year.

High school football games will seldom draw a total attendance in excess of 12,000 to 13,000 people and can generally be played, therefore, in the existing football stadium at Seattle Center.

Non-Sport Events. Rallies, fireworks and other mass spectator activities may be held in the stadium, and provide a source of revenue. Religious rallies, such as those conducted by Billy Graham, account for significant amounts of spectator days in multi-purpose facilities. Generally, however, relatively minor non-sports income can be

anticipated because of the availability of other facilities which will compete effectively for all but the very largest of the events that might be considered for the stadium.

NON-EVENT REVENUES

Visual attention is directed toward the scoreboard in stadiums to such an extent that advertising adjacent to it receives excellent exposure to the buying public. Advertisers often pay premium prices for the privilege of exclusive access to the scoreboards. The Anaheim Stadium scoreboard, which is reported to have cost nearly one million dollars, was provided by a major oil company in return for exclusive advertising privileges during the next ten years. After ten years, the stadium will receive 85 per cent of gross scoreboard advertising revenue. This will probably produce income to the stadium of about $100,000 per year. It would, in most cases, seem desirable for public agencies that are constructing stadiums to plan to own the scoreboard rather than to permit it to be constructed on a lease sale arrangement. The basis for this recommendation lies in the public agencies' ability to borrow money at rates of 1.5 to 2 per cent lower than those paid by private advertiser's for term loans. Merely by exploiting the federal tax exempt feature of its bonds, a public agency operating a stadium can generate $15,000 to $20,000 more income per year from a scoreboard costing a million dollars, than could a private institution which by necessity pays a higher rate of interest for its borrowed funds.

Most modern, multi-purpose stadiums are constructed with provision for a stadium club or restaurant. These facilities serve as a focal point for local business and society leaders, stimulating a higher level of support, and attaching a certain status to attendance at stadium events. Space rent from this source and from renting offices to other tenants may amount to as much as $30,000 a year of rental income.

SUMMARY

Integration of the estimates given earlier in this chapter for attendance and spectator expenditures together with the assumptions made regarding contractual arrangements, indicates that the total gross revenue for the proposed multi-purpose sports stadium in King County will depend primarily upon: whether or not the stadium has major league tenants in both baseball and football; and, the degree of support accorded these teams at the box office (see Exhibit VII-5). If both major league baseball and football clubs are obtained as tenants, and the fans strongly support these teams, total gross revenue from all sources could approximate $880,000 by the fourth year of operation, assuming adequate lease arrangements.

The new Washington D. C. Stadium with poor attendance reported total operating income for the 1963 and 1964 seasons of $637,000 and $685,000. Shea Stadium, with excellent attendance, reports yearly income above $1.3 million. In the event that a major league baseball franchise for Seattle does not materialize, it is conceivable that the minor league baseball team might play in the new stadium. The economics of minor league baseball, however, suggest that $20,000 per year is the maximum rental which could be paid for use of the stadium by a minor league club in Seattle. The alternative to this, of course, is for the minor league ball club to continue to play in Sicks' Stadium which is also subsidized, creating a situation in which somewhat redundant facilities would exist side by side, both subsidized by a public agency or agencies.

IX. ECONOMIC IMPACT RESULTING FROM STADIUM OPERATIONS

INTRODUCTION

One reason that most new stadiums are directly or indirectly subsidized by public agencies is that, in the present cost and market matrix, stadiums are unable to operate profitably and also service the substantial debt that their construction entails. Increased architectural sophistication, costly design requirements to achieve multi-purpose utilization, rising costs of land and construction, and the demands of more sophisticated fans for high quality facilities, have in recent years, escalated the cost of multi-purpose stadiums. Although per capita stadium revenues from baseball and football operations have climbed faster than the consumer price indexes most tenants have been limited in their capacity to pay high rentals. Football has only recently become a profitable operation for most franchises; and baseball, in the aggregate is a somewhat unprofitable business. Further, existence of stadiums without major tenants weakens the bargaining power of all new stadiums. The concatenation of these forces makes it more and more difficult for stadiums to show a profit or break even in terms of conventional profit and loss analysis. As a result, virtually all new stadiums are constructed under public or quasi-public ownership and are subsidized.

Involvement of the public in financing the construction and operation of stadiums requires assessment of the benefits which may accrue to residents of the political jurisdictions which underwrite such projects. In the course of recent years, numerous attempts to evaluate the economic impact of a stadium on a community have been made. "Economic impact" is at best an ambiguous concept. It involves a wide range of assumptions and often requires the use of somewhat fragmentary data to arrive at estimates which are only rough approximations of the total economic effect of a stadium on a community.

