



Impact of the Baltimore Ravens Pro Football Team on the Maryland Economy

1999 Update



Impact of the Baltimore Ravens Pro Football Team on the Maryland Economy

1999 Update

Massoud Ahmadi, Ph.D.
Roger Fujihara

Principal Investigators

October 1999

Office of Business and Economic Research
Pradeep Ganguly, Director
Division of Business Development
217 E. Redwood Street • Baltimore, Maryland 21202
Telephone: (410) 767-6398



Impact of the Baltimore Ravens Pro Football Team on the Maryland Economy 1999 Update

Executive Summary

In January 1998, the Office of Business and Economic Research released a report entitled, "The Impact of the Baltimore Ravens Pro Football Team on the Economy of Maryland: 1998 Update". The study projected that, for the 1998 season, the Ravens would generate a total of \$184 million in overall expenditures, \$86 million in total personal income, 2,730 full-time equivalent jobs, and about \$11.3 million in selected state and local tax receipts. The 1998 update was based on data and surveys compiled when the Baltimore Ravens played at the Baltimore Memorial stadium

The current report provides an update to the previous analysis using more recent data for the 1998 football season, but applying the same methodology to estimate the economic and fiscal impacts. In particular, assumptions and various estimates from the previous study were revised based on actual fan attendance, fan expenditures, expenditures by the visiting football teams, Baltimore Ravens expenditures in Maryland, and expenditures associated with other special events. Similar to the last update, the annual economic and fiscal impacts of the Baltimore Ravens are based largely on the team expenditures in the community, local and out-of-area fans, visiting football teams, electronic media/press, and special event performers. However, unlike the previous study, this report does not include the economic and fiscal impacts from the stadium construction.

Based on the revised information, the various activities associated with the Ravens Pro Football Team and other events held at the PSINet stadium yielded an estimated total of \$202 million in gross expenditures, \$96 million in total personal income, 2,772 full-time equivalent jobs, and \$11.6 million in selected state receipts from taxes and miscellaneous revenues for the Maryland Stadium Authority, and local tax revenues.

Impact of the Baltimore Ravens Pro Football Team on the Maryland Economy 1999 Update

Introduction

This study updates a similar report conducted in 1998 by the Office of Business and Economic Research and provides estimates of the economic and fiscal impacts of the Baltimore Ravens' pro football team on the economy of Maryland. The analysis is based on data related to the 1998 football season at the PSINet Stadium. Therefore, the economic impact estimates reported in this study represent actual fan attendance, fan expenditures, expenditures by the visiting football teams, and Baltimore Ravens' expenditures in Maryland. Similar to the 1998 study, the economic and fiscal impacts of the Baltimore Ravens are based on the team expenditures in the community, local and out-of-state fans, visiting football teams, electronic media/press, and special events. The economic impact methodology employed in this report is the same as that utilized in the 1998 study. Unlike the previous report, this study does not include the economic and fiscal impacts from the stadium construction.

The contribution of the various events held at the stadium to the economy of Maryland can be measured by the sum of direct, indirect, and induced economic effects that arise from the activities associated with the Ravens and other events. The direct impact refers to the initial first round spending of the various event-related activities. The indirect effects arise as local vendors increase their spending on materials, goods and services, and employees, in order to meet additional demand for their products brought about by the events held at the stadium. Induced expenditures result from the increase in consumer spending by employees of the Ravens (including vendors and parking lot attendants at the stadium) and the local businesses supplying goods and services in Maryland.

Assumptions

Table 1 summarizes the most recent assumptions about fan attendance and their

Table 1
Ravens Pro Football Team Economic Impact Assumptions
Estimates for 1998 Season

Assumption Category	NFL Football	Concerts	College Football
Fans (General)			
Fan attendance per event	61,082	75,337	18,032
Total daytrip fans	57,264	72,986	16,978
Total overnight fans	3,818	2,351	1,053
Number of events	10	1	2
Number of fans traveling by bus	6,963	8,588	2,056
Number of fans traveling by light rail	8,735	10,773	2,579
Number of fans traveling by car	45,384	55,975	13,397
Number of fans who park at parking facilities	40,000	49,335	11,808
Number of fans per car	2.8	2.8	2.8
Number of event day employees	1,000	1,233	295
Number of cars projected to be parked at the stadium lot	4,000	4,000	4,000
Number of cars projected to be parked at the city's parking lots	10,643	14,060	323
Average Daily Spending per Fan			
Average ticket price	\$57	\$26	\$24
Stadium concessions	\$13	\$12	\$6
Parking	\$2	\$2	\$4
Overnight fans (lodging)	\$78	\$78	\$78
Overnight fans (transportation, meals, retail, etc.)	\$49	\$49	\$49
Daytrip fans (transportation, retail, etc.)	\$9	\$9	\$9
Visiting Football Teams and Entertainers			
Number of players, coaches, entertainers, etc.	140	100	160
Duration of stay (nights)	1	1	1
Lodging Expenses per night	\$120	\$140	\$120
Other overnight expenses	\$90	\$90	\$75
Electronic Media			
Number of the media/press			
Advance TV crew overnighting	10	10	10
Non-local TV crew overnighting	55	45	45
Non-local press overnighting	31	20	20
Local media/press (daytrip)	342	30	60
Duration of stay (nights)			
Advance TV crew overnighting	6	2	4
Non-local TV crew overnighting	6	1	2

