

ECONOMIC IMPACT OF THE FOXWOODS CASINO

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Introduction

The economic argument for the construction of casinos in Philadelphia has been premised on the creation of jobs and revenue. However, in economic studies and impact statements created primarily by casinos and supporters of gambling in Philadelphia, the economic arguments which support these claims are based on unsupported assumptions. This study examines the assumptions used in one such report developed by Econsult for the developers of the proposed Foxwoods casino. The first part of the study examines specific flaws in the assumptions made in the report. The second part of the study shows how a very different picture of economic decline can be painted by providing alternative assumptions.

While this study does not intend to provide a complete economic analysis of Foxwoods, it demonstrates the need for a comprehensive study independent of special interests to understand the true economic impact of this casino. SugarHouse has not provided an economic impact analysis except for a few unsupported numbers in testimony that are similar to the Numbers in the Econsult report. Since the Econsult report is a study of a generic slots parlor, the results apply to SugarHouse as well. The correspondence is exact in phase 1 of both projects as they both have 3000 slots.

Assumptions of Econsult Report

The Econsult report is a very professional product with clear documentation that allows the assumptions to be understood and analyzed. For example, they provide a clear breakdown of the types of jobs provided by the casino and the average wages of the casino workers. In contrast, SugarHouse provides no documentation and asserts its average wage is twice that of Foxwoods, showing that any benefit estimates from SugarHouse are pure fiction. Thus, the Foxwoods report is the only reasonable starting point for analyzing the economic impact of a casino.

The economic benefit of the proposed Foxwoods casino is contingent upon many assumptions. We have compiled a list of these assumptions and shown how serious flaws in these assumptions undermine the economic benefit that the casino promises.

1. The Econsult report assumes that all casino revenues are new dollars spent in the region that would not have been spent on other activities in the region. This assumption means that all casino spending is new spending with no corresponding reductions in spending elsewhere. Studies of sports facilities and other recreational venues have shown quite the opposite. People have fixed recreational

budgets. Expanding recreation alternatives shifts their budget from existing activities. Instead of spending their money on existing recreation, restaurants, and historical tourism, people simply shift their money to the casinos and no new spending is generated.

2. Econsult assumes that on 1/3 their trips people beyond a 10 mile radius will engage in activities city outside the casino. There is no data backing up this assumption. This 10 miles extends to approximately Manayunk and means a family living near King of Prussia would visit a tourist site 1/3 of the times they come into the city. Research by Cumming Associates (2006) indicates otherwise and has developed more accurate estimates for ancillary spending.
3. Assumptions about spending outside the casino by casino visitors are overstated. Econsult assumes that a day tripping couple, given \$60 in losses per person, would spend \$270 outside the casino. Given the demographics of slots visitors, this is highly unlikely. Most of these visitors are local, or if coming in to gamble would not spend this amount outside the casino.
4. The Econsult report does not address the social costs of gambling, essentially assuming that there will be no social costs associated with the introduction of casinos. Independent research shows that increases in crime and addiction accompany the introduction of casinos. Among the costs of mitigating these consequences include greater police protection and strain on the justice system, welfare programs to provide for families of addicted gamblers, social programs for treatment of addiction, and economic losses from lowered productivity.
5. It is assumed that the land utilized by the casino would remain idle if a casino is not built. Therefore, the benefit of the casino is compared to zero value. This assumption alters the cost benefit analysis significantly; actually comparing reasonable alternative uses of the land would produce a much more accurate cost benefit analysis.
6. The wage tax is erroneously set at 4.1% in the Econsult report. Enabling legislation will drop the wage tax rate to 3.5%. This difference results in approximately 15% lower wage tax benefits to the city.

The result of these assumptions is a seemingly highly favorable analysis of the casino. However, these assumptions are not based on data or experience in other region that introduce gambling and once alternative assumptions are used, the costs to the city of gambling outweigh the benefits.

Analysis of Alternative Assumptions:

The following analysis is intended to demonstrate how applying alternative assumptions to the same economic model utilized in the Econsult report can lead to significantly

different conclusions. Rather than do an economic impact analysis from scratch, we took the estimates in the Econsult report and constructed an evaluation using alternative assumptions. While by no means comprehensive or complete, the analysis serves to demonstrate the need for additional independent economic analysis.

The key differences are as follows.

1. As promised by the enabling legislation, the wage tax rate will drop to 3.5%, unlike the 4.1% number used in the this report
2. Casino expenditures come from peoples' recreation budget, decreasing their other recreational expenditures and the only new expenditures come from people who divert their gambling from Atlantic City to Philadelphia,
3. Social costs are included in the analysis,
4. The land would be put to the highest and best use non-casino use as a comparison of the benefits, rather than assume the land lies idle.