QUANTIFIABLE ECONOMIC IMPACT

The construction of a stadium would stimulate demand for labor and materials which would have an aggregate impact on the local economy of some multiple of the initial construction costs — probably 2 to 2.5 times these costs. The impact from construction alone is not,

however, as significant as the longer term realignment of income flow which will be stimulated by the stadium's operation. It is the long term benefits to the community's economic base that provide the strongest economic reasons for considering a project of this magnitude. The definable effects on long term economic relationship are derived principally from two sources: the business operations of the professional sports teams and the new income generated by out-of-town spectators who would attend sports events at the stadium. Both of these elements stimulate income flows into the local economy which are analogous to those created by manufacturing firms, more traditional types of tourism, federal government expenditures, and other sources of inter-regional income flows.

Business Activities of Commercial Sports Organizations. A major league professional baseball team has, on the average, annual gross receipts of about $3.5 million. In 1963, according to one estimate, the 20 U.S. major league professional baseball teams had aggregate revenues of $68.5 million and aggregate expenditures of $70 million. A typical professional football team has annual income of about $3.5 to $4.0 million. Only recently, primarily since the advent of significant TV revenues, has football become a profitable enterprise for many franchise owners.

Not all the gross income generated by either football or baseball represents a beneficial economic impact on the community. To the extent that the local teams depend for income on the local market, their activities represent a redistribution of local income flows. Consumers, by electing to attend sports activities, either reduce the amount of their income that they spend with other businesses or else they reduce the amount they save. Although sports activities stimulate spending, they do so only in some cases at a loss to other activities within the local economy. There are, however, several mechanisms by which the services of major league sports enterprises are sold to residents of other communities. One of the most important of these is television and radio rights. National sponsors are often either directly or indirectly the source of television and radio income for professional sports. These payments for radio and television rights represent a flow of income from the rest of the economy into the particular region where the sports business is headquartered. Income inflows created by the shares a visiting team receives for playing in other cities is another channel through which inter-regional income flows are facilitated. Usually, however, unless there is some differential rate

of attendance at home games versus away games, these inflows are offset by the visiting team shares which the local teams must pay. The Dallas Cowboys probably generate a net inflow from this source because of their poor home game attendance relative to attendance at away games.

Another source of income flow into the community is the expenditure of visiting teams, officials, and the press who come from other regions to attend games in the local community. Again, these are largely offset by comparable expenditures created when local teams play in other cities. Therefore, these income flows can be considered as trade-offs in most attempts to evaluate the income generating effects of a major league sports team.

Major league sports also create a potential source of out flows beyond "offset" cases described above. Employees of the sports teams depend to a large extent for their salaries on the ticket purchases made by local residents. If these employees reside in other parts of the country during the off season, that part of their income which is spent in their home towns represents a transfer of funds from the local economy to the income flows of the communities in which the athletes and coaches live. Also, maintenance of training camps in communities other than the one in which the team's franchise is located represents potential out flows as do the league expenditures, purchase of materials and supplies from other communities, etc. Payments on the stadium debt could, if the region were a net exporter of capital, contribute to a negative impact. Most growing areas, however, face little risk that debt repayments will permanently leave the local economy. On balance, however, largely because of the revenue from sales of television rights, a professional sports team will generate a net inflow of funds to a local community. Estimates of these flow are included in Exhibit VII-1.

Income Resulting from Out-of-town Spectators. Typically, major league cities have been focal points for visitors from areas in which major league sports are not available. Persons attending conventions, business travelers, sports fans from the hinterlands, and others quite often make provisions in their travel plans to attend sports events either as part of another trip or as the basic reason for a trip to a major league city.

Estimation of the volume and impact of such expenditure requires preparation of several subordinate estimates. The first of these is an estimate of the number of out-of-town spectators who will attend sports events at a major league stadium. Estimates

for out-of-town attendance at existing stadiums range from ten per cent to fifty per cent of total attendance. A recent license plate study in Minnesota indicated that about 33 per cent of the attendance at Twins' baseball games was from beyond the metropolitan area. It has been claimed that 40 to 50 per cent of the attendance at major league sports in Kansas City is by fans who live more than 50 miles away from the stadium, with many spectators coming as far as 150 miles.