system, and the other 74 percent by private cars. In addition, it is assumed that 88 percent of the fans traveling to the stadium by car use parking facilities in Baltimore City.

The annual stadium events used in this analysis include ten professional football games and two college football games, as in the last report. The number of concerts, however, drops from a total of four, in the past study, to one. In contrast to the previous report, the fan attendance per event is lower for professional football games, but higher for concerts and college football games. With respect to the spending of the Ravens' players and staff, we retained the assumption that 40 percent of the payroll is spent within Maryland. Both the payroll and employment of the Ravens organization are higher than the past study. Lastly, in contrast to the previous analysis, this study includes information on other special events, besides the college games and concert, which were held at the new stadium.

Similar to the 1998 update, other areas of economic activity that are not included in this report are:

- Increased economic activity by local fans that are not ticket holders, i.e., bar, restaurant and home consumption expenditures.
- Induced development and construction expenditures.
- Non-local spending by the team, including the players' pension fund.
- Air transportation.
- Increased economic activity generated by the stadium maintenance (other than game day expenditures).

Annual Economic and Fiscal Impacts

Table 2 summarizes the estimated statewide economic and fiscal impacts associated with the Baltimore Ravens 1998 football season and other events held at the PSINet Stadium. The initial or first round impact is estimated to be \$84.7 million in gross expenditures, \$50.3 million in personal income, and 1,165 full-time equivalent jobs. Combining the direct and secondary impacts yields the total economic impact, with \$201.6 million in expenditures, \$95.8 million in personal income, and 2,772 full-time equivalent jobs.

Table 2
Economic and Fiscal Impacts of the Ravens Pro Football Team and
other Events held at PSINet Stadium in Maryland: 1998 Season
-- 1999 Dollars --

Impact Category	Annual Impact		
	Direct	Secondary	Total
Economic Impact (\$Millions)			
Gross Expenditures: Local Spending	\$84.7	\$116.8	\$201.6
Personal Income	\$50.3	\$45.5	\$95.8
Employment	1,165	1,607	2,772
State Receipts (\$Thousands)	\$6,584	\$2,104	\$8,688
Retail Sales Tax	\$1,467	\$585	\$2,051
Personal Income Tax	\$1,928	\$1,520	\$3,448
Admissions Tax and Miscellaneous Receipts	\$3,189	\$0	\$3,189
Local Tax Receipts (\$Thousands)	\$2,149	\$760	\$2,909
Local Personal Income Surtax	\$964	\$760	\$1,724
Admissions Tax	\$749	\$0	\$749
Hotel Occupancy Tax	\$332	\$0	\$332
Parking	\$104	\$0	\$104
Total of Selected State & Local Receipts	\$8,733	\$2,864	\$11,597

Sources: Maryland Stadium Authority; and DBED, Office of Business & Economic Research.

visiting football teams, entertainers, and the media. The state receipts also include miscellaneous revenues received by the Maryland Stadium Authority for other special events held at the stadium. In addition, the fiscal impact includes receipts from the admissions tax, local hotel occupancy tax, and local parking tax.

The total annual fiscal impact for the 1998 football season is estimated to be \$2.1 million in state retail sales tax, \$3.4 million in state personal income tax, and \$3.2 million in admissions (80 percent of the total admissions tax revenue) and miscellaneous receipts. The total annual local tax revenues include \$1.7 million in personal income surtax receipts, \$749,000 in local receipts from the admissions tax (20 percent of the total admissions tax revenue), \$332,000 in hotel occupancy tax receipts, and \$104,000 in local parking tax receipts.

Direct and Total Economic Impact by Expenditure Category

Direct Impact. A detailed breakdown of the economic impact of the 1998 season is presented in Table 3. Local expenditures associated with the Ravens organization generate an estimated \$59.9 million in direct spending, \$39.5 million in direct personal income, and 592 full-time equivalent jobs (including 223 players and staff of the Ravens organization). Stadium concession sales yield \$8.8 million in direct expenditures, \$3.4 million in direct personal income, and 231 full-time equivalent jobs. Expenditures on parking amount to \$1.8 million in direct spending, about \$460,000 in direct personal income, and 28 full-time equivalent jobs. The impact of off-site fan spending shows \$11.7 million in direct sales, \$5.9 million in direct personal income, and 262 full-time equivalent jobs. The activities associated with visiting teams, entertainers, and the electronic media provide \$1.7 million in direct spending, roughly \$780,000 in direct personal income, and 29 full-time equivalent jobs. Lastly, other special events held at the stadium produce nearly \$800,000 in direct expenditures, at least \$230,000 in direct personal income, and 24 full-time equivalent jobs.