Note that when using the Econsult assumptions we sometimes come up with slightly different numbers from them, mainly because of round off in the published numbers.

Construction

We have no basis to challenge the Econsult construction benefits. Their estimates are

Description	Phase 1 Construction	Phase 2 Construction	Phase 3 Construction
City direct expenditures	\$ 267,300,000	\$ 100,900,000	\$ 221,400,000
City Multiplier	1.47	1.47	1.47
City total output	\$ 392,931,000	\$ 148,323,000	\$ 325,458,000
State direct expenditures	\$ 267,300,000	\$ 100,900,000	\$ 221,400,000
State multiplier	2.45	2.45	2.45
State total output	\$ 654,885,000	\$ 247,205,000	\$ 542,430,000
Total jobs city	1556	587	1288
Total earnings city	\$ 63,600,000	\$ 24,000,000	\$ 52,000,000
average wage	\$ 40,874	\$ 40,886	\$ 40,373
Total jobs state	5244	1979	4343
Total earnings state	\$ 209,400,000	\$ 79,000,000	\$ 173,500,000
Average wage	\$ 39,931	\$ 39,919	\$ 39,949

Table 1: Econsult estimates of construction impacts

Note that these benefits are the gross benefits from construction. If a casino is prohibited and the site were used for the development of a large condominium project, there would be equivalent construction benefits from this alternative.

Annual benefits from operations

As Econsult and Foxwoods have detailed estimates of the direct economic benefits from the casino operations, we accept and reproduce their estimates here

Direct expenditures	Phase 1	Phase 2	Phase 3
Casino	\$ 43,900,000	\$ 60,200,000	\$ 65,800,000
Hotel			\$ 7,700,000
Food and beverage	\$ 4,000,000	\$ 5,700,000	\$ 8,700,000
Retail & other	\$ 2,400,000	\$ 2,500,000	\$ 3,200,000
Entertainment	\$ 3,600,000	\$ 3,700,000	\$ 3,900,000
SG&A and other	\$ 41,600,000	\$ 55,400,000	\$ 58,500,000
Capital maintenance	\$ 4,400,000	\$ 4,400,000	\$ 9,400,000
Total direct	\$ 99,900,000	\$ 131,900,000	\$ 157,200,000
City multiplier	1.65	1.65	1.64
Total city output	\$ 164,835,000	\$ 217,635,000	\$ 257,808,000
State multiplier	2.19	2.19	2.19
Total state output	\$ 218,781,000	\$ 288,861,000	\$ 344,268,000
Total jobs-city	1330	1762	2103
Total earnings city	\$ 29,800,000	\$ 39,300,000	\$ 47,000,000
Average wage (Including benefits)	\$ 22,406	\$ 22,304	\$ 22,349
Direct Foxwoods jobs	954	1254	1780
Total jobs state	2656	3514	4157
Total earnings state	\$ 67,100,000	\$ 88,400,000	\$ 104,900,000

Table 2: Annual economic benefits from the casino expenditures

The one anomalous feature in this table is the high city multiplier. It is 10% above the typical multiplier and needs explanation.

Ancillary spending by Casino visitors

The next table presents the Econsult estimates for activity outside the casino. We note the Econsult assumptions on daily spending outside the casino are quite large, especially if the overnighters stay at the casino. The per-day spending for a day tripping couple, given \$60 in losses per person, would be \$270 per day. Given the demographics of a slots

player, this is a big number and very likely an overstatement. In their report there is no explanation of the assumption that 1/3 of day trippers from more than 10 miles would spend outside the casino.

	Phase 1	Phase 2	Phase 3
Visits	5900000	8100000	9100000
Locals <10 miles	3000000	4100000	4600000
Locals 10-20 miles			
Locals 20-30 miles			
Total locals	3000000	4100000	4600000
Existing visitors	400000	500000	600000
Ancillary spending base	2500000	3500000	3900000
% overnighters	12%	14%	16%
Total overnighters	300000	490000	624000
Daily spending per overnigher	\$175	\$193	\$212
Total overnigher spending outside casino	\$52,500,000	\$94,570,000	\$132,288,000
Total day trippers	2,200,000	3,010,000	3,276,000
% who spend	33%	35%	40%
Total day trippers who spend	726,000	1,053,500	1,310,400
Daily spending per day tripper	\$75	\$83	\$91
Total day tripper spending outside casino	\$54,450,000	\$87,440,500	\$119,246,400
Total ancillary spending	\$106,950,000	\$182,010,500	\$251,534,400

Table 3: Econsult estimates of expenditures outside the casinos

Our results differ for two main reasons. The Econsult assumption is that people within a 10-mile radius will not engage in activities outside the casino. This means that people from approximately Manayunk to the casino will not engage in any out-of-casino

activities during the same trip. A better assumption is that anyone living within the distance from King of Prussia to the casino would not engage in any out-of-casino activities during the same trip, as they have access to the city at any time. This assumption is still favorable to the casinos as it is equivalent to one third of the people from Center City who go to King of Prussia Mall take an ancillary trip to the Valley Forge National Park.