Up to 40 per cent of attendance at San Francisco Giants' games is reportedly from out of town. A rather rigorous year-long study conducted in Baltimore in the mid 1950's found 26.1 per cent of Orioles' attendance was from areas more than 45 minutes driving time from the stadium. A study in Milwaukee found more than 50 per cent of the attendance to be from outside the city; with 25 per cent of total attendance coming more than 50 miles.

Similar reports claim that 50 per cent of the attendance at major league sports in Houston and Dallas is composed of out-of-town fans.

Estimation of the volume of out-of-town attendance at a specific stadium is based on evaluation of a number of factors. Among these are the extent and density of the hinterland population within reasonable travel time of the stadium and the degree to which this population identifies itself with the city in which the stadium is located. Seattle, although not blessed with as densely populated a hinterland as some metropolitan centers (see Exhibit IV-13) has exclusive access to the sport markets in the hinterland which it serves. Other factors which influence the out-of-town attendance rate are Sunday versus night time games, availability of transportation, and a broad spectrum of undefinable subjective elements. For purposes of estimating economic impact of a stadium in Seattle, in the third to fifth year of operation, the consultants have employed an out-of-town attendance projection of 200,000 per year for baseball and 70,000 for football. These estimates of out-of-town support represent approximately 18 per cent of the combined out-of-town and local attendance projected for football, and 22 per cent of this combined total for baseball during third year of operation (see last section of Chapter IV for these combined projections of out-of-town and local attendance).

Another assumption underlies the economic impact of out-of-town fans. It concerns their expenditures at the stadium and elsewhere in the stadium city. Stadium expenditures

can be estimated on the same basis as that employed for the stadium income projections in Chapter VII. Somewhat higher than average levels of stadium expenditure can be expected from out-of-town fans. These visitors probably represent a more affluent segment of the population and because of the travel obstacles involved they attend infrequently. They are, therefore, able to spend more on each visit.

Besides the purchasing power injected into the local economy by their stadium expenditures, out-of-town fans also spend in restaurants, hotels, stores, etc. For purposes of estimating the economic impact of such purchases it was assumed that each out-of-town spectator at a major league sporting event would make non-stadium expenditures totaling $15. These conservative projections assume that only 50 per cent of the out-of-town residents who attend a sporting event live sufficiently far away to justify an over night stay. Assuming that an over night visitor spends $30 to $32 a day in Seattle, it appears conservative to project expenditure at a rate of $15 per out-of-town fan per attendance at sporting events. Such a projection assigns only one day's non-stadium expenditure for half the out-of-town fans. It assumes that longer stays are the result of a desire to do other things in the city and that the stadium itself cannot, therefore, be given credit for the decision to remain in the city for longer than the one day associated with attendance at the event. It is further assumed, in order to be conservative, that the out-of-town fans who do not stay overnight spend nothing in the area beyond the expenditures they make at the stadium. Nearly all visitors would, in fact, probably make fuel or restuarant purchases.

Multiplier Effect. The primary income flows from outside the local economic structure have a multiple effect on aggregate demand levels in the regional economy. Basic income multipliers for a regional economy are difficult to define and tend to be highly variable depending on such elements as local patterns of consumption, propensities to consume, local levels of investment, the self sufficiency of the local economy, the size of the local economy, and a host of other factors about which there is scant reliable data.

The bulk of autonomous income flows generated by a stadium would have their initial impact on local service industries such as the lodging business and on retail trade such as eating and drinking places. Because of the nature of these businesses the new income could be expected to produce a total increase of demand 3.5 to 4 times the amount of the initial outside expenditure, after respending cycles had fully run their course.

Another approach to the economic impact of sports is to evaluate the concentration of sports activities within the entire U.S. economy. In 1963, commercial sports activities including baseball, football, racetrack operations, dog racing, horse racing, and automobile racing generated total receipts in the entire U.S. economy of approximately $750 to $800 million — roughly $4 per capita. Organizations located in large cities received the bulk of this income. New York City commercial sports firms received a total of $168 million. Seattle firms received somewhat less than $4 million. The per capita income affect in New York City was in excess of $15. In Seattle it was approximately $3.15. Major league sports can be a form of basic income to those cities which have the ability to attract and support such businesses. In Los Angeles race tracks and commercial sports activities had receipts of nearly $60 million in 1963, representing a source of business income in the Los Angeles economy equivalent to about $8.50 per capita of population. Many cities have no commercial sports industry and to the extent that their residents purchase the services that commercial sports represent, these cities experience an outflow of income to other areas.