Total Impact. The sum of the direct and secondary, including indirect and induced, benefits generates the total impact of the economic activity associated with the Ravens organization and other events held at the PSINet Stadium. Table 3 provides a summary of the various impacts by category. Spending associated with the Baltimore Ravens provides an estimated \$134.7 million in total expenditures, \$69.2 million in total personal income, and 1,673 full-time equivalent jobs. Expenditures for stadium concessions yield a total of \$25.9 million in sales, \$9.8 million in personal income, and 442 full-time equivalent jobs. Spending related to parking produce a total impact of \$5 million in expenditures, \$1.6 million in personal income, and 66 full-time equivalent jobs. Off-site fan spending amounts to \$30.5 million in total sales,

Annual Fiscal Impact by Expenditure Category

Table 4 provides a breakdown of the total annual state revenue and local tax receipts arising from the various activities associated with the Baltimore Ravens 1998 season and other events held at the PSINet Stadium. The Ravens organization generates \$697,000 in state retail sales tax, \$2.5 million in state personal income tax, and \$1.2 million in local personal income surtax receipts. Stadium concession sales provide \$583,000 in state retail sales tax, \$338,000 in state personal income tax, and \$169,000 in local personal income surtax revenue. Tax receipts from parking include \$21,000 in state retail sales tax, \$47,000 in state personal income tax, \$24,000 in local personal income surtax, and \$104,000 in local parking tax revenue. Off-site fan spending contribute \$622,000 in state retail sales tax receipts, \$513,000 in state personal income tax receipts, nearly \$3 million for the state's share of the admissions tax, \$257,000 in local personal income surtax receipts, \$749,000 toward the local share of the admissions tax, and \$250,000 in hotel occupancy tax receipts. Taken together, visiting teams, entertainers, and the electronic media produce \$101,000 in state retail sales tax, \$49,000 in state personal income tax, \$25,000 in local personal income surtax, and \$81,000 in hotel occupancy tax receipts. Lastly, the other special events at the stadium contribute \$28,000 in state retail sales tax receipts, \$10,000 in state personal income tax receipts, \$192,000 in miscellaneous receipts for the Maryland Stadium Authority, and \$5,000 in local personal income surtax receipts.

Table 3
Annual Economic Impact of the Ravens Pro Football Team and
other Events held at PSINet Stadium in Maryland: 1998 Season
-- Millions of 1999 Dollars --

Expenditure Category	Direct Impact			Total Impact		
	Expenditures	Income	Employment	Expenditures	Income	Employment
Ravens Pro Football Team	\$59.9	\$39.5	592	\$134.7	\$69.2	1,673
Stadium Concessions	\$8.8	\$3.4	231	\$25.9	\$9.8	442
Parking	\$1.8	\$0.5	28	\$5.0	\$1.6	66
Off-Site Fan Spending	\$11.7	\$5.9	262	\$30.5	\$13.1	501
Visiting Teams, Entertainers, Electronic Media	\$1.7	\$0.8	29	\$4.1	\$1.7	59
Other Special Events	\$0.8	\$0.2	24	\$1.3	\$0.4	30
Total	\$84.7	\$50.3	1,165	\$201.6	\$95.8	2,772

Sources: Maryland Stadium Authority; and DBED, Office of Business & Economic Research.

Table 4
Annual Fiscal Impact of the Ravens Pro Football Team and
other Events held at PSINet Stadium in Maryland: 1998 Season
-- Thousands of 1999 Dollars --

Expenditure Category	State Taxes and Miscellaneous Revenue			Local Taxes				Total of Selected State & Local Receipts
	Retail Sales	Personal Income	Admissions, Miscellaneous	Income Surtax	Admissions	Hotel Occupancy	Parking	
Ravens Pro Football Team	\$697	\$2,490	\$0	\$1,245	\$0	\$0	\$0	\$4,432
Stadium Concessions	\$583	\$338	\$0	\$169	\$0	\$0	\$0	\$1,090
Parking	\$21	\$47	\$0	\$24	\$0	\$0	\$104	\$195
Off-Site Fan Spending	\$622	\$513	\$2,997	\$257	\$749	\$250	\$0	\$5,388
Visiting Teams, Entertainers, Electronic Media	\$101	\$49	\$0	\$25	\$0	\$81	\$0	\$256
Other Special Events	\$28	\$10	\$192	\$5	\$0	\$0	\$0	\$236