Our assumption of a 20-mile limit is a very conservative assumption and 30-50 miles is at least as good an estimate and probably better. To estimate the population that lives between 10 and 20 miles of Foxwoods, we estimate that visits decline by 30% for every doubling of the distance. Cummings Associates (2006) developed this estimate after years of doing market analyses for casinos. Their report contains the model and statistical fit to the data. See also Grinols (2004). The other difference is that we use the 3% rate for overnight stays, the middle of the range presented in the city analysis of casino impacts. We apply that rate to those beyond 20 miles because the 30% rule for doubling distance would basically eliminate patrons from more than 50 miles from the casino site. Again, we have made an assumption that is favorable to the casinos.

Experience with the casinos in Central City Colorado shows that patrons are not willing to drive the extra mile beyond the Blackwood casinos to Central City from Denver because these casinos are for convenience gambling, as this Foxwoods casino is, Miller (2006). Thus, the racinos north and south of Philadelphia act as blocks for patrons along the Delaware outside of the city. Furthermore, the congestion on the Schuylkill expressway will divert many patrons from the western suburbs to the suburban slots. Going beyond the suburbs to the west, one hits primarily Amish and Mennonite country, an unlikely source of patrons. Potential patrons to the east have to cope with bridge traffic, and beyond a 30-mile radius, Atlantic City is a better draw, as 30 miles is the approximate breakeven travel time to either Philadelphia or Atlantic City . Furthermore, the Atlantic City casinos are more “glamorous” to gamblers than a stand-alone slots parlor in Philadelphia.

We use the Econsult estimates for total visits, locals within 10 miles, existing visitors, percentage of overnighters, and ancillary spending amounts. Our ancillary spending estimate is around 15% of the Econsult estimates.

	Phase 1	Phase 2	Phase 3
Visits	5900000	8100000	9100000
Locals <10 miles	3000000	4100000	4600000
Locals 10-20 miles	2100000	2870000	3220000
Locals 20-30 miles			
Total locals	5100000	6970000	7820000
Existing visitors	400000	500000	600000
Ancillary spending base	400000	630000	680000

% overnighters	0.03	0.03	0.03
Total overnighters	12000	18900	20400
Daily spending per overnigher	\$175	\$193	\$212
Total overnigher spending outside casino	\$ 2,100,000	\$ 3,647,700	\$ 4,324,800
Total day trippers	388000	611100	659600
% who spend	0.33	0.33	0.33
Total day trippers who spend	128040	201663	217668
Daily spending per day tripper	\$ 75	\$ 83	\$ 91
Total day tripper spending outside casino	\$ 9,603,000	\$ 16,738,029	\$ 19,807,788
Total ancillary spending	\$ 11,703,000	\$ 20,385,729	\$ 24,132,588

Table 4: Our estimate of ancillary spending

The next table consists of the Econsult estimates of total benefits from ancillary spending. The direct effects are scaled up by multipliers that capture the effect of local spending by the organizations that have direct expenditures from casino patrons. Notice that the multipliers are lower than the multipliers used for the expenditures by the casinos. Throughout this analysis we use the Econsult multipliers as they have had a great deal of experience in estimating them.

Notice that the average wage for the jobs is around \$20,000. Given that the pay of managers and executives are included, the average wage is not as high as the office jobs in Center City. (SugarHouse claims the average wage would be \$40,000. Given the job breakdown in the Econsult report, it is clear that Econsult is much more honest in its assessment of the direct jobs and wages.) Another possible reason for the average wage being low is that many of these jobs are part-time jobs. If that is the case, the report should present full-time equivalents, not total jobs.

	Phase 1 Construction	Phase 2 Construction	Phase 3 Construction
City multiplier	1.5700	1.5700	1.5700
Total city output	\$ 167,911,500	\$285,756,485	\$394,909,008
State multiplier	2.15	2.15	2.15
Total state output	\$ 229,942,500	\$391,322,575	\$ 540,798,960
Total jobs added to city	1568	2626	3638
Total earnings city	\$ 31,400,000	\$52,000,000	\$73,200,000
total jobs state	2801	4687	6492

Earnings state	\$66,200,000	\$111,200,000	\$154,100,000
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Table 5: Econsult estimates of total benefits from ancillary expenditures by casino patrons.