NON-QUANTIFIABLE ECONOMIC IMPACT

Publicity. Construction of a stadium and the presence of major league sports activities within a city generate the means for broad and continuing publicity exposure of major league cities. There are approximately 1750 daily U.S. newspapers with aggregate net paid circulation of over 60 million. Most papers carry mention of baseball teams on each of the approximately 160 baseball dates each year, and make some reference to the 14 league games and 3 or 4 exhibition games played by each professional football team every year. In addition, there is vast exposure of the community through national television and radio.

New Construction. Some new construction can be expected as a result of the changes in the local economy occasioned by the introduction of major league sports. It is estimated that personnel with major league teams in Minnesota spent over $500,000 to purchase homes in the area. Hotel and restaurant construction are also stimulated by the affect of out-of-town attendance at the sporting events. One observer estimated that over $100 million in new construction resulted from the Twins moving to Minnesota.

Public Service. Sports leaders who reside in and take an interest in the local community provide an intangible benefit in their activities as fund raisers for charity. In 1963, major league baseball teams gave away tickets valued at over $4.5 million to youths, ladies day groups, clergymen, servicemen, senior citizens, etc. Local sports teams also represent part of the business community and as such they make direct contributions to local charities.

Amenity Effects. Another intangible benefit lies in the very existence of the facility. Residents of a community which has no major league sports facilities have a restricted opportunity to be sports spectators. Certainly the more affluent residents of the Seattle Metropolitan Area are not absolutely prohibited from attending major league sports. They become the "out-of-town fans" for major league sports activities in cities such as San Francisco, Los Angeles, Minneapolis, and Denver. Their visits contribute to the economic base of these major league cities, and transfer locally generated purchasing power to other economies. It is suggested that by reducing the income outflows created by local residents journeying to other cities to attend major league sports, a stadium would have a passive basic income affect. A much more important facet of the problem, is that in spite of jet travel, etc., attending games in San Francisco is beyond the capacity of most local people of medium income. By making major league sports available to local residents, a stadium would improve the local spectrum of amenity resources thereby improving the area's attractiveness to industry and expanding the range of activities reasonably available to local residents. For a sports fan, existence of major league sports activities in the local community might be said to be a benefit analogous to the recreation resources of other types — parks, lakes, tennis courts, camping areas, — in which the area abounds.

Certainly if even the most optimistic economic impact estimates could be realized, all citizens will not benefit equally. There are some who may actually suffer a net loss in income as the result of construction of a stadium in the Seattle area. Those local residents associated with minor league baseball, for instance, will to some extent suffer a negative economic impact if they are displaced by a major league team. And although all tax payers will probably participate to some extent in the cost of subsidizing a facility of this type, many because of their occupations or the nature of their business interests, may not be in a position to receive any significant amount of the increased local spending

which such a facility will generate. To them, the merit of a stadium must be based largely on its contribution to their standard of living in terms of broadening the local amenity resource base. It would then be viewed much as would a park or similar facility.

II. CONCLUSIONS AND SUMMARY

CONCLUSIONS

Major League Potential. The Seattle Area is unique among larger urban centers in the United States for having neither major league baseball nor professional football. Its population and income levels, the improved team travel situation implied by jet transportation, and the existence of other West Coast sports franchises have removed most economic limitations that might prevent the area from realizing its major league potential. The relatively untapped local television and radio revenue potentials, as well as local population and industrial growth prospects enhance the attractiveness of the Seattle Area as a market capable at present of supporting professional football. Income and population projections indicate the likelihood that the area could support both professional football and major league baseball within five to seven years — the earliest that a stadium could be expected to reach a "normal" level of operation.

Revenue Outlook. It is doubtful that any 50,000 seat multi-purpose stadium completed at current construction costs could generate sufficient revenue to cover all costs of operations and fully service the requisite debt load. A multi-purpose stadium in Seattle could, however, reasonably be expected to cover its direct operating costs and make a $200,000 to $400,000 yearly contribution to debt service, assuming both major league baseball and professional football tenants were available and the teams were adequately supported by the local market. If professional football and an AAA baseball team were to be the stadium's major tenants, the facility's income would be substantially lower. It would not fully cover all operating and improvement costs. An annual operating subsidy of $50,000 to $150,000 would be required in addition to assumption by the public of the full debt service.

Economic Impact. Depending on the degree of stadium utilization, economic impact in terms of increased local income generated by its operation could range from a negative quantity to well over $20 million annually. In addition, intangible community benefits from publicity, expansion of the local recreation base, and the pleasure derived from attending stadium events, are compelling reasons to consider favorably such a project.