In constructing our table of ancillary-expenditure benefits, we applied the Econsult multipliers to our estimates. Since their report does not give an explicit multiplier for jobs from expenditures, we took the ratio of jobs to expenditures in their estimates and then applied that ratio to our dollar estimates of benefits.

	Phase 1	Phase 2	Phase 3
City multiplier	1.5700	1.5700	1.5700
Total city output	\$ 18,373,710	\$ 32,005,595	\$ 37,888,163
State multiplier	2.15	2.15	2.15
Total state output	\$ 25,161,450	\$ 43,829,317	\$ 51,885,064
Total jobs added to city	172	294	349
Total earnings city	\$ 3,435,944	\$ 5,824,158	\$ 7,022,918
total jobs state	306	525	623
Earnings state	\$ 7,243,933	\$ 12,454,738	\$ 14,784,585

Table 6: The impacts of ancillary spending using ratios and multipliers from the Econsult report.

Note that these estimates do not account for the constraints on peoples' recreation budgets, which further reduces this spending.

By using more realistic assumptions about peoples' behaviors, our estimates of the benefits from ancillary spending are an order of magnitude less than the Econsult estimates.

Tax revenues from gambling

Next we present the city tax revenues from the ongoing operation of the casino. This table includes tax revenues that result from both the direct and ancillary spending by casino patrons.

	Phase 1	Phase 2	Phase 3
Wage taxes	2300000	2600000	2800000
Sales taxes	600000	700000	800000
BPT	900000	1500000	2100000
Real estate taxes	5600000	7800000	10200000
Misc taxes	200000	300000	400000
Hotel tax	1200000	2200000	3000000
Subtotal	\$ 10,800,000	\$ 15,100,000	\$ 19,300,000

4% host fee	14500000	20000000	22500000
Total city taxes	\$ 25,300,000	\$ 35,100,000	\$ 41,800,000

Table 7: Econsult estimates of City tax revenues from direct and ancillary spending

In producing our estimates, we did not have access to the specific formulae used by Econsult. What we did is assume an underlying fixed ratio of tax revenues for each tax versus personal income and wage taxes for the state and city respectively. Any error induced by using this ratio is dwarfed by the differences in expenditure estimates. We accept the Econsult estimates for real estate taxes and the hosting fee.

	Phase 1	Phase 2	Phase 3
Wage taxes	\$ 1,163,258	\$ 1,579,346	\$ 1,890,802
Sales taxes	\$ 278,158	\$ 295,339	\$ 306,936
BPT	\$ 417,237	\$ 632,869	\$ 805,707
Real estate taxes	\$ 5,600,000	\$ 7,800,000	\$ 10,200,000
Misc taxes	\$ 200,000	\$ 300,000	\$ 400,000
Hotel tax	\$ 48,000	\$ 84,857	\$ 98,077
Subtotal	\$ 7,706,654	\$ 10,692,410	\$ 13,701,522
4% host fee	\$ 14,500,000	\$ 20,000,000	\$ 22,500,000
Total city taxes	\$ 22,206,654	\$ 30,692,410	\$ 36,201,522

Table 8: Our estimates of City tax revenues from direct and ancillary spending not factoring in the limits on families' recreational budgets

What keeps our estimates close to Econsult's is that we use their estimate of the host fee and real estate taxes. Note that that fee will be partly consumed in the extra expenditure for police around the casino and is not entirely a pure gain for the city. Also, alternative uses for the site would generate real estate taxes that largely compensate for the real estate taxes here. What is not clear is if the casino is eligible for the 10-year tax break. If so, the real estate taxes apply even if a casino is not built and are not a direct benefit of casino construction and operations.

	Phase 1	Phase 2	Phase 3
Personal income	\$ 3,900,000	\$ 6,100,000	\$ 6,900,000
Sales and use	\$ 6,200,000	\$ 9,000,000	\$ 11,700,000
Corporate net inc.	\$ 900,000	\$ 1,100,000	\$ 1,500,000
Capital stock and franchise	\$ 600,000	\$ 800,000	\$ 1,000,000
Subtotal noncasino	\$ 11,600,000	\$ 17,000,000	\$ 21,100,000
State casino taxes	\$ 185,600,000	\$ 254,900,000	\$ 286,400,000
Total ongoing operations taxes	\$ 197,200,000	\$ 271,900,000	\$ 307,500,000

Table 9: Econsult estimate of state tax revenues

Our estimates of tax revenues are slightly lower.

	Phase 1	Phase 2	Phase 3
Personal income	\$ 2,282,359	\$ 3,096,240	\$ 3,674,317
Sales and use	\$ 3,628,365	\$ 4,568,224	\$ 6,230,363
Corporate net inc.	\$ 526,698	\$ 558,338	\$ 798,765
Capital stock and franchise	\$ 351,132	\$ 406,064	\$ 532,510
Subtotal noncasino	\$ 6,788,554	\$ 8,628,867	\$ 11,235,954
State casino taxes	\$ 185,600,000	\$ 254,900,000	\$ 286,400,000
Total ongoing operations taxes	\$ 192,388,554	\$ 263,528,867	\$ 297,635,954

Table 10: Our estimate of state tax revenues

The two estimates of the state tax revenues are close because the total revenues are dominated by the direct taxes on the casinos.

Losses in economic activity due to gambling

Our estimates of ancillary spending are very generous considering the experiences with the casinos in Atlantic City and Vicksburg MS. In Atlantic City there are fewer independent restaurants now than before casinos arrived. In Vicksburg there was a steep decline in attendance at the Civil War battlefield (25% compared to Gettysburg) after the casinos opened. The same happened at Harpers Ferry (25% compared to Gettysburg). See Miller (2006) page 86 for a discussion on this. The reduction in visitors to nearby historical sites illustrates that, given the time constraints on recreational activities, people have to make a choice of what to do, and mainly they don't do both historical tourism (the core of Philadelphia's tourism market) and gambling. The gamblers also prefer the subsidized food at the casino to outside restaurants.

This discussion leads to our main difference with the Econsult estimates, the impact of casinos on other recreational activities in the city and region. Their report states that activity at the casino will not detract from other economic activity in the region and that all casino spending is new spending with no corresponding reductions in spending elsewhere. What studies of sports facilities and other recreational ventures have shown is that people have recreation budgets. See the Brookings study by Baade and Sanderson (1997). Expanding recreation alternatives shifts the budget from existing activities to new activities. Note that this is also true of time budgets for recreation as well as dollar budgets. Witness the decline in television viewing by teenage males who have switched to video games. The time budget for recreation is an explanation for the drop in attendance at the Vicksburg battlefield.

The casino populations who exceed their recreation budgets are problem and addicted gamblers. For this part of the report, in generating the following estimates, we accept the casino's position that gambling addiction will be controlled. Thus, non-addicted patrons do not exceed their recreation budgets. We expand later on the social costs of addictive gambling, noting that expenditures beyond family recreation budgets lead to social costs beyond any potential overstatement of the shift in recreation expenditures we make in the following analysis.

We reiterate that our assumption that people do not exceed their past recreation expenditures and do not use money needed for necessities or deplete savings is the only possible outcome of the casino position that Foxwoods provides recreation for their visitors and does not profit from addicted or problem gamblers in a significant way.

As with other tables since the Econsult report does not provide scaling factors for taxes we make assumptions using the proportions in the Econsult estimates. We used the multipliers that Econsult developed for ancillary spending because the type of recreational activity that loses to casino spending is the same type of economic activity that they added through their ancillary spending estimates. The Econsult report did not include casino revenues. To estimate casino revenues, we took the 4% hosting fee and multiplied it by 25 to get the full revenues.

Some of the casino spending is true new money spent in the region. This money comes from people in New Jersey who decide to gamble in Philadelphia instead of Atlantic City and from Pennsylvanians who stop going to Atlantic City and move their spending to Philadelphia. Thus, when analyzing the impact of expenditures, we make the assumption that 40% of the activity is new to the city as more people come from the suburbs to the city and people divert their spending from Atlantic City. We use 25% for the state, with that percent reflecting people going to Philadelphia rather than Atlantic City. The reason for the difference between the city and state numbers is the diversion of expenditures from the suburbs to the city by suburban gamblers who already go to Atlantic City and switch to the Philadelphia casino.

The striking feature in the results is the large net job losses associated with the casino. This can be explained simply. The direct economic benefits of casinos come from casino expenditures, \$100 million in phase 1. The revenues in the first phase are \$362.5 million. A large portion of these revenues are economic activity that is diverted from local businesses. \$254 million of casino revenue goes to profit and taxes and not economic activity. Not only is the \$262.5 million lost to the city economy, the multiplier effect of approximately \$130 million is lost.

With ancillary expenditures, Econsult used the total expenditures on ancillary activities when measuring the economic impact of these expenditures. This is correct because the profit margins of the organizations in this sector are much lower than casinos and the profits of small, local businesses are mainly wages for the owner. Recreational expenditures fall into the same economic sectors as the ancillary expenditures, local and regional recreation, dinner, theater, museums, etc., as described in the Econsult report.

We thus use the Econsult multipliers on ancillary expenditures to measure the effect of the diverted recreation budget. The foregone recreational expenditures because of the casino leads to the large job losses for the city.

Subtractions for diverted economic activity, etc.	Phase 1	Phase 2	Phase 3
Casino revenue	\$362,500,000	\$500,000,000	\$562,500,000
Estimate 65% city revenue lost as direct spending on other businesses	235,625,000	325,000,000	365,625,000
Estimate 75% state revenue lost as direct spending on other businesses	\$271,875,000	\$375,000,000	\$421,875,000
City multiplier	1.57	1.57	1.57
Lost economic activity to city	\$369,931,250	\$510,250,000	\$574,031,250
State multiplier	2.15	2.15	2.15
Lost economic activity to state	\$584,531,250	\$806,250,000	\$907,031,250
City jobs lost	5424	7481	8416
State jobs lost	15309	21116	23755
City wages lost	\$108,610,016	\$149,806,919	\$168,532,784
State wages lost	\$361,813,640	\$499,053,296	\$561,434,958

Table 11: Losses in economic activity because of diverted expenditures associated with the direct casino revenues.

We see that because of the revenues extracted from the city by state taxes, casino debt service, and corporate profits, the city suffers significant net job losses from the operations of the Foxwoods casino as shown in the next table. The state job losses are even larger because of greater lost revenue in suburban recreational businesses.

	Phase 1	Phase 2	Phase 3
Gains from casinos in the city	1502	2056	2452
losses from casinos in the city	5424	7481	8416
Net job losses in the city	-3922	-5425	-5964
Job gains from casino in the state	2801	4687	6492
Job losses from casino in the state	15309	21116	23755
Net job losses in the state	-12814	-16953	-17886

Table 12: The impact of the casinos on city and state jobs

Note that the impact on jobs is understated for two reasons. First, the ancillary spending that we estimated earlier also comes under the constraints on the personal recreational budget and would not take place, reducing the casino benefits further. Second, because casino workers have to go through extensive criminal checks, many potential workers cannot get casino jobs because of mistakes earlier in their lives. At the same time, local businesses with less formal hiring practices are willing to give a person a try if that person is recommended by a good employee. With fewer jobs available, those from the bottom of the economic ladder will have a harder time finding work. Given the increased crime associated with joblessness, the expense of the criminal justice system will increase not only from the casino related issues but also because more people will turn to crime.

We now examine the effect of people keeping within their recreation budgets on taxes.

	Phase 1	Phase 2	Phase 3
Wage taxes lost	\$3,801,351	\$5,243,242	\$5,898,647
Sales taxes lost	\$908,979	\$1,253,764	\$1,410,485
BPT lost	\$1,363,469	\$1,880,646	\$2,115,727
Real estate taxes lost from decreased economic activity (equal to other tax losses)	\$6,073,798	\$8,377,653	\$9,424,859
Total city taxes lost	\$12,147,597	\$16,755,306	\$18,849,719
State taxes lost			
Personal income taxes lost	\$12,372,217	\$16,866,942	\$19,455,453
Sales tax as a ratio of personal income taxes	\$19,668,652	\$26,814,112	\$30,929,182
Corp. income tax as a ratio to pers. Inc. tax	\$2,855,126	\$3,892,371	\$4,489,719
Capital stock tax as a ratio to personal income tax	\$1,903,417	\$2,594,914	\$2,993,146
Total state taxes lost	\$36,799,414	\$50,168,339	\$57,867,501

Table 13: The reduction in state and Philadelphia taxes due to the reduction in economic activity resulting from the Foxwoods Casino.

The estimate we put in for real estate tax gains reflects the higher value of the locations that do not lose economic activity because there is no casino. This number is a pure guess. To put it in perspective, \$5 million is roughly the city revenue from just the residential real estate on Pine St. from river to river in Center City. To make this number more precise, Econsult has a model they developed for the Tax Reform Commission that actually estimates the impact on real estate taxes of increased economic activity. We

believe that our number is a significant underestimate, given the net loss of almost 4000 jobs.

The next table presents the effect on taxes and the city budget from extra expenditures resulting from the building the casino. In this case the city comes out ahead in tax revenues before considering alternative uses for the site. The city loses as soon as the extra costs of policing and social services are added into the city budget. The budgetary details of the social costs are covered in the next section

Net city taxes without including gains from alternative use of that site	\$ 10,059,057	\$ 13,937,105	\$ 17,351,803
Police costs	\$ 6,500,000	\$ 7,150,000	\$ 7,865,000
Net available to city	\$ 3,559,057	\$ 6,787,105	\$ 9,486,803
Social costs impact on city budget	\$ 27,900,000	\$ 27,900,000	\$ 27,900,000
Net casino taxes available for general city budget	\$(24,340,943)	\$(21,112,895)	\$(18,413,197)
Taxes from alternative uses of site	\$ 5,000,000	\$ 5,000,000	\$ 5,000,000
Budget hole	\$(29,340,943)	\$ (26,112,895)	\$(23,413,197)

Table 14: The full tax and budget effects of Casinos

The Econsult economic impact analysis, like all other impact analysis skips an important step, calculating the cost of an opportunity lost from an alternative use of a site. We use a rough estimate of the tax benefits of an alternative development for the site. This is roughly what would be the return in new wage taxes and real-estate taxes from a new, large condo/townhouse development.

Interestingly, if the state gives out all of the gambling revenues, income or other taxes will have to be raised to cover the losses in Table 13. That table does not include losses from decreased sales of lottery tickets that cover important programs for the elderly or social costs. Adding in just social costs, the revenue drops from almost \$200 million to less than \$100 million. The state will either raise taxes or keep a larger portion of its casino taxes.

Social Costs

The Econsult report does not mention social costs in their report, effectively assuming no social costs. However, the social costs of gambling have been studied in depth and the widespread consensus in independent research indicates that the introduction of gambling into communities in both rural and urban settings creates increases in a wide range of social ills. Professor Earl Grinols, in testimony before both the Pennsylvania Senate and House Finance Committee, lists the following social problems associated with the introduction of casino gambling (Grinols, 2005):

- Crime: e.g. Aggravated assault, rape, robbery, larceny, burglary, auto theft, embezzlement, fraud.
- Business and Employment Costs: Lost productivity, lost work time, unemployment-related employer costs.
- Bankruptcy
- Suicide
- Illness: e.g. Stress-related, cardiovascular, anxiety, depression, cognitive disorders.
- Social Service Costs: Treatment, unemployment & other social services.
- Direct Regulatory Costs
- Family Costs: e.g. Divorce, separation, child abuse, child neglect, domestic violence.
- Abused dollars

Grinols has further provided per capita cost estimates for these social ills:

Crime	\$46
Business and Employment	\$51
Bankruptcy	\$4
Suicide	\$??
Illness	\$8
Social Services	\$27
Direct Regulatory	\$10
Family Costs	\$1
Abused Dollars	\$44
Total Costs	\$190

Table 15: Per capita costs of gambling

Applying the population of Philadelphia to these per capita social costs gives a net social cost of **\$285 million**.

An alternative method used by the National Gambling Impact Commission (NGIC, 1999) utilizes data on pathological and problem gamblers and the social costs associated with them to determine the total costs to society from gambling. A meta-analysis done at Harvard University (Shaffer, H.J., M.N. Hall, and J. Vander Bilt, 1997) indicates that 1.6% of the US adult population are pathological gamblers and 3.45% are problem gamblers. The NGIC study also cites that the presence of a gambling facility within 50 miles roughly doubles the prevalence of problem and pathological gamblers. Additional data from the National Opinion Research Center (NORC, 1999) estimates that social costs including bankruptcy, arrests, imprisonment, legal fees for divorce, etc. are \$10,550 per pathological gambler and \$5,130 per problem gambler. Utilizing this data, the following table shows the net social costs to Philadelphia from the additional pathological and problem gamblers that would be created if casinos are introduced.

Type	Current	Additional	Cost per	Net Additional
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	Number	Number	Gambler Type	Cost
Pathological	24,000	24,000	\$10,550	\$253.2 million
Problem	51,750	51,750	\$5,130	\$265.5 million

Table 16: The number and cost of additional pathological and problem gamblers in the city of Philadelphia

Thus the total net additional social costs to Philadelphia for both pathological and problem gamblers would be **\$518.7 million**.

In addition to this social cost, the NORC study also estimates annual social costs from job loss, unemployment benefits, welfare, and treatment. They estimate that a pathological gambler will additionally cost \$1,200 each year and a problem gambler will cost \$715 each year. Utilizing these data, the annual costs of pathological and problem gamblers in Philadelphia would be \$28.8 million and \$37 million, respectively. The total additional annual cost if the casinos are introduced would be **\$55.8 million**. Therefore, utilizing this methodology, the social costs from the introduction of casino gambling into Philadelphia would be \$55.8 million annually as well as \$518.7 million lifetime.

Government Costs Estimates

Although the government revenue and costs will indirectly be affected by all of the costs listed by Grinols, the direct costs to the city and state governments are included primarily through fighting crime and social services. Utilizing only the annual costs developed by the NORC, one can estimate conservatively the direct costs to the government.

Assuming the city of Philadelphia and the state of Pennsylvania bear this burden equally, the annual costs to Philadelphia and Pennsylvania would be approximately **\$27.9 million** each. It should be noted that as stated earlier in the report, tax revenues from the casinos to the city of Philadelphia for Phase 1 are \$22.2 million. Therefore, the social costs to Philadelphia alone would negate and actually exceed any benefit derived from taxation of the casinos.

In order to obtain a more inclusive estimate of state of Pennsylvania costs, we extend the methodology into the surrounding counties of Bucks, Montgomery, and Delaware, which being located within the fifty mile radius would also be affected by the casinos. In order to remove effect of the existing casinos located in Bucks and Delaware counties, we assume that only half the direct government costs in these counties are attributable to the casinos in Philadelphia, and the other half are attributable to the existing casino racetracks in Chester and Bensalem. Assuming again that half of the costs would be borne by the local government entity and half would be borne by the state, the following chart shows the additional costs to the state.

County	Population ¹	Effective population	Additional pathological gamblers	Additional problem gamblers	Net cost	Net cost to State
Bucks	623,000	311,500	5000	10,800	\$13.7 million	\$6.9 million

Delaware	556,000	278,000	4500	9,600	\$12.3 million	\$6.2 million
Montgomery	776,000	776,000	12,400	26,800	\$34 million	\$17 million

Table 17: Gambling costs in the surrounding counties

The total direct costs from the social problems associated with gambling in the three surrounding counties would be **\$60 million**, of which the state’s portion would be **\$30 million**.

Combining the annual costs to the State of Pennsylvania for both the city as well as the surrounding three counties gives an estimate of **\$57.9 million** for the annual costs to the State of Pennsylvania.

Combining the economic losses with the social costs

From Table 13 we have the first line of the following table.

	Phase 1	Phase 2	Phase 3
State taxes lost from decreased economic activity	\$36,799,414	\$50,168,339	\$57,867,501
Increased state spending for social costs	\$ 57,900,000	\$ 57,900,000	\$ 57,900,000
Total negative impact on the state budget	\$ 94,699,414	\$108,068,339	\$ 115,767,501
State gambling revenues	\$192,388,554	\$263,528,867	\$297,635,954
Net state revenues	\$97,689,140	\$155,460,528	\$181,868,453

Table 18: Net gambling revenues to the state

Although the state still comes out ahead, the legislation promises a return of the gambling revenues to counties. Thus, the state will find itself having to raise taxes significantly to cover the shortfall in revenues and extra expenses associated with Foxwoods alone.

The city winds up with an annual net loss of roughly \$30 million. To place amount this in perspective, total losses match one half of the total collections of the Business Privilege Tax, one of the major taxes that has been killing jobs in the City of Philadelphia.

Economic viability of the casino

Because the tax take from the casino is so high, we decided to rough out the return on investment in the casino. This numbers are very crude because they do not include

corporate overhead. Nevertheless the numbers give a sense of the magnitude of the returns.

	Phase 1	Phase 2	Phase 3
Investment(construction)	\$ 267,300,000	\$ 368,200,000	\$ 589,600,000
casino direct exp	\$ 99,900,000	\$ 131,900,000	\$ 157,200,000
4% host fee	\$ 14,500,000	\$ 20,000,000	\$ 22,500,000
State casino taxes	\$ 185,600,000	\$ 254,900,000	\$ 286,400,000
Annual expenses	\$ 300,000,000	\$ 406,800,000	\$ 466,100,000
Revenue	\$ 362,500,000	\$ 500,000,000	\$ 562,500,000
Profit	\$ 62,500,000	\$ 93,200,000	\$ 96,400,000
Profit after federal taxes	46875000	69900000	72300000
Return on assets	0.175364759	0.189842477	0.122625509
Interest cost with 50% debt and 9% interest rate	\$ 12,028,500	\$ 16,569,000	\$ 26,532,000
Pretax profit with 50% debt	\$ 50,471,500	\$ 76,631,000	\$ 69,868,000
After tax profit with 50% debt	\$ 37853625	\$ 57473250	\$ 52401000
Return on equity with 50% debt cost 9%	0.28	0.31	0.18

Table 19: Rough estimates of the profitability of each phase with no debt and 50% debt, not including corporate overhead.

With leverage, the first two phases are quite profitable. The third phase loses money. Either the third phase will not be built or the casino will ask for tax breaks so that the third phase is built. We should expect the latter.

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